märklin

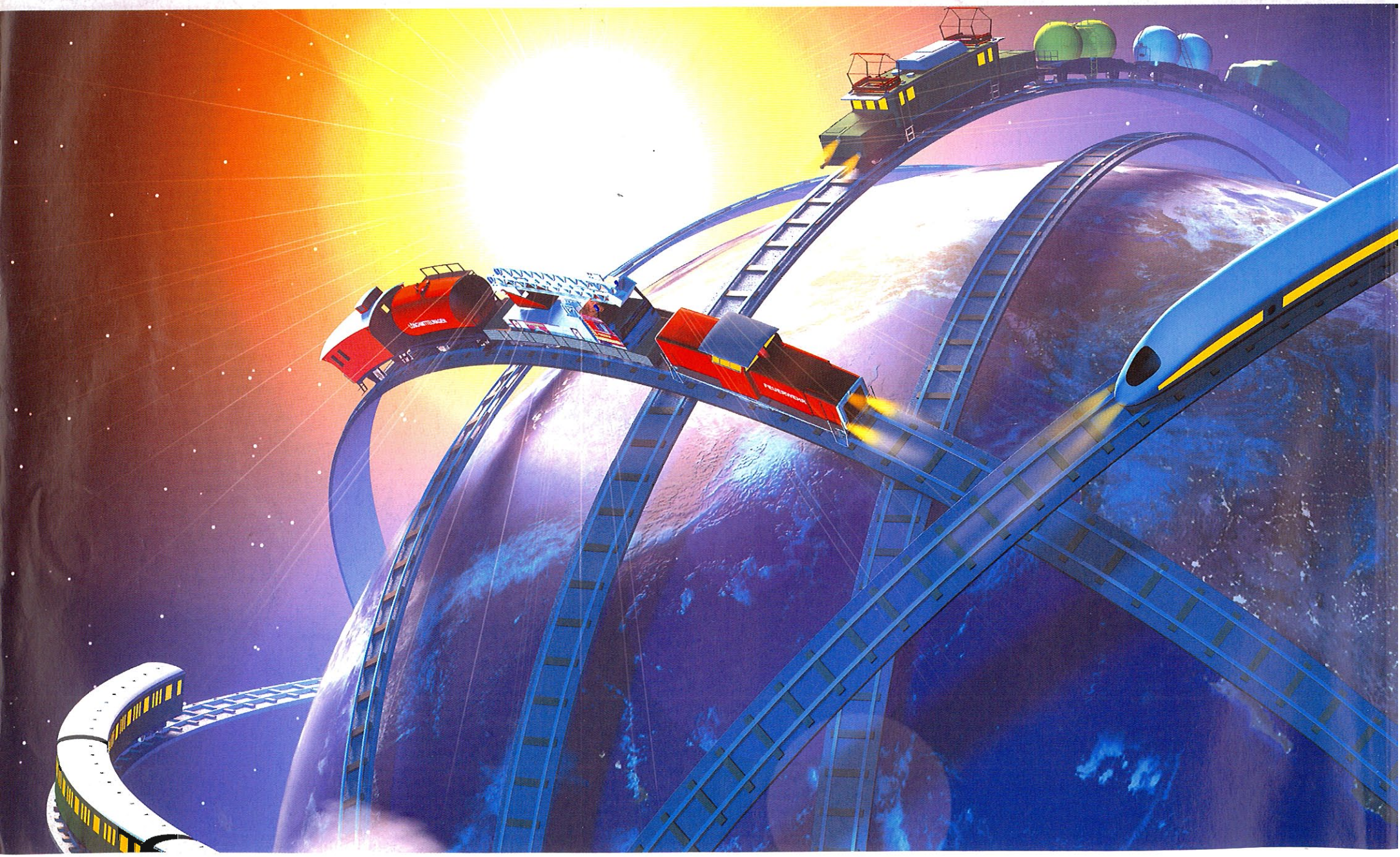
The Big "little" World of Märklin HO

Presentation Book for 2005

märklin

The Big "little" World of Märklin H0

H0 Gauge
Gauge 16.5 mm / 5/8"
Scale 1:87



Introduction.

Welcome to the New 2005 Märklin Presentation Book.

We have decided to develop our familiar main catalog into high-quality Märklin presentation books. These are individually prepared for our customers in the respective gauge, and they are designed to be motivate and inform by means of presentation. The fascination of Märklin is enhanced with these presentation books.
Page for page you will find everything about Märklin H0, including the current new items for 2005.

All of our products are based on the same fundamental idea: To convey the satisfaction to be had with one of the best hobbies in the world, a hobby that knows no age boundaries – model railroading. We want you to experience how fascinating it is to play with precisely detailed reproductions of model railroad equipment, to establish your own world, and to master it with the highest quality technology.
Fascination with Märklin also means owning collector's items that will captivate you with their technical features and their appearance, which is virtually indistinguishable from the original.
Märklin is not only synonymous with perfection recognized around the world, extensively developed technology, and stable value; Märklin is a brand, a passion, and a myth at the same time.

This year allow yourself to be enticed again by fantastic new Märklin H0 models and extensive accessories from our international product line. Discover the special features which characterize all Märklin products in function and detail, and which will provide you with years of satisfaction.

We extend to you our best wishes for this satisfaction with the big little world of Märklin H0.

Paul Adams Stephan Unser

You will find the full 2005 Märklin product line in the presentation books for H0, Z, and 1 Gauge, as well as in the CD-ROM presentation book.
The 3 books and the CO-ROM are available individually or bundled in a high-quality collector's slipcase at your authorized Märklin Dealer.

Märklin H0 2005
Presentation Book

16361 German edition
16362 English edition
16363 French edition
16364 Dutch edition
16365 Italian edition
16366 Swedish edition
16367 Danish edition
16368 Spanish edition

Märklin H0 Gauge full line 2005.
456 pages. Format approximately
29.7 x 21.5 cm / 11-11/16" x 8-15/32".

Märklin 1 2005
Presentation Book

16377 German edition
16378 English edition
16379 French edition
16380 Dutch edition

Märklin Gauge full line for 2005,
176 pages. Format approximately
29.7 x 21.5 cm / 11-11/16" x 8-15/32".

Märklin Z
Presentation Book 2005

16371 German edition
16372 English edition
16373 French edition
16374 Dutch edition

Märklin Z Gauge full line for 2005.
176 pages. Format approximately
29.7 x 21.5 cm / 11-11/16" x 8-15/32".

Märklin 2005
Presentation Book,
Bundled version

16391 German edition
16392 English edition
16393 French edition
16394 Dutch edition

High-quality collector slipcase.
Contents: 3 Märklin 2005 presentation books for H0, Z, and 1 Gauge for 2005.
1 each 2005 CD-ROM presentation book.
Format approximately 30 x 22 x 6 cm/
11-13/16" x 8-21/32" x 2-3/8".

16382
Märklin CD-ROM Presentation Book
"Full line 2005"

Contents: Full line 2005 in German, English, French, and Dutch. Sounds of various models. Search function for quick location of the desired model according to various criteria. Can be used on PCs with Windows 98 or higher, as well as on PPC MAC, System 8.6 to 9.22.

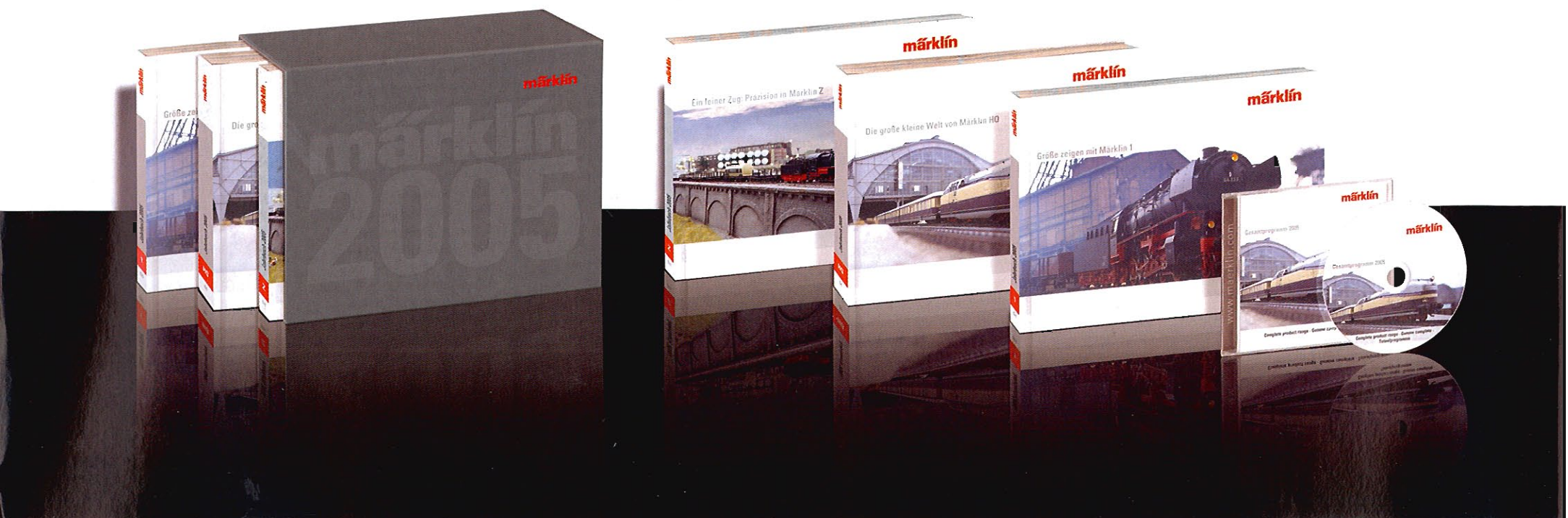


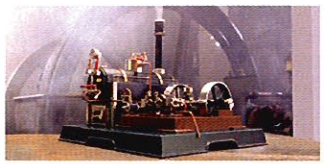
Table of Contents.

Gebr. Märklin & Cie.

"Märklin" Tradition.

Top quality makes Märklin a valuable asset

Technical toys have a long tradition. Transferring real dimensions to a size that can be played with poses a challenge to personnel and material. Regardless of whether you are talking about 1 Gauge or Z Gauge. Playing with technical toys creates experiences, where the relationship to history and the present day are evident. Leave your everyday life behind and enter the world of Märklin. A world in which the satisfaction of sophisticated technology and subtle play become the only determining factors. High-quality technical toys, reproduced in precise detail, have an educational value that cannot be overlooked.

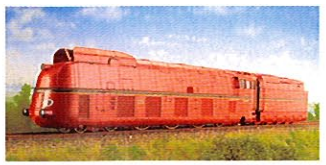


Technical toys have a high educational value

Theodor Friedrich Wilhelm Märklin recognized this early on when he founded his company, the factory for fine tin-plate toys. Objects of daily use and doll kitchen accessories were in the production plans – the thought was that young girls should prepare for their future activities through play.
Trains were added in 1891. At the Leipzig Spring Fair Eugen Märklin exhibited the world's first model railroad system: Locomotives and cars ran on tracks that were laid out in a figure eight. The assortment grew rapidly. The company moved into what is today's production building in Stuttgarter Straße. To this day this "dream factory" is the birthplace of high quality locomotives.

Legendary locomotives awake a collector's passion

Then as now, playing with trains is fascinating. It doesn't matter whether it is simple track layout on the hardwood floor, or a dream layout. The creative play afforded by a model railroad on wings of fantasy is incredibly diverse. Planning skills, and craftsman's dexterity are required. The model railroader is a carpenter, bridge building engineer, electronics engineer, plasterer, landscape architect, and finally traffic planner, all combined. Naturally, best of all is when the family plays with the model railroad together. In many families this has been a cherished custom for generations, at least in the contemplative Christmas season; cultivating playing together with the miniature railroad as a special experience. Father and son put the tracks together. Grandfather may revisit unforgettable moments from his own childhood, when he took over the family living room with his 1 Gauge layout and his tin-plate models.
Märklin locomotives and cars are very stable in value and arouse a pronounced passion for collection. Then as now, a high level of technical engineering knowledge is brought into harmony with the work of skilled hands. And anyone having once succumbed to the myth of the Märklin world will always return to it.



Precisely detailed reproduction of the original makes the difference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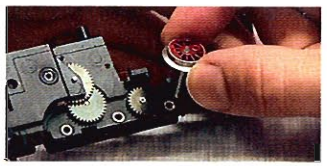
Handcrafted "Märklin" Quality.

Heavy metal – the stuff that locomotives are made of

Boiler decoration – even steam locomotives wear rings



Interplay – perfectly matched gear drive

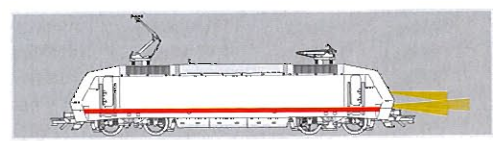
Sure instincts – perfection in every movement of the hand

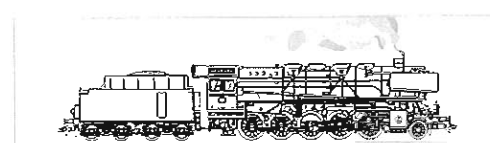
Every one of the excellent locomotives from the Märklin factory has already undergone a long journey before it makes the hearts of connoisseurs beat a little faster. Planning, documentation, and design are the initial stages. In addition, there are the many stations where resourceful minds and skilled hands ensure that the model will leave the Göppingen manufacturing facilities as a small object of desire. Once fine lithographed tin shaped the look of the legendary locomotives and cars; today metal with over 90% zinc content is the critical factor. All high-quality models are created from this material as much as possible. The finest detailing, smooth surface shapes, and enormous sturdiness make the locomotives indestructible life-long companions for model railroaders. Märklin uses the die-cast process. Here molten metal is poured into a mold under pressure. The castings thus produced are characterised by a dense non-porous structure. Countless details of the future locomotives have already been taken into consideration by the mold makers, so that finely-detailed components stand out on the castings. After the casting process is completed, and the casting has been removed from the mold, the refining processes are next on the program. In the past flash was removed by hand, openings or holes were milled and cleaned. In galvanizing basins containing an electrolyte solution with metal salts, a protective coat is deposited onto the surface of the locomotive body. After this procedure the bodies go into the hardening shop.
Then the bodies move on to the continuous spray guns. Side by side they await their first coat of paint. Subsequent coats which are only applied at certain points on the body are done by hand. Paint masks and airbrushes are used in this process. Fine details like boiler rings, on the other hand, can only be painted by hand.
Locomotive assembly – as is also the case in other industries where miniaturized components are involved – is usually done with precision manual work. Z Gauge in particular poses frequent challenges to the fine skills of the workers. In spite of extensive automation, high-quality manual labor will also determine the level of perfection of a locomotive in the future. The scale does not matter here. Without the assistence of skilled labor none of the unmistakable legends made of metal could be produced.

Märklin H0 – 87 Times Smaller, Proven Millions of Times Over, and Infinitely Beautiful.

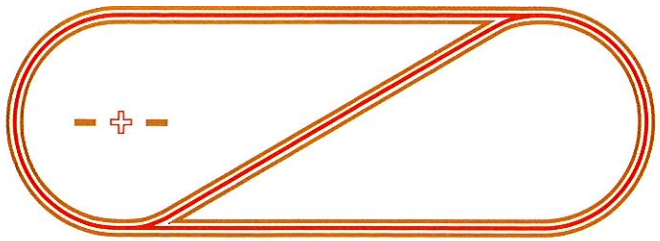
Leipzig Spring Fair 1935. This was the moment that H0 Scale was born. Increasing household purchasing power demanded another solution, which could also be operated in small apartments, practically on the domestic dining room table. Not all railroad fans could afford 1 and 0 Scale, the most popular systems at the time. With H0 Scale and its gauge of 16.5 mm / 5/8", Märklin was the first manufacturer in the world to ensure that the dream of having one's own model railroad became much easier to achieve. How fast it must have been at that time was shown in the 1935 Märklin catalog. The first starter set was offered on two unmarked pages. H0 Scale's success was assured. What are the reasons for this success story? – Many models are robust enough to take even the hard daily operation in the playroom without damage. Large layouts that have prototypical operation as their objective can be realized in a realistic manner. Enduring value, innovative technology, and an ideal compromise of practical size and appropriate detailing are additional pluses. In summary: Märklin H0 is the most successful system – in the world by a long margin; it has proven itself millions of times.

Playing with the wonderful H0 locomotives has been a real pleasure since the introduction of Märklin Systems. The simple and fast operation is fascinating, combined with convenient handling. The starter sets enable an exciting entry into the world of Märklin Systems with the new Mobile Station. It allows individual access to up to ten locomotives. Depending on the power consumption, three to four locomotives can be operated at the same time. For small layouts and temporary layouts in particular, this is precisely the right scale. Even older Delta or digital locomotives can be controlled with the Mobile Station. Thanks to its proven Plug & Play features, anyone wanting to play spontaneously will immediately be satisfied. Put the track together, connect the transformer and the Mobile Station – and you are on track until the sandman shows up. The Central Station is designed for experienced model railroaders. Operating locomotives and controlling up to 16 auxiliary functions available with the new mfx decoders sets new standards. Solenoid accessories such as turnouts and signals are controlled with a light touch on the graphic touch screen on the Central Station. But that's not all: 128 speed levels ensure perfect running characteristics on the track.
In the world of Märklin Systems there are now virtually no limits to the fascination of Märklin H0.





Important: In our H0 program you will no longer find the designation "hobby", because we uniformly equip all H0 products with the operating safety, long service life, and enduring values that are typical of Märklin. The various product descriptions show you the differences in the range of features.

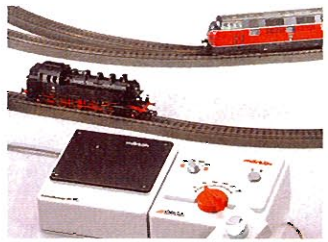


Center conductor principle with symmetrical current conduction

Märklin achieved the critical system advantage with the center conductor principle. While the track in the 30s had a continuous third rail, the introduction of the center stud contacts was really sensational: The ski-shaped pickup shoe consistently ensures good power contact, thanks to its self-cleaning qualities, and the ground return through all of the wheels makes the system operationally reliable. Since the polarity is always the same in the rails – the center conductor is, as its name implies, always in middle – wiring is as easy as child's play. Complicated circuits for reverse loops or wyes are not needed. The development of the track's appearance continued as a constant pace, thanks to the barely visible stud contacts, which project discreetly from the ties. K Track was introduced in stages starting in 1969 and compared to M Track it did not have its own roadbed. With K Track wide radius turnouts and flex track entered the product line.
Virtually any track pattern can be done with these elements. The most recent track system is C Track, which best meets customer wishes. Children understand the simple click connection in seconds. The track layout can be put away just as quickly as it can be set-up. Nothing stands in the way of spontaneous play.

C Track System – safe for children and right for the pros

The ambitious digital model railroader values C Track due to the reliable data transfer, which is ensured with double contacts. Decoders, turnout motors and lanterns can be added one piece at a time. Wide radius turnouts, combined with the flexible K Track ensure elegant track lines. And typical for Märklin: All track systems can be combined thanks to suitable adapter tracks.

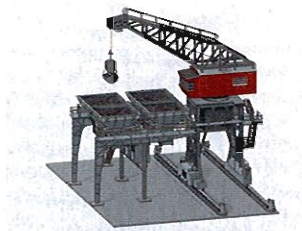


Trailblazers – Delta Multi-Train System and Märklin Digital

Märklin prepared the way for this wonderful technology with the digital system that was introduced in 1984.
With Märklin Digital up to 80 locomotives can be controlled independently of each other. Intriguing auxiliary functions increase the play value.
Moreover, with the simplified Delta multi-train system, Märklin produced a system that was specially tailored for small layouts and flexible daily play. Digital accessory control is possible with the Keyboard or the Memory. One connector allows control with a personal computer. And: The high-quality controller, the 6021 Control Unit, can also be used with Märklin Systems. These are prerequisites for continued operating enjoyment that reaches its peak in the world of Märklin Systems.

Finely detailed and sturdy – signal lights ensure safety

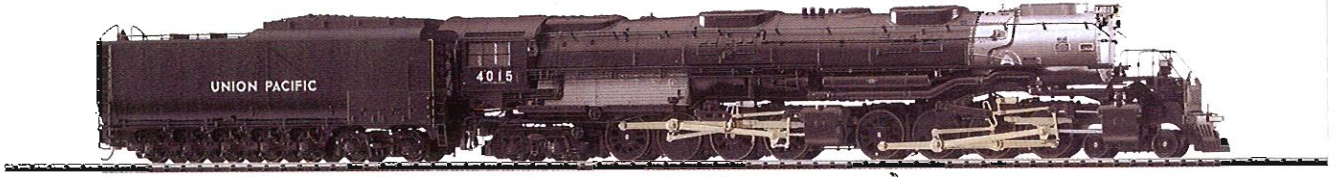
Prototypical train operation includes additional elements that are typical of railroads: Signals ensure safety and guarantee carefree play. The new signal lights are eye-catchers with their finely-detailed, realistic appearance. Diodes ensure realistic light change. In addition to the professional signal lights there are also simple models and the classic semaphores.
The new catenary is an important model railroad accessory. Simple installation and sturdiness in spite of finely-detailed design clearly contribute to the realistic character of a Märklin model railroad.

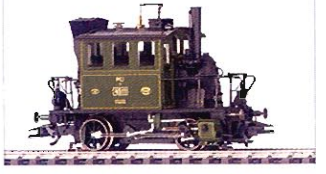


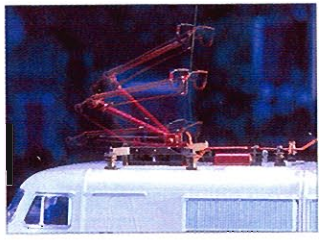
A good turn – large coaling station and gantry crane

Working models enhance any layout. They lend a special note to any layout. Thus, the good old Märklin rotary crane has proven itself thousands of times on layouts and in the playroom. In the meantime it has made way for a new, remote-controlled model. It is a movable gantry crane that handles the loading activities in the industrial area.
The processes in a locomotive maintenance facility are exciting. Here the black giants taken on coal and water. Consequently, a large coaling station is part of the high play value of a locomotive maintenance facility and extensive functions make the coaling bunker with a rotary crane and its working clamshell with movable gripper rotary crane the heart of every locomotive maintenance facility. Now the steam locomotives will not run out of coal.

Our "Drive" Is Innovation.







Märklin locomotives are all electric locomotives. Regardless of whether the mold makers have taken on a V 90, Big Boy, or the 103 – inside there is an electric motor at work. At first, there was a motor wired in series with a flat commutator inside the locomotive bodies. Later there was quantum leap forward. In the 40's a motor that was a further development of the cylindrical design of the 30's with a narrower width fit inside the body. The proven elements, like the copper commutator, which supplied the armature windings of the three-poled unit, were retained. Nevertheless, a smaller motor was still required for the small locomotives. While the commutator remained virtually unchanged, the armature was hidden behind the commutator.

The introduction of the drum-style commutator motor was celebrated in 1973 in the class 03 locomotive. Little by little this motor design was used in all new designs. In 1985, the time was right for a new development. DC current motors revved up the ICE Experimental. An advance in technology technology was achieved with a can motor.

From 1988 on, the drum-style commutator motor ensured even better running characteristics. It was further developed into a five-pole motor and was equipped with two additional armature windings. Its designation "five-star propulsion" caused a sensation.

In 2000, Märklin took a totally new approach with the presentation of the C-Sine motor. The engineers borrowed from the real life railroad. Prototypes were the three-phase asynchronous motors of the classes 101, 152, and 182. With a three-phase motor the stator (the stationary part of the motor) generates a traveling magnetic field, with multiple, electro magnets arranged circular pattern, through variable frequencies of the current, which also generate a traveling, slightly phase-shifted magnetic field in the rotor arranged around the stator. The result is that the motor starts to turn with the speed of the traveling magnetic field. The C-Sine motor functions in a similar manner:

The nine stator windings generate a traveling magnetic field generated by an electronic circuit. The rotor, fitted with twelve permanent magnets, attempts to follow the magnetic field of the stator. The motor starts to spin at the speed of the traveling field. All of this is wear-free and friction-free.

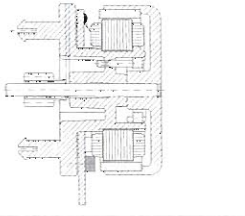
In addition the C-Sine propulsion supplies outstanding torque in all RPM ranges.

Nevertheless, the C-Sine motor does not supply the propulsion for all models. Small locomotives, such as the "Glaskasten" (Glass Box), or the Köf demand other solutions. In order to remain prototypical with as few compromises as possible, high-efficiency motors and gear drives are perfectly tailored to the various models.

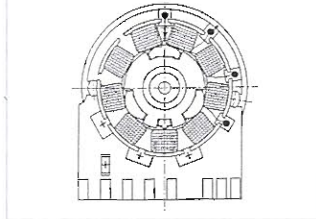
Yesterday's locomotives and today's locomotives differ in an essential achievement: Electronics entered the picture. The remote controlled functions are spectacular. These include the Piezo mechanism. What once appeared impossible is now reality. The finely detailed pantographs can be raised or lowered with a digital push button. Here, special materials are placed in vibration through power impulses and transformed into propulsion movements. These fine adjusting mini-motors ensure movable play of the pantographs for locomotives and cars.

The C-Sine Motor Revolutionizes Propulsion.

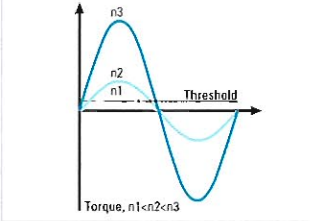
- This motor is maintenance-free, since it doesn't need brushes.
- Outstanding control with load increases.
- Excellent slow speed characteristics.
- Very good coasting characteristics.
- Can be used in conventional and digital operation.
- Switching speed can be turned on digitally.



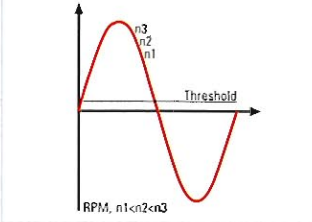
The rotor has a twelve-pole permanent magnet. It surrounds the stator like a bell.



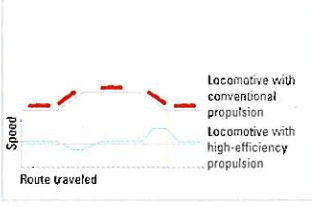
The nine windings on the C-Sine motor form a fixed stator. Brushes are no longer necessary to supply power.



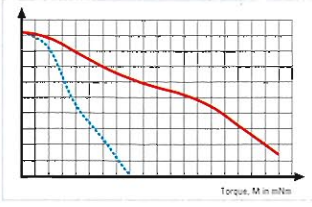
With a conventional motor the strength of the control signal varies with the motor's rpm.



With the C-Sine motor the strength of the control signal from the Hall sensors is constantly and consistently high.

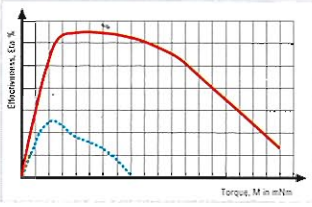


Running Characteristics of the High-Efficiency Propulsion



Torque
Even at low rpm levels the C-Sine motor reaches a high level of torque and there is good pulling power.

Current Draw
Compared to the traditional motor, the C-Sine motor has clearly reduced current draw.



Efficiency
The higher efficiency level increases the power reserves for the locomotive controller (transformer).

C-Sine motor — Conventional motor

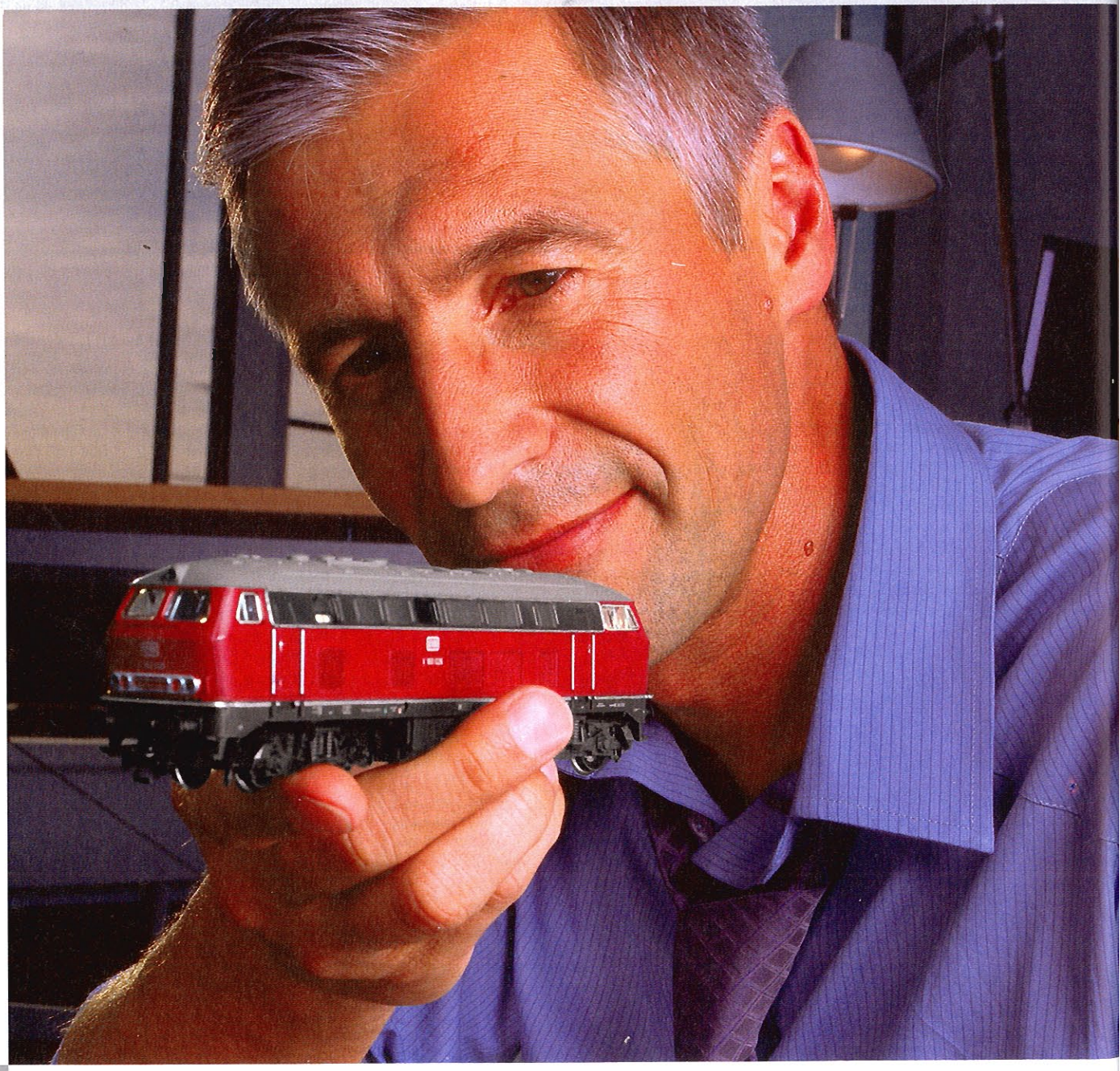
Starter Sets.

When dad goes for a walk with his son, the path of both may lead to the display window of the closost Märklin shop. There they curiously flatten their noses, point to a steam locomotive, a diesel locomotive, talk shop and then enter the store. A pure model railroad atmosphere dominates the bright, inviting rooms. Display cases are hanging on the walls in which numerous locomotives and cars in H0 scale are displayed. More models are located in showcases – exclusive pieces with small tags with the lettering "sold" or "reserved" attached.

Father and son view the vehicles. They are especially impressed by the modern locomotives and cars, which are noticeable by their colorful finish. They strike up a conversation with the owner of the store, a dealer from the old school, who likes to soundly consult his customers.

He recommends that they begin their adventure with the model railroad with a starter set by Märklin. The set contains everything necessary for the first steps: Vehicles, tracks, locomotive control unit. High-quality products and modern technology in a surprisingly advantageous combination. The entry into the model railroad world and into the digital train operation is that simple. The track elements of a starter set are quickly unpacked and set up, the control with Märklin systems is connected in a snap. The trains and their functions can be easily operated digitally – commonly known as plug & play.

The father is amazed at the technical possibilities offered by Märklin today, which would have been inconceivable in the past. The son is fascinated by the adventure world with one of the most modern playing systems - Märklin H0.



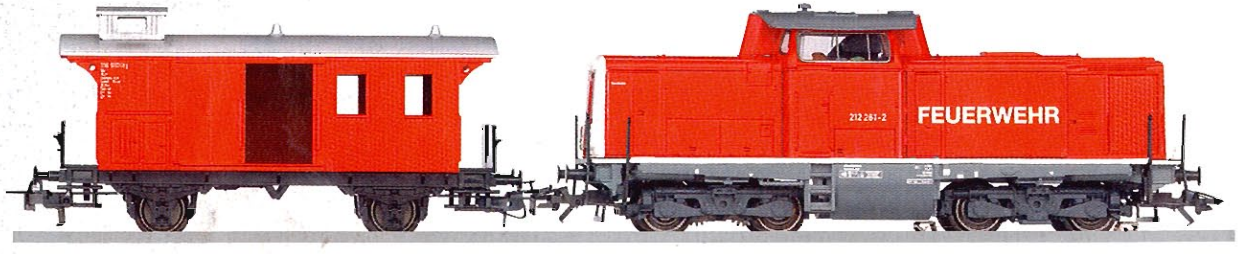

FEUERWEHR

Digital starter set – fire department.

29750 230 volts
29751 120 volts
Fire Department Digital Starter Set. Relief Train with a Diesel Locomotive and a Large C Track Layout, Transformer, and Mobile Statien.

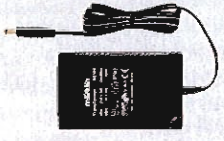
Getting started in digital model railroading.
Mobile Station as a new controller.
Heavy locomotive with high-efficiency propulsion.
A world of play with action: Fire Department.

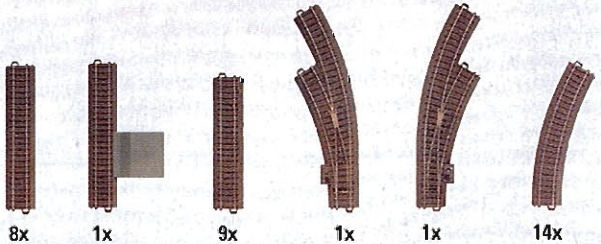
Prototype: Class 212 diesel locomotive and 3 cars painted and lettered for fire fighting.
Model: Locomotive comes with a digital decoder, controlled high-efficiency propulsion, and headlights that can be turned on and off. 1 crew car, 1 low side car, and 1 fire fighting car as well as 1 truck model with a rotary ladder. Relex couplers. Train length 54.0 cm / 21-1/4".
Contents: 14 no. 24130 curved track, 9 each no. 24188 and no. 24172 straight track, 1 pair of 24671 and 24672 curved turnouts. 18 VA transformer. Mobile Station digital controller. Hardware for connections. Illustrated instruction book with many tips and ideas.
This set can be expanded with the C Track extension sets and with the entire C Track program.
The turnouts can be retrofitted with the 74490 electric mechanism.



184 x 84 cm
73" x 34"

29750/29751





8x 1x 9x 1x 1x 14x

V

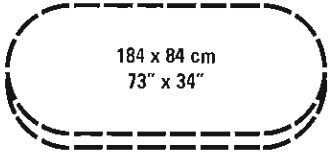

FEUERWEHR
212 261-2
FEUERWEHR
FEUERWEHR
LÖSCHMITTELWAGEN

Start free for switching.

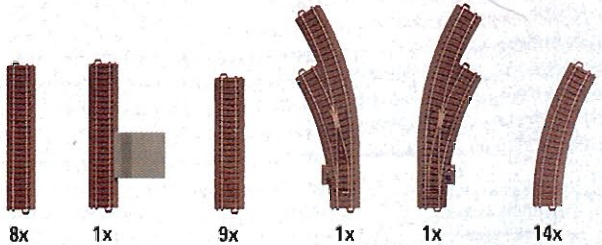
29530 230 volts
29531 120 volts
Steam Locomotive Digital Starter Set.
Freight Train with a Large C Track Layout, Transformer, and Mobile Station.

Getting started in digital model railroading.
Mobile Station as a new controller.
Locomotive with high-efficiency propulsion.
Telex couplers for remote-controlled switching operations.

Prototype: German Federal Railroad (DB) class 86 tank locomotive and 5 German Federal Railroad (DB) freight cars.
Model: Locomotive comes with a digital decoder, controlled high-efficiency propulsion, headlights that can be turned on and off, and Telex couplers for remote-controlled switching operations. 1 boxcar, 2 gondolas, 1 tank car, and 1 baggage car. Relex couplers.
Train length 75.5 cm / 29-3/4".
Contents: 14 no. 24130 curved track, 9 each no. 24188 and no. 24172 straight track, 1 pair of 24671 and 24672 curved turnouts. 18 VA transformer. Mobile Station digital controller. Hardware for connections. Illustrated instruction book with many tips and ideas.
This set can be expanded with the C Track extension sets and with the entire C Track program.
The turnouts can be retrofitted with the 74490 electric mechanism.



29530/29531




86 132
86 132

Combination start with diesel power.

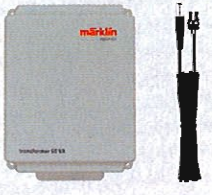
29811 230 Volt (transformer 60 VA)
29812 120 Volt (transformer 42 VA)
Kombi Digital Starter Set.
Freight Train with Diesel Locomotive, large C Track Layout, Transformer, and Mobile Station.

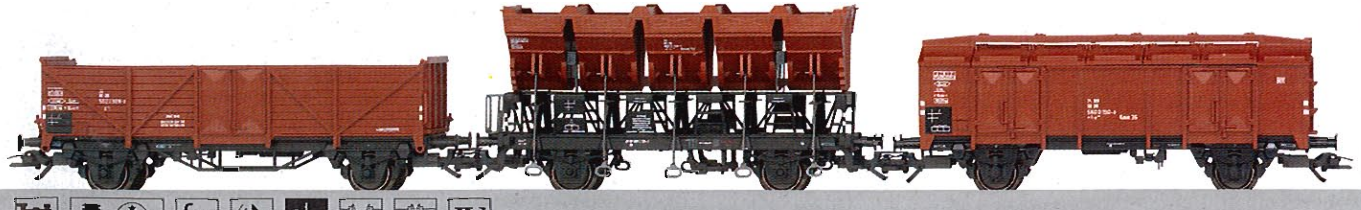
The modern start in digital model railroading.
Professional K Track.
New Mobile Station controller with additional functions.
Heavy diesel locomotive with high-efficiency propulsion.
Awesome sound: Diesel motor and horn.

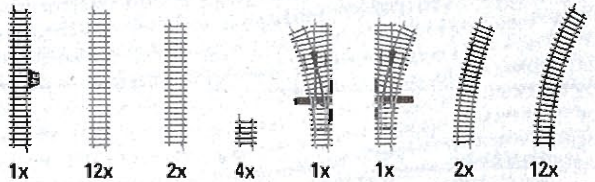
Prototype: German Federal Railroad (DB) class 221 heavy diesel locomotive and 4 freight cars.
Model: Locomotive comes with digital decoder, controlled high-efficiency propulsion, sound effects module (diesel motor and horn) and switchable headlights. 1 open freight car, 1 silo container car, 1 dump car, and 1 gondola. Train length 65.0 cm / 25-19/32".

Contents: 12 sections of no. 2200 straight track, 2 sections of no. 2207 straight track, and 4 sections of no. 2208 straight track. 12 sections of no. 2221 curved track, and 2 sections of no. 2232 curved track. 1 pair of 2265 and 2266 turnouts, as well as 1 special version feeder track. Mobile Station digital controller. Illustrated instruction book with many tips and ideas. Set can be expanded with the Kombi extension sets and with the entire C Track program.
The turnouts can be retrofitted with the 7549 electric mechanism.

29811/29812








DB
221 104-3

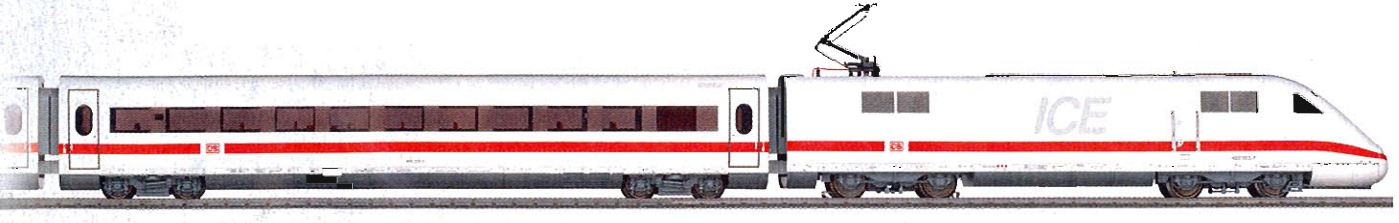
Express Start for the 2nd Generation.

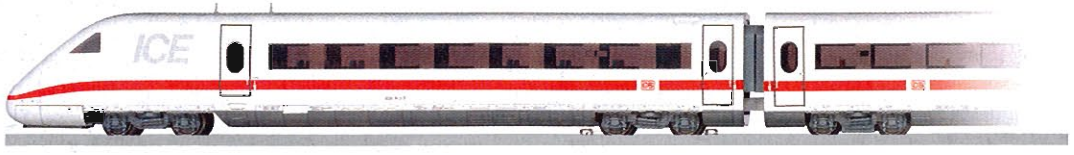
29795 230 Volt
29794 120 Volt
High-Speed Train Digital Starter Set.
High-Speed Train with Large C Track Layout, Transformer, and Mobile Station.

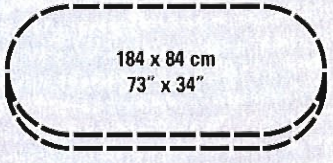
The modern start in digital model railroading.
New Mobile Station controller.
Train with high-efficiency propulsion and horn.

Prototype: German Railroad Inc. (DB AG) InterCity Express (ICE) class 402 high-speed train in a 3-part version.
Model: Power end car with digital decoder, controlled high-efficiency propulsion, horn sound effect and headlights that can be turned on and off. 1 intermediate car and 1 cab control car. Train length 76.5 cm / 30-1/8".

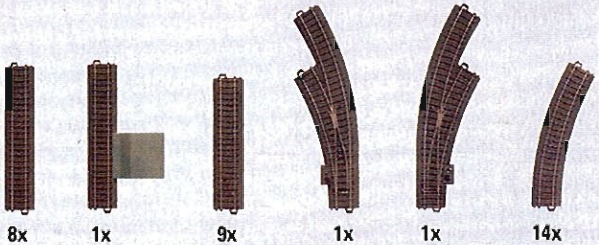
Contents: 14 sections of no. 24310 curved tracks, 8 sections of no. 24188 straight tracks, 1 section of no. 2290 feeder track , 1 pair of 24671 and 24672 curved turnouts. 18 VA transformer. Mobile Station digital controller.
Illustrated instruction book with many tips and ideas. Set can be expanded with the C Track extension sets and with the entire C Track program.
The turnouts can be retrofitted with the 74490 electric mechanism.







29794/29795




ICE

Mega Start in Era III.

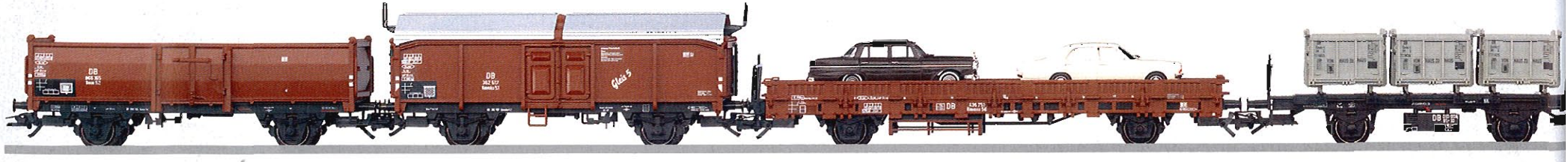
29820 230 Volt (transformer 60 VA)
29821 120 Volt (transformer 42 VA)
Digital Mega Starter Set with 2 trains.
Passenger Train with Large C Track Layout, Transformer, and Mobile Station.

Start digital model railroading with two trains.
New Mobile Station controller with many additional functions.
Both locomotives have high-efficiency propulsion and sound effects.
Awesome sound: Diesel motor, steam cylinder and more.
Steam locomotive with telex coupling for switching.

Prototype: German Federal Railroad (DB) class 50, steam locomotive, class V 160 diesel locomotive, 3 "Silberlinge" commuter cars, and 4 freight cars.
Model: Locomotives with digital decoder, controlled high-efficiency propulsion, controllable lighting and sound effects module with operating sound effects and 4 additional sound effects for each locomotive. Additionally steam locomotive with Telex coupler and connection for a smoke generator that can be retrofitted. 2 2nd class commuter cars, and 1 1st/2nd class commuter car. 1 container transport car, 1 low side car with 2 car models, 1 gondola with sliding roof sections, and 1 open freight car. Train lengths 98.0 cm / 38-19/32" and 75.5 cm / 29 23/32".

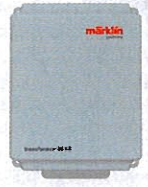
Contents: 14 sections of no. 24310 curved track, 8 sections of no. 24188 straight track, 1 section of no. 24088 feeder track, 9 sections of no. 24172 straight track, 1 pair of 24671 and 24672 curved turnouts. Mobile Station digital controller. Illustrated instruction book with many tips and ideas.

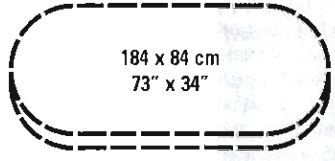
Set can be expanded with the C Track extension sets and with the entire C Track program.
The turnouts can be retrofitted with the 74490 electric mechanism.



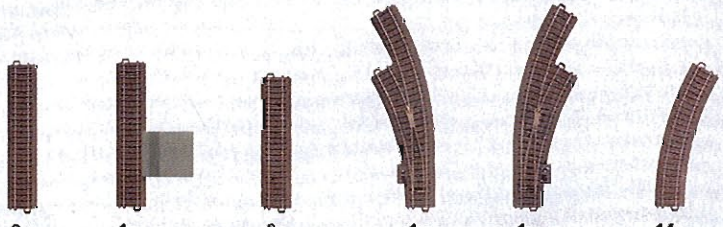
mfx NEM NEM 73150 III


märklin
HO
Mein digitaler Start.
29820




184 x 84 cm
73" x 34"

29820/29821


8x
1x
9x
1x
1x
14x

Starter Sets.

29145
Freight Train Set with C Track Oval and Transformer.

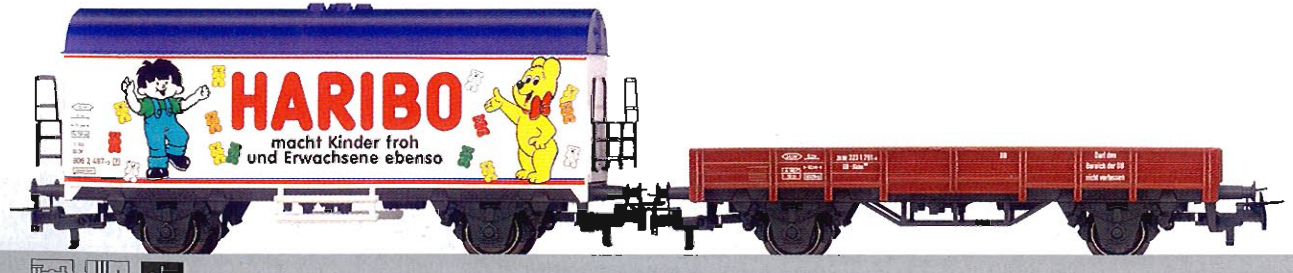
Prototype: German Federal Railroad class 89.0, 3 different freight cars. Model: Locomotive comes with a Delta electronic circuit. 1 no. 4423 low side car, 1 no. 4430 gondola, 1 no. 44174 refrigerator car. Train length 46.7 cm / 18-3/8".

Contents: 12 no. 24130 curved track and 2 each no. 24172 and no. 24188 straight track, feeder wire set, 32 VA transformer with continuously smooth speed adjustment and connections for electric accessories.

This set can be expanded with the C Track extension sets and with the entire C Track program.

29145

12x 2x 2x



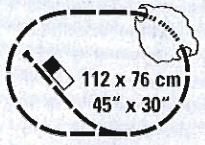
29216 230 volts
Swiss Starter Set
Branch Line Train with a C Track Layout and Transformer.

Locomotive comes with a Delta circuit, ready for multi-train operation.
Compact layout with a turnout and siding track.
Accessories for play value: freight stetion and tunnel.
Sound effects: automatic locomotive whistle.
Play surface for the starter set.

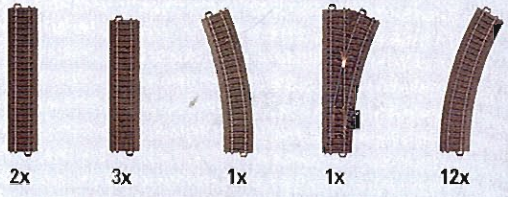
Export model for Switzerlend.

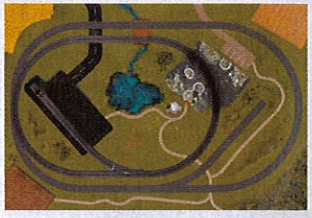
Prototype: Swiss Federal Railways (SBB/CFF/FFS) "Tigerli" locomotive, 1 passenger car, and 3 freight cars. **Model:** The locomotive comes with a Delta electronic circuit. 1 axle powered. 1 traction tire. Coupler hooks. 1 passenger car, 1 high side gondola, 1 stake car, and 1 boxcar with sliding doors that can be opened. Relex couplers. Train length 56.5 cm / 22-1/4". 12 sections of 24130 curved track, 2 sections of 24188 straight track, 3 sections of 24172 straight track, 1 each 24612 turnout, 1 section of 24224 curved track, 1 track bumper. 32 VA transformer with stepless adjustment of the speed and connections for electric accessories. Feeder wire set. **Sound effects module with automatic locomotive whistle that can be connected to the track.** Small freight station as a kit. Large, finished corner tunnel. Freight load. Instruction booklet with color illustrations and photographs.

Can be expanded with the entire C Track program, with a Delta controller and with other accessories.



29216





III-V

Swiss Freight Service Express Start.

29510 230 volts
Swiss Digital Starter Set.
Freight Train with a Large C Track Layout, Transformer, and Mobile Station.

Getting started in digital model railroading.
New Mobile Station controller
Locomotive for the first time with high-efficiency propulsion.

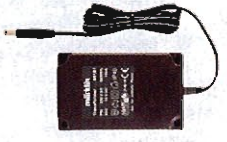
Prototype: Swiss Federal Railways (SBB) class Ae 3/6 II electric locomotive and 4 Swiss Federal Railways (SBB) freight cars.
Model: Locomotive comes with a digital decoder, controlled high-efficiency propulsion on 3 axles and headlights that can be turned on and off. 2 boxcars, 1 gondola with a load and 1 wine car. Train length 71.2 cm / 28-1/16".

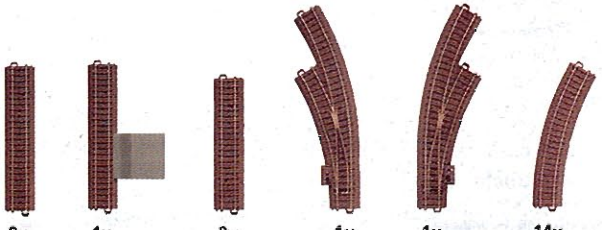
Contents: 14 no. 24130 curved track, 9 each no. 24188 and no. 24172 straight track, 1 pair of 24671 and 24672 curved turnouts. 18 VA transformer. Mobile Station digital controller. Hardware for connections. Illustrated instruction book with many tips and ideas. This set can be expanded with the C Track extension sets and with the entire C Track program.

The turnouts can be retrofitted with the 74490 electric mechanism.

184 x 84 cm
73" x 34"

29510





8x 1x 9x 1x 1x 14x

NEM NEM III


10447

Double Start with the Swiss Cross.

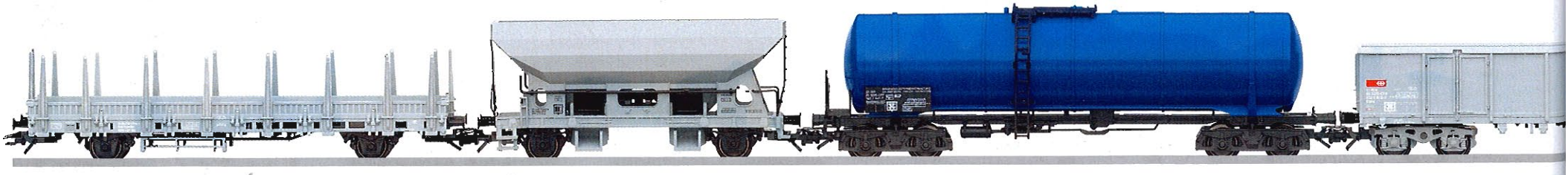
29850 230 volts
Digital Swiss Mega Starter Set with 2 Trains.
Express Train and Freight Train with a Large C Track Layout, Transformer, and Mobile Station.

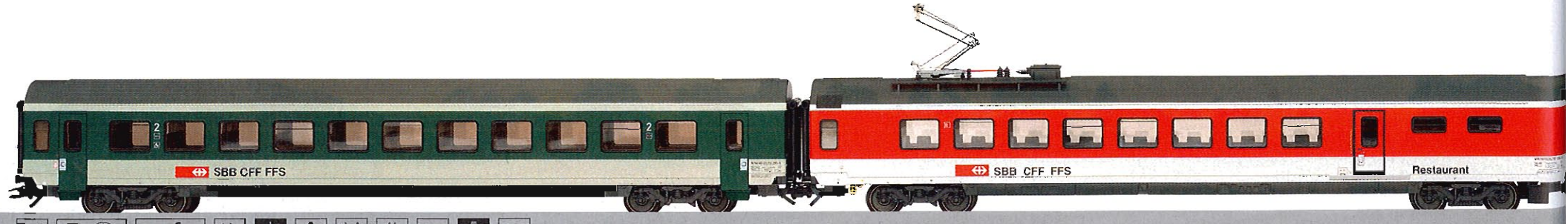
Getting started with 2 Swiss trains in digital model railroading.
Mobile Station as a new controller with auxiliary functions.
Both locomotives made of metal and with high-efficiency propulsion.
Different horn sound effects in both locomotives.

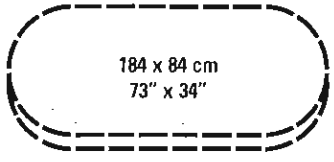
Prototype: Swiss Federal Railways (SBB) class 460 and class 660 (Ae 6/6) electric locomotives, 3 Swiss Federal Railways (SBB) type Mark IV express train passenger cars, and 4 Swiss Federal Railways (SBB) freight cars.
Model: The locomotives come with a digital decoder, controlled high-efficiency propulsion, headlights that can be turned on and off, and sound effects generators with several sound functions. 1 each express train passenger car 1st class and 2nd class as well as 1 dining car. 1 gondola, 1 stake car, 1 tank car, and 1 bulk freight car. Train lengths 101.2 cm / 39-13/16" and 84.9 cm / 33-7/16".

Contents: 14 no. 24130 curved track, 9 each no. 24188 and no. 24172 straight track, 1 pair of 24671 and 24672 curved turnouts. 60 VA transformer. Mobile Station digital controller. Hardware for connections. Illustrated instruction book with many tips and ideas.

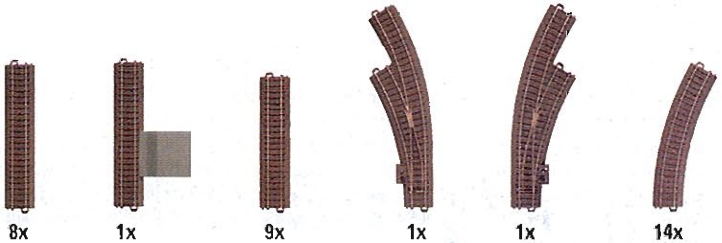
This set can be expanded with the C Track extension sets and with the entire C Track program.
The turnouts can be retrofitted with the 74490 electric mechanism.







29850



8x 1x 9x 1x 1x 14x

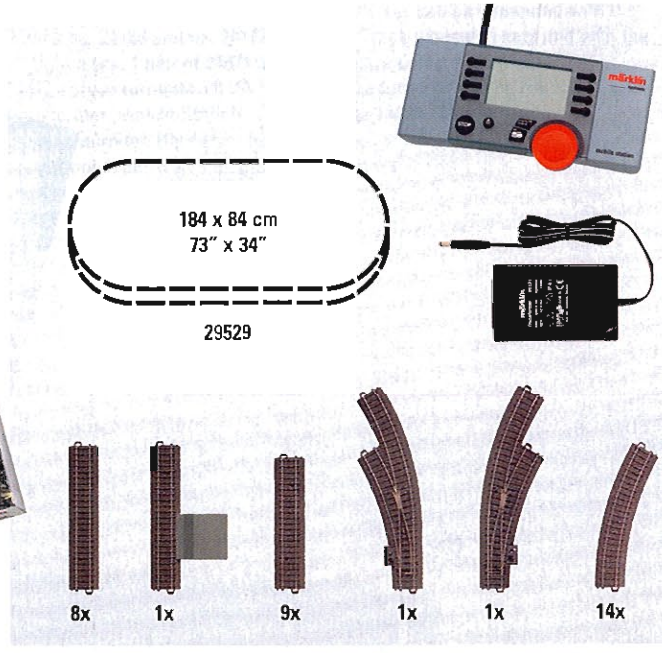
Digital starter set France.

29529 230 volts
French Digital Startor Set.
Express Train with a Large C Track Layout, Transformer, and Mobile Station.

Getting started in digital model railroading.
Mobile Station as a new controller with auxiliary functions.
Metal locomotive with high-efficiency propulsion.
Different horn sound effects.

Prototype: French State Railways (SNCF) class BB 15 000 electric locomotive and 3 French State Railways (SNCF) Eurofima passenger cars.
Model: Locomotive comes with a digital decoder, controlled high-efficiency propulsion on 2 axles, headlights that can be turned on and off, and 2 horn sound effects. Train length 101.0 cm / 39-3/4".
Contents: 14 no. 24130 curved track, 9 each no. 24188 and no. 24172 straight track, 1 pair of 24671 and 24672 curved turnouts. 18 VA transformer. Mobile Station digital controller. Hardware for connections. Illustrated instruction book with many tips and ideas. This set can be expanded with the C Track extension sets and with the entire C Track program.

The turnouts can be retrofitted with the 74490 electric mechanism.



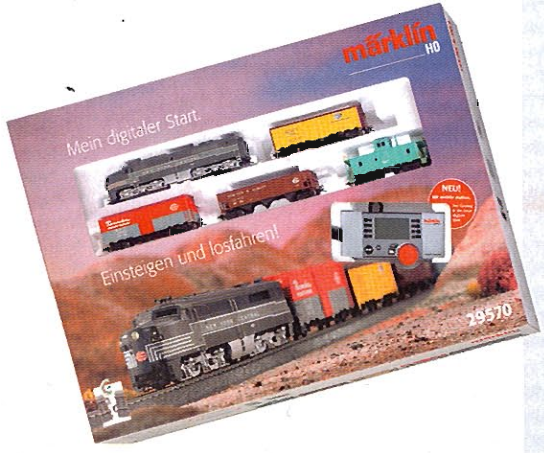

SNCF
15062

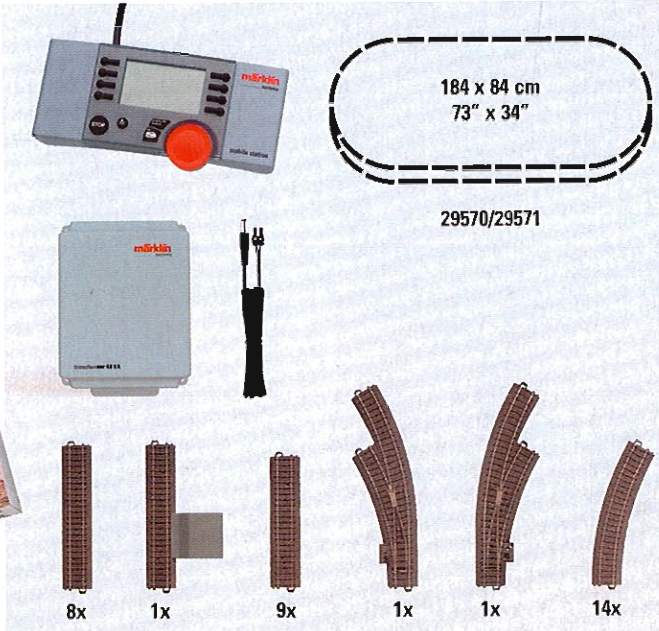
American start signals.

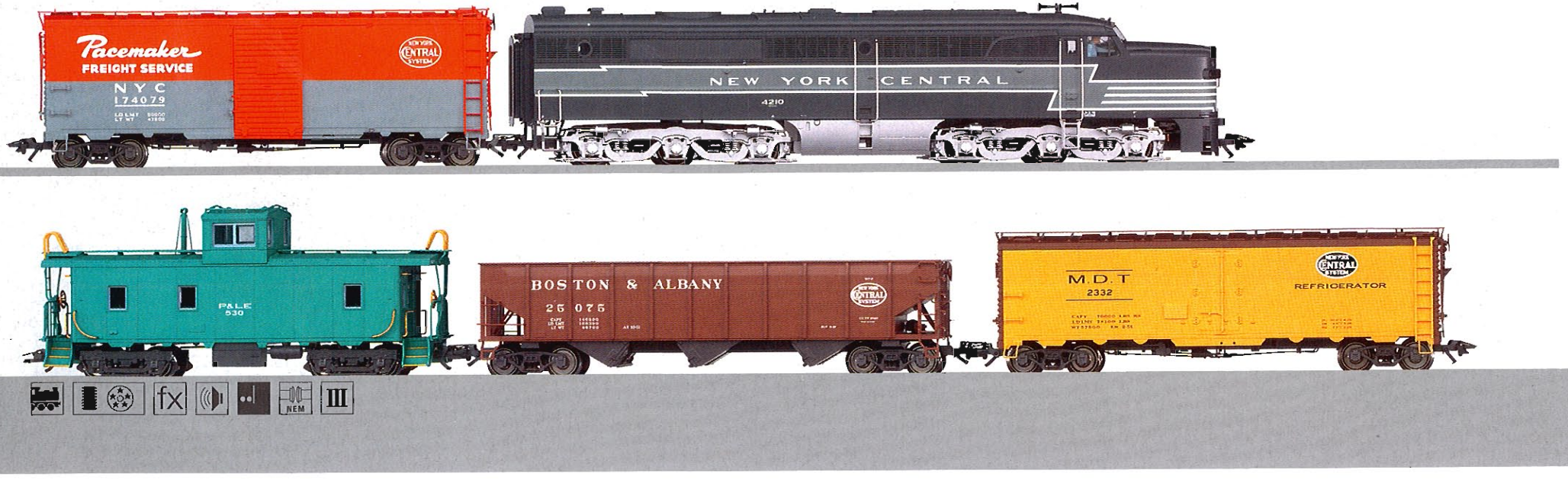
29570 230 Volt (transformer 60 VA)
29571 120 Volt (transformer 42 VA)
USA Digital Starter Set.
Freight Train with Diesel Locomotive, large C Track Layout, Transformer, and Mobile Station.

The introduction to digital model railroading.
New Mobile Station controller with additional functions.
Heavy locomotive with high-efficiency propulsion.
Awesome sound: Diesel motor, bell, horn.

Prototype: New York Central System (NYC) type ALCO PA-1 heavy diesel locomotive and 4 freight cars.
Model: Locomotive comes with digital decoder, controlled high-efficiency propulsion, sound effects module (diesel motor, bell, and horn) and switchable lighting. 1 Box Car, 1 Reefer, 1 Hopper Car and 1 Caboose. Train length 70.0 cm / 27-9/16".
Contents: 14 sections of no. 24310 curved track, 8 sections of no. 24188 straight track, 1 section of no. 24088 feeder track, 9 sections of no. 24172 straight track, 1 pair of 24671 and 24672 curved turnouts. Mobile Station digital controller. Illustrated instruction book with many tips and ideas. Set can be expanded with the C Track extension sets and with the entire C Track program. The turnouts can be retrofitted with the 74490 electric mechanism.








4210
NEW YORK CENTRAL
NEW YORK CENTRAL SYSTEM

Passenger train sets.

29551 230 Volts
29552 120 Volts
"Hogwarts Express™" Passenger Train Starter Set with C Track, Transformer, and Mobile Station.

Prototype: Express locomotive and 2 English style passenger cars.
Model: Locomotive comes with a digital Decoder, large front headlight, and a sound effects generator. The headlight, locomotive whistle, and preset acceleration and braking delay can be controlled digitally. One each passenger coach with and without a service area. The locomotive and cars come with Relex couplers. Train length 80.0 cm/31-1/2".
Contents: 14 sections 24130 curved track, 8 sections 24188 straight track, 1 no. 24088 feeder track, 9 sections 24172 straight track, 1 pair of 24671 and 24672 curved turnouts. 18 VA transformer. Mobile Station digital controller. Colorful play surface with themes for the setup of the layout, can be folded, and a suitable backdrop wall. Detailed instructions for setup. This set can be expanded with the C Track extension sets and the entire C Track program.
The turnouts can be retrofitted with the 74490 electric turnout mechanism.

The 29551/29552 starter set is only available in certain countries.

Hogwarts Express™

The Hogwarts Express™ is the train that travels between King´s Cross Station (via platform 9 and three-quarters) and Hogwarts School of Witchcraft and Wizardry.

The model railway, elegant steam locomotive and classic compartment cars are meticulously designed, exceptionally detailed and replicate the train shown in the films. The play surface which incorporates images of the films provides the perfect background for your Hogwarts Express™ train.

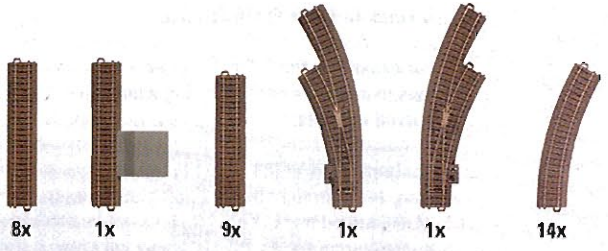
41551
"Hogwarts Express™" Passenger Car Set.

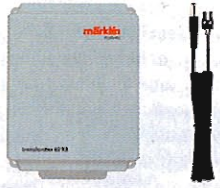
Prototype: 3 English style express train passenger cars. 2 compartment coaches (Composite Coach) and 1 coach with service area (Brake Coach).

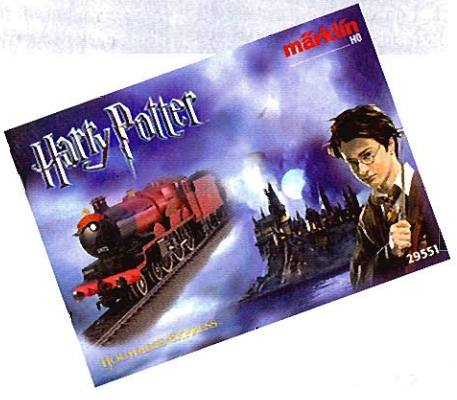
Model: Suitable addition to the 29551/29552 starter set. The cars have different car numbers. NEM coupler pockets with Relex couplers. Can be replaced with other makes of couplers. Total length over the buffers 82.0 cm/32-5/16".

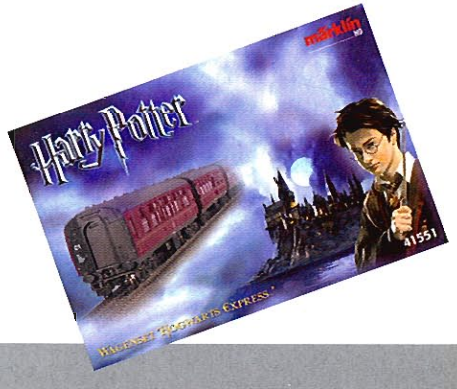
The 41551 car set is only available in certain countries.

29551/29552







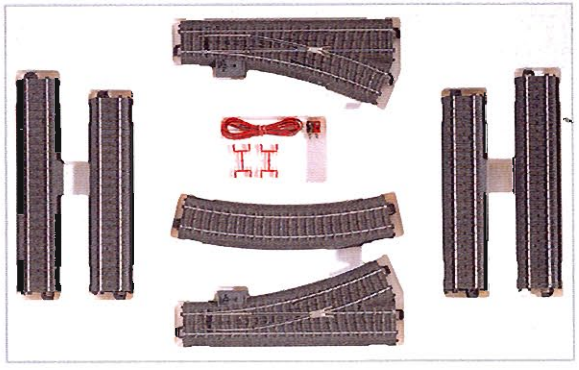


The Small C x C.

24902
C Track C_2 Extension Set.

For expanding the small C Track starter set (C_1 contents) to include a passing siding.

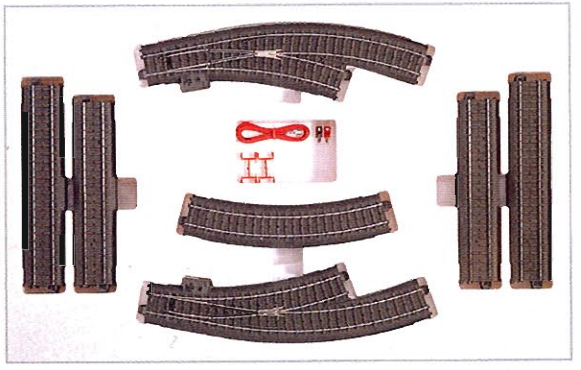
Contents: 3 no. 24188 straight track, 5 no. 24172 straight track, 2 no. 24224 curved track, 1 no. 24611 turnout, 1 no. 24612 turnout, wire, plugs, and instructions.



24903
C Track C_3 Track Extension Set.

For expanding the C Track starter sets to include a passing siding with curved turnouts.

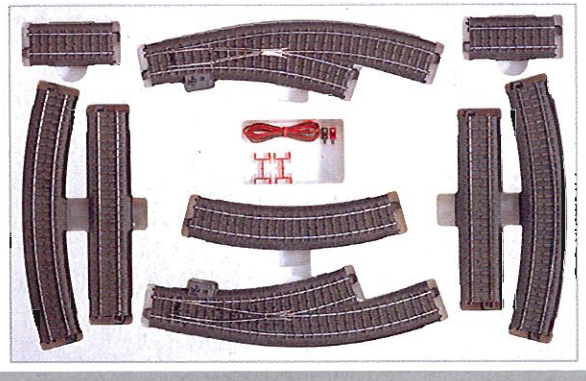
Contents: 7 no. 24188 straight track, 7 no. 24172 straight track, 2 no. 24130 curved track, 1 no. 24671 curved turnout, 1 no. 24672 curved turnout, wire, plugs, connectors and instructions.



24904
C Track C_4 Track Extension Set.

For expanding the C Track starter sets to include a passing siding with curved turnouts. A parallel route can be created when combined with the 24903 C_3 track extension set.

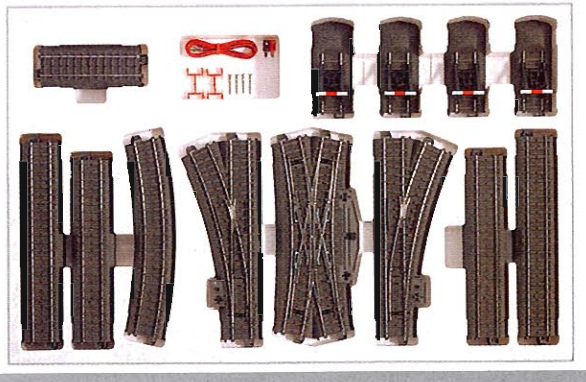
Contents: 4 no. 24188 straight track, 4 no. 24172 straight track, 2 no. 24077 straight track, 2 no. 24130 curved track, 6 no. 24230 curved track, 1 no. 2467 1 curved turnout, 1 no. 24672 curved turnout, wire, plugs, connectors and instructions.



24905
C Track C_5 Track Extension Set.

For expanding the C Track starter sets to include storage sidings and a yard lead.

Contents: 7 no. 24188 straight track, 7 no. 24172 straight track, 2 no. 24094 straight track, 1 no. 24224 curved track, 1 no. 24611 turnout, 1 no. 24612 turnout, 1 no. 24620 double slip switch, 4 no. 24977 track ends with track bumpers, wire, plugs, connectors and instructions.

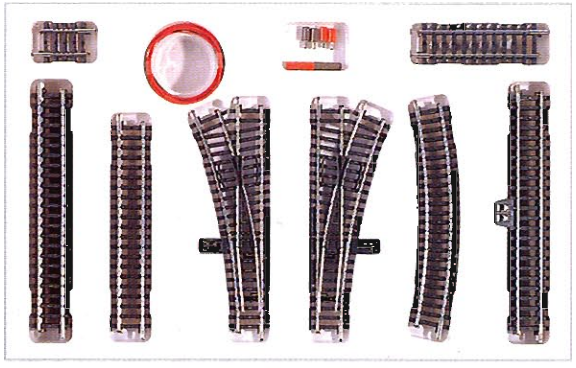


K + O + M + B + I = "KOMBI" Extension Set Program.

2215
O Extension Set.

With this extension set a K Track starter set can be expanded to include a passing siding or spur tracks.

Contents: 6 no. 2200 straight track, 2 no. 2201 straight track, 2 no. 2207 straight track, 2 no. 2208 straight track, 2 no. 2232 curved track, 1 pair no. 2264 turnouts with hand levers, 1 no. 2290 feeder track, instructions.

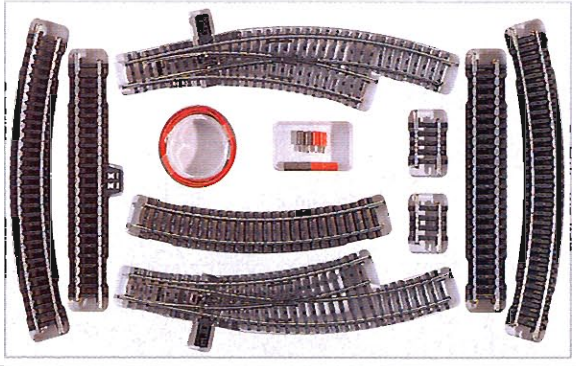


2216
M Extension Set.

With this extension set a K Track starter set can be expanded to include a passing siding or spur tracks with curved turnouts. Has limited uses with the 29865 K Track starter set.
Contents: 6 2200 straight track, 2 no. 2221 curved track, 1 pair no. curved turnouts the same as 2267 but with hand levers, 1 no. 2290 feeder track, instructions.

2217
B Extension Set.

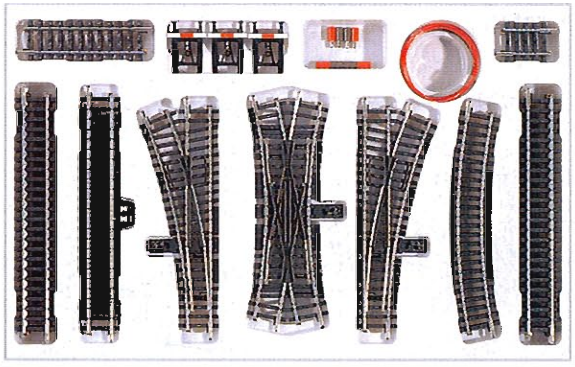
With this extension set a K Track starter set can be expanded to include a long passing siding or spur tracks with curved turnouts. Has limited uses with the 29865 K Track starter set.
Contents: 6 no. 2200 straight track, 2 no. 2203 straight track, 2 no. 2208 straight track, 2 no. 2221 curved track, 6 no. 2231 curved track, 1 pair curved turnouts the same as 2267 but with hand levers, 1 no. 2290 feeder track, instructions.



2218
I Extension Set.

With this extension set a K Track starter set can be expanded to include spur tracks with a pair of turnouts and a double slip turnout.

Contents: 8 no. 2200 straight track, 2 no. 2201 straight track, 2 no. 2207 straight track, 2 no. 2208 straight track, 2 no. 2232 curved track, 1 pair no. 2264 turnouts with hand levers, 1 double slip switch, the same as 2260 but with hand lever, 1 no. 2290 feeder track, 3 no. 7391 track bumpers, instructions.



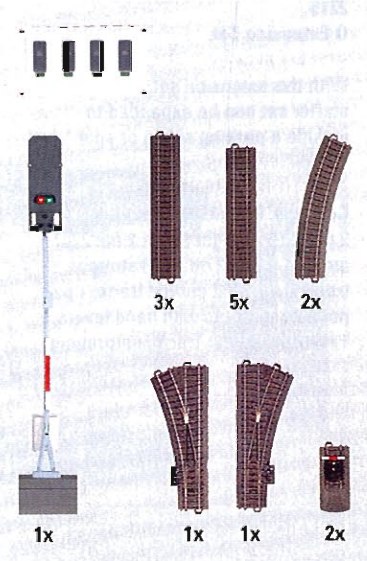
Theme Extension Sets.

78030
"Station" Theme Extension Set.

The station extension set for starter sets.
2 exclusive building kits.
Includes block signal and control box.

For expanding the C Track starter sets or an existing C Track layout.

Contents: Building kit of a station, building kit of a railroad track walker's house, automobile.
3 sections of 24188 straight track,
5 sections of 24172 straight track,
2 sections of 24224 curved track,
1 no. 24611 turnout, 1 no. 24612 turnout, 2 no. 24977 track bumper.
1 no. 72750 control box, 1 no. 74391 block signal, 1 no. 74920 railroad grade crossing, feeder wire set and instructions for setup.

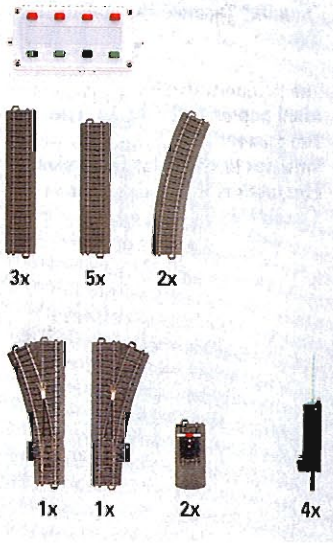


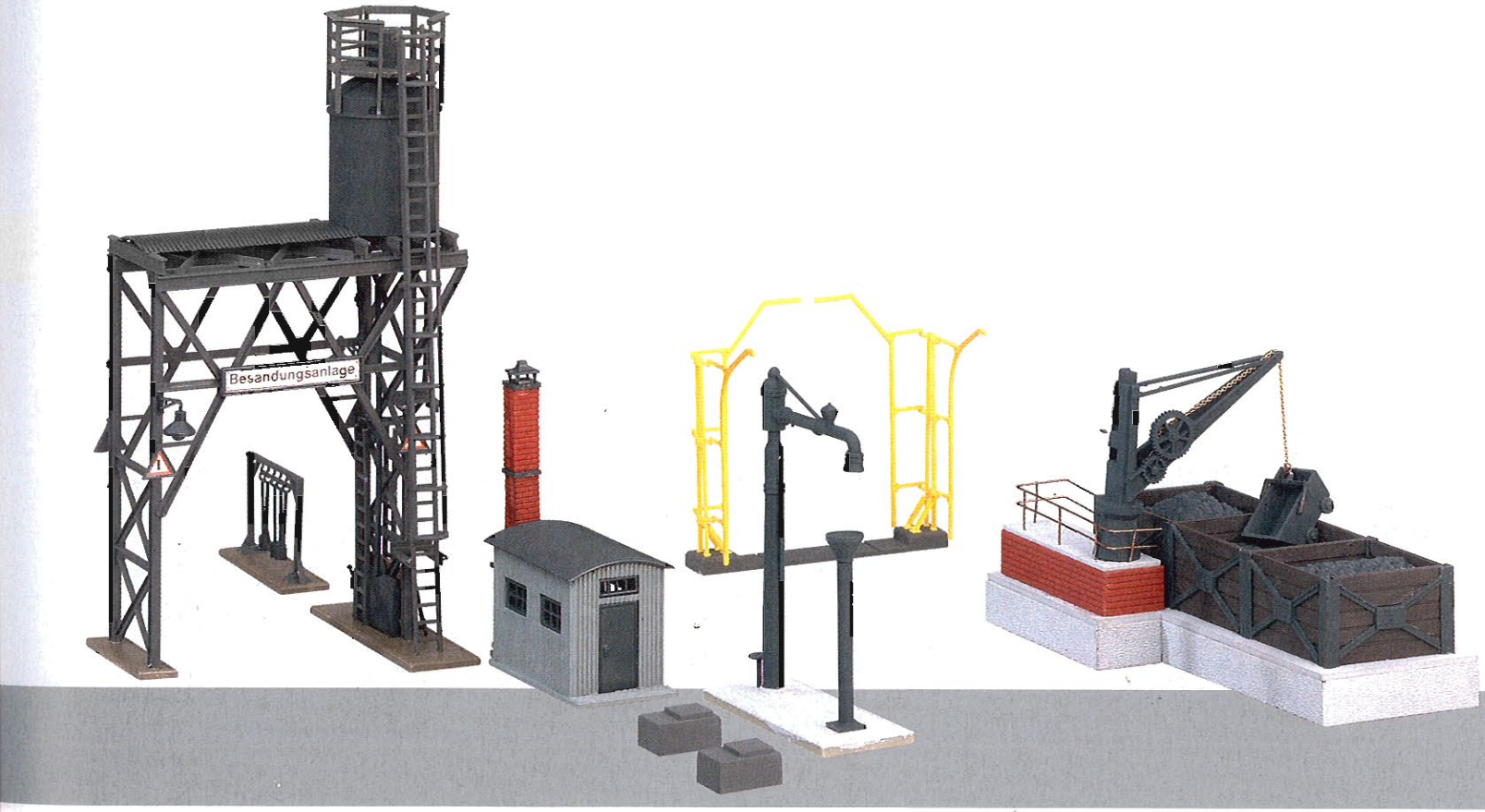
78010
"Railroad Maintenance Facility"
Theme Extension Set.

A start for your own railroad maintenance facility.
Includes turnout mechanisms and control box.
4 exclusive kits.

For expanding the C Track starter sets or an existing C Track layout, includes 2 additional turnout mechanisms for the C Track layout to be expanded.

Contents: Building kit of a sanding tower, building kit of a small coaling station, building kit of a loading gauge, building kit of a water standpipe. 3 sections of 24188 straight track, 5 sections of 24172 straight track, 2 sections of 24224 curved track, 1 no. 24611 turnout, 1 no. 24612 turnout, 2 no. 24977 track bumper, 4 no. 74490 turnout mechanisms. 1 no. 72720 control box, 8 plugs, feeder wire set and instructions for setup.





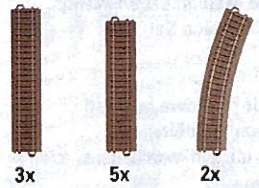
Theme Extension Sets.

78000
"Fire Department" Theme Extension Set.

Ideal add-on to the theme "Fire Department".
Vehicles in an exclusive version.
Fire truck with blinking light.
1 exclusive building kit.

For expanding the C Track starter sets or an existing C Track layout.

Contents: Building kit of a village fire department, fire department ladder truck with double flashing blue lights, wheel loader in fire department colors, set of figures. 3 sections of 24188 straight track, 5 sections of 24172 straight track, 2 sections of 24224 curved track, 1 no. 24611 turnout, 1 no. 24612 turnout. Feeder wire set and instructions for setup.

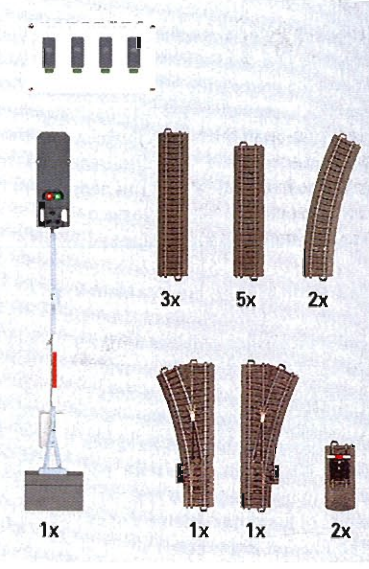


78020
"Sawmill" Theme Extension Set.

Lumber processing on your model railroad layout.
1 exclusive building kit.
Includes block signal and control box.

For expanding the C Track starter sets or an existing C Track layout.

Contents: Building kit of a sawmill, truck with loading crane. 3 sections of 24188 straight track, 5 sections of 24172 straight track, 2 sections of 24224 curved track, 1 no. 24611 turnout, 1 no. 24612 turnout, 2 no. 24977 track bumper. 1 no. 72750 control box, 1 no. 74391 block signal, feeder wire set and instructions for setup.



Locomotives.

Although it has been almost 30 years that the German Railroad stopped smoking, the attraction of the black, stomping and hissing monsters continues. Even those born later, who did not experience a planned operation with fire and water, are bright-eyed when a special steaming train passes.

At a scale of 1 : 87, the fascination remains with the steam locomotive and intermeshes with the Märklin myth. Irregardless, if the newly constructed delicate T 3 places the current versions of the Württemberger K or the Bavarian Gt 2 x 4/4 in front of the train, one will always imagine to feel the scent of burnt coal in one's nose. The illusion is perfect, if an operating sound electronic system operates in the digitally controlled machine, as in the standard locomotives of classes 03 or 41, and if a smoke generator is installed in the smokestack.

Anyone interested in modern railroads, for example, will give his attention to "Hercules". Railroad aficionados know the Austrian class 2016, a diesel locomotive by Siemens, under this affectionate term.

Class 290, a proven powerful shunting locomotive, is at home on German tracks. Both locomotives are extremely economical to operate and put their stamp on the railroad operation of the present, even if the sporty electrical train classes of the "Taurus" generation dominate in main-line service. The hobby model train continues to be exciting with models by Märklin, both with steam horses as well as with electrical and diesel traction units.


211
2494

Steam Locomotives.

3087
Tank Locomotive.

Prototype: Provincial railroad design.
Model: Comes with a reverse unit. 1 axle powered. 1 traction tire. Coupler hooks. Length over buffers 10.8 cm / 4-1/4".

In earlier times tank locomotives were indispensable for switching or transfer work on short routes. The concept was built on the ability to turn the locomotive, universal applicability and low maintenance and repair costs. In addition, they were supposed to use little energy and be usable on branch lines with low axle load limits.

37135
Tank Locomotive.

New 5-pole motor.
First time for this locomotive type in a digital version.

One-time series.

Prototype: Royal Bavarian State Railroad (K.Bay.Sts.B.) class D XII branch line locomotive. Later, the class 73.
Model: Locomotive comes with a digital decoder and a controlled special motor. 2 axles powered.

Headlights will work in conventional operation and can be controlled digitally. Acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Many separately applied details. Length over the buffers 13.8 cm / 5-7/16".

36861
Tank Locomotive.

Prototype: "Glaskasten", Royal Bavarian State Railroad (K.Bay.Sts.B.) class PtL 2/2.
Model: Comes with a digital decoder. 2 axles powered. 1 traction tire. Metal inner boiler. Numerous separately applied hand rails and grab irons. Finely detailed reproduction of the boiler appliances and the decorative striping. Headlights will work in conventional operation and can be controlled digitally. Length over buffers 8.0 cm / 3-1/8".

The legendary PtL 2/2 branch line locomotives were far better known by the name "Glaskasten" ("Glass Box") than by their exact railroad technical designation. The nickname came from the special design of the engineer's cab around the boiler. The semi-automatic coal firing for these locomotives made them suitable for one-man operation. This feature was the major factor in their being assigned for light branch line service.

Steam Locomotives.

37055
Steam Locomotive.

One-time series for the jubilee celebrating "200 years of the Kingdem of Württemberg".

Prototype: Freight locomotive class K of Royal Württemberg State Railways. Version in green paint scheme.

Model: With digital decoder, controlled propulsion, and sound effects generator. High-efficiency motor with bell-shaped armature in the boiler. Articulated frame to enable unit to negotiate sharp curves with side play for axles. 6 powered axles. 4 traction tires. Adjustable close coupling between the locomotive and tender. Detailed engineer's cabin, figures of locomotive engineer and fireman are included. Free standing lanterns with integrated LED's. Ready for installation of retrofitted 7226 smoke generator. Headlights and smoke generator will work in conventional operation and can be controlled digitally. Steam locomotive running sound effects, whistle signal as well as acceleration and braking delay, can be controlled digitally with Control Unit or systems. Additional sound effects functions can be controlled digitally with Systems. Brake hoses and prototype couplings can be installed on the buffer beam. Length over buffers 23.5 cm / 9-1/4". Packaged in a decorative wooden case.

Digital Functions	6020	6021	60652	60212
Headlights	x	x	x	x
Smoke generator contact	(x)	x	x	x
Steam locomotive sound effects		x	x	x
Whistle signal		x	x	x
Direct control		x	x	x
Coal shoveling sound effects			x	x
Air pump sound effects			x	x
Bell sound			x	x
Brake sound effects			x	x
Injector sound effects				x
Steam discharge sound effects				x
Sliding superstructure sound effects				x

With the notorious Geislinger slope and the connection Bretten – Ulm, the Royal Württemberg State Railways had two routes with steep inclines. They demanded everything locomotives had to give. As train loads continuously increased in the early years of the 20th century, the State Railways required stronger and stronger locomotives that could not have axle loads in excess of 16 t. Consequently in 1917, developers ventured the step to the six-coupled class K. In order to ensure good ride qualities in curves, the first and sixth axles offered lateral shift. Maschinenfabrik Esslingen weakened the wheel flange by 15 mm / 19/32" on the third and fourth coupled axles. The two outer cylinders worked on the fourth coupled wheel set, the two inner cylinders worked on the third wheel set. Trial runs demonstrated that the locomotives offered unusually good performance on the mountain. On level ground however they were overpowered, and consequently they were not economical. Their service life was spent true to their home routes in Württemberg. In the Second World War, some locomotives reached Austria, Hungary, and Yugoslavia. In 1953, the German Federal Railway took the last K (from 1925 on designated as class 59.0) out of service. In Austria the locomotives were underway until 1957 as class 659.

N mfx NEM I

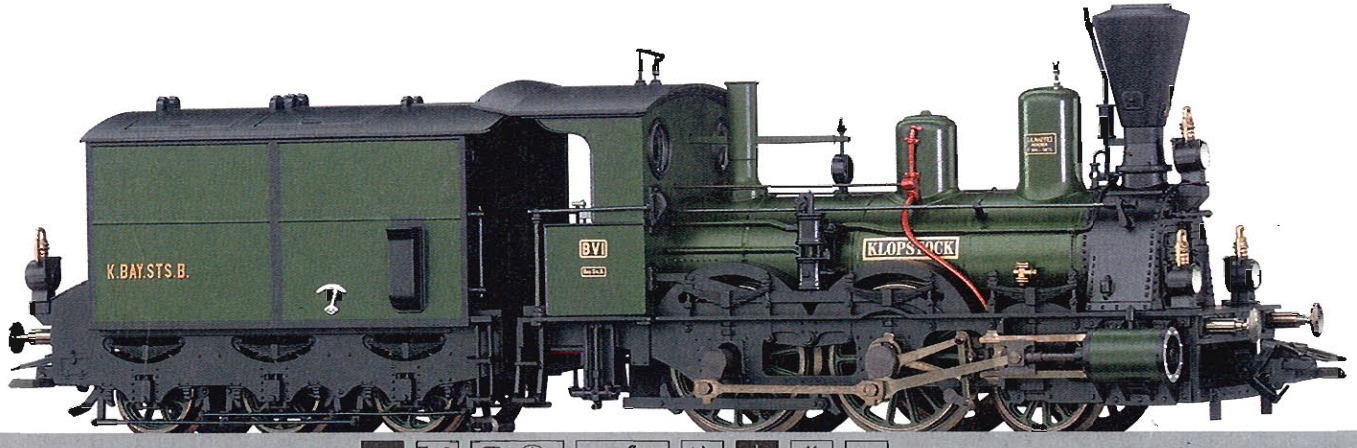
37974
Steam Locomotive with Tender.

One-time series for the jubilee celebrating "200 years of the Kingdom of Bevaria".

A suitable peat supply car item no. 45094 can be used as additional tender.

Prototype: Royal Bavarian State Railroad (K.Bay.Sts.B.) old-time locomotive class B VI. Version for peat firing. "Klopstock" name plate.
Model: With digital decoder, controlled high-efficiency propulsion, and multi-function sound effects generator. High-performance generator with bell-shaped armature in the locomotive's tank. 2 powered axles, 2 traction tires. Detailed running gear with exterior frame and Stephenson valve gear. Headlights will work in conventional operation and can be digitally controlled. Speed-dependent steam locomotive running sound effects, whistle signal as well as acceleration and braking delay, can be controlled digitally with Control Unit or systems. Additional sound effects can be controlled digitally with Systems. Tender with raised body and movable hatches. Close coupling between locomotive and tender. Brake hoses and prototype couplings can be installed on the buffer beam. Length over buffers 16.3 cm / 6-13/32". Packaged in a decorative wooden box.

Digital Functions	6020	6021	60652	60212
Headlights	x	x	x	x
(f1 not assigned)				
Steam locomotive sound effects		x	x	x
Whistle signal 1		x	x	x
Direct control		x	x	x
Shoveling coal sound effect			x	x
Air pump sound effect			x	x
Whistle signal 2			x	x
Braking sound effect			x	x
Injector sound effect				x
Steam discharge sound effect				x
Sliding superstructure sound effect				x



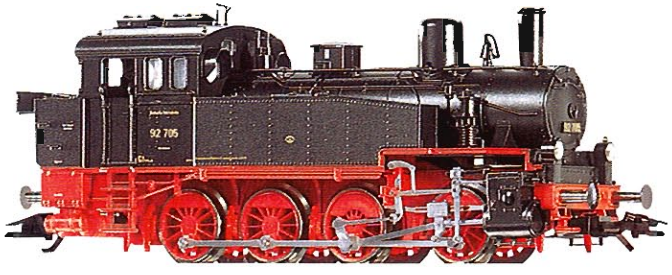
N mfx I

Between 1863 and 1871 Maffei supplied Bavarian State Railways with 107 B-coupled locomotives with a front axle. Technically the B VI was only slightly different than its predecessor class, the B V. The coupled wheel diameter increased from 1462 mm / 57-1/2" to 1616 mm / 63-3/4", and service weight increased to 31 t. Like its predecessor, the B VI could be heated with coal as well as with peat. After installation of the replacement boiler, permissible steam pressure increased from 8 to 10 bar. In scheduled service the B VI primarily hauled passenger trains. It was soon displaced by faster locomotives in lower service levels. Decommissioning started in 1895, which continued into the 1920s. Two machines that were active in construction service made it into the provisional numbering system of the German State Railway as 34 7461 and 7362, and were decommissioned shortly after the new numbering system went into effect in 1925. One locomotive, the 316, made railroad history. Christened "Tristan" the locomotive hauled the court train of Ludwig II, when his majesty traveled.

Steam Locomotives.

34132
Tank Locomotive.

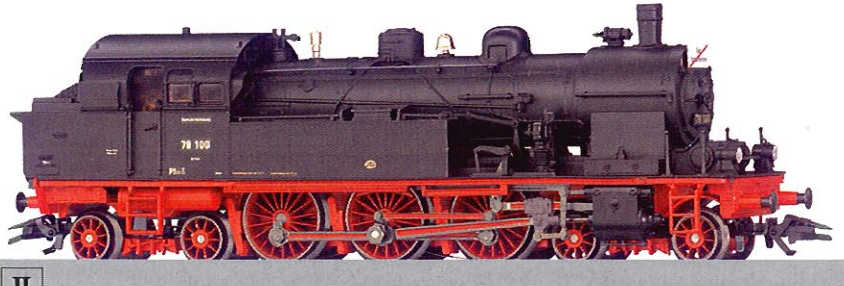
Prototype: Former German State Railroad Company (DRG) class 92, formerly Prussian class T 13.
Model: Comes with a miniaturized Delta electronic circuit. Special motor with flywheel. 4 axles powered. 2 traction tires. Rigid frame, running gear with side play for axles. Length over buffers 12.8 cm / 5-1/6".

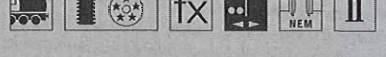


37073
Tank Locomotive.

Prototype: German State Railroad Company (DRG) class 78. Version for "Ruhr Express Service".
Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. 3 axles powered. 2 traction tires. Many separately applied details. Separately applied signboard on the smoke box. Headlights will work in conventional operation and can be controlled digitally. **Acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 16.9 cm / 6-5/8".

The increase in the population in the Ruhr and Saal areas led to a demand for fast connections between cities as early as the provincial railroad period. Different studies were commissioned and carried out. The actual break-through did not occur until 1932 when the "Ruhr Express Service" was placed into service with a total of 32 trains between Essen and Dortmund. The train routes were continuously expanded and extended to Cologne, Mönchen-gladbach and Wuppertal-Vohwinkel. In addition to different powered rail cars, the 4-axle "English design" compartment cars turned out particularly well in this service. The attractive paint scheme became a trademark symbol for this regularly scheduled express passenger service. The dense sequence of stations, most of them only a 30 to 60 second stop, demanded locomotives that could accelerate quickly. The class 78 met this equirement as if it were child's play. The additional sign mounted on the smoke box was another indication of the special use for these units.





37540
Steam Locomotive with Tender.

Prototype: German State Railroad Company (DRG) class 55 general purpose locomotive. Former Prussian G 8.1
Model: With digital decoder, controlled high-efficiency propulsion, and sound effects generator with many functions. High efficiency motor with bell-shaped armature and fly-wheel in the boiler. 4 powered driving axles. 2 traction tires. Headlights will work in conventional operation, can be digitally controlled. 72270 smoke generator can be retrofitted. Smoke generator, speed-dependent steam locomotive sound effects, whistle signal, as well as acceleration and braking delay can be digitally controlled with the 6021 Control Unit. **Additional operating sound effects can be digitally controlled with the 60652 Mobile Station and with the 60212 Central Station.** Engineer's cab with interior details. Permanent drawbar between locomotive and tender. Many separately applied details. Length over buffers 21.0 cm / 8-9/32".

Digital Functions	6020	6021	60652	60212
Two headlights	x	x	x	x
Smoke generator contact	(x)	x	x	x
Steam locomotive sound effects		x	x	x
Locomotive whistle (long)		x	x	x
Direct control		x	x	x
Switching whistle (short)			x	x
Bell			x	x
Air pump			x	x
Steam discharge			x	x

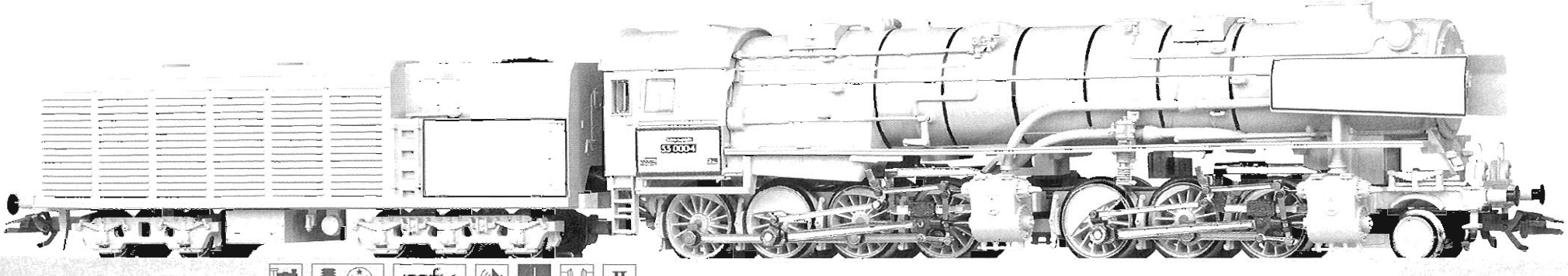
Steam Locomotives.

37022
Steam Locomotive with Tender.

One-time series.

Prototype: German State Railroad company (DRG) intended as class 53.0 heavy freight locomotive with tender, based on a 1943 design from Borsig. Long-distance version with large condensation tender. Photo gray paint scheme.
Model: With digital decoder, controlled high-efficiency propulsion, mechanism for cooling fans in the tender, and sound effects generator with many functions. 4 powered axles. 4 traction tires. 2 Märklin 7226 smoke generators can be retrofitted. Headlight, smoke generator contact and fan cooler wheels in conventional operation. These functions, speed-dependent steam locomotive sound effects, as well as acceleration and braking delay can be digitally controlled with the 6021 Control Unit. **Additional operating sound effects can be digitally controlled with the 60652 Mobile Station and with the 60212 Central Station.** Locomotive and tender with NEM coupler pockets. Distance between locomotive and tender can be adjusted. Length over buffers 35 5 cm / 13-31/32".

Digital Functions	6020	6021	60652	60212
Triple white headlights	x	x	x	x
Smoke generator contact	(x)	x	x	x
Mechanism for cooling fans	(x)	x	x	x
Steam locomotive sound effects		x	x	x
Direct control		x	x	x
Locomotive whistles (long)			x	x
Cooler sound effect			x	x
Air pump			x	x
Injector			x	x
Squealing brakes				x
Switching whistle (short)				x
Steam discharge				x
Coal supply				x
Rocker gate				x



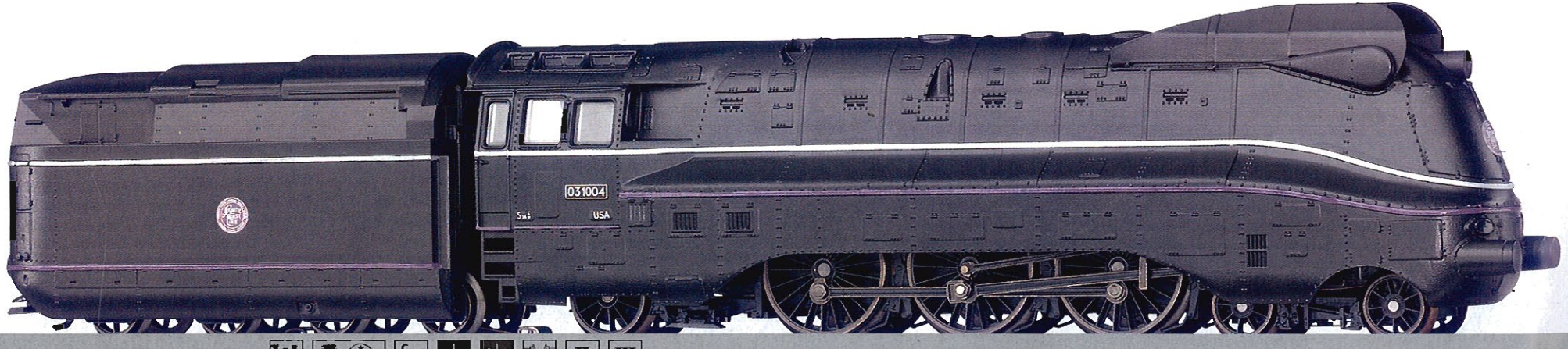
37914
Steam Locomotive with Tender.

Locomotive has metal constructien. Large additional long distance headlight.

Prototype: Class 03.10 express locomotive with streamlining. Version for the use of the United States Transportation Corps (USTC) in Germany. Paint and lettering derived from the locomotives of the Atlantic Coast Line Railroad.

Model: Locomotive comes with a digital decoder and high-efficiency propulsion. 3 axles powered. 2 traction tires. Headlights will work in conventional operation and can be controlled digitally. **Additional front headlight (high beam) as well as acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Authentic lettering. Length over buffers 27.4 cm / 10-13/16".

Right after World War II, American soldiers were involved in the reconstruction of the German infrastructure. The United States Transportation Corps (USTC) first had to set up arrangements for the transportation needs of the military administration. A company of railroad specialists handled the overhauling of large steam locomotives at the Henschel plant in Kassel. These soldiers were already railroaders heart and soul back home. Apparently, their superiors shared this passion, and hence one of the "new" class 03.10 express locomotives was painted in the design of an American railroad, Atlantic Coast Line. The typical high beam headlight was installed and the purple emblem of the ACL was applied on the locomotive. During the occupation period, the service trains of the USTC thus provided the impression of the great name trains along the east coast of the USA.



Insider Model for 2004.

37050
Steam Locomotive
with Tender.

Completely new tooling.
Metal boiler, streamlined fairing, and tender body.
Tender cover can be opened.
Steam locomotive sound effects and whistle.

The 37050 locomotive is being produced in a one-time series only for Insider members.

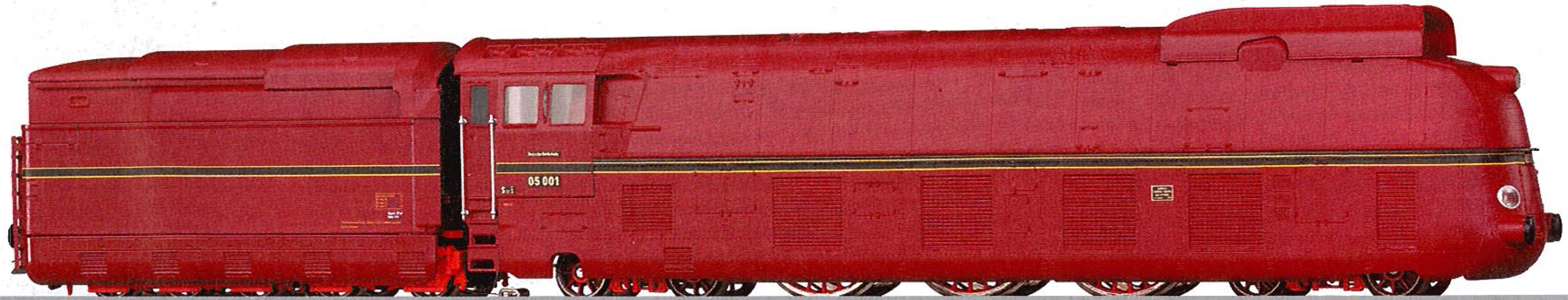
Prototype: German State Railroad Company (DRG) class 05 express locomotive. Version with full streamlined fairing.
Model: Locomotive comes with a digital decoder, controlled propulsion, and a sound effects generator. High-efficiency motor with bell-shaped armature, in the firebox. 3 axles powered. 2 traction tires. Closed side streamlined fairing without additional cutouts. This locomotive can negotiate curves with a minimum radius of 360 mm / 14-3/16". Headlights are maintenance-free LED's. Headlights will work in conventional operation and can be controlled digitally. Locomotive can be retrofitted with the 7226 smoke generator. Smoke generator contact, steam locomotive sound effects synchronized with the driving wheels, locomotive whistle as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Tender is made of metal. Permanent close coupling between the locomotive and tender. The decoder is accessible under the hatches on the tender that can be opened. Length over the buffers 30.7 cm / 12-1/16".

The World Record Steam Locomotive.

The DRG covered only a small, exclusive market segment for long distance passenger service with the express passenger service provided by the diesel powered rail car trains. Locomotive-hauled trains continued to form the backbone of passenger service. They offered far more capacity, more room, comfort, and service, for example: dining and sleeping cars. And yet more speed was required for these trains too. The locomotive builders developed suggestions for a steam locomotive that was intended have a speed of 175 km/h or 109 mph. The DRG decided on a three-cylinder locomotive with a 4-6-4 wheel arrangement and with coal firing. Its dimensions were immense: The driving wheels had a diameter of 2.30 meters or 90-9/16 inches, the boiler tubes were 7 meters or 275-9/16 inches long, and the power output reached 2,360 pounds per square inch.

Between Hamburg and Berlin the 05 002 surpassed the world speed record for steam locomotives with 200.4 km/h or 125.25 mph in a test run on May 11, 1936, record that still stands today. The fact that t his value was never surpassed proves the limits of this technology. The immense moving masses of cylinders, drive rods and side rods did not permit higher speeds. The fireman was hard pressed to keep the boiler steamed up.

The two units built in 1935 have a very futuristic look with their red streamlining. As a status symbol of the DRG, they were used in express passenger service and bore for a while the Olympic rings.



NEM II


05 001

05 001

05 001

Steam Locomotives.

30000
Steam Locomotive.

Prototype: German Federal Railroad (DB) class 89.0. Standard design locomotive.

Model: Comes with a Delta electronic circuit. 3 axles powered. 2 traction tires. Coupler hooks can be replaced by other couplers. Length over buffers 11.0 cm / 4-5/16".

30951
Tank Locomotive.

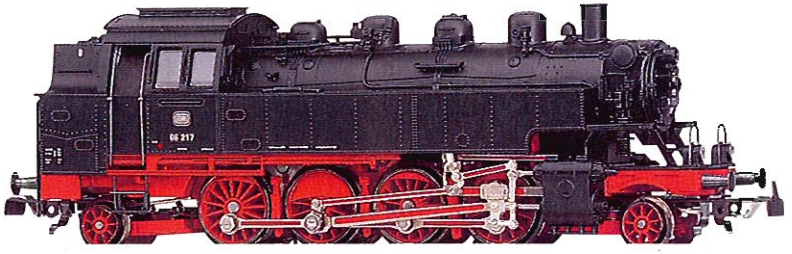
Prototype: German Federal Railroad (DB) class 74. Former Prussian T 12. **Model:** Locomotive comes with a Delta electronic circuit. 3 axles powered. Locomotive comes with traction tires. Coupler hook on the front with advance uncoupler tab, Relex coupler on the back. Length over buffers 13.5 cm / 5-5/16".

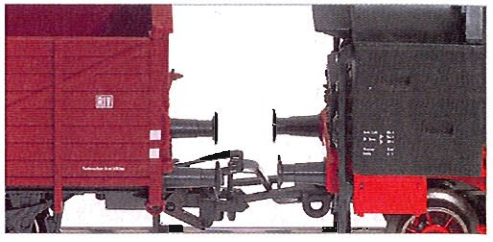
30322
Tank Locomotive.

Prototype: German Federal Railroad (DB) class 81 heavy switch engine. **Model:** Locomotive comes with a Delta electronic circuit. 4 axles powered. 2 traction tires. Coupler hooks with pre-uncoupler. Length over the buffers 12.8 cm / 5-1/16".

33961
Tank Locomotive.

Prototype: German Federal Railroad (DB) class 86.
Model: Locomotive comes with a Delta electronic circuit. 4 powered axles. 2 traction tires. Telex couplers for uncoupling cars by remote control anywhere on a layout. Length over buffers 15.8 cm / 6-7/32".





Telex couplers for remote-controlled uncoupling.

37133
Steam Locomotive with Heating Chimney.

Prototype: German Federal Railroad (DB) class 75 tender locomotive, shunted as steam donor. Drive-capable locomotive for use under a stationary heating chimney.
Model: Comes with a digital decoder and controlled high-efficiency propulsion. 3 powered axles. 2 traction tires. Headlights will work in conventional operation, can be digitally controlled. The acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Length over buffers 13.9 cm / 5-15/32".

Heating chimney in a lattice girder bridge for installation over the track. Completely assembled, detailed metal model. Height 140 mm / 5-1/2". Passage app. 60 mm / 2-3/8".

Steam Locomotives.

37140
Tank Locomotive.

Prototype: German Federal Railroad (DB) class 89.70-75 tank locomotive. Former Prussian branch line T 3 locomotive.
Model: Locomotive comes with a digital decoder and controlled propulsion. Miniature motor is in the boiler. 3 powered axles. 2 traction tires. Detailed running gear with representation of the Allan valve gear. Headlights will work in conventional operation and can be digitally controlled. The acceleration and braking delay can be controlled digitally with Control Unit or Systems. Engineer's cab with clear view. Many separately applied details. Length over buffers 9.9 cm / 3-29/32".

In 1882, Henschel delivered the first example of a triple coupled saturated steam locomotive for secondary line service. The T 3 was impressive, it was service-friendly, robust, and versatile. The jurors at the Chicago World's Fair in 1893 were also convinced. They awarded a prize to the 11 year old design. Even 13 years later, the manufacturers still dared to exhibit the T 3. In Milan, Hanomag presented the last locomotive, fitted with a Lentz poppet valve distribution, as an experiment. The exhibition efforts paid off for the companies involved. Same design locomotives went to China, France, Greece, and Italy. The German State Railway gave it the class designation 89.70.
In Germany, in addition to the Prussian State Railways, numerous private railroads purchased the T 3. Starting in 1891, the Royal Württemberg State Railways also entered the circle of T-3 operators. The first units were produced by Krauss, in neighboring Bavaria. Thereafter all locomotives came from Württemberg factories, the Maschinenbau-Gesellschaft Heilbronn, and Machinenfabrik Esslingen. The drive gear of the Württemberg locomotives was more powerfully designed, the wheel diameter somewhat smaller. Instead of the Allan valve gear, outside mount, they were fitted with a Heusinger valve gear. They were in service for the German State Railroad as class 89.3.
Several units of both classes were employed by the State Railways of both states after 1945. Finally, the 89 7296 and 7377 rolled onto the German Federal Railroad's holding siding in 1961.

N mfx NEM III


897314

Steam Locomotives.

30033
Passenger Locomotive with Tender.

Prototype: German Federal Railroad (DB) class 24. Locomotive comes with Wagner smoke deflectors. Nickname: "Steppenpferd" or "Prairie Pony".

Model: Locomotive comes with a Delta electronic circuit. 3 axles powered. Locomotive comes with traction tires. Coupler hook on the front, Relex coupler on the tender. Length over buffers 20.0 cm / 7-7/8".

III

37550
Steam Locomotive with Tender.

Prototype: German Federal Railroad (DB) class 55 freight locomotive. Formerly Prussian G8.1.
Model: Locomotive comes with a digital decoder and controlled propulsion. High efficiency motor with bell-shaped armature and flywheel in the boiler. 4 powered axles. 2 traction tires. Headlights can be digitally controlled. 72270 smoke generator can be retrofitted. Engineer's cab with interior details. Permanent drawbar between locomotive and tender. Many separately applied details. Length over buffers 21.0 cm / 8-9/32".

NEM III

The class G 8.1 Prussian freight steam locomotive was a further development of the G 8. The first locomotives were delivered in 1913. While something over 1,000 units of the G 8 were built, the G 8.1 was a success like no other locomotive before it. A total of 4,934 locomotives were delivered to the Prussian Railroad Administration (KPEV) and to the German State Railroad Company (DRG). Ten units went to the Mecklenburg Friedirich Franz Railroad (MFF) and 137 units to the Alsace-Lorraine Imperial Railways.

By 1922 Linke-Hofmann had delivered 50 locomotives to the Polish State Railroad. In addition, other locomotives of this class went into the export market, among others, to the Baghdad Railroad, to Lithuania, and to Rumania. The class G 8.1 was an essential part of the German State Railroad's motive power. Even after 1945 there were still over 1,000 locomotives of this class on the roster in both parts of Germany. The locomotive with the remarkable road number 55 5555 was built as the Prussian "Magdeburg 5242" by Orenstein & Koppel and was in service until 1961 on the DB.

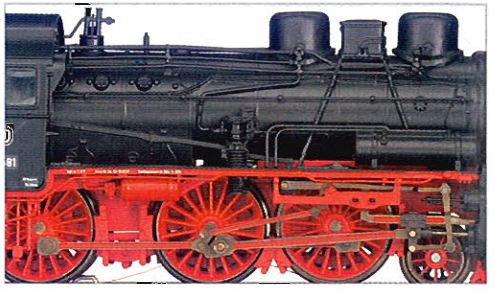
37030
Steam Locomotive with Tender.

Metal frame, boiler, and tender.
High-efficiency motor with bell-shaped armature.
Complete drive gear in the locomotive boiler.
Tender with trucks and with open underbody.
Many separately applied details.

Prototype: German Federal Railroad (DB) class 38^{10-40} passenger locomotive. Former Prussian P8. Version with 3 domes, small Witte smoke deflectors and box-style tender.
Model: Locomotive comes with a digital decoder and controlled propulsion. High-efficiency motor with bell-shaped armature and flywheel in the boiler. 3 axles powered. 2 traction tires. Headlights will work in conventional operation and can be controlled digitally. Locomotive can be retrofitted with 72270 smoke generator. **Smoke generator contact as well as acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Engineer's cab has interior details. Permanent close coupling between locomotive and tender. Figures of a locomotive engineer and fireman included. Length over buffers 21.8 cm / 8-9/16".

"The beautiful P8 as a Märklin model" was a new item in 1967 in the Märklin catalog. This was a top of the line model then and is now in the HOBBY program where it enjoys ongoing demand. The demands of today's model railroaders and the possibilities available with today's metal technology require once again development of new tooling that will pay justice to the esthetics and the importance of this locomotive. Scale dimensions, fine detailing, and modern precision technology exemplify this new item. Only the miniature crew remains from the earlier Märklin model.

For over 100 years the Prussian P8 has been considered by railroad enthusiasts in Germany and Europe to be one of the most beautiful steam locomotives built. From 1906 to 1928 over 3,800 of these locomotives were built for the Royal Prussian Railroad Administration (KPEV), for other German provincial railroads, for foreign railroads, and even for the German State Railroad Company (DRG). Over 300 units were still in use in Germany after 1945 and the last of them were used into the 1970s in regional service. At present there about 20 survivors of this group in operational condition spread out over all of Europe.

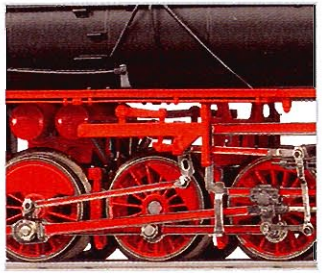


Steam Locomotives.

37884
Freight Locomotive with Tender.

Prototype: German Federal Railroad (DB) class 44. Early version without smoke deflectors, with front skirting and two headlights.
Model: Locomotive comes with a digital decoder and controlled high efficiency propulsion. 5 axles powered. 4 traction tires. Articulated frame to allow the locomotive to negotiate sharp curves. Headlights work in conventional operation and can be controlled digitally. Ready for installation of 7226 smoke generator. **Smoke generator contact as well as acceleration and braking delay are controlled digitally with the 6021 Control Unit.** Adjustable close coupling between the locomotive and tender. Length over buffers 26.0 cm/26.2 cm / 10-1/4"/10-5/16".

The classic work horse for heavy freight trains in the 50s and 60s was without a doubt the class 44. These legendary machines mastered the great flows of freight in the expanding economy of the so-called Economic Miracle period. This was the high point and the shining moment for the 2,000 hp, 185 metric ton heavy Jumbos, as the class 44 locomotives were affectionately called.



37889
Steam Locomotive with Tender.

Prototype: German Federal Railroad (DB) class 44 heavy freight locomotive. Version with Wagner smoke deflectors.
Model: Locomotive comes with digital decoder, controlled high-efficiency propulsion, Telex coupler on the tender and multi-function sound effects generator. 5 powered axles. 4 traction tires. Articulated frame allows the locomotive to negotiate sharp curves. 7226 smoke generator can be retrofitted. Headlights will work in conventional operation and can be digitally controlled. Smoke contact, telex couplers, speed-dependent steam locomotive sound effects, as well as acceleration and braking delay can be digitally controlled with the Control Unit. Additional sound effects can be controlled digitally with Systems. Adjustable close coupling between the locomotive and tender. Length over buffers 26.0/26.2 cm / 10-1/4"/10-5/16".

Digital Functions	6020	6021	60652	60212
Headlights	x	x	x	x
Smoke generator contact	(x)	x	x	x
Telex couplers		x	x	x
Steam locomotive sound effects		x	x	x
Direct control		x	x	x
Whistle signal – long			x	x
Air pump sound effects			x	x
Whistle signal – short			x	x
Brake sound effects			x	x
Steam discharge sound effects				x
Coal shoveling sound effects				x
Sliding superstructure sound effects				x

39161
Steam Locomotive with Tender.

One-time series.

Prototype: German Federal Railroad (DB) class 42.90 freight locomotive Franco-Costi. Version with Wagner wind deflectors.
Model: With digital decoder, controlled high-efficiency propulsion system C-sine motor, lighted engineer's cab and running gear lights. 5 powered axles. 4 traction tires. Articulated frame. Lighting with maintenance-free LED. Headlights and engineer's cab lighting are conventional in operation, and they can be digitally controlled. Running gear lights, as well as acceleration and braking delay can be digitally controlled with Control Unit or Systems. Close coupling between locomotive and tender. Length over buffers 26.7 cm / 10-1/2".

A Franco Crosti tank is a conventional locomotive tank with a subsequent second tank. It heats feed water with the assistance of passing smoke gases. This second tank is therefore called emission pre-heater. The Italian designers Franco and Crosti already built their first test machines with this technology during the thirties. The savings in coal were approximately 20% with the improved efficiency.

The German Federal Railroad took advantage of this idea for this reason and contracted Henschel to build two locomotives of class 42.90. The emission pre-heater is below the cylindrical shell in these machines. The flat operating smokestacks project from both sides of the tank, which results in a pretty striking appearance. The standard smokestack no longer serves to discharge the smoke gases during operation, but is only required for heating. Relatively high operating cost resulted despite the increased efficiency, since the pre-heating tanks were easily subject to corrosion.

N fx NEM III

Steam Locomotives.

37921
Steam Locomotive with Tender.

Prototype: German Federal Railroad (DB) class 41 fast freight locomotive. Standerd design locomotive with welded tender and Witte smoke deflectors.
Model: Locomotive comes with digital decoder, controlled high-efficiency propulsion, Telex coupler on the tender and multi-function sound effects generator. 4 powered axles. 2 traction tires. 7226 smoke generator can be retrofitted. Headlights will work in conventional operation and can be digitally controlled. Smoke contact, telex couplers, speed-dependent steam locomotive seund effects, as well as acceleration and braking delay can be digitally controlled with the 6021 Control Unit. **Additional operating sound effects can be digitally controlled with the 60652 Mobile Station and with the 60212 Central Station.** Length over buffers 27.5 cm / 10-13/16".

Digital Functions	**6020**	**6021**	**60652**	**60212**
Triple white headlights	x	x	x	x
Smoke generator contact	(x)	x	x	x
Telex coupler		x	x	x
Steam locomotive sound effects		x	x	x
Direct control		x	x	x
Locomotive whistle (long)			x	x
Air pump			x	x
Switching whistle (short)			x	x
Squealing brakes			x	x
Steam discharge				x
Shoveling coal				x
Rocker gate				x

mfx NEM III

37953
Steam Locomotive
with Tender.

Prototype: German Federal Railroad (DB) class 03 express locomotive. Standard design locomotive with welded tender and Witte smoke deflectors.
Model: Locomotive comes with digital decoder, controlled high-efficiency propulsion, Telex coupler on the tender and multi-function sound effects generator. 3 powered axles. 2 traction tires. 7226 smoke generator can be retrofitted. Headlights will work in conventional operation and can be digitally controlled. Smoke contact, telex couplers, speed-dependent steam locomotive sound effects, as well as acceleration and braking delay can be digitally controlled with the 6021 Control Unit. **Running gear lights and additional operating sound effects can be digitally controlled with the 60652 Mobile Station and with the 60212 Central Station.**
Length over buffers
27.7 cm / 10-29/32".

Digital Functions	6020	6021	60652	60212
Triple white headlights	x	x	x	x
Smoke generator contact	(x)	x	x	x
Telex coupler		x	x	x
Steam locomotive sound effects		x	x	x
Direct control		x	x	x
Locomotive whistle (long)			x	x
Air pump			x	x
Running gear lights			x	x
Squealing brakes			x	x
Switching whistle (short)				x
Steam discharge				x
Shoveling coal				x
Rocker gate				x

Steam Locomotives.

37952
Steam Locomotive with Tender.

Running gear lights that can be digitally controlled.

Prototype: German Federal Railroad (DB) class 03 express locomotive. Standard locomotive with Witte smoke deflectors and riveted tender. **Model:** With a digital decoder, controlled high-efficiency propulsion and running gear lights. 3 powered axles. 2 traction tires. 7226 smoke generator can be retrofitted. Headlights and smoke generator contact are conventional in operation, and can be digitally controlled. Running gear lights, as well as acceleration and braking delay with 6021 control unit, can be digitally controlled. Length over buffers 27.7 cm / 10-29/32".

39103
Express Locomotive with Tender.

Prototype: German Federal Railroad (DB) oil-fired class 01.10. **Model:** With digital decoder, high-efficiency propulsion system C-sine motor, running gear lights, and sound effects generator. 3 powered axles. 2 traction tires. Ready for installation of 7226 smoke generator. Headlights and smoke generator will work in conventional operation and can be controlled digitally. **Steam locomotive sound effects and running gear lights can be controlled digitally with the 6021 Control Unit.** Length over buffers 27.7 cm / 10-29/32".

The Super Pacific – an experience for the senses.

The 01 1053 express train locomotive was built in 1940 at Schwartzkopff in Wildau, in a series of 55 high-efficiency locomotives. The Super Pacific 01.10 represents a modification of the 01 series through an additional inner cylinder, a larger tender, cladding, and further tuning measures. All locomotives were used in the express train service of the DB where the heavy cladding was dismantled and a boiler with even better performance was implemented. At 2350 PS and a top speed of 140 km/h or 87 mph the machine was almost on a par with the new diesel locomotives. Our prototype locomotive had to move several times with the DB: It came to Osnabrück from Hannover, via Hildesheim, Paderborn, Offenburg, Kassel and Bebra. Finally, in 1967 it was assigned the computer number 011 053-2, and remained in service under this number for close to a year on the Emsland route to Norddeich.

39104
Steam Locomotive with Tender.

One-time series.

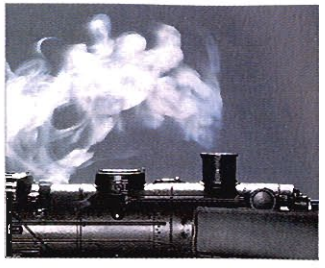
Prototype: German Federal Railroad (DB)class 01.10 express locomotive. Three-cylinder high-efficiency locomotive with coal firing, rebuild version with new style boiler.
Model: With digital decoder, high-efficiency propulsion system C-sine motor, running gear lights, and sound effects generator. 3 powered axles. 2 traction tires. 7226 smoke generator can be retrofitted.

Headlights and smoke generator contact are conventional in operation, and they can be digitally controlled. **Speed-dependent steam locomotive sound effects, running gear lights, as well as whistle signal can be digitally controlled with the 6021 Control Unit.** Boiler bands are set-off in color. Buffer plate warning stripes. Length over buffers 27.7 cm / 10 29/32".

Genuine Steam Locomotive Action.

The Märklin smoke generator kits 7226, 72270 (see page 393), as well as the Seuthe smoke generator kits nos. 11 and 24 bring genuine steam locomotive action to a model railroad layout. All of these smoke generators can be refilled with Märklin 02420 smoke fluid (see page 393).

Many Märklin steam locomotives come from the factory already equipped for installation of a smoke generator, which is quite easy to install: Simply insert the smoke generator into the smoke stack from the top or from underneath, put in some smoke fluid, and your locomotive is ready to belch smoke like the real thing. When the track current is turned on, the smoke fluid heats up and is expelled at short intervals as clouds of smoke. Your locomotive is now accompanied by an amazingly realistic stream of smoke.



Important:
On some locomotives a different smoke generator kit is used for conventional and for Delta/Digital operation. Please follow the instructions for the locomotive. The 7226 smoke generator is identical with the Seuthe no. 10, and the 72270 smoke generator is identical with the Seuthe no. 20.

Steam Locomotives.

37954
Steam Locomotive with Tender.

One-time series.

Prototype: German Federal Railroad (DB) class 03 express locomotive. Standard locomotive with welded tender and Witte smoke deflectors. Used during the 1972 Olympic Games.
Model: Locomotive comes with digital decoder, controlled high-efficiency propulsion, Telex couplers on tender and sound generator with many functions. 3 axles powered. 2 traction tires. Locomotive can be retrofitted with 7226 smoke generator. Headlights will work in conventional operation and can be controlled digitally. Smoke generator contact, Telex couplers, speed-related locomotive noise, as well as acceleration and braking delay can be controlled with the 6021 Control Unit. **Running gear lights and other operating noises can be digitally controlled with Mobile Station 60652 and Central Station 60212.** Boiler rings designed in color. Special lettering on tender. Length over buffers 27.7 cm / 10-29/32".

Digital functions	**6020**	**6021**	**60652**	**60212**
Triple white headlights shine	x	x	x	x
Smoke generator contact	(x)	x	x	x
Telex couplers		x	x	x
Steam locomotive sound		x	x	x
Direct controls		x	x	x
Locomotive whistle (long)			x	x
Air pump			x	x
Running gear lights			x	x
Squealing brakes			x	x
Switching whistle (short)				x
Let off steam				x
Shovel coal				x
Rocker gate				x

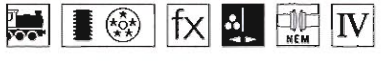
mfx NEM IV

37554
Freight Locomotive
with Tender.

Metal frame, boiler and tender. Motor and running gear in the locomotive.
Precision motor with bell-shaped armature and flywheel.
Special decoder with speed control.

Prototype: German Federal Railroad (DB) class 055. Former Prussian G 8.1 as it appeared in the 1970s.
Model: Comes with a digital decoder and controlled propulsion. High-efficency motor with bell-shaped armature and flywheel in the boiler. 4 axles powered. 2 traction tires. Headlights work in conventional operation and can be controlled digitally. Locomotive can be retrofitted with a 72270 smoke generator. **Smoke generator contact as well as acceleration and braking delay can be turned on and off with the 6021 Control Unit.** Engineer's cab with interior details. Permanent close coupling between the locomotive and tender. Many separately applied details. Length over buffers 21.0 cm / 8-1/4".

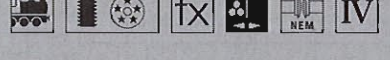
The indestructible class 55 experienced the changeover to Era IV in Germany with around 200 units still on the roster. The German Federal Railroad's (DB) approximately 50 units were reclassified with the computer number 055 until they were retired in 1973. Of the former Prussian armada, at one time 5,000 class G 8.1 locomotives, only 3 museum pieces still remain in in Bochum, Speyer and Darmstadt.

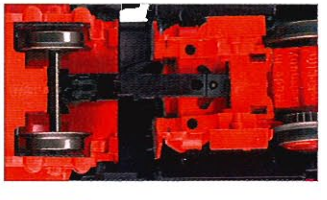


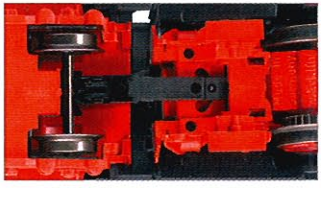
37841
Freight Locomotive
with Tender.

Digital: Telex coupler for remote control uncoupling from the train.

Prototype: German Federal Railroad (DB) class 051. Rebuilt version with a tender with a brakeman's cab as the locomotive appeared in the 1970s.
Model: Comes with a digital decoder, controlled high-efficiency propulsion and a Telex coupler on the tender. The motor for the locomotive is in the boiler. 5 axles powered. 4 traction tires. Driving wheels divided into two linked groups to enable the locomotive to negotiate sharp curves. Can be retrofitted with a 7226 smoke generator. Headlights work in conventional operation and can be controlled digitally. **Smoke generator contact, Telex coupler as well as acceleration and braking delay can be turned on and off with the 6021 Control Unit.** Adjustable close coupling between the locomotive and the tender. Many separately applied details. Length over buffers 26.3 cm / 10-3/8".







Adjustable close coupling between the locomotive and tender.

Steam Locomotives.

37558
Steam Locomotive with Tender.

The freight cars in the 47908 set go well with this locomotive.

Export model for Austria.

Prototype: Austrian Federal Railways (BBÖ/ÖBB) class 55. Former German class 55, Prussian class G 8.1 before that.
Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. High-efficiency motor with bell-shaped armature and flywheel, in the boiler. 4 axles powered. 2 traction tires. Headlights will work in conventional operation and can be controlled digitally. 72270 smoke generator can be retrofitted into the locomotive. **Smoke generator contact** as well as **acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Engineer's cab with interior details. Permanent close coupling between the locomotive and tender. Many separately applied details. Length over buffers 21.0 cm / 8-1/4".

37056
Steam Locomotive with Tender.

Prototype: early version of the 1950s.
Prototypical raised tender superstructure.
Goes well with the 48805 freight car set.

One-time series on the occasion of the anniversary "150 Years of the Semmering Railroad".

Export model for Austria.

Prototype: Austrian Federal Railways (BBÖ/ÖBB) class 659 heavy freight locomotive. Former German class 59, before that the Württemberg class K.
Model: Locomotive comes with a digital decoder and controlled propulsion. High-efficiency motor with a bell-shaped armature, built into the boiler. Rigid frame with side play for the axles, able to negotiate sharp curves. 6 coupled driving axles powered. 4 traction tires. Free-standing lanterns with integrated, maintenance-free LED's. Headlights will work in conventional operation and can be controlled digitally. Locomotive can be retrofitted with the 7226 smoke generator. Smoke generator contact as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Adjustable coupling between the locomotive and tender. The tender comes with a raised coal load. Detailed engineer's cab. Figures of a locomotive engineer and fireman included. Length over the buffers 23.5 cm / 9-1/4".

37157
Steam Locomotive with Tender.

Cars in set, item no. 47877, go well with this locomotive.

Export model for Belgium.

Prototype: Belgian State Railways (SNCB/NMBS) class 26. Former German class 52 with box-style tender and open engineer's cab.

Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. Motor in the locomotive's boiler. 5 axles powered. 4 traction tires. Driving wheels divided into two linked groups to enable the locomotive to negotiate sharp curves. Headlights will work in conventional operation and can be controlled digitally. 7226 smoke generator can be retrofitted into locomotive. **Smoke generator contact as well as acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 26.3 cm / 10-3/8".

Steam Locomotives.

37886
Steam Locomotive with Tender.

With new decoder and sound effects circuit.
Heavy freight locomotive with telex couplers.
Suitable freight cars 46752 and 48821.
Paint scheme with black boiler bands.

Export model for France.

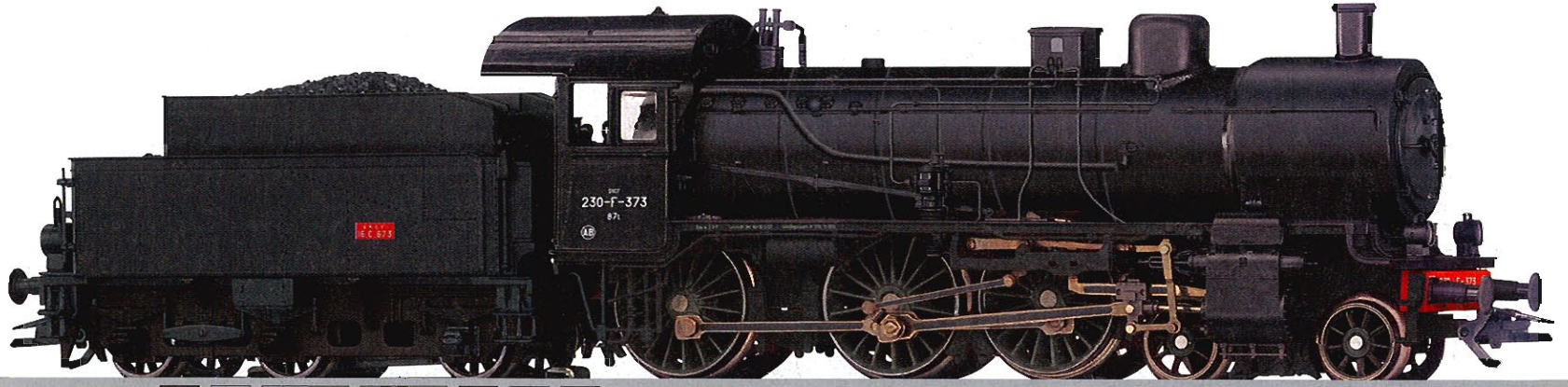
Prototype: French State Railways (SNCF) class 150 X heavy freight locomotive. Former German class 44.
Model: Locomotive comes with digital decoder, controlled high-efficiency propulsion, Telex coupler on the tender and multi-function sound effects generator. 5 powered axles. 4 traction tires. Articulated frame allows the locomotive to negotiate sharp curves. 7226 smoke generator can be retrofitted. Headlights will work in conventional operation and can be digitally controlled. Smoke contact, telex couplers, speed-dependent steam locomotive sound effects, as well as acceleration and braking delay can be digitally controlled with the 6021 Control Unit. **Additional operating sound effects can be digitally controlled with the 60652 Mobile Station and with the 60212 Central Station.** Adjustable close-coupling between the locomotive and tender. Length over buffers 26.0/26.2 cm / 10-1/4"/10-5/16".

Digital Functions	**6020**	**6021**	**60652**	**60212**
Double headlights	x	x	x	x
Smoke generator contact	(x)	x	x	x
Telex couplers		x	x	x
Steam locomotive sound effects		x	x	x
Direct control		x	x	x
Locomotive whistles (long)			x	x
Air pump			x	x
Injector			x	x
Squealing brakes			x	x
Switching whistle (short)				x
Steam discharge				x
Shoveling coal				x
Rocker gate				x

37036
Steam Locomotive.

Export model for France.

Prototype: French State Railways (SNCF) 230 F passenger train locomotive. Former German P 8. Tank with 2 domes without deflectors. Three-axle box-type tender.
Model: Comes with a digital decoder and controlled high-efficiency propulsion. High-efficiency motor with bell-shaped armature in the boiler. 3 powered axles. 2 traction tires. 72270 smoke generator can be retrofitted. Lighting with maintenance-free LEDs. Headlights and smoke generator contact are conventional in operation, and they can be digitally controlled. The acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Close coupling between locomotive and tender. Detailed driver's cab. Connecting brake hoses, prototype couplings and piston rod protective tubes. Length over buffers 21.0 cm / 8-9/32".



N mfx NEM III

Steam Locomotives.

37034
Steam Locomotive.

Export model for Italy.

Prototype: Passenger train locomotive group 675 of the Italian State Railroads (FS). Former German P 8. Tank with 2 domes without deflectors. Four-axle box-style tender.
Model: Comes with a digital decoder and controlled high-efficiency propulsion. High-efficiency motor with bell-shaped armature in the boiler. 3 powered axles. 2 traction tires. Lighting with maintenance-free LEDs. 72270 smoke generator can be retrofitted. Headlights and smoke generator contact are conventional in operation, and they can be digitally controlled. The acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Close coupling between locomotive and tender. Detailed driver's cab. Connecting brake hoses, prototype couplings and piston rod protective tubes. Length over buffers 21.8 cm / 8-19/32".

N mfx NEM II III

37559
Steam Locomotive with Tender.

Metal frame, boiler, and tender.
Can motor with bell-shaped armature and with flywheel.
Propulsion system built into the locomotive.
Special decoder with speed control.
Goes well with the freight cars in the 47878 and 47879 sets.

Export model for Italy.

Prototype: Italian State Railways (FS) class 460 freight locomotive. Former Prussian G 8.1.
Model: Locomotive comes with a digital decoder and controlled propulsion. High-efficiency motor with a bell-shaped armature, built into the boiler. 4 coupled driving axles powered. 2 traction tires. Headlights will work in conventional operation and can be controlled digitally. Locomotive can be retrofitted with the 72270 smoke generator. Smoke generator contact as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Engineer's cab has interior lighting.

Permanent close coupling between the locomotive and tender. Many separately applied details. Length over the buffers 21.0 cm / 8-1/4".

37134
Tank Locomotive.

Metal frame, boiler, water tanks, and coal bunker.

Export model for Sweden.

Prototype: Swedish State Railways (SJ) class S/Sa.
Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. 3 axles powered. 2 traction tires. Headlights will work in conventional operation and can be controlled digitally. **Acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 13.9 cm / 5-1/2".

Steam Locomotives.

37973
Steam Locomotive with Tender.

Prototype: Union Pacific Railroad (UP) class 2400 fast freight locomotive. United States Railroad Administration (USRA) standard design 2-8-2 „Mikado".
Model: With digital decoder, controlled high-efficiency propulsion, and sound effects generator. High-efficiency motor with bell-shaped armature in the boiler. 4 powered axles. 2 traction tires. 72270 smoke generator can be retrofitted. Headlights and smoke generator contact are conventional in operation, and they can be digitally controlled. Lighting with maintenance-free LEDs. Speed-dependent steam locomotive sound effects, whistle signal, as well as acceleration and braking delay can be digitally controlled with the 6021 Control Unit. Prototypical non-functional coupler inserted on the front. Close coupling between locomotive and tender. Separately applied metal grab irons. Many separately applied details. Figures of a locomotive engineer and fireman are included for the engineer's cab. Negotiable minimum radius 360 mm / 14-3/16". Length over couplings 29.0 cm / 11-13/32".


U.P. 47428D
UNION PACIFIC
LIVESTOCK DISPATCH
U.P.
47428

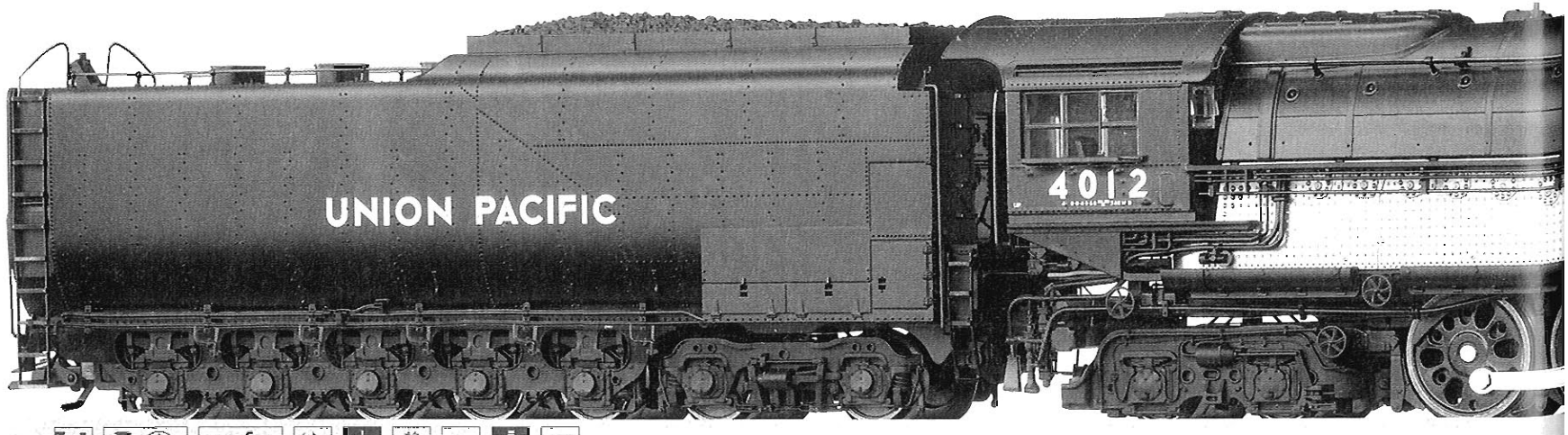
Insider Model for 2004.

37991
Steam Locomotive
with Tender.

The 37991 locomotive in the version presented is manufactured as a one-time series for Insider members.

Prototype: Union Pacific Railroad (UP) class 4000 "Big Boy" heavy-duty freight locomotive. Locomotive version – road number 4012 as it looked around 1960.
Model: With a digital decoder, controlled high-efficiency propulsion, sound effects generator, and auxiliary functions. High efficiency motor with bell-shaped armature and fly-wheel in the boiler. 8 powered axles. 4 traction tires. Articulated frame allows the locomotive to negotiate sharp curves. Boxpok wheels. Middle driving axles with spring suspension. Headlight, tender, and number boards illuminated with maintenance-free LED's. 2 smoke generators (Seuthe no. 11), can be retrofitted, contacts are always ready for operation. Headlights, number boards, and engineer's ceb lighting will work in conventional operation and can be controlled digitally. Speed-dependent steam locomotive sound effects, bell sound, whistle signal, squealing brakes, as well as acceleration and braking delay can be digitally controlled with the 6021 Control Unit or with the 60652 Mobile Station. **Additional operating sound effects can be digitally controlled with the 60212 Central Station.** Efficient speaker in the tender, adjustable volume. Coupler hooks at both ends can be inserted in the rail guard. Close coupling between locomotive and tender. Steam lines are hinge-mounted with the cylinders. Separately applied metal grab irons. Many separately applied details. Figures of a locomotive engineer and fireman for the engineer's cab are included. Length over couplings 46.5 cm / 18-5/16".

Operating Instructions:
The locomotive can be used on curved tracks with a radius greater than 360 mm / 14-3/16", however we recommend larger radii. Signals, catenary mast, bridge rails, tunnel portals etc. must maintain sufficient clearance to the curved track. The track must be stably mounted due to the heavy weight of the locomotive Turntable and transfer table can only be used in transit position.



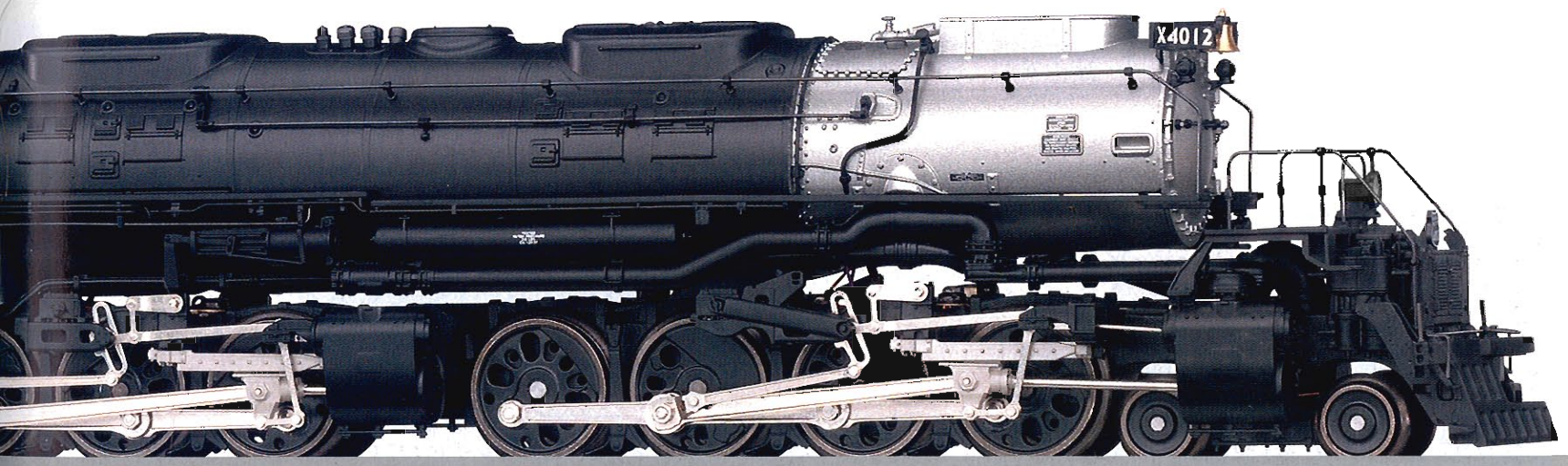
mfx

The 25 class 4000 machines are considered to the world's largest series production steam locomotives. In this regard the nickname "Big Boy", which was even used officially, is rather modest. The approximately 40 m / 131 feet giants produced a power output of over 6,200 Hp with four huge cylinders.

Accordingly the acoustic backdrop that accompanied such a monster was particularly imposing.
With the new sound effects circuit, the H0 model produces the typical sound of the huge steam engine in operation, as well as a selection of auxiliary sounds which can be triggered individually. The full range of acoustic functions is available when the locomotive is operated with the Central Station from the Märklin Systems program.

Digital Functions	6020	6021	60652	60212
Headlights	x	x	x	x
Number boards	(x)	x	x	x
Steam locomotive sound effects		x	x	x
Locomotive whistles (long)		x	x	x
Direct control		x	x	x
Engineer's cab		x	x	x
Bell sound		x	x	x
Locomotive whistles (short)		x	x	x

Digital Functions	6020	6021	60652	60212
Squealing brakes		x	x	x
Air pump				x
Valves/injectors				x
Auxiliary blower				x
Coupling sound effects				x
Rail joint				x
Desludging/pneumatics				x
Cab radio communication				x



Tender Locomotives.

37251
Fireless Steam Locomotive.

Prototype: Fireless steam locomotive no. 3 in the Mannheim "GKM" power plant.
Model: Comes with a digital decoder and controlled high-efficiency propulsion. 4 powered axles. 2 traction tires. Metal ladders on the boiler. Many separately applied details. Yellow/black safety paint scheme. Reproduction of the steam filler support. Headlights will work in conventional operation and can be digitally controlled.
The acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Length over buffers 12.8 cm / 5-1/32".

Fireless steam locomotives, also known in Germany as steam accumulator locomotives, were preferred for industrial railroads where steam with which to fill the locomotive occurs practically as a byproduct. The energy supply for this kind of locomotive consists of a quantity of water heated beyond the boiling point of 100° Centigrade or 212° Fahrenheit. On the Henschel 0-8-0 locomotives the water capacity was 20 cubic meters or 5,283 gallons and the steam pressure was 20 Bar or 290 pounds per square inch. These units were affordable, used very little fuel and other supplies, and were very robust in daily switching work. For these reasons this type of motive power is still being used successfully in places such as the Mannheim power plant.

36810
Battery-powered Locomotive.

Prototype: German Federal Railroad (DB) class Ks small locomotive. Version with battery accumulators and electric mechanism on diesel locomotive frame.

Model: Comes with a digital decoder and controlled miniature motor. 2 powered axles. 2 magnets mounted in the frame for increased traction. Separately applied metal grab irons. Headlights will work in conventional operation and can be digitally controlled. The acceleration and braking delay can be controlled digitally with Control Unit or Systems. Length over buffers 7.4 cm / 2-29/32".

Diesel Locomotives.

30881
Diesel Locomotive.

Blinking light on the cab roof.

Prototype: Henschel class DHG 700 C industrial locomotive.
Model: Comes with a Delta electronic circuit. Built-in blinking light. Buffer beams with yellow/black warning stripes. Metal handrails. 3 axles powered. 1 traction tire. Couple hooks. Length over buffers 11.2 cm / 4-7/16".

The DHG 700 is a modern industrial locomotive as is used by companies with their own trackage. With appropriate equipment it can also be operated by remote control in the prototype. For safety reasons many of these industrial locomotives have blinking lights and particularly noticeable striping on the buffer beams.

III-V

37365
Diesel Hydraulic Switch Engine.

Prototype: German Federal Railroad (DB) class V 36. Version with cupola for switching work.
Model: Locomotive comes with a digital decoder and high-efficiency propulsion. 3 axles powered. 2 traction tires. Hood for motor has road number board. Numerous separately applied handrails and grab irons. Headlights will work in conventional operation and can be controlled digitally. **Acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 10.6 cm / 4-3/16".

fx III

3078
Diesel Locomotive.

Prototype: Henschel class DHG 500 industrial locomotive.
Model: Comes with a reverse unit. 3 axles powered. 1 traction tire. Couple hooks. Length over buffers 11.2 cm / 4-7/16".

Many companies have their own trackage and use the DHG 500 industrial locomotive to distribute cars to those locations where they are to be loaded or unloaded. In addition, they are also used to assemble trains for the transfer point where these trains are picked up by the railroad.

III-V

36800
Diesel Locomotive.

Prototype: German Federal Railroad (DB) class Köf II small locomotive. Version with open engineer's cab.
Model: Locomotive comes with a digital decoder and controlled miniature motor. 2 axles powered. 2 track adhesion magnets for greater tractive effort. Separately applied metal grab irons. Headlights will work in conventional operation and can be controlled digitally. Acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Length over the buffers 7.4 cm / 2-15/16".

NEM III

Diesel Locomotives.

37654
Diesel Locomotive.

One-time series.

Prototype: German Federal Railroad (DB) class 261 switching locomotive. Heavy-duty version of the original V 60.
Model: Comes with a digital decoder, controlled high-efficiency propulsion and Telex couplers. 3 powered axles and 2 powered jackshafts. 2 traction tires. Headlights will work in conventional operation and can be controlled digitally. The Telex couplers front and rear can be controlled independent of each other digitally with the 6021 Control Unit. Acceleration and braking delay can also be controlled digitally with the 6021 Control Unit. Separately applied metal end railings. Length over buffers 12.0 cm / 4-23/32".

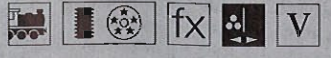
37652
Diesel Locomotive.

Controllable propulsion for precise switching work.
Telex couplers for remote-controlled uncoupling.
Metal locomotive body.
Finely constructed metal end handrails.
Detailed frame.

Prototype: German Railroad, Inc. (DB AG) class 362. Switch engine with hydraulic drive. Current version of the former V 60.
Model: Locomotive comes with a digital decoder, controlled high-efficiency propulsion, and Telex couplers for remote-controlled uncoupling. 3 axles powered. 2 traction tires. Headlights will work in conventional operation and can be controlled digitally. The Telex couplers front and rear can be controlled independent of each other digitally with the 6021 Control Unit. Acceleration and braking delay can also be controlled digitally with the 6021 Control Unit. Separately applied end handrails. Length over buffers 12.0 cm / 4-3/4".

The Märklin Telex coupler for remote-controlled coupling and uncoupling of model railroad cars to locomotives was patented as long as 40 years ago. This equipment has since turned out to be the ideal auxiliary function, particularly for switch engines. Since the introduction of the Digital System, the Telex coupler has been the easiest and most elegant solution for switching maneuvers. Modern digital locomotives with adjustable speed and acceleration and braking delay that can be turned off now enable precise and prototypical switching work.

The model of the DB V 60 switch engine has been a classic in the Märklin program for decades. This locomotive is now being given a newly tooled metal body with separately applied plastic parts as an addition to the frame that was redesigned recently. The detailing has been refined on this new model, particularly in the area of the end handrails, the windows, and the headlights.



37900
Diesel Locomotive.

Completely new tooling.
Compact high-efficiency propulsion system C-sine motor.
All driving axles are powered.

One-time series.

Prototype: German Federal Railroad (DB) class 290 heavy-duty switching locomotive. Former class V 90.
Model: Comes with a digital decoder and controlled high-efficiency C-sine propulsion. New maintenance-free high-performance compact engine, centrally installed with flywheel and 2 drive shafts.
4 powered axles. 4 traction tires.
Lighting with maintenance-free LEDs. Headlights and marker lights, in conventional operation, can be digitally controlled. The acceleration and braking delay can be controlled digitally with the 6021 Control Unit.
Outlined engineer's cab equipment.
Separately applied metal grab irons.
Enclosed additional steps. Length over buffers 16.4 cm / 6-15/32".

The V 100 was too light for heavy switching work. This was why the German Federal Railway commissioned a new class from Maschinenbau Kiel (MaK). The V 90 – from 1968 on, designated class 290 – was supposed to be closely modeled on the successful V 100 general-purpose locomotive. This was not so much apparent from the outside; the V 90 was more angular than then V 100. However, inside, the German Federal Railway had proven components installed, such as the traction diesel that worked in the V 100/20 (212) and very similar cardan shaft transmission.
On August 4th 1968 the German Federal Railroad accepted the V 90 001. 20 pre-series locomotives demonstrated the quality of the design in hard daily switching work. The series version had only slight design changes. By the 4th of September 1974 the German Federal Railroad had taken delivery of a total of 387 production machines from MaK, Deutz, and Henschel. Procurement ceased as a more powerful variant was ready, in the form of the 291. The 290 999 was a locomotive that the German Federal Railway leased from the military. It was purchased in 1990 and the German Federal Railway gave it the number 290 408. Today, the machines are working at all larger switching railway stations, and in addition are hauling transfers. However, they do not bear their original number. After installation of radio remote control the, DB gave them the designation 294.

N mfx IV

Diesel Locomotives.

37725
General-Purpose Diesel Hydraulic Locomotive.

Prototype: German Railroad, Inc. (DB AG) class 212.
Model: Locomotive comes with a digital decoder and high-efficiency propulsion. Metal frame. 2 axles powered. 4 traction tires. Metal grab irons. Scale narrow hoods. Headlights will work in conventional operation and can be controlled digitally. **Acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 14.1 cm / 5-9/16".

fx NEM V

37724
General-Purpose Diesel Hydraulic Locomotive.

Prototype: German Federal Railroad (DB) class V 100.20.
Model: Comes with a digital decoder with controlled high-efficiency propulsion. Metal frame. 2 powered axles. 4 traction tires. Metal grab irons. Scale narrow hoods. Headlights will work in conventional operation and can be digitally controlled. **The acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 14.1 cm / 5-9/16".

fx NEM III

37726
Double Unit Diesel Locomotives.

Genuine double unit operation with 2 matching locomotives. Headlights and rear lights can be correctly controlled individually and paired. Combination is ideally suited for transporting heavy loads.

Prototype: German Railroad, Inc. (DB AG) class 212 and 213 light main-line locomotives. Used in DB Cargo freight traffic.
Model: Both locomotives come with a Digital Decoder and controlled high efficiency propulsion. Metal frame. The locomotives can be coupled together or they can be operated singly. Each has 2 powered axles and 4 traction tires. Headlights will work in conventional operation and can be digitally controlled. Light suppress in double unit operation as well as acceleration and brake delay can be controlled with the 6021 Control Unit. Scale narrow hoods. Metal grab irons. Length over buffers 2 x 14.1 cm / 2 x 5-9/16".

Digital Functions	6020	6021	60652	60212
Headlights/marker lights	x	x	x	x
f1 not assigned	–	–	–	–
Front light off	–	x	x	x
Rear light off	–	x	x	x
Direct control	–	x	x	x

mfx NEM V


DB
Cargo

Diesel Locomotives.

33745
General-Purpose Diesel
Hydraulic Locomotive.

Prototype: German Railroad, Inc. (DB AG) class 218.
Model: Locomotive comes with a Delta electronic circuit. Metal frame. 2 powered axles. 4 traction tires. Separately applied exhaust stacks. Relex couplers. Length over buffers 18.2 cm / 7-5/32".

V

30747
General-Purpose Diesel
Hydraulic Locomotive.

Prototype: German Federal Railroad (DB) class 218.
Model: Comes with a reverse unit. Metal frame. 2 powered axles. 4 traction tires. Separately applied exhaust stacks. Relex couplers. Length over buffers 18.2 cm / 7-5/32".

IV

3374
General Purpose Diesel
Hydraulic Locomotive.

Prototype: German Federal Railroad (DB) class 216.
Model: Comes with a Delta electronic circuit. Metal frame. 2 axles powered. 4 traction tires. Length over buffers 18.2 cm / 7-13/16".

IV

39820
Diesel Locomotive.

One-time series.

Prototype: Heavy diesel hydraulic locomotive V 270 of the Prignitz Railroad Company (PEG) as locomotive leased to the ImoTrans GmbH. Former class 221 of the German Federal Railroad (DB), then class 420 of the Greek Railroads (OSE).

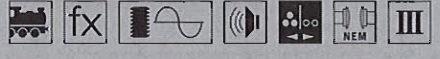
Model: Locomotive comes with a digital decoder, C-Sine high efficiency propulsion, and sound effects generator. 2 powered axles. 4 traction tires. Headlights will work in conventional operation, can be digitally controlled. Tail lights, diesel locomotive sound and shunter's whistle as well as acceleration and deceleration can be digitally controlled with a control Unit or systems. Additional operating sound effects can be digitally controlled with Systems. Fitted metal handles on the side and at the front. Couplings can be replaced with front skirting. Length over buffers 21.0 cm / 8-9/32".

Digital Functions	6020	6021	60652	60212
Headlights	x	x	x	x
Marker lights		x	x	x
Shunter's whistle		x	x	x
Diesel locomotive operating sound effects		x	x	x
Direct control		x	x	x
Compressed air sound effects			x	x
Braking sound effect			x	x

39821
Heavy Diesel Locomotive.

C-Sine Motor.
Heavy metal construction.
Diesel motor and horn sounds are also controlled digitally.

Prototype: German Federal Railroad (DB) class V 200.1.
Model: With digital decoder, C-Sine high-efficiency propulsion and sound effects circuit. 2 axles powered. 4 traction tires. Engineer's cabs and engine room with interior details. Headlights work in conventional operation and can be controlled digitally. **Diesel locomotivo sound effects, marker lights as well as acceleration/ braking delay are digitally controlled with the 6021 Control Unit.** Length over buffers 21.0 cm / 8-1/4".



Diesel or Electric Locomotive?

The German Federal Railroad's only diesel electric locomotives were the two double locomotives, V 188 001 and V 188 002, built in 1939 by Krupp in Essen and by Siemens. In the 1950s these two giants were thoroughly overhauled by Krauss-Maffei in Munich, with a preserved third pair serving as a source of parts.
The old diesel motors, each with 940 horsepower, were replaced by new 12 cylinder units, each with 1,100 horsepower and developed by Maybach for the modern V 200 diesel locomotive. Their classification remained as the V 188 (from the earlier 1,880 horsepower rating). The brake equipment, the heating plant and other equipment were constantly adapted to changing requirements. The paint scheme was also adapted to the red scheme used for the newly built diesel locomotives of the time. Starting in 1968 the computer number 288 was the new class for both pairs of locomotives. The earlier designations "a" and "b" for the respective halves were retained and not changed to the pure number representation. The service performed by these two veterans in Franconia lasted another two or four years, In 1971 diesel electric traction on the DB finally came to an end for good.

Diesel Locomotives.

36845
Diesel Locomotive.

Prototype: Austrian Federal Railroad (ÖBB) class 2016 general purpose locomotive. Diesel electric design "Hercules".
Model: Metal version with many integrated details. Total body realistic Digital decoder and special motor. 4 axles powered via cardan shafts. 2 traction tires. LED lighting, conventional in operation and can be digitally controlled. Adjustable running characteristics. Length over buffers 21.7 cm / 8-17/32".

In 1998 the ÖBB (Austrian Railways) ordered a diesel-electric locomotive with three-phase motor from Siemens. On one hand, the 2016 was intended to replace the outdated class 2043, and 2143 locomotives. On the other hand, with this locomotive the ÖBB wanted to procure a high-performance, universal locomotive.

In addition to the ÖBB, the Hong Kong KCRC also ordered EuroRunner ER 20 type locomotives. In addition, several locomotives are part of Siemen's lease locomotive pool, and among other things haul the "Allgäu-Express" Munich – Oberstdorf. In Austria they are known as "Hercules".

N NEM V

37659
Diesel Locomotive.

Export model for Austria.

Prototype: Austrian Federal Railroad (ÖBB) class 2070 "Hector" general purpose locomotive. Diesel hydraulic model G 800 BB of the Vossloh Schienenfahrzeugtechnik GmbH 9VSF), developed from standard locomotives of the former MaK.
Model: Comes with a digital decoder and controlled high-efficiency propulsion. Centrally installed high performance motor with bell-shaped armature and flywheel. 4 powered axles. 4 traction tires. Lighting with maintenance-free LEDs. Headlights will work in conventional operation, can be digitally controlled. The acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Wrap around metal end railings. Length over buffers 16.5 cm / 6-1/2".

N mfx V

Diesel Locomotives.

36807
Diesel Locomotive.

Export model for France.

Prototype: French State Railways (SNCF) small locomotive class YDE 18 110. Corresponds to German class Köf II. Version with open engineer's cab.

Model: Comes with a digital decoder and controlled miniature motor. 2 powered axles. 2 magnets mounted in the frame for increased traction. Separately applied metal grab irons. Headlights will work in conventional operation and can be digitally controlled. The acceleration and braking delay can be controlled digitally with Control Unit or Systems. Length over buffers 7.4 cm / 2-29/32".

N fx NEM III

37653
Diesel Locomotive.

Metal locomotive body.
Correct dual headlight arrangement.
Telex couplers for unhindered switching operations.
Ideal partner for the 37270 road engine.

Export model for Belgium.

Prototype: Belgian State Railways (SNCB/NMBS) class 260 switch engine, original version of the later class.
Model: Locomotive comes with a digital decoder, controlled high-efficiency propulsion, Telex couplers. 3 axles and a jackshaft powered. 2 traction tires. Headlights will work in conventional operation and can be controlled digitally. Independent Telex couplers front and rear as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Separately applied metal end railings. Length over the buffers 12.0 cm / 4-3/4".

fx III

37669
Diesel Locomotive.

Heavy metal construction.
Prototype: Early CFL version with two headlights.
Signal sound effect in digital operation.

Export model for Luxembourg.

Prototype: Luxembourg State Railways (CFL) class 1600 general-purpose locomotive. Construction licensed from Belgium of an American design.
Model: Locomotive comes with a digital decoder, controlled high-efficiency propulsion, and a sound effects generator. 3 axles powered. 4 traction tires. Headlights will work in conventional operation and can be controlled digitally. Sound effect of a horn as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Length over the buffers 20.5 cm / 8-1/16".

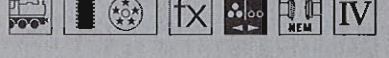
The "Fat Noses" from Luxembourg.

Starting in 1954, the European Schedule Conference obligated the railroads to increase the minimum speed for international passenger trains to 80 km/h or 50 mph. As a result of this pressure the CFL accepted the offer of the Belgian Railways to sell it 4 of their class 202 diesel locomotives, which were being built in the Anglo-France-Belge shops in La Croyère, Belgium. This solution seemed to be the fastest and most suitable for the situation, particularly since 6 regular locomotives with the same GM diesel motor had already been delivered by the same builder in 1954. The 4 Luxembourg units were run by the CFL as the class 1600 (corresponding to their power output of 1,600 hp) and all were delivered in April of 1955. Road no. 1604 was maintained as a "National Monument" and has been completely restored since March of 1988 to its original condition, with individual headlights and with the old CFL logo.

37673
Diesel Locomotive.

Push/pull cars (with no headlight/marker light changeover) that go well with this locomotive: Item nos. 43532, 43534, 43536.

Prototype: Belgian State Railways (SNCB/NMBS) class 55.
Former class 205. Authorized for use with push/pull trains.
Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. 3 axles powered. 4 traction tires. Headlights will work in conventional operation and can be controlled digitally. **Marker lights as well as acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 22.6 cm / 8-7-/8".



Diesel Locomotive.

37270
Diesel Locomotive.

New model.
Used for freight trains and passenger trains.
Horn in digital operation.
50 years of diesel locomotives in Belgium.

One-time series.

Prototype: Belgian State Railways (SNCB/NMBS) class 201 multi-purpose locomotive. Original version of later class 59.
Model: With digital decoder, controlled high-efficiency propulsion, and sound effects generator. 2 powered axles. 4 traction tires. Lighting with maintenance-free LEDs. Headlights will work in conventional operation, can be digitally controlled. Horn sound effect, as well as acceleration and braking delay can be digitally controlled with the 6021 Control Unit. Prototypically correct overhangs of different length. Separately applied grab irons and cooling grate. Length over buffers 18.6 cm / 7-5/16".

In the early 50's the SNCB sought an alternative to steam motive power, for branch lines, that could be not be electrified economically, and as a bridge solution for main lines until the catenary was extended. At this time the only interesting references for wide-spread use of efficient diesel locomotives were in the United States. Consequently the introduction of diesel operation at the SNCP consequently necessitated collaboration between the American companies and the Belgian railway manufacturers.

At the end of 1953 the SNCB placed an order for 55 four-axle type 201 locomotives that were to be assembled in the Johl-Cockerill factories in Seraing. They were intended for the easier stretches in the northern plain of Sambre and Maas and were fitted with a Baldwin motor. The first series production machine was delivered in December 1954. The last of these long-life locomotives was still pulling the work trains used to build the high-speed stretches in France and Belgium in June 2002.

When delivered from the Cockerill works all 201 class locomotives were designed in a splendid two-tone version, the so-called "star". Two colors were used for the body: the lower half was light green, the upper half was dark green. Broad yellow side stripes ran both ends and crossed under a majestic symmetrical star. This paint scheme was simplified in the mid 60's, when certain work was performed on the chassis for safety and maintenance reasons (steps and additional hand rails were attached).

Diesel Locomotives.

37746
Diesel Locomotive.

Export model for Italy.

Prototype: Multipurpose locomotive V 216 by Server Servizi Ferroviari, a company for the Italian State Railroads (FS CARGO). Use of maintenance and construction trains, but also in the transportation service. Former German model 216/V 160.

Model: Comes with a digital decoder and controlled high-efficiency propulsion. 2 powered axles. 4 traction tires. Metal frame. Headlights will work in conventional operation and can be digitally controlled. Diesel locomotive sound and signal horn as well as acceleration and braking delay can be digitally controlled with Control Unit or Systems. Additional operating sound effects can be digitally controlled with Systems. Length over buffers 18.2 cm / 7-5/32".

Digital Functions	6020	6021	60652	60212
Headlights	x	x	x	x
Horn 1		x	x	x
Horn 2		x	x	x
Diesel locomotive operating sound effects		x	x	x
Direct control		x	x	x
Compressed air sound effects			x	x
Braking sound effect			x	x

N mfx NEM V

36806
Diesel Locomotive.

Metal frame and body.
White headlights / red marker lights at both ends.
This switch engine goes well with the 37559 locomotive and the 47878 and 47879 cars.

Export model for Italy.

Prototype: Italian State Railways (FS) class 213 small locomotive. Former German class Köf II.
Model: Locomotive comes with a digital decoder and controlled miniature motor. 2 axles powered. 2 track adhesion magnets for greater tractive effort. Separately applied metal grab irons. Headlights will work in conventional operation and can be controlled digitally. Acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Length over the buffers 7.4 cm / 2-15/16".

NEM IV

37364
Diesel Locomotive.

Export model for Denmark.

Prototype: Danish State Railways (DSB) switching tractor no. 1. Former German class V 36.
Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. 3 axles and jackshaft powered. 2 traction tires. Headlights will work in conventional operation and can be controlled digitally. Acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Many separately applied details. Length over the buffers 10.6 cm / 4-3/16".

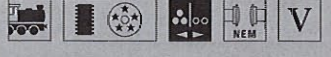
37658
Diesel Locomotive.

Metal locomotive body.
Prototype: the latest construction train locomotive.
Prototype: Locomotive with the girl's name "Carin".
Goes well with the 46250 and 48545 cars for construction trains.

Export model for the Netherlands.

Prototype: Type MaK 1206 "Carin" construction train locomotive for the Dutch construction firm Strukton. Used on the routes of the Dutch State Railways (NS).

Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. High-efficiency motor with bell-shaped armature and flywheel. 4 axles powered. 4 traction tires. Headlights are maintenance-free LED's. Headlights will work in conventional operation and can be controlled digitally. Acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Metal handrails along all four sides of the locomotive. Length over the buffers 16.5 cm / 6-1/2".



Diesel Locomotives.

ALCO PA

Some things are remembered long after their natural lives have passed – they are history. This applies particularly to the American Locomotive Company's (ALCo) "PA" locomotive. Standing for "passenger A-unit" with an engineer's cab, the PA was introduced in 1946, and became an immediate success with the new deluxe trains. Although a competing locomotive manufacturer sold more passenger units overall, this sleek, powerful design and the PA's modern, powerful technology quickly found the hearts of railroad employees and passengers. The PA was used on almost all of the main lines in the United States, but their greatest presence was in the Southwest. Particularly well known were the bright yellow Union Pacific PA's and the classic silver and red of the Santa Fe, but also the "Daylight" version of the Southern Pacific in orange and red. In the Southeast, Southern Railway's PA's worked a train by the name of the "Pelican". In the northeastern United States, the elegant gray tones of the New York Central's PA's matched the passenger cars of the same color which they pulled, thus forming a complete picture.

In conjunction with the "name trains", the striking, harmonious shape of the PA formed an ideal combination of powerful technology and aesthetic design. Railroad crews favored the PA because of its smooth ride and the safety provided by the long nose and sturdy superstructure. The rhythmic, full sound of the 4-stroke diesel motors, which these diesels made while accelerating, was incomparable among railroad experts. The fans named the PA an "Honorary Steam Locomotive" because of a peculiarity of the ALCo 244 diesel prime mover when starting up. Until the fuel started burning completely, thick clouds of black smoke would pour from the exhaust stacks, and then the PA would roar off. While the ElectroMotive Diesel E unit had been a continuation of passenger locomotive development dating back to the 1930's, the PA was a development born of post-war optimism toward the future of railroad passenger service. This optimism was to produce some

49610
Diesel Locomotive for Multiple Unit Operation.

Metal construction.
Real multiple unit operation: 2 locomotives controlled from a single decoder.
Pilot with guide mechanism at the end coupled to a train swings out a little on curves.
Diesel motor sound effects vary according to how the locomotive is running (only with 37610).
Road numbers 600 (37610) and 601 (49610).

One-time series.

Prototype: Same as model 37610, but with a different road number.
Model: Booster unit for real double-heading with model 37610. High-efficiency motor, controlled from the decoder in the 37610 locomotive. 2 axles powered. 4 traction tires. Lights as well as acceleration and braking delay controlled from the decoder in the 37610 locomotive. Special coupling with multi-conductor electrical connection between the two locomotives. Close coupler in standard coupler pocket at both ends, can be replaced by American couplers or by a cover plate. Length over couplers 23.5 cm / 9-1/4".

The 49610 locomotive can be operated only in conjunction with a 37610 locomotive. Can be used on track with a minimum radius of 360 mm / 14-3/16".

of the finest passenger trains that had ever been seen in North America.In the 1950's, competition for the railroad came from outside the industry. Passengers started choosing their own cars and the faster airplanes. The transportation market had changed, and the great streamliners became fewer. This development caused a change in the role of the PA. By 1955, the Union Pacific had reassigned the first units of this class to freight service. Other railroads would follow suit. Locomotive after locomotive was quietly retired from this less prestigious service over the course of the years, and most of them fell victim to the cutting torch. Four Santa Fe locomotives remained preserved and were used by the Delaware & Hudson Company again for the "Laurentian" streamliner.

After being pulled from this service, these locomotives survived again in Mexico, continuing to pull passenger trains. Through the intervention of many railroad enthusiasts, at least two locomotives were save from the scrap yard after being retired from service and ended up in railroad museums in Mexico. Two other locomotives are now undergoing the slow process of restoration in Portland, Oregon. One PA will be decorated in the red and silver livery of its original owner, the Santa Fe. It will be placed on display in the Smithsonian Institution in Washington, DC. The other PA is in better mechanical condition and will be painted in the Nickel Plate Railroad's scheme of blue and silver. This locomotive will receive a new diesel prime mover and trucks, eventually returning to operational status for special excursions. Apart from that, the Märklin model of the PA offers you the chance to grasp the elegant lines of this beautiful locomotive in all of its dimensions. The high quality model technology provides even today the appropriate experience of power and dynamism of the original.

37610
Diesel Locomotive.

One-time series.

Prototype: Union Pacific Railroad (U.P.) class 600. American Locomotive Company (ALCO) type PA-1. Diesel-electric propulsion. **Model:** Comes with a digital decoder, controlled high-efficiency propulsion, sound effects generator and auxiliary functions. 2 axles powered. 4 traction tires. Headlights lighted number boards will work in conventional operation and can be controlled digitally. **Mars light, diesel motor sound effects, and horn as well as acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Powerful speaker. Volume is adjustable.** Can be coupled to a second powered locomotive without a decoder that is controlled with the decoder in the first locomotive. Close coupler in the standard pocket can be replaced by an American knuckle coupler. Length over the couplers 23.5 cm / 9-1/4".

Diesel Locomotives.

49611
Diesel Locomotive for Multiple Unit Operation.

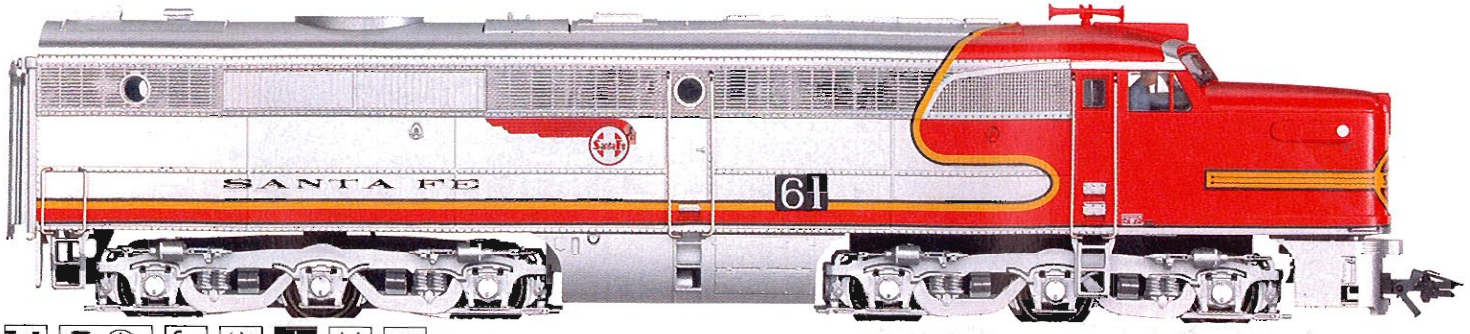
The 49611 locomotive can only be operated in conjunction with a 37611 locomotive. The minimum required curve for operation is 360 mm / 14-3/16".

Prototype: Same as model 37611, but with road number 77L.
Model: Booster unit for real multiple unit operation with model 37611. High-efficiency motor, controlled from the decoder in the 37611 locomotive. 2 axles powered. 4 traction tires. Lights as well as acceleration and braking delay can be controlled from the decoder in the 37611 locomotive. Special coupling with multiple-pin electrical connections between the two locomotives. Close coupler in standard coupler pocket can be replaced by an American type coupler or by a cover. Length over the couplers 23.5 cm / 9-1/4".

37611
Diesel Locomotive.

Prototype: Atchison Topeka & Santa Fe Railway (AT & SF) class 52 express locomotive. American Locomotive Company (ALCO) type PA-1. Diesel-electric propulsion. Road number 61L.

Model: Locomotive comes with a digital decoder, controlled high-efficiency propulsion and auxiliary functions. 2 axles powered. 4 traction tires. Headlight and lighted number boards will work in conventional operation and can be controlled digitally. Mars light, diesel motor sound effects, horn sounds as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Powerful speaker. Adjustable volume. This locomotive can be coupled to a second motorized locomotive without a decoder (49611), which is controlled from the decoder in the first locomotive. Close coupler in the standard pocket can be replaced with an American style coupler or with a cover plate. Length over couplers 23.5 cm / 9-1/4".



Electric Locomotives.

37476
Electric Locomotive.

Prototype: German State Railroad Company (DRG) class E 69.
Model: Comes with a digital decoder and controlled high-efficiency propulsion. 2 axles powered. 1 traction tire. Clear view through the engineer's cab. Separately applied handrails. Headlights will work in conventional operation and can be controlled digitally. **Accleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 8.5 cm / 3-3/8".

37440
Electric Locomotive.

Prototype: German Federal Railroad (DB) class E44 general purpose locomotive. Old style locomotive.
Model: With digital decoder, controlled high-efficiency propulsion, and sound effects generator. Motor with flywheel centrally installed. 4 powered axles. 2 traction tires. Lighting with maintenance-free LEDs. Headlights will work in conventional operation, can be digitally controlled. **Signal horn sound effect, as well as acceleration and braking delay with 6021 Control Unit, can be digitally controlled.** Buffer beam swings prototypically with the trucks. Length over buffers 17.5 cm / 6-7/8".

After an interruption due to the great economic crisis, the electrification of the German State Railroad's network was continued starting in 1930. New, powerful locomotives were needed for the new routes. In the meantime the German railroad industry had developed new concepts and prototypes for modern general purpose locomotives.

This design from Siemens shows clear progress compared to the provincial railroad designs of before that had been merely developed further. This unit was designed as a general purpose locomotive and was built on a welded frame, mounted on trucks with integrated buffer beams and powered with axle-suspended motors. This gave this compact locomotive a total weight of 78 metric tons without the need for pilot trucks and still below the critical 20 metric ton limit for axle loads. The modern motors put out 2,200 kilowatts or 2,950 horsepower that was available directly to the axles without the need for an expensive mechanism. The maximum speed reached on level track was 90 km/h or 56 mph.

The first unit was successfully tested and placed into service by the German State Railroad as early as 1930 as the E 44 001. Additional, regular production locomotives with a maximum speed of 80 km/h or 50 mph were ordered immediately, initially for the route from Stuttgart to Augsburg (with the Geislingen Grade). The German State Railroad purchased a total of 174 regular production locomotives, of which 45 remained in East Germany with most of the rest in the West. Seven more locomotives were built new for the German Federal Railroad and several were equipped with push/pull controls or resistance brakes. The indestructible E 44 was in regular use well into the 1980s – at the end as the 144 (DB) and 244 (DR).

37477
Electric Locomotive.

Prototype: German Federal Railroad (DB) class E 69 branch line locomotive. Red version.
Model: Locomotive comes with a digital decoder and a controlled miniature motor. 2 axles powered. 1 traction tire. Headlights will work in conventional operation and can be controlled digitally. **Acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** View through engineer's cab not obstructed. Separately applied handrails and grab irons. Length over the buffers 8.5 cm / 3-3/8".

37562
Electric Locomotive.

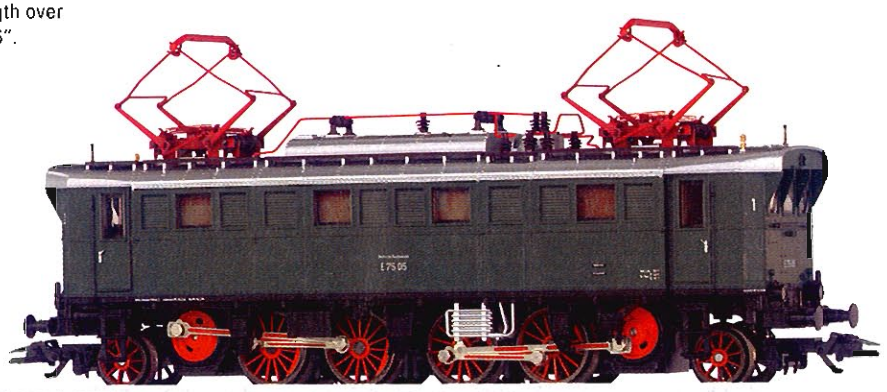
Prototype: German Federal Railroad (DB) class E 60. Version with brakeman's platforms.
Model: Comes with a digital decoder and controlled high-efficiency propulsion. 3 axles powered. 2 traction tires. Numerous separately applied handrails. Headlights will work in conventional operation and can be controlled digitally. **Acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 12.8 cm / 5-1/16".

The E 60 was one of the few electric switch engines that the German Federal Railroad took over from the German State Railroad. In the 1950s all of the locomotives in this class were equipped with brakeman's platforms for switching work and were painted red as part of an extensive overhaul program. The original pantographs with two wipers were replaced by standard design pantographs with a single wiper.

Electric Locomotives.

34750
Electric Locomotive.

Prototype: German Federal Railroad (DB) class E 75.
Model: Comes with Delta electronic circuit. 4 axles powered. 2 traction tires. Engine room has imitation of the interior details. Length over buffers 17.7 cm / 6-15/16".



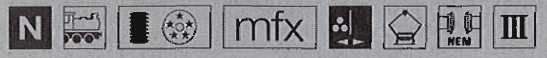
37750
Electric Locomotive.

Model: Same as 34750, but with a digital decoder, controlled high-efficiency propulsion and a sound module for a whistle. Headlights will work in conventional operation and can be controlled digitally. Whistle as well as acceleration and braking delay can be controlled digitally with the 6021 Control Unit.

A total of 31 class E 75 locomotives were placed into service starting in 1927. These units were equipped with a continuous main frame in which both of the groups of driving wheels were mounted. A 20-pole motor for each group powered the driving axles through a jackshaft and side rods. The maximum speed was only 70 km/h or 44 mph with a service weight of 106 metric tons.

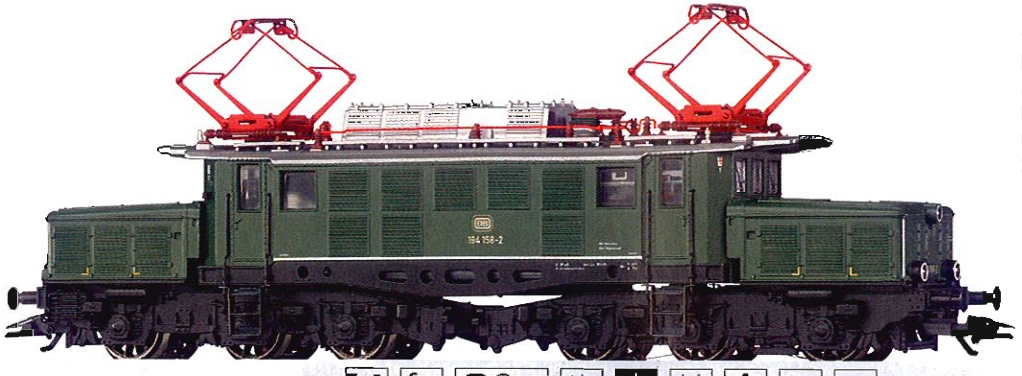
37470
Electric locomotive.

Prototype: German Federal Railroad (DB) class E 04 express locomotive.
Model: Comes with a digital decoder and controlled high-efficiency propulsion. 3 powered axles. 2 traction tires. Headlights will work in conventional operation, can be digitally controlled. The acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Installed metal grab irons. Length over buffers 17.8 cm / 7".



39223
Electric Locomotive.

Prototype: German Federal Railroad (DB) class 194 freight locomotive. Locomotive as it has been preserved to date in its earlier, original paint scheme and with its original equipment, operational and authorized for operation.
Model: Locomotive comes with a digital decoder, controlled C-Sine high-efficiency propulsion, and a sound effects generator. 3 axles powered. 4 traction tires. Articulated frame to enable the locomotive to negotiate curves better. Headlights will work in conventional operation and can be controlled digitally. Maintenance-free LED's are used for headlights. Marker lights, horn sound effects, as well as acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Length over buffers 21.0 cm / 8-1/4".



It was called the German Crocodile, which every railroad expert recognizes as a compliment. The E 94 was used on practically all of the hilly and mountainous routes in Germany. A total of 197 units were placed into service from 1940 to 1956, and the last one was retired in 1988. One of the last of these locomotives, and the prototype for our model, is the road number 194 158-2. It escaped the being scrapped, because an enthusiastic woman locomotive engineer bought it from the scrap dealer. This E 94 was restored step by step from the ground up and was put back into running condition: The transformer, electrical circuits, controls, engineer's cabs, braking system, superstructures, running gear. After several years of work during evenings, weekends, and vacations by the Historic Railroad Locomotives/Cars Association (historische Eisenbahnfahrzeuge e. V.) team and with the support of the Neuss Railways, Siemens, and the Austrian Federal Railways facilities in Linz, the locomotive now once again gleams in the original condition, as it did on the former German Federal Railroad. After provisional acceptance by the railroad, full permission for the locomotive's operation was given in August of 2001 by the German Federal Railroad Office.

Electric Locomotives.

34402
Electric Locomotive.

Prototype: German Railroad, Inc. (DB AG) class 110. Fast general-purpose locomotive. New version of the former E 10.
Model: Locomotive comes with a Delta electronic circuit. 2 axles powered. 4 traction tires. Separately applied metal handrails. Length over buffers 18.3 cm / 7-3/16".

IV

39581
Electric Locomotive.

Horn sound effects that work in digital operation.

Prototype: German Federal Railroad (DB) class 151.
Heavy freight locomotive as it looked when first delivered.
Model: Comes with a digital decoder, C-Sine high-efficiency propulsion and a sound effects generator. 3 axles powered.
4 traction tires. Headlights will work in conventional operation and can be controlled digitally. **Horn sound effects as well as acceleration and braking delay can be controlled digitally with the 6021 Control Unit.**
Length over buffers 22.2 cm / 8-3/4".

fx IV

37538
Electric Locomotive.

One-time series.

Prototype: German Federal Railroad (DB) class 120.0 fast general purpose locomotive. "E 120" presentation version for the 1979 Munich Transportation Exhibition.
Model: Comes with a digital decoder, controlled high-efficiency propulsion, sound effects and lighting functions. 2 powered axles. 4 traction tires. Lighting with maintenance-free LEDs. Headlights will work in conventional operation, can be digitally controlled. Engineer's cab lighting, whistle signal, as well as acceleration and braking delay, can be digitally controlled with the 6021 Control Unit. Engineer's cabs with interior details. Separately applied grab irons. Length over buffers 22.1 cm / 8-11/16".

25 years of revolution on rails.

In addition to the Transrapid magnetic suspension train, another sensation was also introduced at the 1979 Transportation Exhibition in Munich: The first electronically controlled three-phase current locomotive for universal implementation. The designation was not taken quite as seriously by the manufacturers, Krauss-Maffei, Henschel, Krupp, and BBC as it was by the official DB: At the presentation the E120 bore the Epoch III code letters for electric locomotives in addition to the regular class designation.

Breakthrough technologies were already in evidence in the first 5 prototypes. These technologies have been used and further developed in the 120.1 main series, in the ICE project, and in today's Europa locomotives.

37316
Electric Locomotive.

Prototype: German Federal Railroad (DB) class 111 general-purpose locomotive. Original version.
Model: Locomotive comes with a digital decoder, controlled high-efficiency propulsion, and a sound effects circuit. 2 axles powered. 4 traction tires. Headlights will work in conventional operation and can be controlled digitally. Sound effect of a whistle as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Engineer's cabs and engine room have interior details. Separately applied grab irons. Length over the buffers 19.1 cm / 7-1/2".

Electric Locomotives.

37537
Electric Locomotive.

New metal body.
Engineer's cabs have interior details and lighting.
All of the lights are maintenance-free LED's.
Digital sound: Locomotive whistle.

Prototype: German Federal Railroad (DB) class 120.0 express general-purpose locomotive. Original version.
Model: Locomotive comes a Locomotive comes with a digital decoder, controlled high-efficiency propulsion, sound and lighting effects. 2 axles powered. 4 traction tires. Headlights are maintenance-free LED's. Headlights will work in conventional operation and can be controlled digitally. Engineer's cab lighting, sound effect of a whistle as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Engineer's cabs have interior details. Separately applied grab irons. Length over the buffers 22.1 cm / 8-11/16".

The Three-Phase Current Pioneer.

The class 120 marked the technological change to three-phase current propulsion. This principle promised compact, motors without commutators and largely free of parts that would wear out, commutator rings, brushes, and mechanical contacts. Because a wide torque range and rpm range can be mastered with three-phase current technology, the performance specifications for this new development were broadly formulated. The class 120 was designed to pull 200 km/h or 125 mph fast InterCity trains and 5,400 metric ton freight trains and be equipped with push/pull controls and electric regenerative brakes.

In 1977, the DB ordered five experimental units, which were thoroughly tested on test stands, on test runs, and in operational use. Startup, tractive effort, acceleration, running characteristics, braking power, power consumption, and stability were on the program. Comparison tests with other makes of locomotives as well as startup tests on the Lötschberg and Semmering grades confirmed the effectiveness of the technology.
The speed record was 265 km/h or 165 mph. During the test phase, new developments were introduced, for example: microprocessors for faster monitoring and control. Components were constantly improved until all five units were technically at the same level in 1982 and were ready for regular production. During the several years of development the purchasing policy changed, however. Instead of all-round locomotives, special locomotives were once again preferred on the basis of common development platforms with many parts in common. Therefore, only the first production run of 60 units were purchased of the class 120. The five prototypes, to which the prototype of our model also belongs, continue to be used for test purposes.

Electric Locomotives.

39582
Electric locomotive.

Prototype: Heavy freight train locomotive class 151 of the Railion Deutschland AG (formerly DB Cargo) of the German Railroad Company (DB AG). Current design.
Model: Locomotive comes with a digital decoder, C-Sine high e fficiency propulsion, and sound effects generator. 3 powered axles. 4 traction tires. Headlights will work in conventional operation, can be digitally controlled. Signal horn sound effects, as well as acceleration and braking delay can be controlled digitally with Control Unit or Systems. Separately applied metal grab irons. Detailed pantographs. Length over buffers 22.2 cm / 8-3/4".

N mfx V

37401
General Purpose Electric Locomotive.

Prototype: German Railroad, Inc. / Business Area Freight Service (DB Cargo) class 140. Former E 40. Current version in 1999/2000.
Model: With digital decoder and adjustable high-efficiency propulsion. 2 axles powered. 4 traction tires. Headlights work in conventional operation and can be controlled digitally. **Acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 18.3 cm / 7-1/4".

34401
Electric Locomotive.

Prototype: German Railroad, Inc. (DB AG) class 140. General-purpose locomotive. New version of the former E 40.
Model: Locomotive comes with a Delta electronic circuit. 2 axles powered. 4 traction tires. Separately applied metal handrails. Length over buffers 18.3 cm / 7-3/16".

Electric Locomotives.

36850
Electric Locomotive.

New model.
Metal body.

Prototype: German Railroad, Inc. (DB AG) class 185 general purpose locomotive. Two-system locomotive. **Model:** Metal version with many integrated details. Total body realistic Digital decoder and special motor. 4 axles powered via cardan shafts. 2 traction tires. LED lighting, conventional in operation and can be digitally controlled. Adjustable running characteristics. 2 mechanically functioning pantographs. Length over buffers 21.7 cm / 8-17/32".

Electric Locomotives.

37398
Electric Locomotive.

Prototype: German Railroad, Inc. (DB AG) class 101 express locomotive. Series production version.
Model: With digital decoder, controlled high-efficiency propulsion, and sound effects generator.
2 powered axles. 4 traction tires. Movable imitation of the truck pivot point. Lighting with maintenance-free LEDs. Headlights and smoke generator contact are conventional in operation, and they can be digitally controlled. Long distance headlights front and rear, as well as acceleration and braking delay can be controlled digitally with Control Unit or Systems. Signal horn and other operating sound effects can be controlled digitally with Systems. Engineer's cabs with interior details. Length over buffers 21.9 cm / 8-5/8".

Digital Functions	6020	6021	60652	60212
Headlights	x	x	x	x
Converter	(x)	x	x	x
Front long distance light		x	x	x
Rear long distance light		x	x	x
Direct control		x	x	x
Fan sound effects			x	x
Signal horn, high			x	x
Signal horn, low			x	x
Compressed air sound effects			x	x
Brake sound effects				x
Doors closing sound effects				x

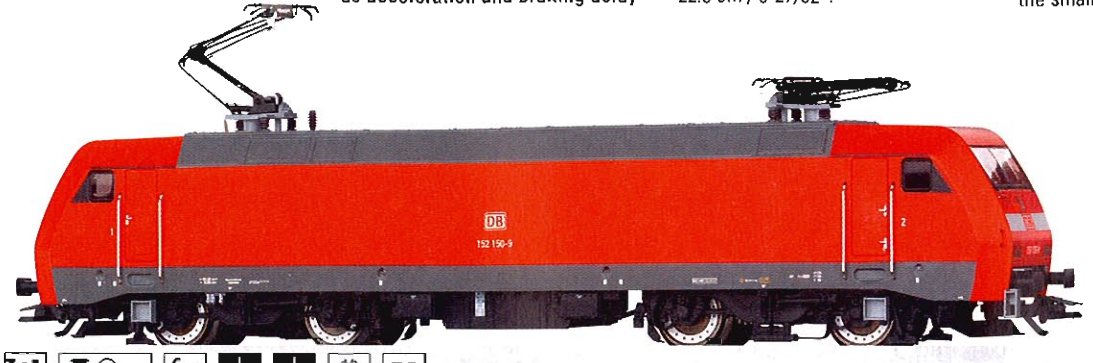
N mfx NEM V

39340
Electric Locomotive.

C-sine high-efficiency propulsion.
Headlights with full beam and low beam.
Each pantograph can be individually remote-controlled
Prototypically slow movement sequence.

Prototype: German Railroad, Inc. (DB AG) class 152 general purpose locomotive.
Model: With digital decoder and controlled high-efficiency propulsion C-sine, lighting functions and remote-controlled pantographs. 2 powered axles. 4 traction tires. Lighting with maintenance-free LED. Headlights and marker lights, in conventional operation, can be digitally controlled. **Long distance headlights, mechanism for raising and lowering both pantographs, as well as acceleration and braking delay can be digitally controlled with the 6021 Control Unit.** Engineer's cabs with interior details. Separately applied grab irons. Separately applied rail guard. Wheels with representation of the brake disks. Length over buffers 22.5 cm / 8-27/32".

Information about this model:
The model is introduced from the factory with a built-in mechanism for raising and lowering both pantographs. Remote control is enabled by miniature technologies: specially developed piezo motors in the small drive unit, and control electronics that are precisely adapted to the locomotive decoder. Each of the two pantographs can be individually raised or lowered from the digital locomotive controller. Movement is prototypically slow and soft. Operation is permanently connected to supply from the center conductor track, in order to ensure supply current for pantograph control at all times.



39830
Electric Locomotive.

Metal frame aud body.
Close couplers with guide mechanism.
C-Sine motor.
Headlights have maintenance-free LEDs.
Long distance headlights.
Sound effects module for an air horn.
Low speed switching range.

Prototype: German Railroad, Inc. (DB AG) class 182.
Model: Comes with a digital decoder, C-Sine motor, long distance headlights and a sound effects module. 2 axles powered. 4 traction tires. Engineer's cabs with interior details. Separately applied handrails. Separately applied snowplows. Headlights will work in conventional operation and can be controlled digitally. **Triple long distance headlights that change over with the direction of travel, sound effects module for an air horn as well as low speed switching range without acceleration and braking delay can be controlled digitally with the 6021 Control Unit 6021.** Length over buffers 22.5 cm / 8-7/8".

Electric Locomotives.

39832
Electric Locomotive.

One-time series.

Prototype: Siemens Dispolok GmbH class ES64 U2 general-purpose locomotive. Version for the "boxXpress" cooperative project in ocean harbor traffic.

Model: Locomotive comes with a digital decoder and a controlled C-Sine high-efficiency propulsion system, light and sound functions. 2 axles powered. 4 traction tires. Headlights / marker lights are maintenance-free LED's. Headlights and marker lights will work in conventional operation and can be controlled digitally. Long distance headlights, air horn sound effect as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Engineer's cabs have interior details. Separately applied hand-rails. Separately applied pilots. The wheels on the locomotive have a representation of sound mufflers. Length over the buffers 22.5 cm / 8-7/8".

36854
Electric Locomotive.

Suitable hopper cars are available under item no. 46253.

Prototype: General purpose locomotive 185-CL 009, no. 222 of the Nr. 222 of the Ruhrkohle AG Bahn und Hafen GmbH (RAG/BuH) (Ruhr Coal/Rail and Harbor companies). Two-system locomotive.

Model: Metal version with many integrated details. Total body realistic Digital decoder and special motor. 4 axles powered via cardan shafts. 2 traction tires. LED lighting, conventional in operation and can be digitally controlled. Adjustable running characteristics. 2 mechanically functioning pantographs. Length over buffers 21.7 cm / 8-17/32".

39833
Electric Locomotive.

One-time series.

Prototype: German Railroad, Inc. (DB AG) class 182. Used in freight service (Railion). Locomotive painted and lettered in a design from the account "DHL".

Model: Locomotive comes with a digital decoder and a controlled C-Sine high-efficiency propulsion system, light and sound functions. 2 axles powered. 4 traction tires. Headlights / marker lights are maintenance-free LED's. Headlights and marker lights will work in conventional operation and can be controlled digitally. Long distance headlights, air horn sound effect as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Engineer's cabs have interior details. Separately applied handrails. Separately applied pilots. The wheels on the locomotive have a representation of sound mufflers. Length over the buffers 22.5 cm / 8-7/8".

A Wiking model of the new VW T5 Transporter in the current paint and lettering scheme for the packager service firm "DHL" is included with this locomotive.

39834
Electric locomotive.

One-time series.

Prototype: Express general multi-purpose locomotive ES64U2 of the Central Weser Railroad (MWB). Built as Austrian class 1116 "Taurus". Multi-system locomotive with 2 pantographs.

Model: Locomotive comes with a digital decoder, C-Sine high efficiency propulsion, and sound effects generator. 2 powered axles. 4 traction tires. Headlights and marker lights, in conventional operation, can be digitally controlled. High beam headlights and horn sound effects, as well as acceleration and deceleration can be controlled digitally with control unit or systems. Additional operating sound effects can be digitally controlled with Systems. Engineer's cabs with interior details. Separately applied metal grab irons. Length over buffers 22.5 cm / 8-27/32".

Digital Functions	6020	6021	60652	60212
Headlights/marker lights (f1 not assigned)	x	x	x	x
Full beam headlight		x	x	x
Horn		x	x	x
Direct control		x	x	x
Main switch sound effects			x	x
Compressed air sound effects			x	x

Electric Locomotives.

37510
Electric Locomotive.

Export model for Switzerland.

Prototype: Swiss Federal Railways (SBB/CFF/FFS) class Ae 3/6 II express locomotive.
Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. 3 axles and 2 jackshafts powered. 2 traction tires. Headlights will work in conventional operation and can be controlled digitally. Separately applied handrails and grab irons. Length over the buffers 16.0 cm / 6-5/16".

37522
Electric Locomotive.

Export model for Switzerland.

Prototype: Swiss Federal Railways (SBB/CFF/FFS) class De 6/6. "Seetal Crocodile", version around 1953.
Model: Comes with a digital decoder and controlled high-efficiency propulsion. Special motor with flywheel. 6 powered axles. 4 traction tires. Articulated frame allows the locomotive to negotiate sharp curves. Headlights will work in conventional operation and can be digitally controlled. White tail light as well as acceleration and braking delay can be controlled digitally with Control Unit or Systems. Separately applied metal grab irons. Brake hoses and prototype couplings can be installed on the buffer beam. Length over buffers 16.2 cm / 6-3/8".

N mfx NEM III

39560
"Crocodile" Freight Locomotive.

Metal frame and body.
Headlights / marker lights with maintenance-free LEDs.
C-Sine motor.
Swiss headlight changeover:
3 x white, 1 x white
Light changeover for the locomotive running "light": 3 x white, 1 x red.

Prototype: Swiss Federal Railways (SBB) class Ce 6/8III. Design with diagonal side rod drive.
Model: Comes with a Digital decoder, C-Sine motor, and different light functions. 3 axles powered. 4 traction tires. Driving wheels divided into two coupled groups enabling the locomotive to negotiate sharp curves. Three-part metal body with end hoods that can swing out on curves. Separately applied number boards. Detailed roof equipment. Headlights with the Swiss light changeover work in conventional operation and can be controlled digitally. **The changing between the Swiss light change-over and a white headlight / red marker light changeover, as well as the low speed range for switching without the acceleration / braking delay are controlled digitally with the 6021 Control Unit.** Length over buffers 23.0 cm / 9-1/8".

fx NEM III IV

Electric Locomotives.

36330
Electric Locomotive.

New tooling.
Locomotive has switch engine headlight changeover like the Swiss prototype.

One-time series.

Prototype: Swiss Federal Railways (SBB/CFF/FFS) class Ee 3/3 switch engine. Series built starting in 1932.
Model: Locomotive comes with a digital decoder and a miniature motor with a flywheel. 3 axles and jackshaft powered. Headlights are maintenance-free LED's integrated into the end platforms. Headlights will work in conventional operation and can be controlled digitally. Acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Separately applied roof equipment. Separately applied handrails and grab irons. Brake hoses and prototypical couplers can be mounted on the buffer beams. Length over the buffers 11.2 cm / 4-7/16".

NEM IV

36851
Electric Locomotive.

New model.
Metal body.

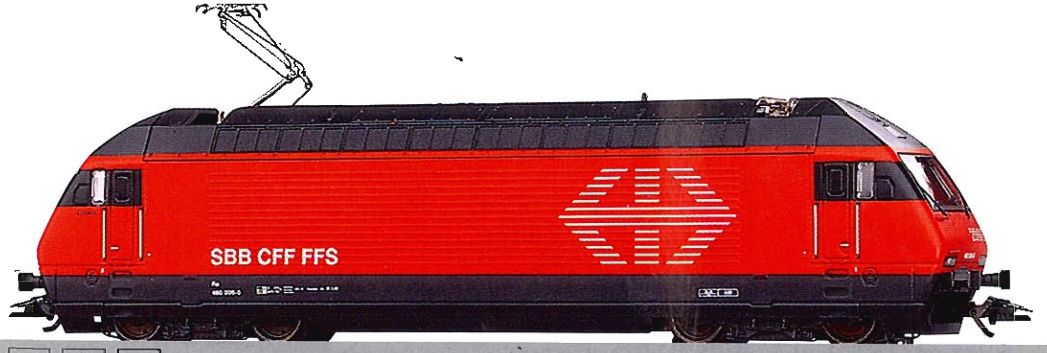
Prototype: Swiss Federal Railways (SBB/CFF/FFS) class 482 general purpose locomotive. Two-system locomotive.
Model: Metal version with many integrated details. Total body realistic Digital decoder and special motor. 4 axles powered via cardan shafts. 2 traction tires. LED lighting, conventional in operation and can be digitally controlled. Adjustable running characteristics.
4 mechanically functioning pantographs. Length over buffers 21.7 cm / 8-17/32".

39602
Electric Locomotive.

Metal frame and body.
Headlights with maintenance-free LEDs.
C-Sine motor.
Different light functions:
Swiss headlight changeover:
3 x white, 1 x white
Headlight / marker light changeover for the locomotive running light:
3 x white, 1 x red
Dual long distance headlights with super bright LEDs.

Prototype: Swiss Federal Railways (SBB) class 460.
Model: With Digital decoder and C-Sine motor. 2 axles powered.
4 traction tires. Engineer's cabs with interior detailing. Separately applied horns and grab irons. **Built-in long distance headlights.** Headlights digitally controlled. Long distance headlights, that change over with the direction of travel, and the changeover between Swiss headlight changeover and white headlights / red marker lights can be turned on with the 6021 Control Unit. The headlights with Swiss headlight changeover will work in conventional operation. Length over buffers 21.3 cm / 8-3/8".

In digital operation the slow speed control for switching can be activated with the "f4" button on the 6021 Control Unit. When this is done the values set for the acceleration and braking delay are temporarily overridden. The maximum speed is reduced considerably at the same time. Despite this the full control range is still available with all of the speed levels for controlling the locomotive. This makes it possible to have very precise switching operations.



Electric Locomotives.

36852
Electric Locomotive.

Prototype: BLS Lötschbergbahn AG (Alpine Bern-Lötschberg-Simplon Railroad) class 485 general purpose locomotive. Two-system locomotive.
Model: Metal version with many integrated details. Total body realistic Digital decoder and special motor. 4 axles powered via cardan shafts. 2 traction tires. LED lighting, conventional in operation and can be digitally controlled. Adjustable running characteristics.
4 mechanically functioning pantographs. Length over buffers 21.7 cm / 8-17/32".

N V

39831
Electric Locomotive.

Export model for Austria.

Prototype: Austrian Federal Railways (ÖBB) class 1116 general-purpose locomotive. Named the "Taurus". Dual system locomotive.

Model: Locomotive comes with a digital decoder and a controlled C-Sine high-efficiency propulsion system, light and sound functions. 2 axles powered. 4 traction tires. Headlights / marker lights are maintenance-free LED's. Headlights and marker lights will work in conventional operation and can be controlled digitally. Long distance headlights, air horn sound effect as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Engineer's cabs have interior details. Separately applied handrails. Separately applied pilots. The wheels on the locomotive have a representation of sound mufflers. Length over the buffers 22.5 cm / 8-7/8".

39358
Electric Locomotive.

Version with 3 pantographs.
Metal frame and body.
Close couplers with guide mechanism.
C-Sine motor.
Maintenance-free LED's for headlights.
Long distance headlights.
Sound effects module for horn.
Slow speed range.

Prototype: Austrian Federal Railways (ÖBB) class 1116. Version with 3 pantographs.
Model: Locomotive comes with a digital decoder, C-Sine motor, long distance headlights and a sound effects module. 2 axles powered. 4 traction tires. Engineer's cabs with interior details. Separately applied handrails. Separately applied snowplows. Headlights will work in conventional operation and can be controlled digitally. Direction-dependent long distance headlights, sound effects module for a horn as well as slow speed range without acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Length over buffers 22.5 cm / 8-7/8".

Electric Locomotives.

37241
Electric Locomotive.

Export model for the Netherlands.

Prototype: Dutch State Railways (NS) class 1100. Rebuilt version as it last looked.
Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. 2 axles powered. 4 traction tires. Headlights will work in conventional operation and can be controlled digitally. **Acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 18.0 cm / 7-1/16".

37263
Electric Locomotive.

Export model for the Netherlands.

Prototype: Dutch State Railways (NS) class 1800 general-purpose locomotive. New classification for the former class 1600. Road number 1855 with the coat-of-arms for the city of Eindhoven.
Model: Comes with a Digital decoder, controlled high-efficiency propulsion and a sound effects generator. 2 axles powered. 4 traction tires. Headlights will work in conventional operation and can be controlled digitally. **Horn sound effects as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 21.0 cm / 8-1/4".

37120
Electric Locomotive.

Prototype: Heavy general purpose locomotive class 1200 of the Netherlands Railroad (NS). Version in final operational livery.
Model: With digital decoder, controlled high-efficiency propulsion, and sound effects generator.
2 powered axles. 4 traction tires. Lighting with maintenance-free LEDs. Headlights will work in conventional operation and can be digitally controlled. Signal horn sound effects, as well as acceleration and braking delay can be controlled digitally with Control Unit or Systems. Brake hoses can be installed on the buffer beam. Length over buffers 20.8 cm / 8-3/16".

N mfx V

Electric Locomotives.

37331
Electric Locomotive.

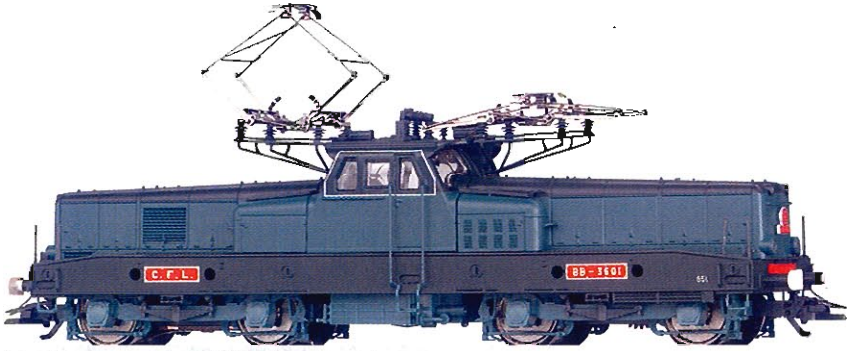
Metal construction.
All axles powered.
Can be used for freight and passenger trains.

One-time series.

The 41273 car set goes well with the 37331 electric locomotive and can be found on page 214.

Prototype: Luxembourg Railways (CFL) class 3600. Original version. Similar in design to the French class BB 12 000.

Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. Special motor with a flywheel. 4 axles powered. 4 traction tires. Headlights will work in conventional operation and can be controlled digitally. Marker lights as well as acceleration and braking delay can be controlled digitally. Headlights and marker lights with maintenance-free LED's. Pantographs mounted on free-standing frames. Numerous separately applied handrails. Brake hoses and prototype couplers can be mounted on the buffer beams. Length over buffers 17.5 cm / 6-7/8".

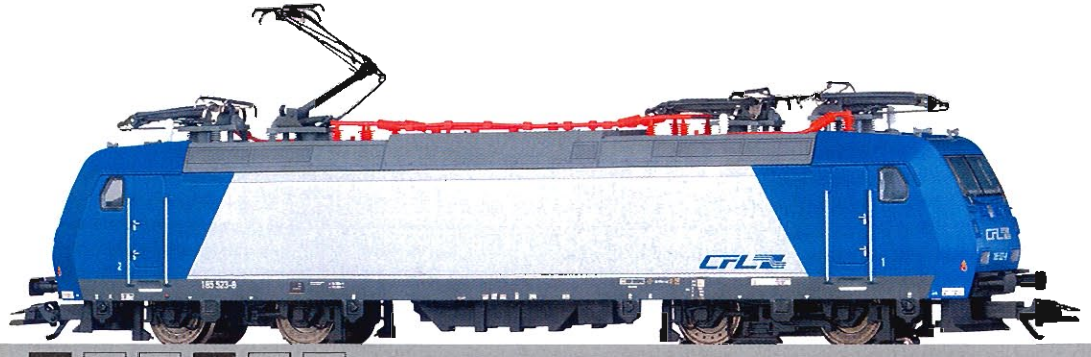


36853
Electric Locomotive.

Export model for Luxemburg.

Prototype: Luxemburg Railroad (CFL) general purpose locomotive, class 185. Two-system locomotive.

Model: Metal version with many integrated details. Total body realistic Digital decoder and special motor. 4 axles powered via cardan shafts. 2 traction tires. LED lighting, conventional in operation and can be digitally controlled. Adjustable running characteristics. 4 mechanically functioning pantographs. Length over buffers 21.7 cm / 8-17/32".

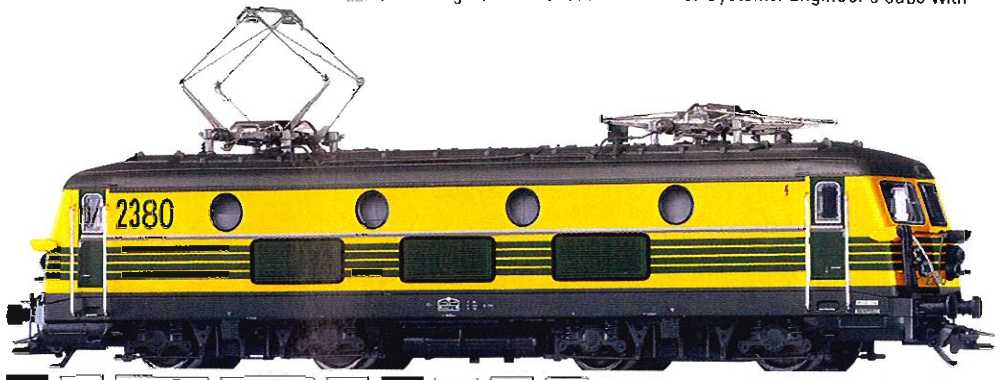


37236
Electric Locomotive.

Export model for Belgium.

Prototype: Belgian State Railways (SNCB) class 23 general purpose locomotive. Version in striped "zebra" design.

Model: With digital decoder, controlled high-efficiency propulsion, and sound effects generator. 2 powered axles. 4 traction tires. Lighting with maintenance-free LEDs. Headlights will work in conventional operation and can be digitally controlled. Signal horn sound effects, as well as acceleration and braking delay can be controlled digitally with Control Unit or Systems. Engineer's cabs with interior details. Separately applied metal grab irons and additional details. Couplings can be replaced with front skirting. Length over buffers 21.0 cm / 8-9/32"



N mfx NEM IV

37332
Electric Locomotive.

Metal construction.
All axles powered.
Use for freight and passenger trains.

Export model for France.

Prototype: French State Railways (SNCF) class BB 12 000 general-purpose locomotive.
Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. Special motor with flywheel. 4 axles powered. 4 traction tires. Headlights are maintenance-free LED's. Headlights will work in conventional operation and can be controlled digitally. Marker lights as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Pantographs mounted on free-standing open frames. Separately applied metal handrails and grab irons. Brake hoses and prototype coupler can be mounted on the locomotive. Length over the buffers 17.5 cm / 6-7/8".

fx NEM III

Electric Locomotives.

37255
Electric Locomotive.

Metal construction.
Current paint scheme for the prototype.
Horn sound effect in digital operation.
Goes well with the 46551, 47211, 47450 cars.

Export model for France.

Prototype: French State Railways (SNCF) class BB 422 200 general-purpose locomotive. Assigned to the freight service area (FRET). Dual system locomotive.

Model: Locomotive comes with a digital decoder, controlled high-efficiency propulsion, and a sound effects generator. 2 axles powered. 4 traction tires. Headlights will work in conventional operation and can be controlled digitally. Sound effect of a whistle as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Pantographs positioned specifically for this type of locomotive. Separately applied metal handrails and grab irons. Length over the buffers 20.0 cm / 7-7/8".

37389
Electric Locomotive.

First time for this locomotive type with high-efficiency propulsion.
Whistle sound effect in digital operation.

Export model for France.

Prototype: French State Railways (SNCF) class 26 000 express general-purpose locomotive. "SYBIC" dual system locomotive. Used in passenger service.

Model: Locomotive comes with a digital decoder, controlled high-efficiency propulsion, and a sound effects circuit. 2 axles powered. 4 traction tires. Headlights will work in conventional operation and can be controlled digitally. Sound effect of a whistle as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Different design pantographs. Separately applied grab irons. Length over the buffers 20.4 cm / 8-1/16".

37242
Electric Locomotive.

Current color scheme for the prototype.
Goes well with the express train passenger cars in the 41895, 41896 sets.

Export model for Italy.

Prototype: Italian State Railways (FS) class E 424 general-purpose locomotive. Rebuilt version. Italian design pantographs.

Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. 2 axles powered. 4 traction tires. Headlights will work in conventional operation and can be controlled digitally.

Acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Metal pilots. Separately applied metal handrails and grab irons. Length over the buffers 17.6 cm / 6-15/16".

37240
Electric Locomotive.

Export model for Italy.

Prototype: Italian State Railways (FS) class E 424. Rebuilt version in the current paint scheme.

Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. 2 axles powered. 4 traction tires. Headlights can be controlled digitally.

Acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Length over buffers 17.5 cm / 6-7/8".

Electric Locomotives.

37412
Electric Locomotive.

Export model for Sweden.

Prototype: Swedish State Railways (SJ) class Rc 2. Current version for the "Green Cargo" freight service business group.

Model: Locomotive comes with a digital decoder and controlled high-efficiency propulsion. 2 axles powered. 4 traction tires. Headlights will work in conventional operation and can be controlled digitally. **Acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Length over buffers 18.0 cm / 7-1/16".

37413
Electric Locomotive.

Export model for Sweden.

Prototype: Swedish State Railways (SJ) class Rm freight locomotive with tender Original version. Used in ore and freight service.

Model: Comes with a digital decoder and controlled high-efficiency propulsion. 2 powered axles. 4 traction tires. Headlights will work in conventional operation, can be digitally controlled. Acceleration and braking delay can be controlled digitally with the 6021 Control Unit. Double-arm pantograph. Length over buffers 18.0 cm / 7-3/32".

36335
Electric Locomotive.

One-time series.

Prototype: Swedish State Railways (SJ) class Ub switching locomotive.
Model: With digital decoder and miniature motor with flywheel.
3 axles and 2 jackshafts powered.
Lighting with maintenance-free LED's. Headlights will work in conventional operation and can be digitally controlled. The acceleration and braking delay can be controlled digitally with Control Unit or systems. Separately applied roof equipment. Separately applied metal grab irons. Brake hoses and prototype couplings can be installed on the buffer beam. Length over buffers 11.2 cm / 4-13/32".

N NEM IV

36336
Electric Locomotive.

One-time series.

Export model for Norway.

Prototype: Norwegian State Railroad (NSB) switching locomotive class El 10.
Model: With digital decoder and miniature motor with flywheel.
3 axles and 2 jackshafts powered.
Lighting with maintenance-free LED's. Headlights will work in conventional operation and can be digitally controlled. The acceleration and braking delay can be controlled digitally with Control Unit or Systems. Separately applied roof equipment. Separately applied metal grab irons. Brake hoses and prototype couplings can be installed on the buffer beam. Length over buffers 11.2 cm / 4-13/32".

N NEM IV

Electric Locomotive.

37490
Electric locomotive.

A wider shoe may be required for the pantograph for the operation of a catenary, which is tensioned in a zigzag or curve. A matching attachment is available as single part: 611073.

Prototype: Pennsylvania Railroad (PRR) type GG-1 heavy general purpose locomotive. Wheel arrangement 4-6-6-4. Built by General Electric and Westinghouse. Original version in Brunswick green design. **Model:** With digital decoder, controlled high-efficiency propulsion, and sound effects generator with many functions. High-efficiency motor with centrally installed bell-shaped armature. 4 powered axles in each draw frame. 4 traction tires. Articulated frame to enable unit to negotiate sharp curves with 2 sets of powered wheels and 2 sets of carrying wheels. Headlights are maintenance-free LED's. Headlights and interior lighting work in conventional operation and can be controlled digitally. Fan operating sound effects, as well as acceleration and braking delay can be digitally controlled with Control Unit or Systems. Additional operating sound effects can be digitally controlled with Systems. High-performance speaker. Large American design pantograph. Length over couplings 28.0 cm / 11-1/32".

Digital Functions	6020	6021	60652	60212
Headlights	x	x	x	x
Full beam headlight		x	x	x
Engineer's cab lighting 1/2	(x)	x	x	x
Fan sound effects		x	x	x
Direct control		x	x	x
Bell permanent operation			x	x

Digital Functions	6020	6021	60652	60212
Single whistle signal			x	x
Whistle signal sequence			x	x
Air discharge sound effects			x	x
Switching mechanism sound effects				x
Main switch sound effects				x
Braking sound effects				x

N mfx NEM III

Loewys Crocodile.

In the 30's in the middle of the deepest depression, the Pennsylvania Railroad PRR ventured to electrify their main routes in the eastern United States. The gigantic project included the repair and reinforcement of railway track, construction of new tunnels with greater diameters, as well as integration of suburban railways. The first stretch extended from Washington via Baltimore, Wilmington, and Philadelphia to Penn Station in New York (including the suburban lines under the Hudson River). All that was missing was the suitable locomotive; up to that point the PRR's long distance passenger trains were steam-powered. A multi-year trial phase commenced. At the end of the trial a prototype built by General Electric and Baldwin in 1934 with 4-6-6-4 wheel arrangement, was declared the winner. The GG-1's data are impressive: 6 twin motors (a pair for each axle) output a total of 3445 kW (4620 HP) with peaks even exceeding 5965 kW (8000 HP). The pilot truck diameter is 1.45 m (57 inches) the total weight 208 t (460 000 pounds), the length 23 m (79.5 feet). The GG-1 reached speeds of 145 km/h (90 miles/h).
The year before a designer, originally from France, applied for employment at the PRR. Most likely to get rid of him he was assigned to design the trash containers in Penn Station New York. The result was so impressive that he was invited to make a few suggestions for the design of the GG-1.

Raymond Loewy, pursued the task with thorough precision. Instead of the coarse, riveted superstructures of the prototype, he came up with a smooth-surface design. He provided an elegant, dynamic package for the mighty power of this machine. The superstructures have the effect of all being from the same cast, they are harmoniously rounded and flow into each other without interruption. Five, sharply converging gold stripes on a dark green scheme underline the elegance.

An the 10th of February 1935 the PRR placed the electrified stretch between Washington and New York in operation. Thanks to its power reserves, the GG-1 shortened travel times and compressed the timetable. Consequently the PRR also electrified its routes to the west. In total the PRR has 4300 km (2677 miles) under wire, that is more than 40 percent of the total electrified network of the USA. Daily 3500 passenger trains operate on the PRR network. The 137 GG-1's pull more than 900 trains a day, including the prestigious express trains between New York and Washington. After replacing the drive mechanism, the GG-1 has a second career pulling freight trains which it usually pulls as a double unit.

Powered rail cars and trains.

Swiftness and elegance – is it possible to have both? At least in rail traffic, there are current or historical vehicles, which do justice to both terms. One of the visually most appealing is the Henschel-Wegman train, the insider model of the current year. It was intended for the express route between Berlin and Dresden and convinced by its comfort and especially by its performance of the specifically developed class 61. The streamlined locomotives and the streamlined cars not only stirred excitement among experts.

This also applied to an express powered train of the fifties, the VT 11.5 which already became a legend shortly after being in operation. It permitted "first class travel" in the truest sense, as the title in the Märklin book states so eloquently in reference to the diesel locomotive (refer to page 420).

The 628.2/928.2 is somewhat simpler as a regional power train; the exterior elegance develops by repeatedly looking. Windows, doors, front sides, destination indicator – everything is clearly illustrated. The model is currently in operation, along with the stars of long-distance travel: The high-speed trains for the network of the InterCity Express. Several generations of the ICE are on inventory as Märklin models, just as in the large scale operations. These models are designed for the high driving accuracy, even at high speeds, typical for Märklin models.


DB
DB
DB

Powered Rail Car Train.

37770
Diesel Powered Rail Car Train.

One-time series.

Complete new tooling.
Model is based on the famous powered rail car from the era of the "flying trains".
Motor has a flywheel.
Reliable tracking due to the genuine "Jacobs" truck.

Metal body.
Interior lighting.
Digital sound: Horn.

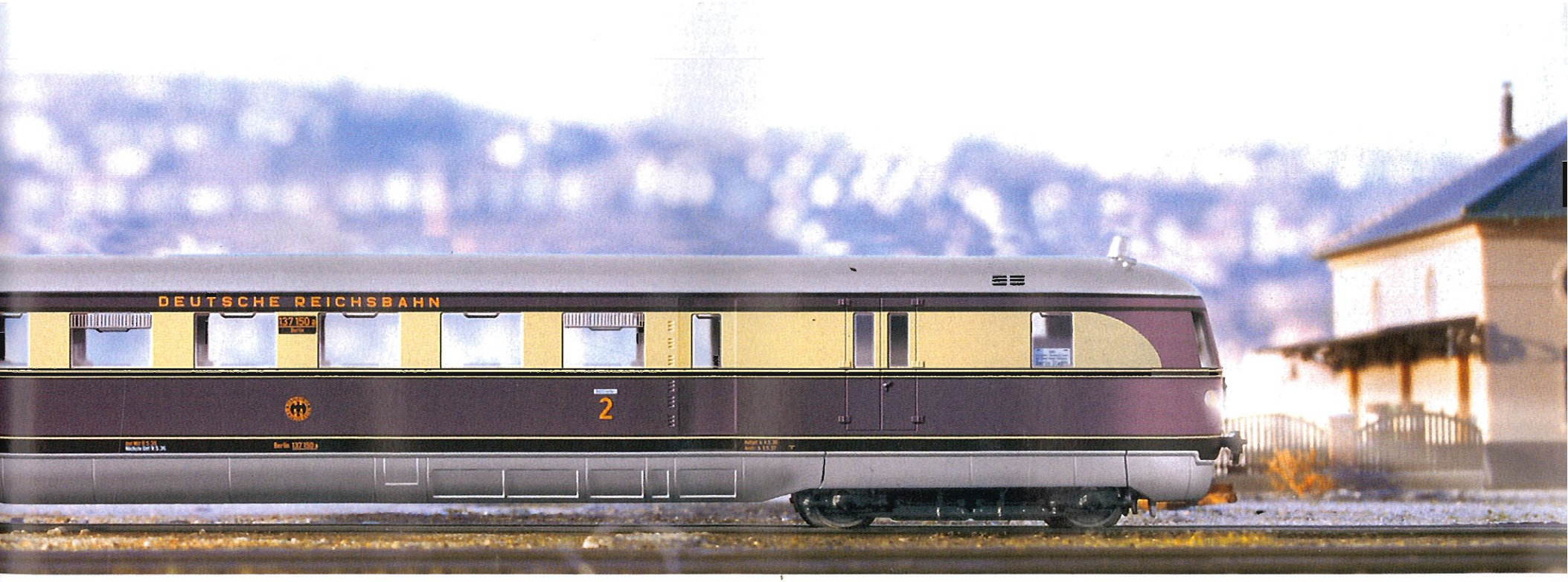
Prototype: German State Railroad Company (DRG) class SVT 137 express powered rail car.
Two-piece "Hamburg"-type with "Jacobs" truck.
Model: With digital decoder, controlled high-efficiency propulsion, light and sound effects functions. High-efficiency motor with bell-shaped armature and flywheel in the "Jacobs" truck.
2 powered axles. 4 traction tires.
Continuous side skirting with guided plates over the wheel cutouts. Guide mechanism with closed bellows between the two halves of the rail car. Lighting with maintenance-free LED. Headlights will work in conventional operation, can be digitally controlled. Interior lighting, horn sound effect, as well as acceleration and braking delay can be digitally controlled with the 6021 Control Unit. Roof with separately applied details. Reproduction of the Scharfenberg coupler on the ends (without function) Length over couplings 48.4 cm / 19-1/16".

The Fastest Train in the World.

In the 1920s the German State Railroad Company was faced with increased competition. Automobiles and airplanes made traveling more individual and faster. The day trip – depart in the morning, return at night – became an attractive offering for businessmen and the well heeled. If the Railroad company did not want to lose these customers, rail travel had to become faster. After initial attempts with the rail zeppelin (which set a world record for the fastest rail vehicle at 230 km/h or 143 mph, (a record which stood for 24 years), the German Railroad commissioned a two-piece combustion powered rail car. It was placed in service in May 1932 and linked the two metropolitan centers of Berlin and Hamburg. The express powered rail car raced through the 228 km or 142 miles stretch in 132 minutes. With an average speed of 128 km/h or 80 mph it was the fastest scheduled train in the world and took its place in history as the "Flying Hamburger". The new express service was an immense success. Naturally the State Railroad ordered additional powered rail cars. This Hamburg type is the prototype for our model. The design was improved for the VT 137s; they received a modified front part, and they were equipped for double unit travel. The propulsion system worked in accordance with the diesel electric principle. A unit comprised of a 12-cylinder diesel motor and generator sat on each of the two end trucks. These units functioned as power plants which generated the electricity for the electric traction motors. They were placed on the two axles of the middle "Jacobs" truck, which combined the two halves of the car.

The express service network of the SVT was quickly extended. To and from Berlin the Hamburg-type powered rail car traveled to Cologne, Frankfurt, Leipzig, Stuttgart, and Munich; there was also a direct connection between Hamburg and Cologne. The German State Railroad held the 03 class streamline steam engine in reserve as a backup. They could jump in with a three-part skirted passenger car composition in the event that an SVT failed.

As opposed to the prototype, the Hamburg class received a multiple control unit. The stretch from Berlin to the south was traveled as a double unit. In Nürnberg the two powered rail cars were separated, and they continued on separately to Stuttgart, or Munich, respectively. Train and station personnel were trained for this separation maneuver in order to save time. After a 60 second stop the first powered rail car moved out of the station, after another 60 seconds the second powered rail car left the station. On the return route the two cars were re-coupled in Nürnberg. Today we are familiar with this type of double unit operation from the ICE 2.



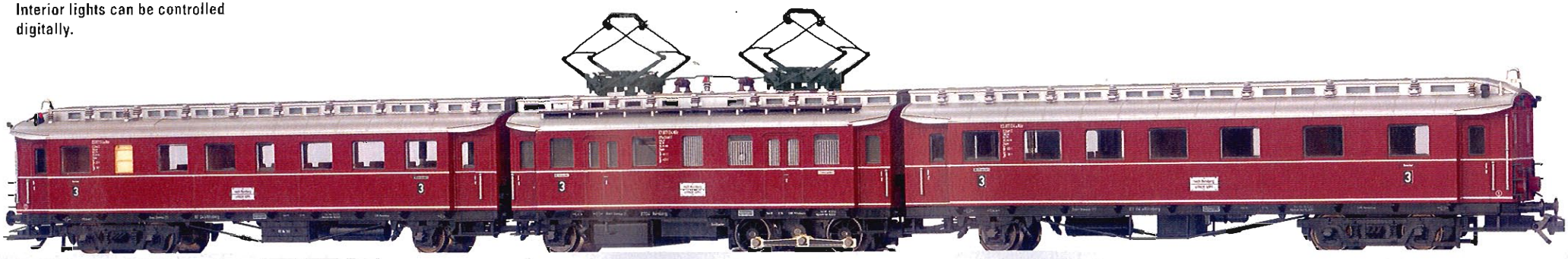
Powered Rail Car Train.

37265
Electric Rail Car Train.

Motor with flywheel.
Headlights and interior lights with maintenance-free LED's.
Interior lights can be controlled digitally.

Prototype: German Federal Railroad (DB) class ET 87.
Model: Unit comes with a digital decoder, controlled high-efficiency propulsion, and interior lighting. 2 axles powered. 2 traction tires.

Close-coupled special connection between the cars. Open view into the engineer's cabs in the end cars. Interior lighting with maintenance-free LED's. Headlights and interior lights will work in conventional operation and can be controlled digitally. **Acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Train length 49.0 cm / 19-5/16".



In 1914 the KPEV purchased a total of 6 three-unit rail car trains for the hilly route between Nieder-Salzbrunn and Halbstadt in Silesia in order to better manage the constantly increasing passenger loads in this region.

These rail car trains were initially classed as E.T.501-506, and they had a visually striking appearance that reminded one of the express train passenger cars in use at that time with clerestories, truss rods, and inset doors. The motorcar was located in the middle between the two cab control cars and this arrangement guaranteed good running characteristics on curves. When the passenger loads into Halbstadt, now a Czech city, decreased after World War I, these rail car trains, now know as ET 87, were assigned to other routes. After 1932 they were painted in the attractive scheme of cream/violet used on the DRG powered rail cars.

In 1945 three of these train sets were brought to Bavaria, where they were overhauled and painted in the DB's new paint scheme.

They were now used mostly in commuter service around Nürnberg, mainly on the electrified routes to Fürth and Altdorf. In 1959 the last remaining ET 87 was taken out of service. Regrettably, all of them were scrapped.

Powered rail car trains.

37762
Diesel Powered Rail Car Train.

Prototype: German Railroad, Inc. (DB AG) class 628.2 with class 928.2 control car.
Model: Unit comes with a digital decoder and controlled high efficiency propulsion. 2 axles powered. 4 traction tires. Headlights and interior lighting works in conventional operation and can be controlled digitally. Lighted destination signs at the ends of the train. **Acceleration and braking delay can be controlled with the 6021 Control Unit.** Close coupled special connection between powered and control car. Reproduction of the original couplers and brake hoses. Length over buffers 52.5 cm / 20-11/16".

The regional express passenger service has been made very attractive with the use of the class 628 diesel powered rail cars in the new color scheme.

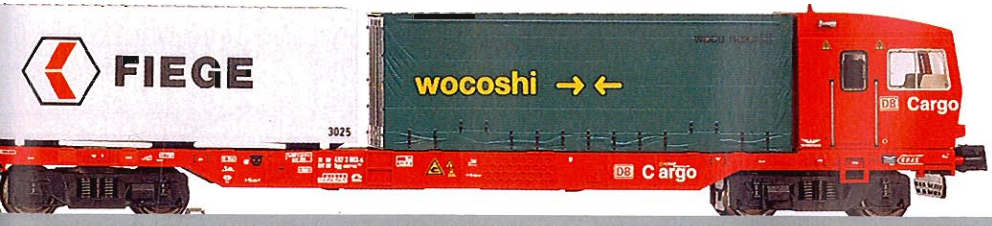
A 12-cylinder diesel motor with 560 horsepower gives this train a maximum speed of 120 km/h or 75 mph.

37090
Powered Freight Rail Car Train.

Prototype: German Railroad, Inc., DB Cargo (DB AG) class Sggoorrss 700 "CargoSprinter".
Model: 5-part unit. Comes with a Digital decoder and controlled high-efficiency propulsion. 1 powered end car. 2 axles powered. 2 traction tires. 3 intermediate cars. 1 non-powered end car. Engineer's cabs on the end cars have interior details. Direction-dependent power pickup through the end car at the front of the train. Continuous electrical connections through the entire powered rail car train. Loaded with different versions of containers and flatbed trailers with tarps. Flatbed trailers having folding supports. Headlights on the powered end car will work in conventional operation and can be controlled digitally. **Acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Train length 104.3 cm / 41-1/16".

Combining the advantages of the railroad with the flexibility of trucks was the basic idea of this powered freight rail car train from the Windhoff Company in Rheine, Germany. This 91 meter or 298' 6" train has a powered end unit with an engineer's cab at each end and three non-powered intermediate cars in between. These units can be loaded with flatbed trucks with tarps as well as with different types of containers. With this the CargoSprinter closes a gap in the rail service offered and creates greater flexibility and customer proximity. At the same time, there is no longer a need for the time-consuming switching maneuvers for locomotive hauled trains. Each of the end cars is powered by two six-cylinder diesel motors mounted below the floor that are rated for a maximum speed of 120 km/h or 75 mph.


DB Cargo
Mehl Grieß
stern
Schönbuch Bräu
DB Cargo


FIEGE
wocoshi
DB Cargo
DB Cargo

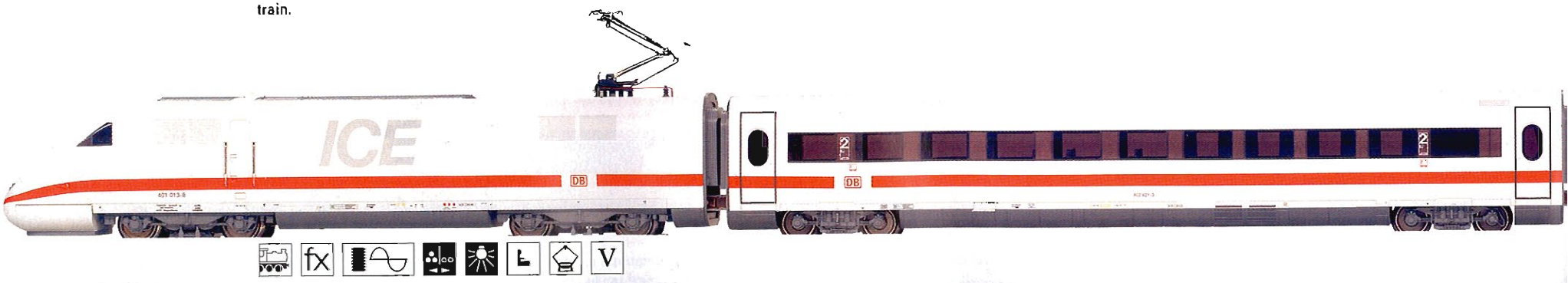
Powered Rail Car Train.

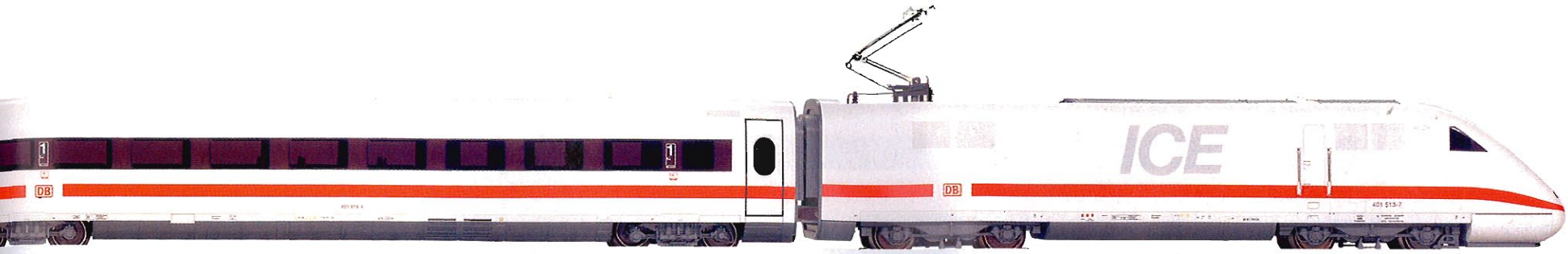
39711
Powered Rail Car Train.

C-Sine motor.
Comes from the factory with interior lighting.
Sound effects for a horn.
Sound effects for the warning whistle that the doors are closing.
Direction-dependent power pickup in the end car at the front of the train.

Prototype: German Railroad, Inc. (DB AG) class 401 high-speed ICE 1 InterCity Express train. 1 class 401.0 powered end unit. 1 type Avmz 801.8 intermediate car, 1st class. 1 type Bvmz 802.6 intermediate car, 2nd class. 1 class 401.5 powered end unit.

Model: 4-part version. Comes with a Digital decoder, C-Sine motor and sound effects module. 2 axles powered. 4 traction tires. Powered end units have a metal frame. Engineer's cabs have interior details. Direction-dependent power pickup in the end car at the front of the train. Interior lighting is supplied with power by means of a continuous electrical connection through the entire train. Headlights will work in conventional operation and can be controlled digitally. **The sound effects for a horn and the warning whistle that the train's doors are closing as well as the low speed switching range without acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Train length 97.0 cm / 38-3/16".



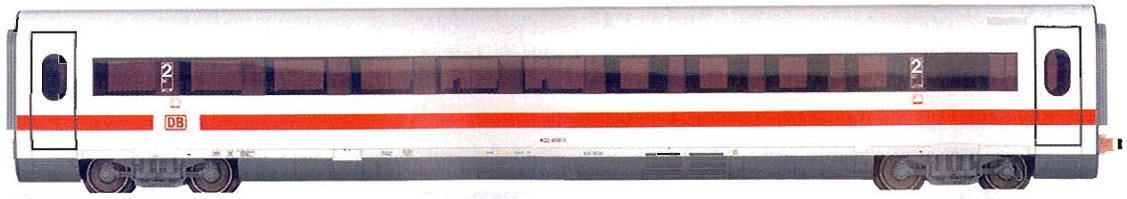

ICE
DB
DB


ICE
DB

Intermediate car.

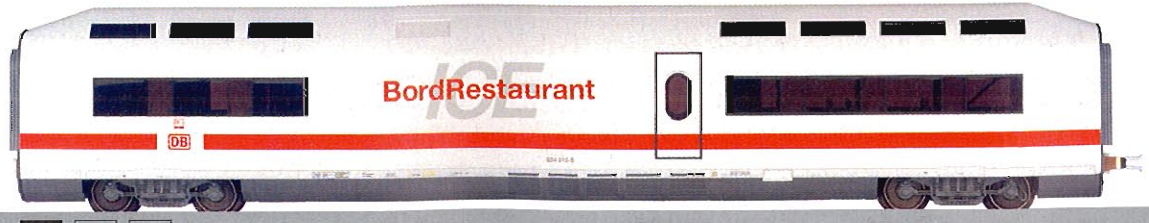
43713
Open Seating Car.

Prototype: German Railroad, Inc. (DB AG) type Bvmz 802.8, 2nd class. Intermediate car for the ICE 1.
Model: Intermediate car to add to the 39711 model. Special close couplings with guide mechanism. Interior lighting is supplied with power by means of a continuous electrical connection through the entire train. Length 26.4 cm / 10-3/8".



43733
Dining Car.

Prototype: German Railroad, Inc. (DB AG) type WSmz 804.0. Intermediate car for the ICE 1.
Model: Intermediate car to add to the 39711 model. Special close couplings with guide mechanism. Interior lighting is supplied with power by means of a continuous electrical connection through the entire train. Length 26.4 cm / 10-3/8".



43703
Open Seating Car.

Prototype: German Railroad, Inc. (DB AG) type Avmz 801.0, 1st class. Intermediate car for the ICE 1.
Model: Intermediate car to add to the 39711 model. Special close couplings with guide mechanism. Interior lighting is supplied with power by means of a continuous electrical connection through the entire train. Length 26.4 cm / 10-3/8".

43723
Service Car.

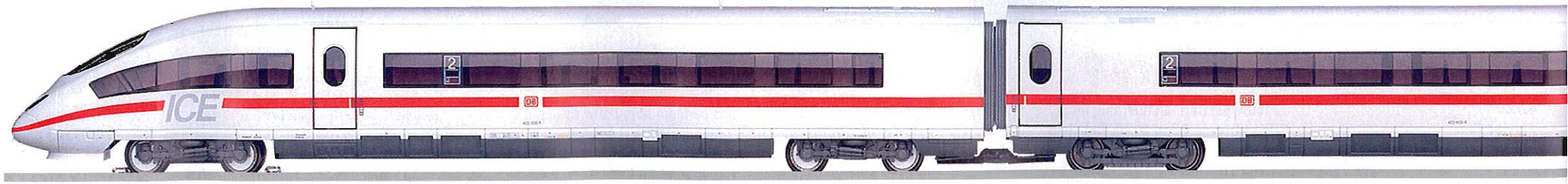
Prototype: German Railroad, Inc. (DB AG) type BSmz 803.0, 2nd class. Intermediate car for the ICE 1.
Model: Intermediate car to add to the 39711 model. Special close couplings with guide mechanism. Interior lighting is supplied with power by means of a continuous electrical connection through the entire train. Length 26.4 cm / 10-3/8".

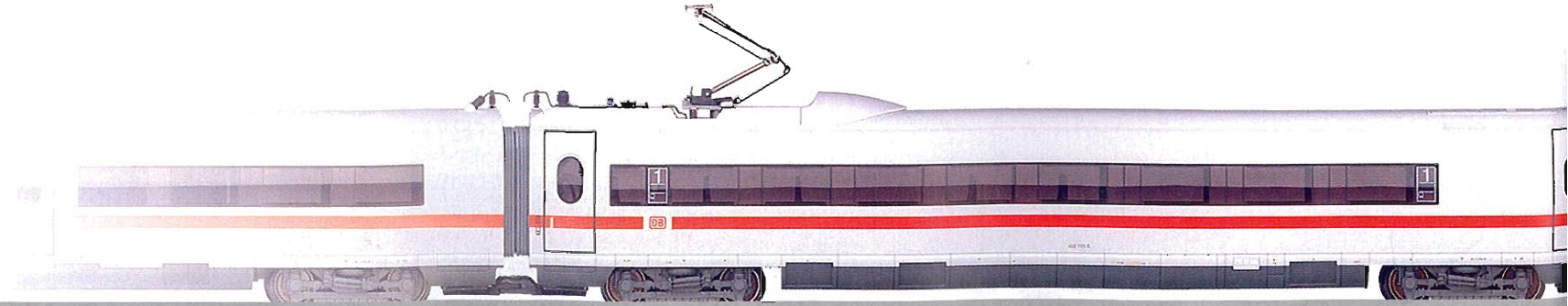
Powered Rail Car Train.

37783
Powered Rail Car Train.

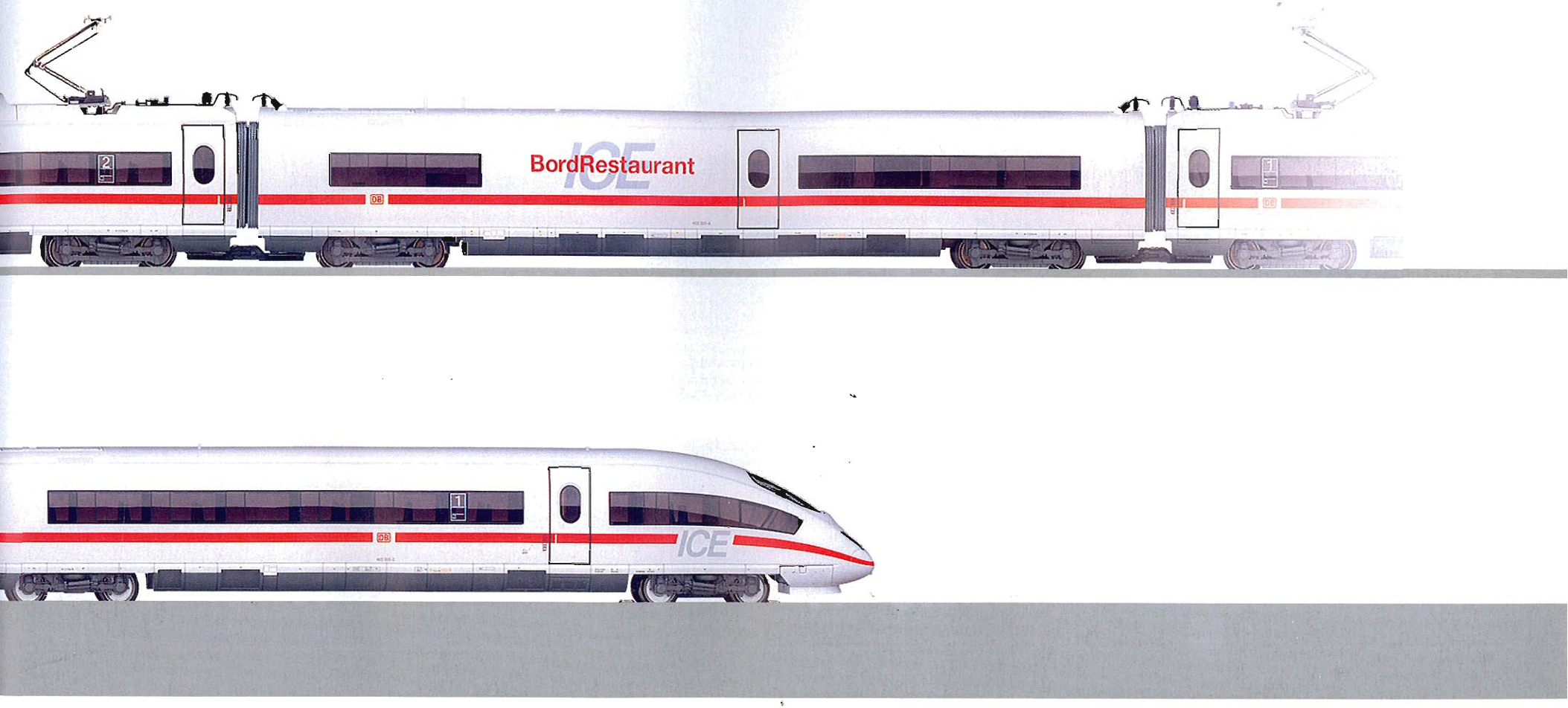
Prototypical roof arrangement.
Scale length.
Interior lighting installed at the factory.
Motor comes with a flywheel.
Open view into the cockpit.
Direction-dependent power pickup in the end car at the front of the train.

Prototype: German Railroad, Inc. (DB AG) class 403 ICE 3 high speed powered rail car train. 1 type 403.0 end car. 1 type 403.1 transformer car. 1 type 403.3 dining car. 1 type 403.6 transformer car. 1 type 403.5 end car.
Model: 5-part version. Train comes with a digital decoder, high-efficiency propulsion, and long distance headlights. 2 axles powered. 4 traction tires. Engineer's cabs in the end cars have interior details. Direction-dependent power pickup in the end car at the front of the train. Special close couplers with guide mechanism. Interior lighting is supplied with power by means of a continuous electrical connection through the entire train. Pantographs are only mechanically functional, they do not function electrically. Headlights / marker lights together with the interior lighting will work in conventional operation and can be controlled digitally. **Direction-dependent long distance headlights as well as acceleration and braking delay can be controlled digitally with the 6021 Control Unit.** Train length 142.2 cm / 56".





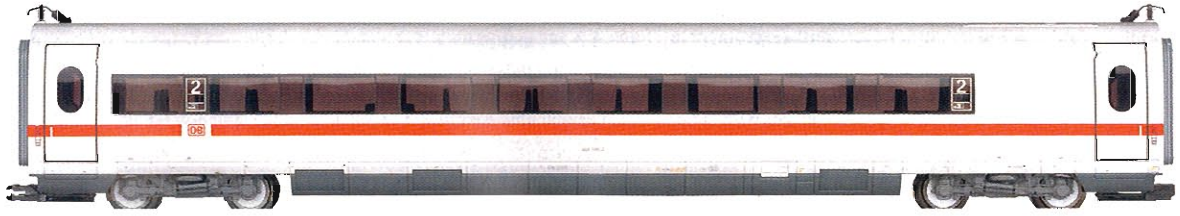
The class 406 designates those ICE trains that are used as four-system trains, particularly in cross border passenger service. The class 403 by contrast is designed as a single system train for operation with 15,000 volts at 16 2/3 hertz. These trains are authorized to travel at speeds up to 330 km/h or 206 mph, and they shorten travel times especially on the newly constructed routes. Externally, they differ from the class 406 in the arrangement of the pantographs and the roof arrangement. The 8-part unit has a total length of 200 meters or 656 feet 2 inches with seating for 415 passengers. The weight of the train when not loaded is 409 metric tons.



Intermediate Car.

43734
Intermediate Car for the Express Powered Rail Car Train.

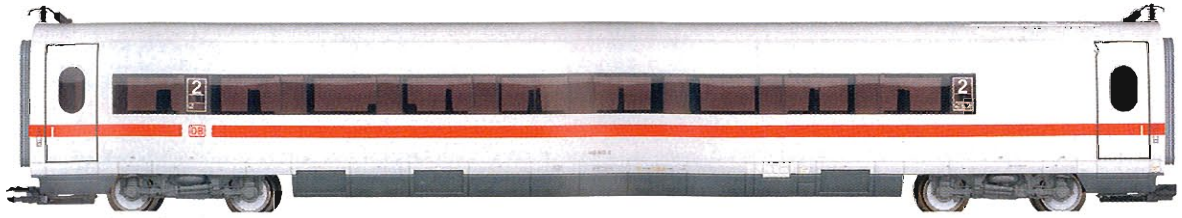
Prototype: German Railroad, Inc. (DB AG) power converter car for the ICE 3. Type 403.7, 2nd class.
Model: Intermediate car to go with the model of the ICE-3 train, item no. 37783. Special close couplings with guide mechanism. Interior lighting powered by continuous electrical connections in the train. Length 27.9 cm / 11".



43744
Intermediate Car for express powered rail car train.

Digital working car.
Horn.
"Please close the doors!"

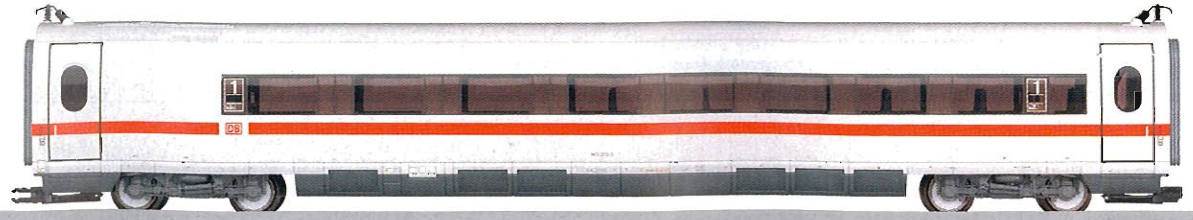
Prototype: German Railroad, Inc. (DB AG) type 3 ICE intermediate car. Class 403.8, 2nd class.
Model: Intermediate car goes well with 37783 model of the ICE 3 train. With digital decoder and sound effects functions. Compressed air horn and warning signal of the door closing system can be controlled digitally with the 6021 Control unit. Special close coupling with guide mechanism. Interior lighting supplied via continuous electric connection of the train. Length 27.9 cm / 10-31/32".



43714
Intermediate Car for the Express Powered Rail Car Train.

Prototype: German Railroad, Inc. (DB AG) power converter car for the ICE 3. Type 403.2, 1st class.
Model: Intermediate car to go with the model of the ICE-3 train, item no. 37783. Special close couplings with guide mechanism. Interior lighting powered by continuous electrical connections in the train. Length 27.9 cm / 11".

Important:
The couplings for the 37783 and 34780/37780 powered rail car trains are technically the same. In the prototype the two classes are not mixed however.



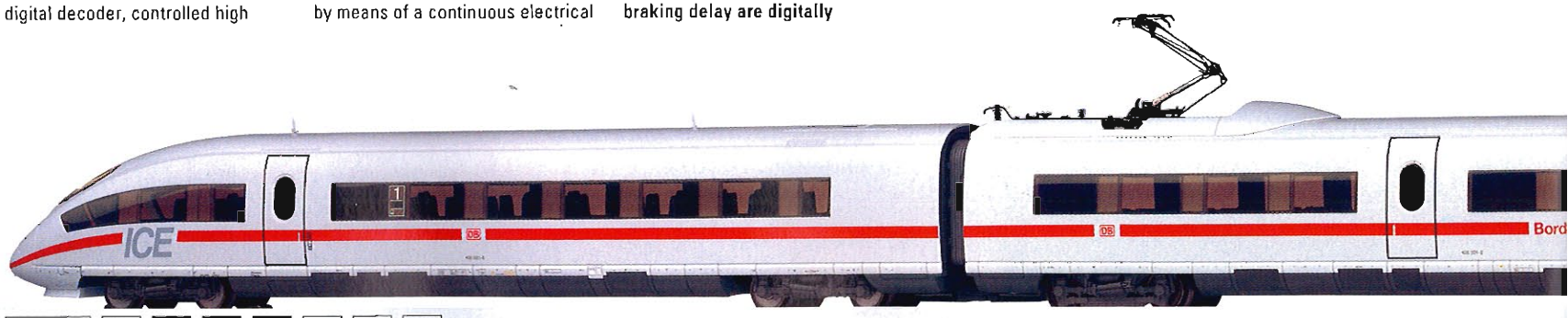

ICE
DB

Powered Rail Car Train.

37780
Powered Rail Car Train.

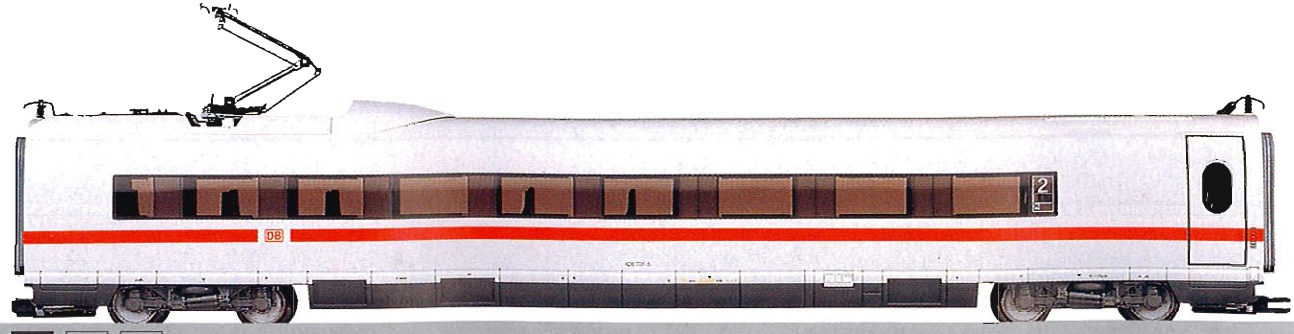
Interior lighting built in at the factory.
Scale length.
Motor with flywheel.
Open view into the cockpit.
Direction-dependent power pickup in the end car at the front of the train.

Prototype: ICE 3 high-speed train. German Railroad, Inc. (DB AG) class 406 for international service. 1 type 406.0 end car, 1st class. 1 type 406.3 intermediate car with dining area. 1 type 406.5 end car, 2nd class.
Model: 3-part train. Comes with a digital decoder, controlled high efficiency propulsion, and long distance headlights. 2 axles in the intermediate car powered. Motor with a flywheel. 4 traction tires. Direction-dependent power pickup in the end car at the front of the train. Interior lighting powered by means of a continuous electrical connection through the entire train. Headlights and interior lighting work in conventional operation and can be controlled digitally. **Long distance headlights that change over with the direction of travel as well as the acceleration and braking delay are digitally controlled with the 6021 Control Unit.** Engineer's cabs have interior details. Special close couplers with guide mechanism. Train length 86.3 cm / 34".



43737
Intermediate Car for the Model of the ICE 3.

Prototype: German Railroad, Inc. (DB AG) type 406.7 power converter car, 2nd class.
Model: Intermediate car to add to the 34780/37780 models of the ICE trains. Special close couplings with guide mechanism. Interior lighting powered by the continuous electrical connections through the entire train. Length 27.9 cm / 11".

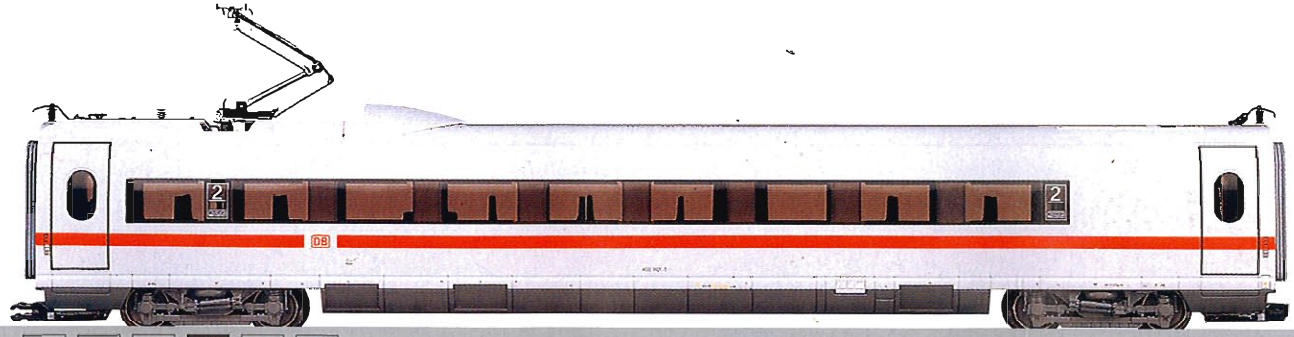


At the end of October 1998 the third ICE generation, the ICE 3, was presented to the public for the first time at the Eurailspeed in Berlin. This new ICE was presented with a whole series of technological refinements and is contributing to the further shortening of travel times. With the ICE 3 the variety of locomotives and cars on the German Railroad, Inc. system is being expanded by one with a very striking appearance. The ICE 3's appearance more than anything else attracts attention with its streamlined front part that sets new standards with its aerodynamic shape. The most striking technical change is of course the propulsion concept. Whereas the propulsion for the ICE 1 and ICE 2 was located in the two powered end cars, in the new generation ICE 3 the entire propulsion system is now distributed under the car bodies. In general, the ICE 3 will be operated as an eight-car train. Some of the trains are equipped for the German Railroad, Inc.'s power system and are designated as the class 403. The rest are equipped as four-system trains for cross border use in Europe. These powered rail car trains are designated as the class 406 and are intended chiefly for international routings. The interiors of the trains will also attract attention with their functional, appealing ambiance. Particularly attractive is the passenger area directly behind the engineer that allows a direct view into the cockpit and down the tracks.

43747
Intermediate Car for the Model of the ICE 3.

Working digital car.

Prototype: German Railroad, Inc. (DB AG) type 406.8, 2nd class. **Model:** Intermediate car to add to the 34780/37780 models of the ICE trains. **Built-in sound effects module.** Special close couplings with guide mechanism. Interior lighting powered by the continuous electrical connections through the entire train. Sound effects module for air horn and warning whistle for the automatic door closing mechanism are digitally controlled with the 6021 Control Unit. Length 27.9 cm / 11".



Train Set.

26834
Starter Set "Walhalla".

One-time series for the jubilee celebrating "200 years of the Kingdom of Bavaria".

Prototype: Tank locomotive "Glaskasten" (glass box), Royal Bavarian State Railroad (K.Bay.Sts.B.) class PtL 2/2. Design without jackshaft. 1 BCL passenger car BCL, 2nd/3rd class passenger car, and CL 3rd class 1 PpostL mail and baggage car. 1 tank car with brakeman's cabin, privately owned car. Regensburg home district.
Model: Locomotive comes with a digital decoder and controlled miniature motor. 2 powered axles. 2 traction tires. Headlights will work in conventional operation and can be digitally controlled. The acceleration and braking delay can be controlled digitally with Control Unit or systems. Cars with many applied details and fine decorative striping. Total length over buffers 47.9 cm / 18-27/32".

If you travel down the Danube you will discover a Greek temple of marble, about 10 kilometers / 6 miles after Regensburg. Leo von Klenze took his design orientation from the Parthenon of Athens when he was commissioned to erect a hall of fame. The building got its name "Walhalla" from the residence of the Germanic gods, "Valhalla". 26 years after starting the work, King Ludwig I was able to declare on the 18th of October 1842, "May "Walhalla" promote the

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strengthening and increase of German mind! May the Germans, regardless of their tribe always feel that they have a common Fatherland". In the notable architecture of the hall today stand 126 busts of significant personalities, who for the most part come from German speaking areas, including Johann Sebastian Bach, and Ludwig van Beethoven, Otto von Guericke and Johann Gregor Mendel, Johannes Gutenberg and Jakob Fugger, August II from Saxony and Friedrich II from Prussia, Immanuel Kant and Gottfried Wilhelm Leibniz, as well as Sophie Scholl and Ulrich von Hutten. In addition, there are 64 panels commemorating great personalities such as Hildegard von Bingen, Albertus Magnus, Roswitha from Gandersheim, and Walther von der Vogelweide, Heinrich III, and Hermann the Defender, as well as Peter Henlein, and Gerhard, Master Builder of Cathedrals. Some visitors may note that many prominent persons are missing, for instance Friedrich List. However this does nothing to diminish this unusual memorial.

A complete listing of those honored in the "Walhalla" can be found on the Internet at http://de.wikipedia.org/wiki/Walhalla.

Insider Model for 2005.

Insider Model for 2005.

26610
"Henschel-Wegmann" Train Set.

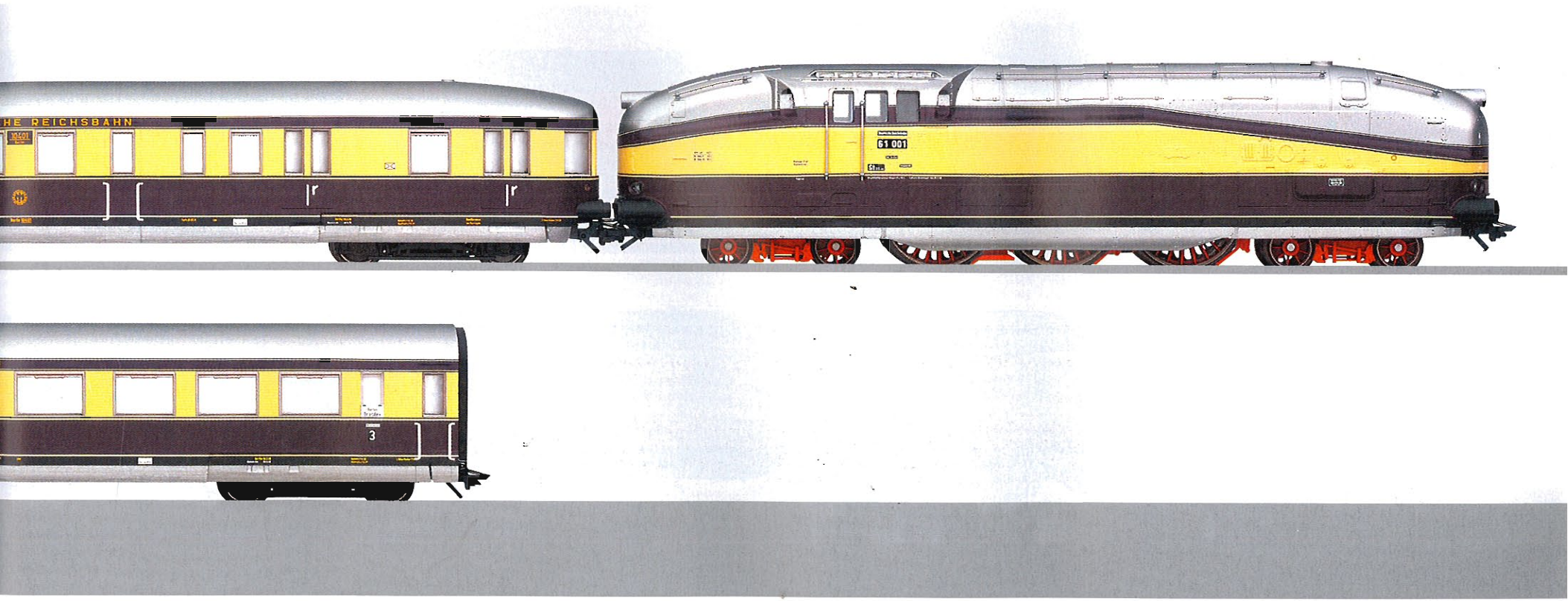
Compact high-efficiency propulsion system C-sine motor.
Articulated special frame to enable unit to negotiate sharp curves with driving wheel axles.
Closed streamlining of the locomotive.
Cars with side aprons and streamlined bogie covers.
Locomotive and cars are prototypically interchangeable.

In 2005 model 26610 is available in a one-time series for Insider members only.

Prototype: German State Railroad Company (DRG) class 61 express tender locomotive, with streamlining and 4 streamlined express train passenger cars. 1 end car 2nd and 3rd class with vista area. 2 intermediate cars with 2nd and 3rd class compartments, and 1 end car with baggage compartment, dining area and galley. Light bogies Görlitz III.
Model: Locomotive comes with a digital decoder, C-Sine high efficiency propulsion, and sound effects generator. The motor is a new maintenance-free compact high-efficiency motor. 3 powered axles. 2 traction tires. Articulated frame to enable unit to negotiate sharp curves with driving wheel axles. Closed side streamlining without additional apertures or movable screens. Curves starting with normal radius 360 mm / 14-3/16" possible. Lighting with bright, maintenance-free LEDs. Headlights will work in conventional operation, can be digitally controlled. Opposing train lights, speed-dependent steam locomotive running sound effects, as well as acceleration and braking delay, can be controlled digitally with the control unit or systems. Whistle signal and other operating sound effects can be controlled digitally with Systems. Close coupler mechanisms on both ends of the locomotive, additional illustration of the Scharfenberg couplers (without any function).
Car with side aprons and laid out bogie covers for a small curved track. Close couplers with a mechanism are also on both end cars. Total length over buffers 122 cm / 48-1/32".

Digital Functions	6020	6021	60652	60212
Headlights	x	x	x	x
Opposing train light		x	x	x
Steam locomotive sound effects		x	x	x
Whistle signal		x	x	x
Direct control		x	x	x
Shoveling coal sound effect			x	x
Air pump sound effect			x	x
Braking sound effect			x	x
Injector sound effect			x	x
Steam discharge sound effect				x
Sliding superstructure sound effect				x

In the mid 1930's competition threatened the steam locomotive: Fast, diesel-powered cars dominated high-quality long-distance travel. Consequently the steam engine industry produced modern high-performance locomotives that reached speeds of up to 200 km/h or 124 mph.
For traffic between Berlin and Dresden the German State Railroad procured a whole train. It was pulled by the class 61. From this class Henschel produced two prototypes with totally different designs. He 61 001 had a 2'C2' wheel arrangement and a two-cylinder drive gear. The State Railroad provided the 61 002, which was completed in 1939 a trailing axle and an additional cylinder. Naturally, both locomotives had streamlined bodies.
While other streamlined locomotives hauled conventional trains, the German State Railroad especially commissioned streamlined cars for express service between Berlin and Dresden. They were built by Wegmann; like Henschel a company based in Kassel. Interestingly enough there was no first class car. To compensate, first class comfort dominated in 2nd class, according to the press. The appellation "salon car" was totally justified. The first and last cars both had a rounded end with large panorama windows. Travelers in the last car were thus offered an excellent view of and around the route the train was putting behind itself.
When the 1936 summer timetable went into effect the German State Railroad started express service between Prussia and Saxony. Two pairs of trains were underway daily. The fastest train completed the journey in one hour and 40 minutes. At this speed it surpassed the previous record holder by 28 minutes. In the afternoon however, the turnaround time at the terminus between the D 54 and D 57 was tightly metered out at only 32 minutes. The German State Railroad also had to consider that replacement locomotives of other classes did not reach the top speed of the 61. If the 61 fell out to scheduled or non-scheduled service, the Dresden 01 or 03 took over the rake of cars. Instead of 175 km/h or 109 mph, however it reached only 130 to 140 km/h or 81 to 87 mph. As a consequence the German State Railroad loosened up the timetable slightly.
Express service ended when the war started. From that point the cars served the military, the locomotives spent most of their time in inactivity. At the end of the war the 61 001 remained in the British zone. By 1951 it was relegated as splint class. In 1952 it was taken out of service, and it was dismantled in 1957. The 61 002 became part of the State Railroad of the Soviet zone. It hauled passenger and express trains from Dresden. After it was taken out of service in 1958; main frame, front wheels and coupled wheels remained intact in the high-speed trial train, 18201.



Train Set.

26512
Express Train Set.

One-time series.

Prototype: German Federal Railroad (DB) class 110 electric express locomotive with "pants crease" and 4 express train passenger cars in "Pop colors". 1 type Büm car, 2nd class (blue) and 1 type Aüm car, 1st class (orange). 1 type WRüge dining car (red) and 1 type Düm baggage car (green). In 1972 train D 611 was in regular service from Dortmund to the Olympic grounds in Munich.

Model: The locomotive comes with a digital decoder and controlled high-efficiency propulsion. 2 axles powered. 4 traction tires. Headlights will work in conventional operation and can be controlled digitally. Acceleration and braking delay can be controlled digitally with the 6021 Control Unit. The cars can be retrofitted with current-conducting couplers. The baggage car has roll-down doors. The cars have destination signs. Total length over the buffers 126.5 cm / 49-7/16".

German society changed in the 1960's. The youth revolt broke the hardened political lines. Artists rebelled against traditional ways of seeing things, with Pop Art. The exhilarating and easily digested fare penetrated all areas of life. Light and exhilarating was also the feel of the glass tent architecture for Munich's Olympia Park.

The graphic artist, Otl Aicher, created a visual concept for the 72 Olympic games that included the pastel color tones of the rainbow.

The German Federal Railways also followed the trend. The sad, dark green of the passenger cars dampened the spirit. Using the

model of the special paint scheme of the Rheingold the company sought more modern, fresher, more dynamic colors for the express trains, which would enhance the image of the DB.

In 1970 the DB commissioned 16 express train cars in cobalt blue/pebble gray. The colors chrome oxide green/pebble gray were intended for a second series of 24 cars. The new colors met with little enthusiasm from passengers, and little enthusiasm internally at DB. Only the pebble gray side walls were convincing; brighter friendlier colors were desired for the window strips. In the second approach there were cars with blood orange, cobalt blue, blue-violet, magenta, red-violet, and green window strips. The side walls were pebble gray, longitudinal girders and chassis were deep black, roofs were umbra-gray 1st class cars were marked with a yellow-gold identifying stripe. Thereafter, a portion of the 1st and 1st/2nd class coach cars delivered in 1970/71 were painted orange, 2nd class coach cars and 2nd class with baggage compartment were painted blue, dining car and sleeping car, as well as half dining car, were painted red, and the baggage car was painted green. The unusual rich coloring resulted in the nickname, pop cars. A total of 146 cars were given the pop treatment. The DB mostly sent the colorful trains from Bremen, Osnabrück, Norddeich and Dortmund to Munich. In addition, pop trains traveled the Basel – Hamburg route, later as DC trains as well. Due to the pop colors, the closed effect of the window strip made the cars look elongated and modern. Other railways copied the effect. The pebble-gray side walls however proved to be very sensitive to dirt. Consequently, in 1974 the DB selected ocean blue/beige as new standard colors. In 1985 the last pop cars were stationed in Munich. A little while later the DB returned to essential design elements of the pop cars for its new color concept for passenger cars.

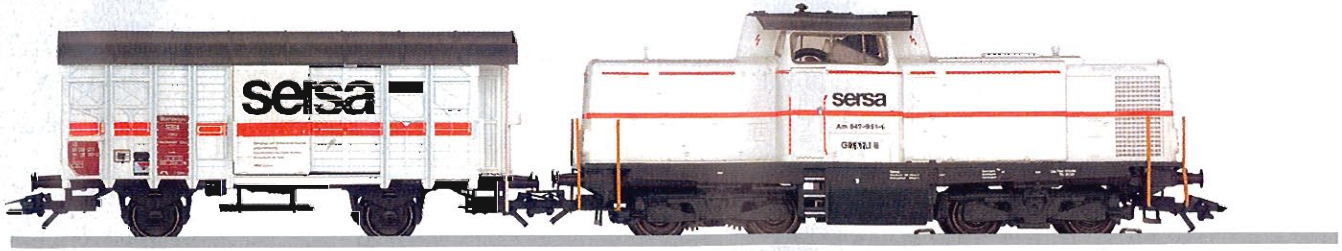
Train Set.

28462
Diesel Locomotive with Construction Train.

Export model for Switzerland.

Prototype: "Gretli II" locomotive (former German V 100) and two boxcars, types Gs and K3, painted and lettered for the Swiss construction firm SERSA as well as a Swiss Federal Railways (SBB/CFF/FFS) type Typ L7 gondola.

Model: The locomotive comes with a Delta circuit. 2 axles powered. 4 traction tires. The model of the K3 boxcar has sliding doors that can be opened. The models of the Gs and L7 cars come with Swiss side doors. Also included is a model of a two way power shovel in the color scheme of the same company. Total length over buffers 48.5 cm / 19-1/8".



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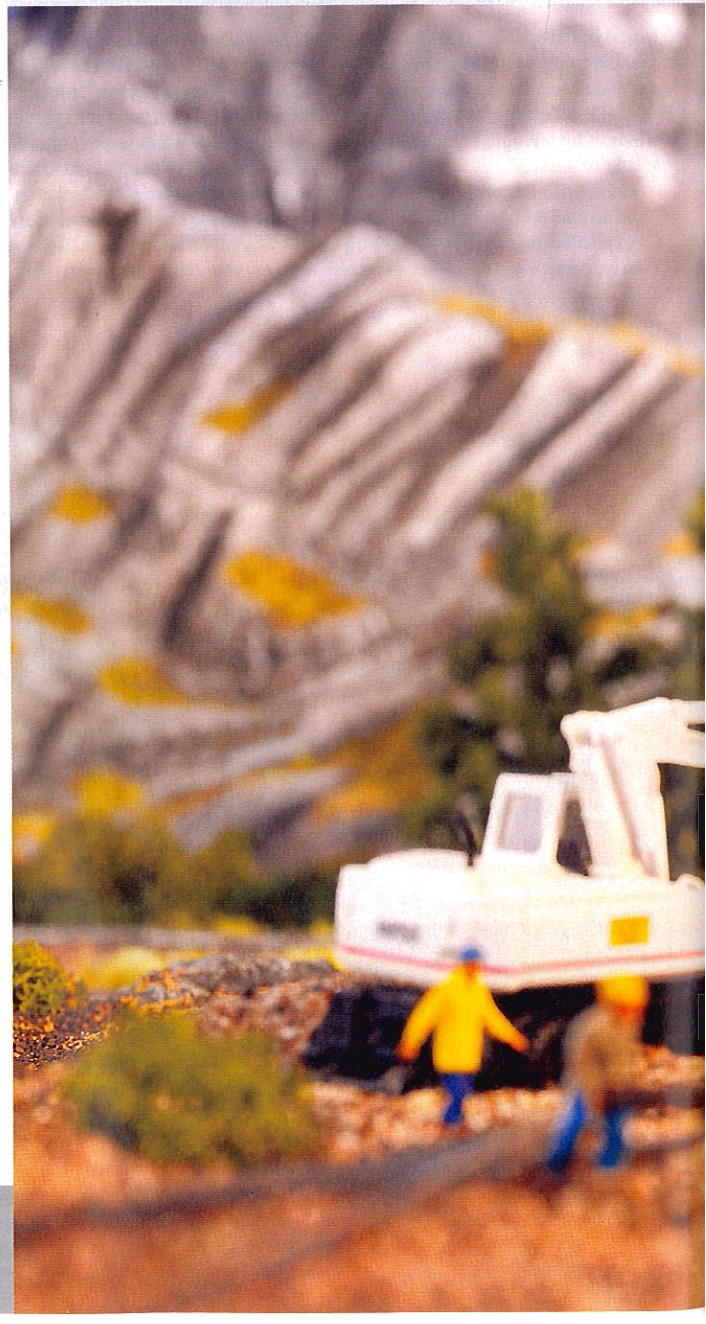



sersa

Powered Rail Car Train.

37782
Powered Rail Car Train.

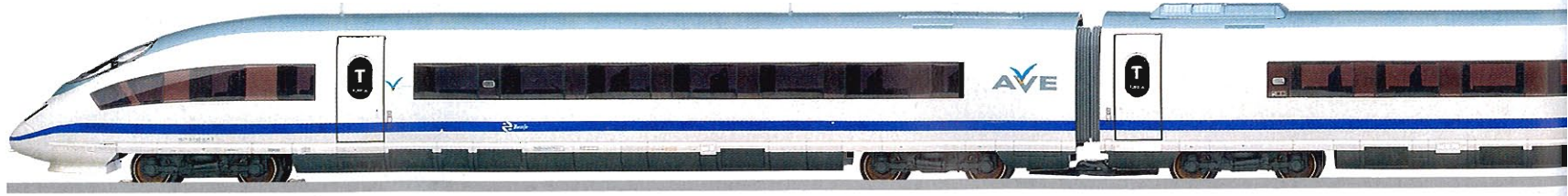
Prototypical roof arrangement.
Scale length 1:87.
Factory-installed interior lighting.
Motor has a flywheel.
Unimpeded view into the cockpit.
Power pickup always in the end car at the front of the train.

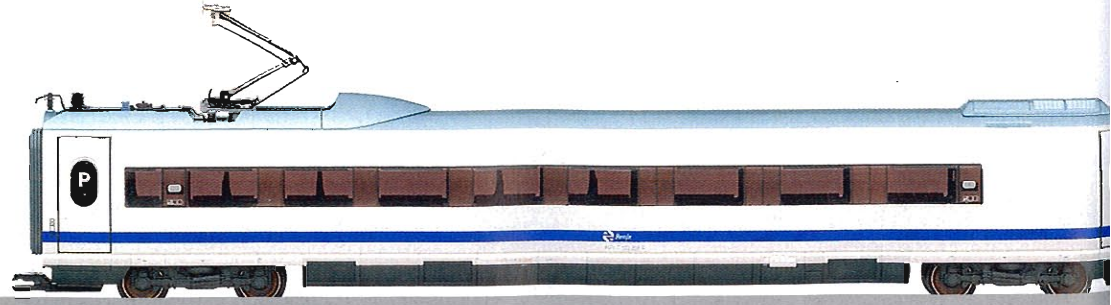
Export model for Spain.

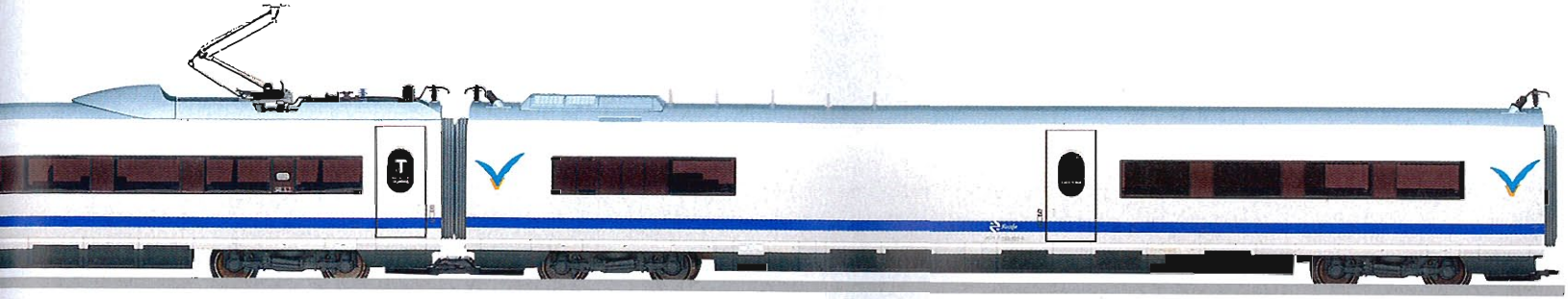
One-time series.

Prototype: "Velaro" high-speed train painted and lettered for the firm Alta Velocidad Espanola (AVE). To be placed into service starting in 2004 between Madrid and Barcelona. 2 end cars with engineer's cabs, 2 intermediate cars with transformers and 1 intermediate car with a cafeteria.

Model: 5-unit train. Train comes with a digital decoder, controlled high-efficiency propulsion, and long distance headlights. 2 axles in the center car are powered. 4 traction tires. Motor with a flywheel. Power pickup always in the end car at the front of the train. Interior lighting powered by means of continuous electrical connection in the entire train. Pantographs work mechanically, but have no electrical connections. The headlights and interior lighting will work in conventional operation and can be controlled digitally. Long distance headlights that change over with the direction of travel as well as the acceleration and braking delay can be controlled digitally with the 6021 Control Unit. The engineer's cabs have interior details. Special close couplings with guide mechanisms. Train length 142.2 cm / 56".






T


C

Passenger Cars.

Whether it is the Silberling or the double-decker coach, the express or the night train car – the convinced Märklin fan cannot get enough of excellent passenger cars. The powerful, finely detailed locomotives from the H0 program demand a suitable coupling of a locomotive at the front.

Märklin can also serve an excellent new development in the following year. The passenger cars of the Langenschwalbach class, which offered an extraordinary riding comfort, did not only operate in Hesse. This high quality was very popular with travelers. A principle that also applies equally to all Märklin models. Just visit your Märklin dealer and observe the cars closer.

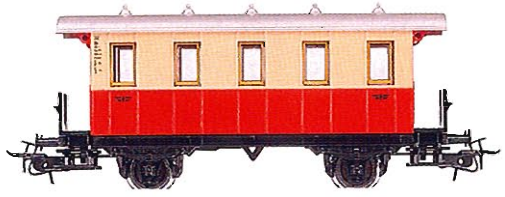
You will also find plenty of alternatives in the Märklin assortment for a layout which are situated in later eras. How would you like a Talgo formation? The original frequents between the Northern and Southern Germany in a night jaunt. The comfortable cars reach maximum quiet and smooth operation on the express route and in curves at a reliable tilting technology. Passenger train cars of many railroad companies are also available as models for international connecting trains. Precisely the themes from European long-distance traffic offer especially attractive train combinations and varied operating capabilities.


1
DB

Passenger Cars.

4107
Passenger Car.

Relex couplers. Length over buffers 11.0 cm / 4-3/8".
DC wheel set 2 x 70 0600



I - V

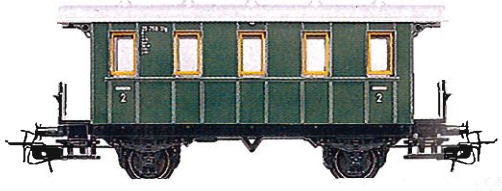
4108
Baggage Car.

With cupola for conductor's compartment. Relex couplers. Length over buffers 11.0 cm / 4-3/8".
DC wheel set 2 x 70 0600

I - V

4039
Passenger Car.

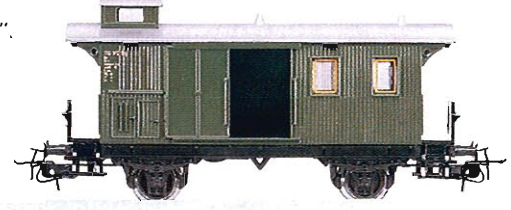
2nd class. Relex couplers. Length over buffers 11.0 cm / 4-3/8".
DC wheel set 2 x 70 0600



I - V

4038
Baggage Car.

With cupola for conductor's compartment. Relex couplers. Length over buffers 11.0 cm / 4-3/8".
DC wheel set 2 x 70 0600



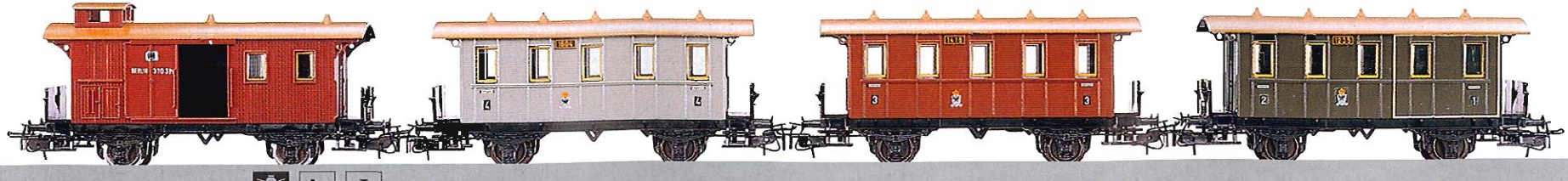
I - V

4035
Prussian Passenger Car Set.

Prototype: 1 each passenger car in 1st/2nd class, 3rd class, 4th class and 1 baggage car with a raised conductor's compartment.

Model: Relex couplers. Total length 45.0 cm / 17-3/4".
DC wheel set 8 x 70 0600

Models not available separately.



I

43020
Passenger Car.

Prototype: German Federal Railroad (DB) branch line car. Bavarian design. 2nd class with open seating area.
Model: Train destination signs with lettering printed on the car sides. Length over the buffers 14.1 cm / 5-9/16".
DC wheel set 2 x 32 3760 04

43010
Passenger Car.

Prototype: German Federal Railroad (DB) branch line car. Bavarian design. 2nd class with 2 compartments.
Model: Train destination signs with lettering printed on the car sides. Length over the buffers 14.1 cm / 5-9/16".
DC wheel set 2 x 32 3760 04

43030
Baggage Car.

Prototype: German Federal Railroad (DB) branch line car. Bavarian design. With a baggage area and mail compartment.
Model: Train destination signs with lettering printed on the car sides. Length over the buffers 11.4 cm / 4-1/2".
DC wheel set 2 x 32 3760 04

Passenger Cars.

43108
"Ruhr Express Service"
Commuter Car Set.

Prototype: 3 different German State Railroad Company (DRG) compartment cars. 2 type C4i-33e cars, 3rd class. 1 type BC4i-33f car, 2nd and 3rd class.

Model: Detailed construction with numerous separately applied handrails and ladders. 2-color paint scheme for the car bodies. Imprinted train destination signs.

Ready for installation of current-conducting couplers. Total length over buffers 76.9 cm / 30-1/4".
DC wheel set 12 x 70 0580

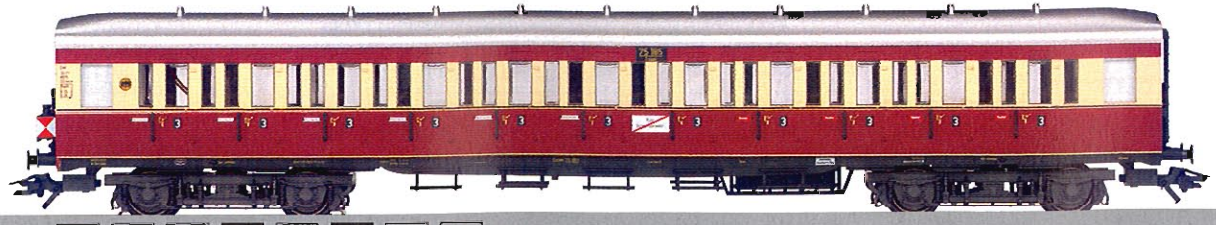
Models not available separately.

43109
"Ruhr Express Service"
Commuter Car.

Working car.

Prototype: German State Railroad Company (DRG) type C4i-33e, 3rd class.
Model: Add-on car for the 43108 car set. **Built-in function decoder with a sound effects module and marker lights.** Detailed construction with numerous separately applied handrails and ladders. 2-color paint scheme for the car body. Imprinted train destination signs. Ready for installation of current-conducting couplers. **Marker lights will work in conventional operation and can be controlled digitally. Sound effects module for the conductor's all-aboard departure whistle can be controlled digitally with the 6021 Control Unit.** Length over buffers 25.5 cm / 10-1/16".

The address and the function assignments on the decoder are particularly designed for use with locomotive item no. 37073. This car can also be used with no limitations with other digital locomotives.



The increase in the population in the Ruhr and Saal areas led to a demand for fast connections between cities as early as the provincial railroad period. Different studies were commissioned and carried out. The actual breakthrough did not occur until 1932 when the "Ruhr Express Service" was placed into service with a total of 32 trains between Essen and Dortmund. The train routes were continuously expanded and extended to Cologne, Mönchengladbach and Wuppertal-Vohwinkel. In addition to different powered rail cars, the 4-axle "English design" compartment cars turned out particularly well in this service. The attractive paint scheme became a trademark symbol for this regularly scheduled express passenger service. The dense sequence of stations, most of them only a 30 to 60 second stop, demanded locomotives that could accelerate quickly. The class 78 met this equirement as if it were child's play. The additional sign mounted on the smoke box was another indication of the special use for these units.

Passenger Cars.

43241
Dining Car.

Prototype: Type WRü, Mitropa 1215, used on the German State Railroad Company (DRG).
Model: Prototypical roof arrangement. Ready for installation of current-conducting couplers. Length over buffers 27.0 cm / 10-5/8".
DC wheel set 4 x 70 0580

NEM 73155 L II

42751
Express Train Car Set of the German State Railroad Period.

Prototype: 4 different German State Railroad Company (DRG) express train passenger cars.1 type B4i car, 2nd class. 2 type C4ü cars, 3rd class. 1 type Pw4ü baggage car.

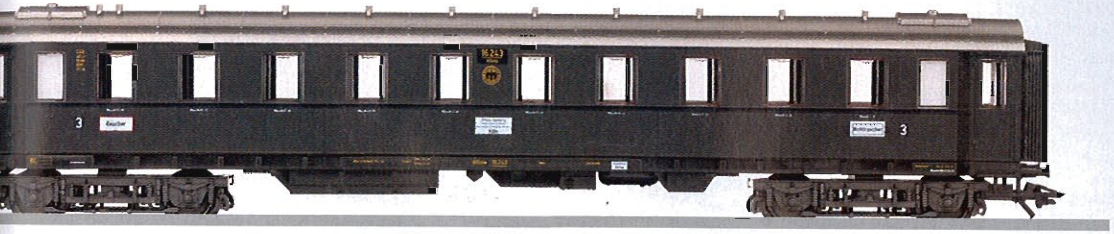
Model: Total length over buffers 97.5 cm / 38-3/8".
DC wheel set 16 x 70 0580

Models not available separately.

NEM 7335 L II

43251
Sleeping Car.

Prototype: Type WLRü, Mitropa 22079, used on the German State Railroad Company (DRG).
Model: Prototypical roof arrangement. Ready for installation of current-conducting couplers.
Length over buffers 27.0 cm / 10-5/8".
DC wheel set 4 x 70 0580



Passenger Cars.

43258
"Berlin-Hamburg"
Express Train Passenger Car Set.

"Schürzenwagen" baggage car is new tooling.
Version with streamlined roof.
Coach with marker lights.
Appropriate train for the model of the class 05.

One-time series.

Prototype: 3 German State Railroad Company (DRG) "Schürzenwagen" semi-streamlined cars. 1 coach, 3rd class. 1 dining car and 1 baggage car. Version for the D 6 express train.
Model: Coach has pickup shoe for power and 2 red marker lights. Train destination signs with lettering printed on the car sides. Ready for installation of current-conducting couplers. Total length over the buffers 77.5 cm / 30-1/2".
DC wheel set 12 x 70 0580

NEM 73150 73155 73155 II

43259
"Berlin-Hamburg"
Express Train Passenger Car Set.

One-time series.

Prototype: 2 German State Railroad Company (DRG) "Schürzenwagen" semi-streamlined cars. 1 coach, 1st/2nd class and 1 coach, 2nd/3rd class. Version for the D 6 express train.

Model: Train destination signs with lettering printed on the car sides. Ready for installation of current-conducting couplers. Total length over the buffers 49.6 cm / 19-1/2".
DC wheel set 8 x 70 0580

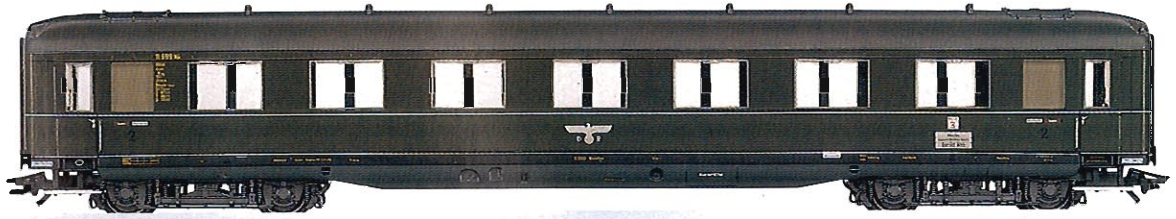
NEM 73150 II


SPEISEWAGEN

Passenger Cars.

43201
Express Train Passenger Car.

Prototype: German State Railroad Company (DRG) type ABü, 1st and 2nd class.
Model: Prototypical roof arrangement. Ready for installation of current-conducting couplers. Length over buffers 25.1 cm / 9-7/8".
DC wheel set 4 x 70 0580



43221
Express Train Passenger Car.

Prototype: German State Railroad Company (DRG) type C4ü, 3rd class.
Model: Prototypical roof arrangement. Ready for installation of current-conducting couplers. Length over buffers 24.4 cm / 9-5/8".
DC wheel set 4 x 70 0580

43266
Mail Car.

Prototype: German State Postal System type Post4ü, used on the German State Railroad Company (DRG).
Model: Prototypical roof design with skylights. Built-in marker lights. Ready for installation of current-conducting couplers. Length over buffers 26.3 cm / 10-3/8".

43211
Express Train Passenger Car.

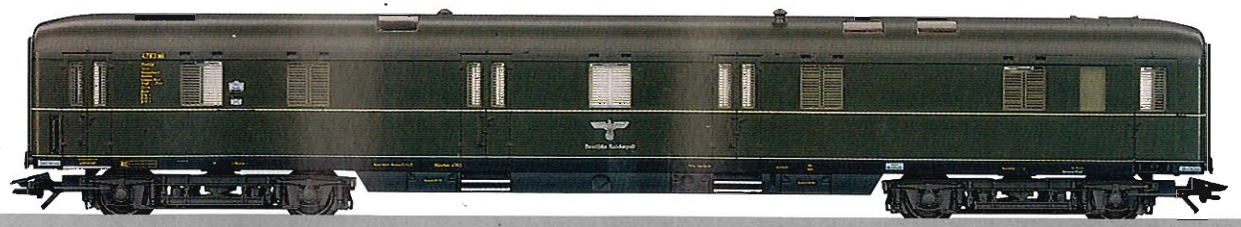
Prototype: German State Railroad Company (DRG) type BC4ü, 2nd and 3rd class.
Model: Prototypical roof arrangement. Ready for installation of current-conducting couplers. Length over buffers 24.4 cm / 9-5/8".
DC wheel set 4 x 70 0580

43231
Express Train Passenger Car.

Prototype: German State Railroad Company (DRG) type ABC4ü, 1st, 2nd and 3rd class.
Model: Prototypical roof arrangement. Ready for installation of current-conducting couplers. Length over buffers 24.4 cm / 9-5/8".
DC wheel set 4 x 70 0580

43261
Mail Car.

Prototype: German State Postal System type Post4ü, used on the German State Railroad Company (DRG).
Model: Roof design with skylights. Ready for installation of current-conducting couplers. Length over buffers 26.3 cm / 10-3/8".
DC wheel set 4 x 70 0580



Passenger Cars.

In 1889, the sophisticated spa, Langenschwalbach – today Bad Schwalbach – got a rail connection. The line extended to Wiesbaden and had inclines of approximately 33‰ as well as curve radii of minimum 200 m / 656'2". The Prussian State Railway had a new type of passenger car built especially for the curve traffic. Although at that time commuter cars almost always had two or three rigid axles, the Langenschwalbach cars were given dual axle bogies, initially with a short wheelbase of 1650 mm / 5'5" and a small wheel diameter of 740 mm / 29-1/8". However it was soon apparent that a wheelbase of 2000 mm / 78-3/4" and the usual wheel diameter of 960 mm / 37-3/4" did not lessen ride comfort. The body showed the first elements of a lightweight design. Thus the developers used the outer fairing as integral construction. Tubular frames served as cross girders. The design proved so effective that it was imitated with for 35 years with few changes.

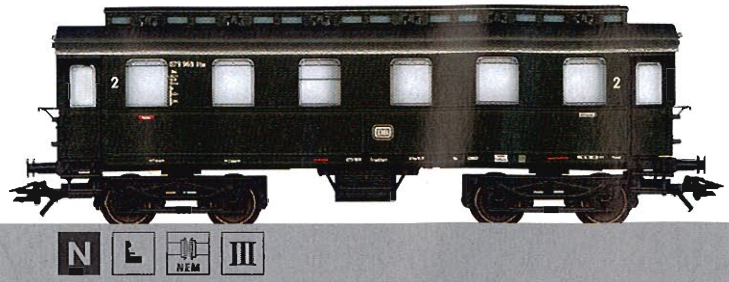
In 1892, the first Langenschwalbach cars were on the tracks. First only 1st to 3rd class. From 1907 on, the State Railways also placed 4th class cars of this type in service. Combination post and baggage cars came later. As the cars were quite popular with the public, they were soon in service outside of their home district. German Federal Railways decommissioned the cars in the 1950s. Numerous cars found new jobs in construction train service.

43040
Passenger Car.

Prototype: German Federal Railroad (DB) Langenschwalbach design bogie car. Type LAB4i, 1st and 2nd class. Former BC4i Pr14, 3rd series.
Model: Version with an open end platform and an enclosed transition. Roof and fanlight in rebuilt version. Type-specific truck bogies. Applied grab irons, transition panel, and battery-box. Length over buffers 16.5 cm / 6-1/2".
DC wheel set 4 x 70 0580

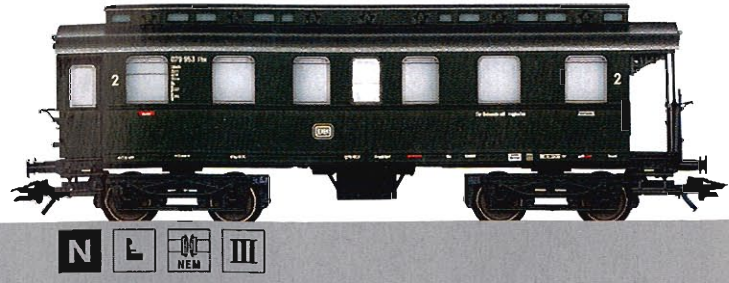
43050
Passenger Car.

Prototype: German Federal Railroad (DB) Langenschwalbach design bogie car. Type LB4i, 2nd class. Former C4i Pr15, 3rd series.
Model: Version with two enclosed transitions. Roof and fanlight in rebuilt version. Type-specific truck bogies. Applied grab irons, transition panels and battery-box. Length over buffers 14.9 cm / 5-7/8".
DC wheel set 4 x 70 0580



43070
Passenger Car.

Prototype: German Federal Railroad (DB) Langenschwalbach design bogie car. Type LB4itr, 2nd class with load bearing compartment. Former CC4i Pr14, 3rd series.
Model: Version with an open end platform and an enclosed transition. Roof and fanlight in rebuilt version. Type-specific truck bogies. Applied grab irons, transition panels and battery-box. Length over buffers 14.9 cm / 5-7/8".
DC wheel set 4 x 70 0580



43060
Passenger Car.

Prototype: German Federal Railroad (DB) Langenschwalbach design bogie car. Type LB4i, 2nd class with bearing load compartment. Former C4i Pr14, 3rd series.
Model: Version with two open end platforms. Roof and fanlight in rebuilt version. Type-specific truck bogies. Applied grab irons, transition panels and battery-box. Length over buffers 14.9 cm / 5-7/8".
DC wheel set 4 x 70 0580

N NEM III

43080
Baggagecar.

Prototype: German Federal Railroad (DB) Langenschwalbach design bogie car. Type LPw4i, baggage area combination with compartment reserved for mail. Former PwPost4i Pr14, 3rd series.
Model: Version with an open end platform and an enclosed transition. Type-specific truck bogies. Applied ladders, grab irons, and transition panels. Length over buffers 14.0 cm / 5-1/2".
DC wheel set 4 x 70 0580

N NEM III

Passenger Cars.

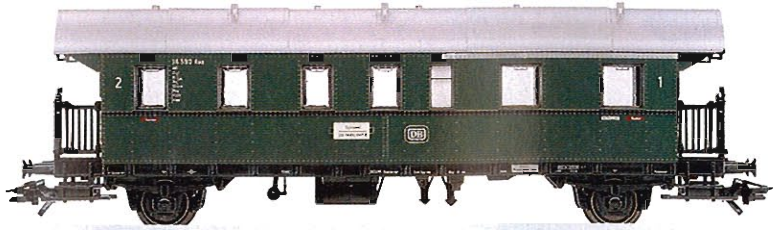
4335
Passenger Car.

Prototype: German Federal Railroad (DB) type Bie standard design branch line car. 2nd class.
Model: Length over buffers 14.9 cm / 5-7/8".
DC wheel set 2 x 70 0580

The class 86 tank locomotive (Märklin model 33961) goes well with these branch line passenger cars and can be found on page 57.

4313
Passenger Car.

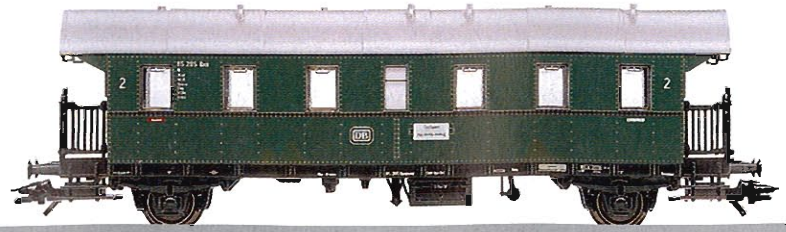
Prototype: German Federal Railroad (DB) type Abi "Donnerbüchse" standard car. 1st and 2nd class.
Model: Length over buffers 16.0 cm / 6-5/16".
DC wheel set 2 x 70 0580



The prototypes for the two-axle cars for normal passenger trains originally had wood roofs and interior walls. Later they were built entirely of steel. The type 29 was built right from the start entirely of steel. By today's standards these cars were very noisy and rumbled a great deal. Consequently, a popular nickname for them was "Donnerbüchsen" or "Thunder Boxes". On the German Federal Railroad they were indispensable in the postwar period for commuter and branch line traffic.

4314
Passenger Car.

Prototype: German Federal Railroad (DB) type Bi "Donnerbüchse" standard car. 2nd class.
Model: Length over buffers 16.0 cm / 6-5/16".
DC wheel set 2 x 70 0580



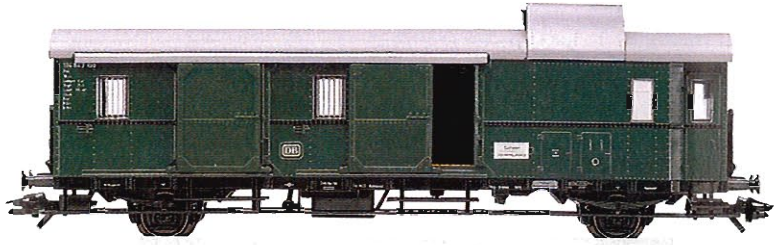
43351
Passenger Car.

Prototype: German Federal Railroad (DB) type ABie-34 standard design branch line passenger car. 1st and 2nd class.
Model: Length over buffers 14.9 cm / 5-7/8".
DC wheel set 2 x 70 0580

At the time they were ordered, a number of standard design branch line cars were planned as trailer units for powered rail cars. These cars were all equipped with their own heating and rail car paint scheme. Towards the end of the 1950s, when the older storage battery powered rail cars were being retired, a number of the trailer cars used with them were brought back into the passenger car pool.

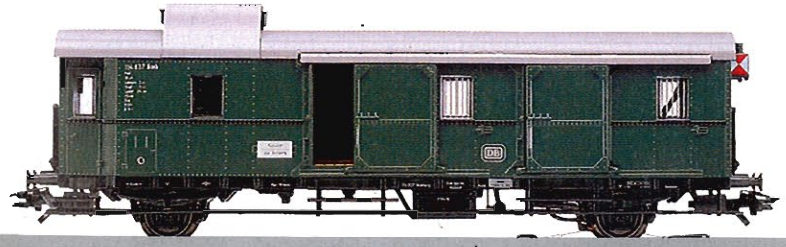
4315
Baggage Car.

Prototype: German Federal Railroad (DB) type Pwi "Donnerbüchse" standard car.
Model: 4 sliding doors that open. Side walkways. Length over buffers 16.0 cm / 6-5/16".
DC wheel set 2 x 70 0580



4316
Baggage Car.

Same as 4315, but with marker lights. Maintenance-free LEDs.



Passenger Cars.

42750
Express Train Passenger Car Set.

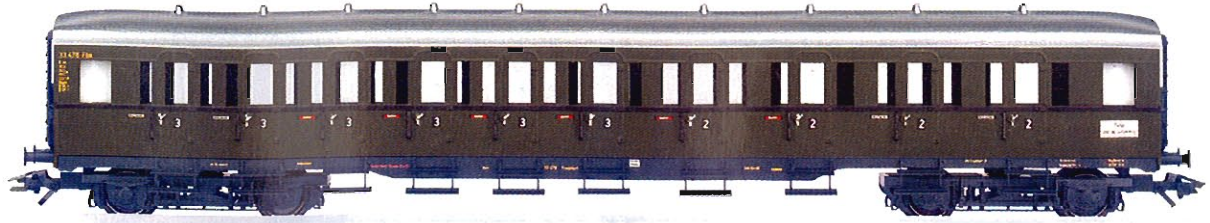
Prototype: 4 German Federal Railroad (DB) standard cars. German State Railroad design group 28 and 30. One A4yse-30/55 1st class car. Two B4üwe 28/51 2nd class cars, and one Pw4ü-30 baggage car with roof cupola.

Model: Different road numbers. Printed train destination signs. Roofs with traces of soot suggested. Total length over buffers 97.5 cm /38-3/8".
DC wheel set 16 x 70 0580

NEM 7335 III

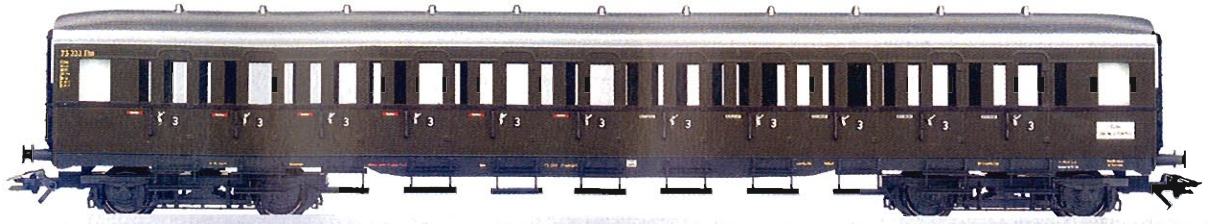
43100
Compartment Car.

Prototype: German Federal Railroad (DB) type BC4i, 2nd and 3rd class.
Model: Ready for installation of current-conducting couplers. Handrails separately installed on the entry doors. Ladders separately applied to the ends. Length over buffers 25.5 cm / 10-1/16".
DC wheel set 4 x 70 0580



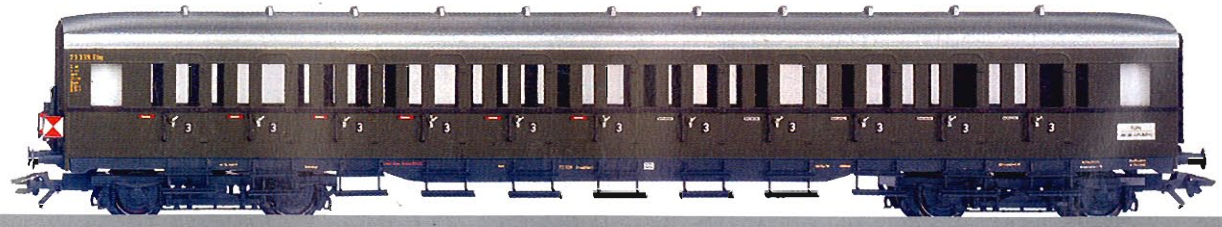
43110
Compartment Car.

Prototype: German Federal Railroad (DB) type C4i, 3rd class.
Model: Ready for installation of current-conducting couplers. Handrails separately installed on the entry doors. Ladders separately applied to the ends. Length over buffers 25.5 cm / 10-1/16".
DC wheel set 4 x 70 0580



43119
Compartment Car.

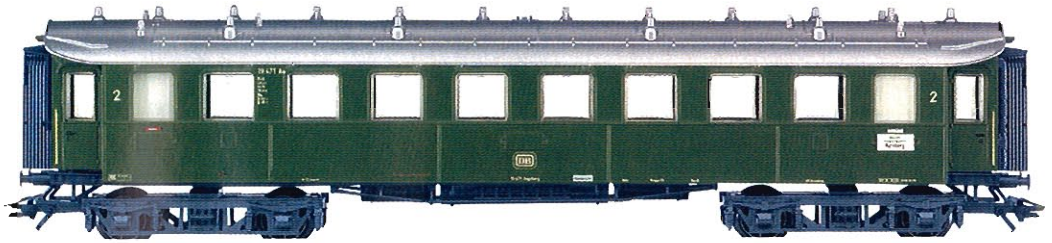
Prototype: German Federal Railroad (DB) type C4i, 3rd class.
Model: Built-in marker lights with maintenance-free LEDs. Ready for installation of current-conducting couplers. Handrails separately installed on the entry doors. Ladders separately applied to the ends. Length over buffers 25.5 cm / 10-1/16".



Passenger Cars.

41352
Express Train Passenger Car.

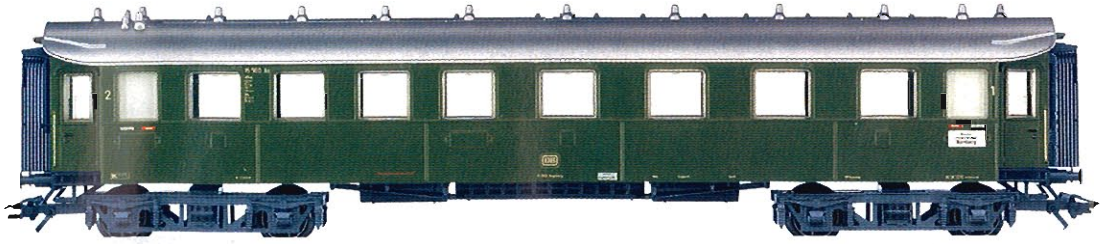
Prototype: German Federal Railroad (DB) type B4ü Bay 11/30, 2nd class.
Model: Light traces of soot on the roof. Length over buffers 22.1 cm / 8-11/16".
DC wheel set 4 x 70 0580



NEM 7335 III

41362
Express Train Passenger Car.

Prototype: German Federal Railroad (DB) type AB4ü Bay 11, 1st and 2nd class.
Model: Light traces of soot on the roof. Length over buffers 23.2 cm / 9-1/8".
DC wheel set 4 x 70 0580



NEM 7335 III

1372
Express Train Baggage Car.

Prototype: German Federal Railroad (DB) type Pw4ü Bay 09/21a.
Model: Light traces of soot on the roof. Length over buffers 20.0 cm / 7-7/8".
DC wheel set 4 x 70 0580

The model of the DB class 03 express locomotive (Märklin model 37952, see page 66) goes well with the 41352, 41362 and 41372 express train passenger cars.

NEM III

4317
Passenger Car.

Prototype: German Federal Railroad (DB) type AB3ygeb 756 rebuilt car. 1st and 2nd class.
Model: Ready for installation of current-conducting couplers.
Length over buffers 15.2 cm / 6".
DC wheel set 2 x 70 0580
1 x 40 6240

4318
Passenger Car.

Prototype: German Federal Railroad (DB) rebuilt coach type B3ygeb 761. 2nd class.
Model: Ready for installation of current-conducting couplers.
Length over buffers 15.2 cm / 6".
DC wheel set 2 x 70 0580
1 x 40 6240

4319
Passenger Car.

Prototype: German Federal Railroad (DB) type BD3yg 766 rebuilt car. 2nd class with baggage compartment.
Model: Ready for installation of current-conducting couplers.
Length over buffers 15.2 cm / 6".
DC wheel set 2 x 70 0580
1 x 40 6240

The rebuilt cars are always used on the DB as permanently coupled pairs of cars. Such a prototypical composition can be equipped with the 7317 lighting kit.

Passenger Cars.

43238
Set – 2 Express Train Passenger Cars "Rheingold".

One-time series.

Prototype: German Federal Railroad (DB) skirted passenger cars. 1 AB4üwe-39/52, 1st and 2nd class car, and 1 B4üwe-38/52, 2nd class car.
Model: Coach car with Görlitz type trucks. Prepared for 7319 current-conducting couplers. "Rheingold" train destination signs. Short gangway bellows for the train ends are included. Total length over buffers 49.0 cm / 19-9/32".
DC wheel set 8 x 70 0580

N 73150 NEM III

43237
Set – 4 Express Train Passenger Cars "Rheingold".

One-time series.

Prototype: German Federal Railroad (DB) skirted passenger cars. One each, A4üe-38/52 1st class, AB4üwe-39/52 1st and 2nd class, B4üwe-38/52 2nd class, and 1 WR4ü-39 dining car.

Model: Coach car with Görlitz type trucks, Minden-Deutz type dining car. Prepared for 7319 current-conducting couplers. "Rheingold" train destination signs. Fill pieces for dining car skirting, as well as short gangway bellows for the train ends included. Total length over buffers 101.5 cm / 39-31/32".
DC wheel set 16 x 70 0580

N 73150 NEM III


DB


SPEISEWAGEN
D S G
SPEISEWAGEN


DB

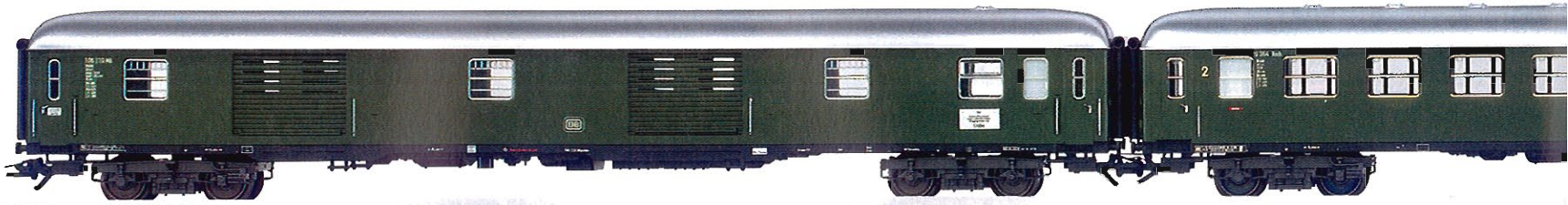
Passenger Cars.

42758
Express Train Passenger Car Set.

Models not available separately.

Prototype: 3 different German Federal Railroad (DB) express train passenger cars. 1 coach, 1st class. 1 coach, 2nd class. 1 baggage car.

Model: All of the cars have adjustable buffers. Ready for installation of 7319 current-conducting couplers. Baggage car has 2 jalousie doors that can be raised and lowered. Total length over buffers 81.4 cm / 32-1/16".
DC wheel set 12 x 70 0580



NEM 7330 III

42943
Express Train Passenger Car Set.

One-time series.

Prototype: 2 German Federal Railroad (DB) compartment cars. Standard design UIC-x cars in "Pop colors". 1 type Aüm (blue) car, 1st class and 1 type Büm (green) car, 2nd class. Goes with train D 611 from 1972.
Model: For adding to the 26512 express train set. Train destination signs with lettering printed on the car sides. Adjustable buffers. Ready for installation of the 7319 current-conducting couplers. Total length over the buffers 54.1 cm / 21-5/16".
DC wheel set 8 x 70 0580

NEM 7330 IV

Working cars.

49962
Sound Effects Car for Locomotives.

Digital working model.
Supplement for steam locomotives without their own sound effects circuit.

Prototype: Mail car employed by the German Federal Railroad (DB). Skirted car design
Model: With digital decoder and sound effects generator for different steam locomotive operating sound effects. In addition to speed-dependent exhaust sound effects, different whistle sounds and bells, pump, injector, sliding superstructure, and other sound effects are available. **The desired sound effect can be digitally selected with the 60652 Mobile Station, and with the 60212 Central Station.** Length over buffers 26.3 cm / 10-11/32".

Digital Functions	**6020**	**6021**	**60652**	**60212**
Steam locomotive sound effects	x	x	x	x
Locomotive whistles (long)		x	x	x
Switching whistle (short)		x	x	x
Bell 2 x		x	x	x
Bell 1 x			x	x
Bell 3 x			x	x
Air pump			x	x
Squealing brakes			x	x
Doors closing				x
Steam discharge				x
Shoveling coal				x
Rocker gate				x
Injector				x

mfx NEM III

49964
Sound Effects Car for Locomotives.

Digital working model.
Supplement for diesel locomotives without their own electronic sound effect system.

Prototype: Baggage car Pw4ü-38 of the German Federal Railroad (DB) Skirted car design.
Model: With digital decoder and sound effects generator for different **Diesel locomotive** operating sound effects. Various whistling sounds and horns, compressed air and braking sound effects and additional operating sounds are also available for the speed-related engine sound. The desired sound effect can be digitally selected with the 60652 Mobile Station or with the 60212 Central Station. Length over buffers 25.1 cm / 9-7/8".

Digital Functions	**6020**	**6021**	**60652**	**60212**
Function not assigned				
F1 to f4 not assigned				
Diesel locomotive operating sound effects			x	x
Long whistle signal			x	x
Short whistle signal			x	x
Horn, high-pitched sound			x	x
Horn, low-pitched sound				x
Auxiliary diesel sound effect				x
Compressed air burst sound effect				x
Compressed air hiss sound effect				x
Braking sound effect				x
Closing doors sound effect				x
Starter sound effect				x
Oil pump sound effect				x

N mfx NEM III

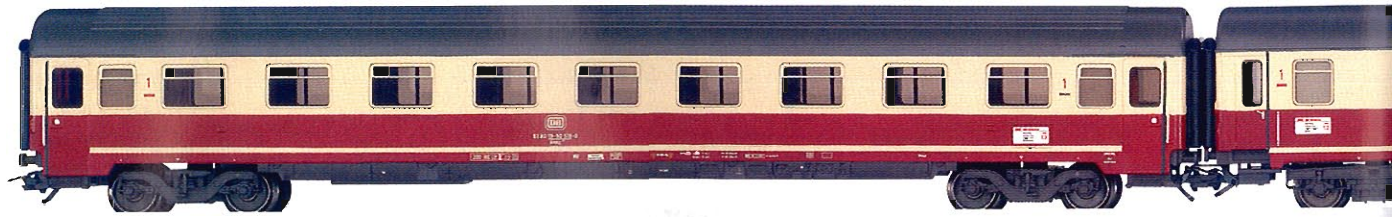
Passenger Cars.

42993
Car Set.

Models not available separately.

Prototype: 3 different German Federal Railroad (DB) InterCity cars. 1 type Avmz compartment car, 1st class. 1 type Apmz open seating car, 1st class. 1 type Avmz compartment car, 1st class.

Model: Ready for installation of current-conducting couplers. Adjustable buffers. Imprinted train destination signs. Total length over buffers 80.8 cm / 31-13/16".
DC wheel set 12 x 70 0580



NEM 7330 IV

42994
Car Set.

Models not available separately.

Prototype: 3 different German Federal Railroad (DB) InterCity cars. 1 type Bpmz open seating car, 2nd class. 2 type Bm compartment cars, 2nd class, with different car numbers.

Model: Ready for installation of current-conducting couplers. Adjustable buffers. Imprinted train destination signs. Total length over buffers 80.8 cm / 31-13/16".
DC wheel set 12 x 70 0580

NEM 7330 IV

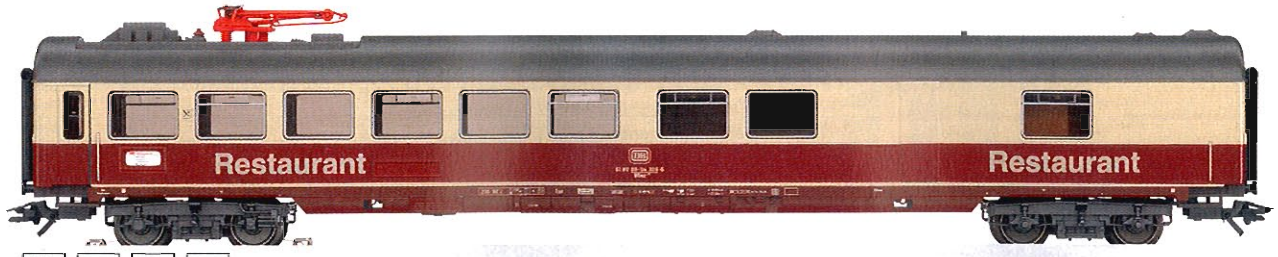
Passenger Cars.

42973
Express Train Passenger Car.

Working digital model. Pantograph can be raised and lowered by remote control. Conductor's all aboard whistle. Goes with the model of the "Südwind" or "South Wind" train.

Prototype: German Federal Railroad (DB) type WRmz 135 dining car. Goes well with the TEE and IC trains such as the "Südwind" or "South Wind" train.

Model: An add-on to the 42993 and 42994 car sets. Car comes with a digital decoder, remote-controlled pantograph, and sound function. The mechanism for raising and lowering the pantograph and the conductor's all aboard whistle can be controlled digitally with the 6021 Control Unit. Train destination signs with lettering printed on the car sides. Adjustable buffers. Length over the buffers 27.0 cm / 10-5/8".



42972
Express Train Passenger Car.

Prototype: German Federal Railroad (DB) type ARDmh 105 bar car. Goes well with the TEE and IC trains such as the "Südwind" or "South Wind" train.
Model: An add-on to the 42993 and 42994 car sets. Train destination signs with lettering printed on the car sides. Adjustable buffers. Ready for installation of the 7319 current-conducting couplers. Total length over the buffers 27.0 cm / 10-5/8".
DC wheel set 4 x 70 0580

Passenger Cars.

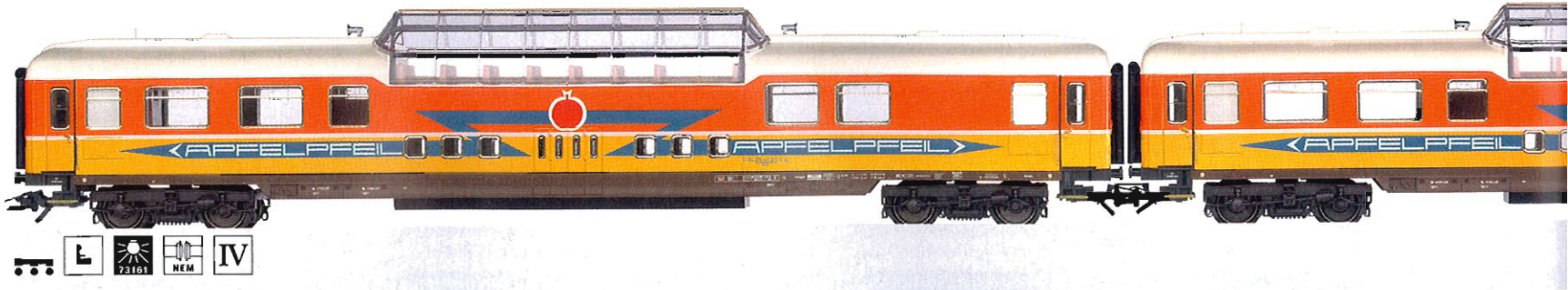
42995
"Apfelpfeil" Express Train Passenger Car Set (1).

One-time series.

Prototype: 2 vista dome cars of the International Apfelpfeil Organization (IAO). German Federal Railroad former type ADm 101 for the TEE "Rheingold".

Model: Panorama cupola with 8 view areas and walkway in roof color. Integrated specific optical fiber to the interior lighting. Various road numbers. Separately applied speaker on the roof (without function). Chassis with representation of the lowered baggage area. Detailed trucks. Prepared for 7319 current-conducting couplings.

Adjustable buffers. Length over buffers 54.1 cm / 21-5/16".
DC wheel set 8 x 70 0580



42997
"Apfelpfeil" Express Train Passenger Car Set (2).

One-time series.

The 42995 and 42997 car sets go well with the model of the class 111 electric locomotive; item no. 37316.

Prototype: 3 excursion cars of the International Apfelpfeil Organization (IAO). Former German Federal Railroad type UIC-x compartment car for TEE traffic.

Model: 2 cars in complete corporate color scheme. 1 car in original color scheme with corporate address. Different road numbers. Separately applied speaker on the roof (without function). Chassis with representation of the side skirting. Detailed trucks. Prepared for 7319 current-conducting couplings.Adjustable buffers.

Length over buffers 81.2 cm / 31-31/32".
DC wheel set 12 x 70 0580

In the 70's, the International Apfelpfeil Organization (IAO) organized the so-called "Apfelfahrten" (Apple trips); these offered romantic travel throughout Europe with special trains. In 1976 the IAO took over the well-known "Rheingold" vista dome cars and other cars from the TEE car pool of the German Federal Railroad. For several years the easily-identifiable trains were symbols of comfortable and animated travel at reasonable prices.
Later, faced with increasing competition from flat-rate travel with charter aircraft, this concept could no longer be sustained economically. In 1979 the IAO stopped operations and declared bankruptcy. The special cars were sold to other tour operators and are still in use today; some of them have been converted.

Passenger Cars.

A total of 1,821 cars were rebuilt in the late 1950s, and part of this program was that the car frames were altered to a standard length of 19.45 meters or 63 feet 10-1/8 inches. The introduction of weather tight diaphragms between the cars was an important detail to enable passengers to board and get off of the train more quickly at station stops. In addition, all classes were equipped with upholstered seats for the first time. Like the three-axle rebuilt cars, the four-axle versions were built using old German State Railroad and provincial railroad cars.

4131
Passenger Car.

Prototype: German Federal Railroad (DB) type AByg 503 rebuilt car.
1st and 2nd class.
Model: Length over buffers 22.4 cm / 8-3/4".
DC wheel set 4 x 70 0580

NEM 7329 IV

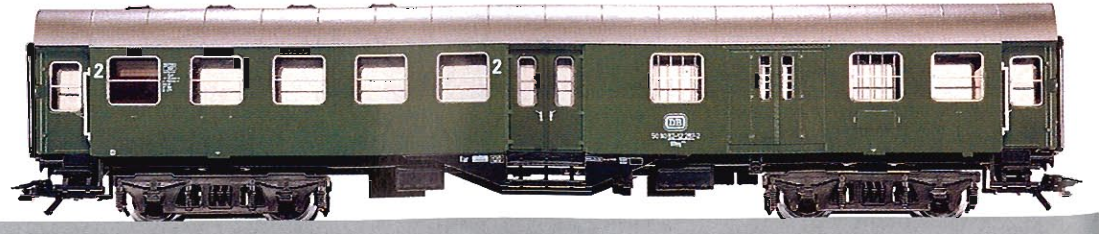
4132
Passenger Car.

Prototype: German Federal Railroad (DB) rebuilt coach type Byg 515.
2nd class.
Model: Length over buffers 22.4 cm / 8-3/4".
DC wheel set 4 x 70 0580

NEM 7329 IV

4133
Passenger Car.

Prototype: German Federal Railroad (DB) rebuilt coach type BDyg 533.
2nd class with baggage compartment.
Model: Length over buffers 22.4 cm / 8-3/4".
DC wheel set 4 x 70 0580

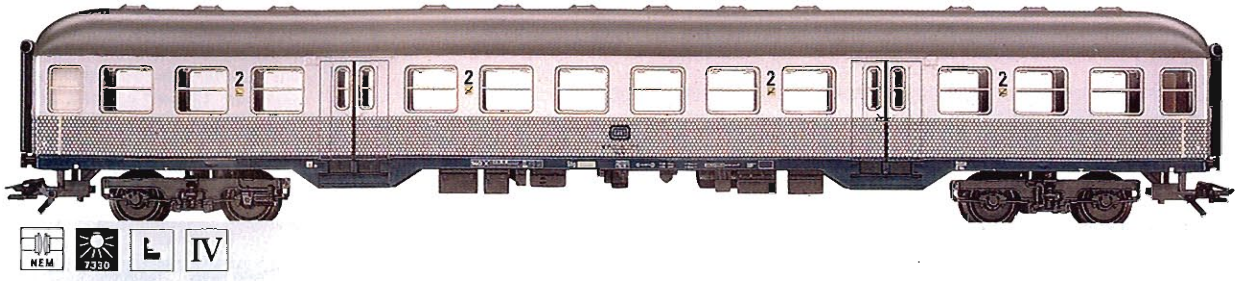


NEM 7329 IV

4256
Commuter Car.

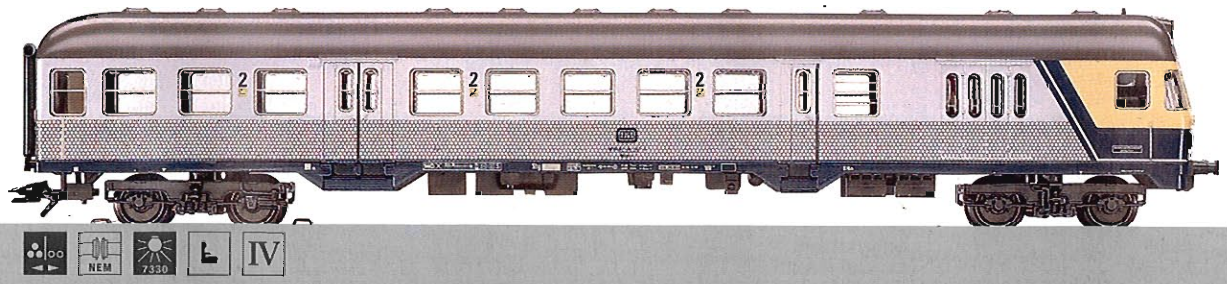
Prototype: German Federal Railroad (DB) "Silberling" type Bnb 719.
2nd class.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 26.4 cm / 10-3/8".
DC wheel set 4 x 70 0580

The unpainted exterior skin of stainless steel with the peacock's eye pattern under the windows gave the German Federal Railroad commuter cars, which replaced older rolling stock starting in 1960, the name "Silberlinge" ("Silver Coins").In the prototype a large number of 2nd class cars were equipped with baggage and engineer's compartments at one end, which were later expanded to a complete engineer's cab with destination signs. Thanks to the engineer's cab, these cars can be used in push/pull service with locomotives equipped for this type of operation. This saves the time required to turn locomotives at the end stations. On main lines and branch lines, trains of Silberlinge often run with class 111, 140, 141, 212 or 216 locomotives. The modern, three-phase class 120 locomotive also occasionally pulls a push/pull train. Recently, Silberlinge have been replaced on lightly traveled routes increasingly with the new class 628 powered rail cars. In urban areas, however, they are still often seen, even in S-Bahn traffic in the Rhine-Main area or in the greater Hamburg area, for example.



4257
Commuter Car with Control Cab.

Prototype: German Federal Railroad (DB) type BDnf 735, 2nd class with baggage compartment.
Model: Lighted destination board on the end of the car. Adjustable buffers. Ready for installation of current-conducting couplers. Length over buffers 26.4 cm / 10-3/8".



When operated cab control car first, triple white headlights shine.

When operated cab control car last, dual red marker lights shine.

Passenger Cars.

42551
Commuter Car.

Prototype: German Railroad, Inc. (DB AG) type ABn. Regionalbahn paint scheme. 1st and 2nd class.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 26.4 cm / 10-3/8".
DC wheel set 4 x 70 0580

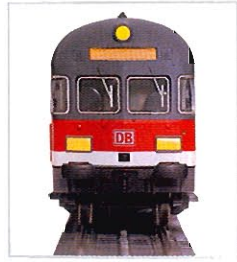
42561
Commuter Car.

Prototype: German Railroad, Inc. (DB AG) type Bnz. Regionalbahn paint scheme. 2nd class.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 26.4 cm / 10-3/8".
DC wheel set 4 x 70 0580

42571
Commuter Car with Control Cab.

Prototype: German Railroad, Inc. (DB AG) type BDnzf "Silberling". Regionalbahn paint scheme. 2nd class with baggage compartment.

Model: Lighted destination sign. Adjustable buffers at the vestibule end of the car. Ready for installation of 7319 current-conducting couplers. Length over buffers 26.4 cm / 10-3/8".

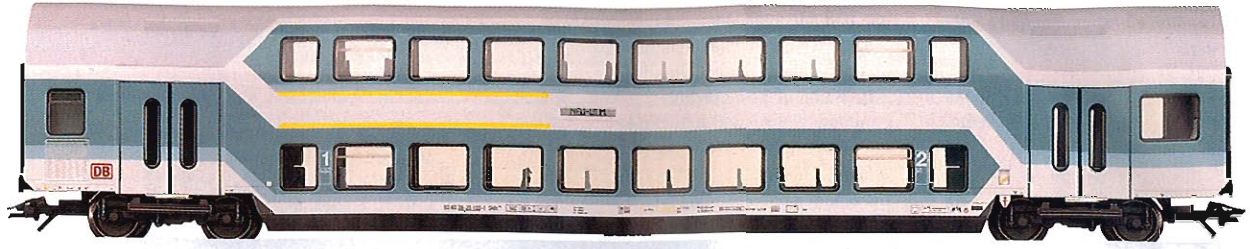


When operated cab control car first, triple white headlights shine.

When operated cab control car last, dual red marker lights shine.

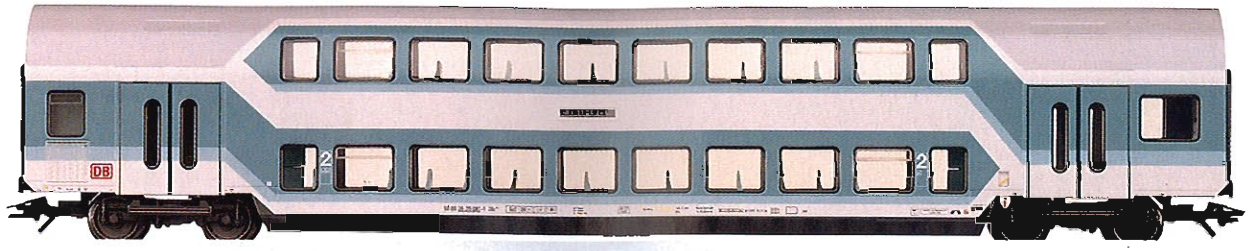
43581
Bilevel Car.

Prototype: German Railroad, Inc. (DB AG) type DABz 756, 1st and 2nd class.
Model: Ready for installation of current-conducting couplers. Length over buffers 26.8 cm / 10-9/16".
DC wheel set 4 x 70 0580



43582
Bilevel Car.

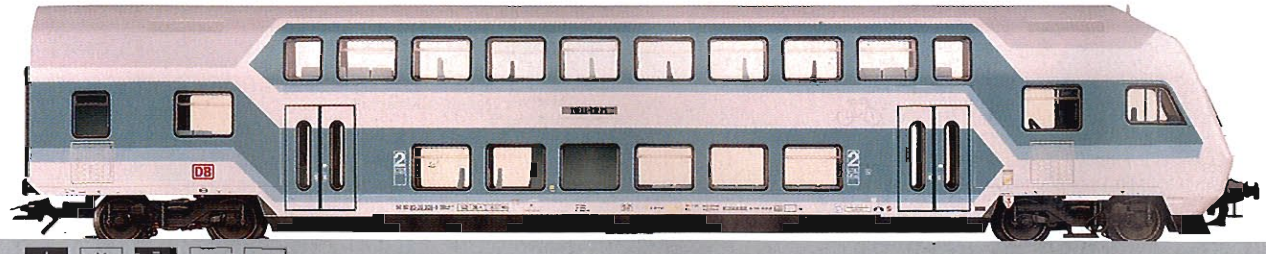
Prototype: German Railroad, Inc. (DB AG) type DBz 751, 2nd class.
Model: Ready for installation of current-conducting couplers. Length over buffers 26.8 cm / 10-9/16".
DC wheel set 4 x 70 0580

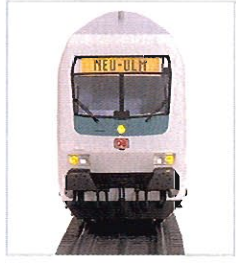


43583
Bilevel Cab Control Car.

Prototype: German Railroad, Inc. (DB AG) type DBbzf 761, 2nd class.
Model: Detailed buffer beam with separately applied front cowling. Lighted destination sign.

Engineer's cab with interior details. Ready for installation of current-conducting couplers. Length over buffers 27.3 cm / 10-3/4".





When operated cab control car first, triple white headlights shine.

When operated cab control car last, dual red marker lights shine.

Passenger Cars.

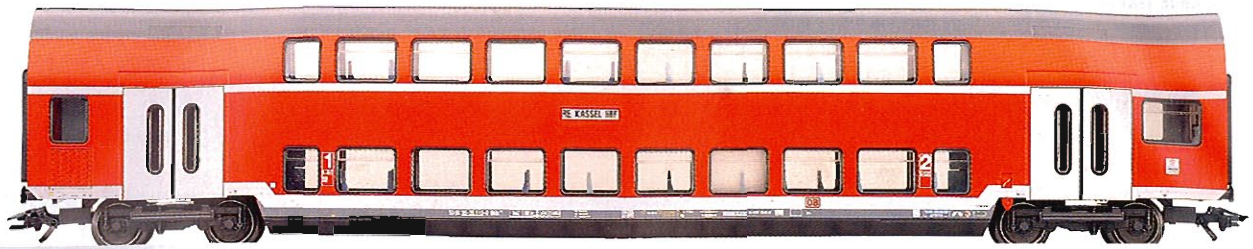
42932
Commuter Service Baggage Car.

Sliding doors that can be opened.
Commuter service color scheme.

Prototype: German Railroad, Inc. (DB AG) type Dm.
Model: Two sliding jalousie doors on each side of the car. Ready for installation of 7319 current-conducting couplers. Adjustable buffers. Length over buffers 27.0 cm / 10-5/8".
DC wheel set 4 x 70 0580

43584
Bilevel Car.

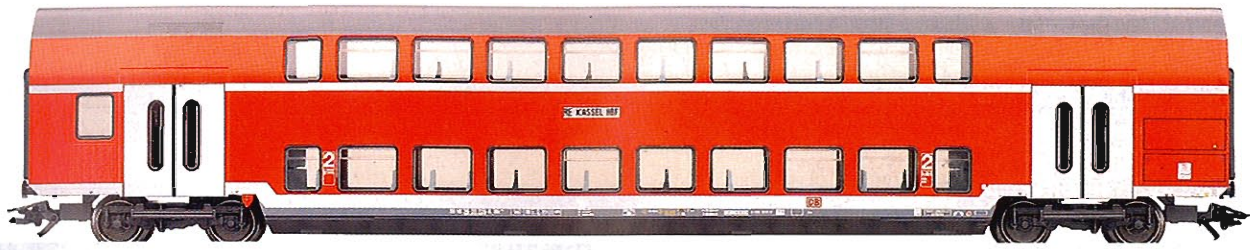
Prototype: German Railroad, Inc. (DB AG) type DABz 756, 1st and 2nd class.
Model: Ready for installation of current-conducting couplers. Length over buffers 26.8 cm / 10-9/16".
DC wheel set 4 x 70 0580



NEM 73140 V

43585
Bilevel Car.

Prototype: German Railroad, Inc. (DB AG) type DBz 751, 2nd class.
Model: Ready for installation of current-conducting couplers. Length over buffers 26.8 cm / 10-9/16".
DC wheel set 4 x 70 0580

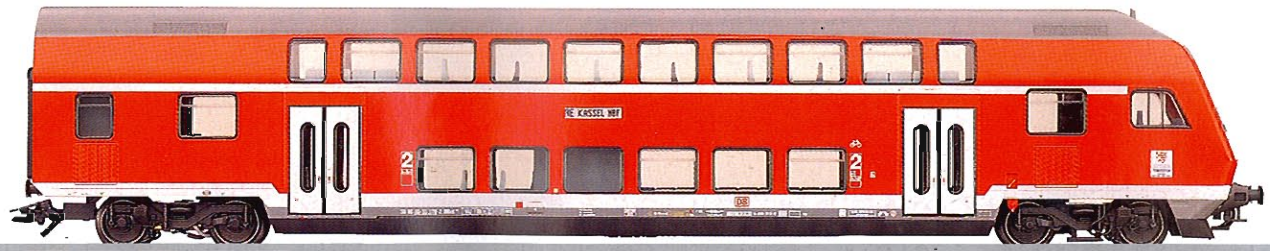


NEM 73140 V

43586
Bilevel Cab Control Car.

Prototype: German Railroad, Inc. (DB AG) type DBbzf 761, 2nd class.
Model: Detailed buffer beam with separately applied front cowling. Lighted destination sign.

Engineer's cab with interior details. Ready for installation of current-conducting couplers. Length over buffers 27.3 cm / 10-3/4".



NEM 73140 V

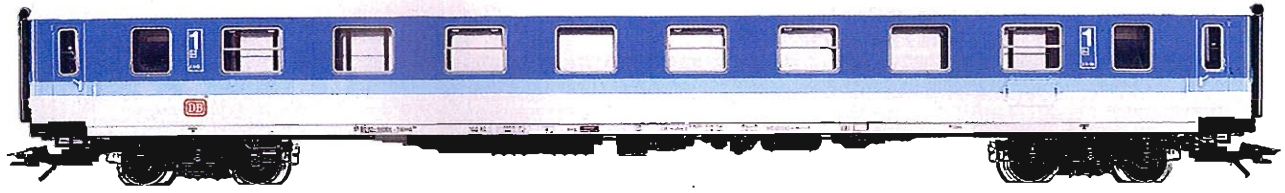
When operated cab control car first, triple headlights shine.

When operated cab control car last, dual red marker lights shine.

Passenger Cars.

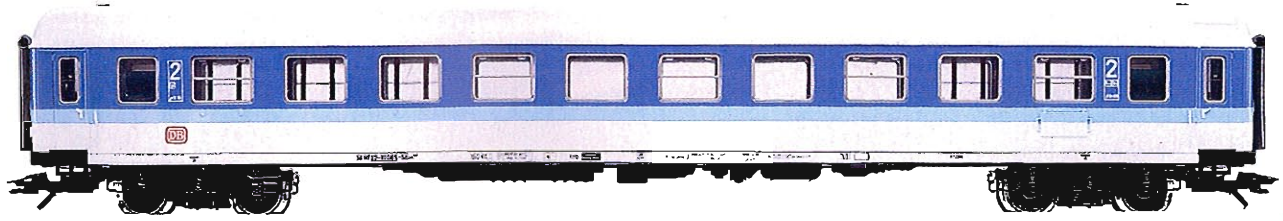
4281
Express Train Passenger Car.

Prototype: German Federal Railroad (DB) type Aim 260 InterRegio car. 1st class.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 27.0 cm / 10-5/8".
DC wheel set 4 x 70 0580



4282
Express Train Passenger Car.

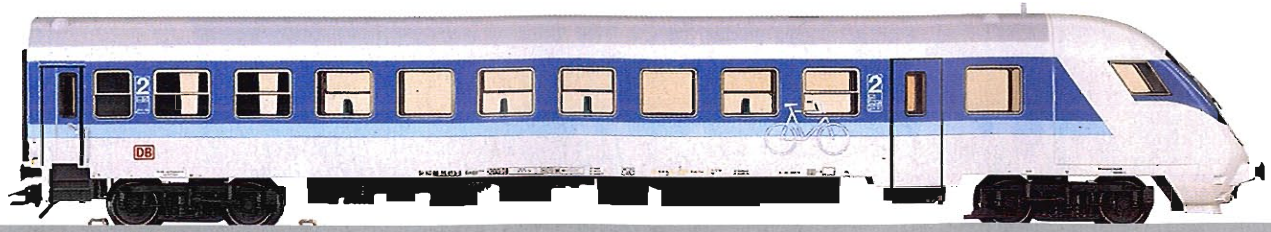
Prototype: German Federal Railroad (DB) type Bim 263 InterRegio car. 2nd class.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 27.0 cm / 10-5/8".
DC wheel set 4 x 70 0580



43300
Express Train Passenger Car.

Prototype: German Railroad, Inc. (DB AG) type Bimdzf 269.0 InterRegio cab control car. 2nd class with engineer's cab for push/pull operation.

Model: Engineer's cab with interior details. Detailed buffer beam. Separately applied front cowling. Ready for installation of 7319 current-conducting couplers. Length over buffers 27.5 cm / 10-13/16".

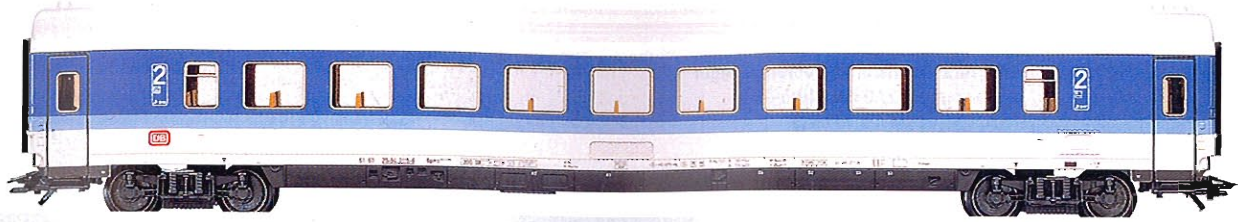


When operated control car first, triple headlights shine.

When operated control car last, dual red marker lights shine.

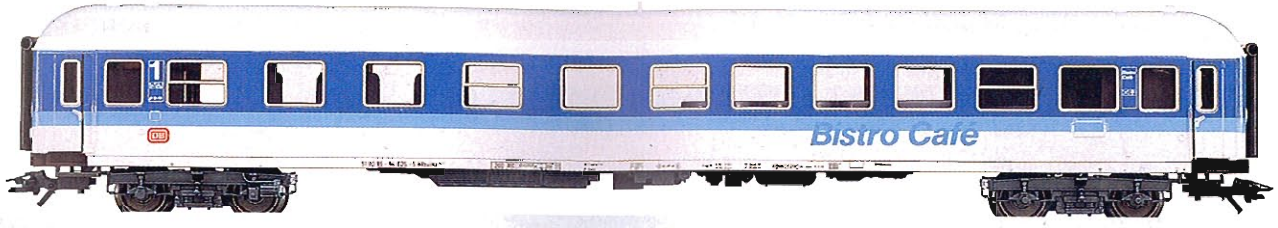
4327
Express Train Passenger Car.

Prototype: German Federal Railroad (DB) type Bpmz 293.2 FD/InterRegio car. 2nd class.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 26.4 cm / 10-3/8".
DC wheel set 4 x 70 0580



4384
Express Train Passenger Car.

Prototype: German Federal Railroad (DB) type ARbuimz 262 InterRegio Bistro Café car. 2nd class.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 27.0 cm / 10-5/8".
DC wheel set 4 x 70 0580

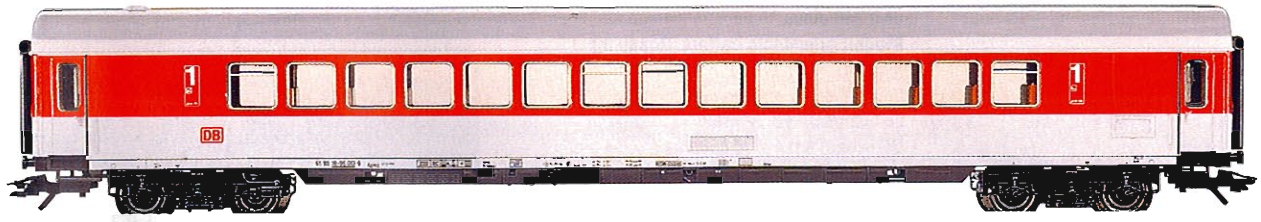


Most of the passenger cars can be equipped with interior lighting. Please see pages 394-397 for this.

Passenger Cars.

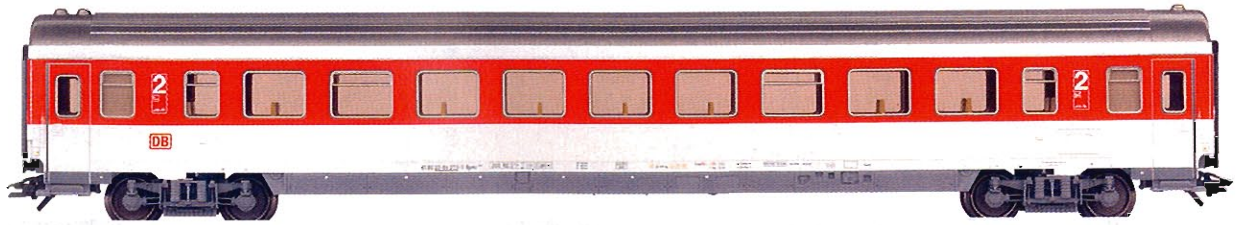
42861
Express Train Passenger Car.

Prototype: German Railroad, Inc. (DB AG) type Apmz 121.3 InterCity open seating car, 1st class.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 27.0 cm / 10-5/8".
DC wheel set 4 x 70 0580



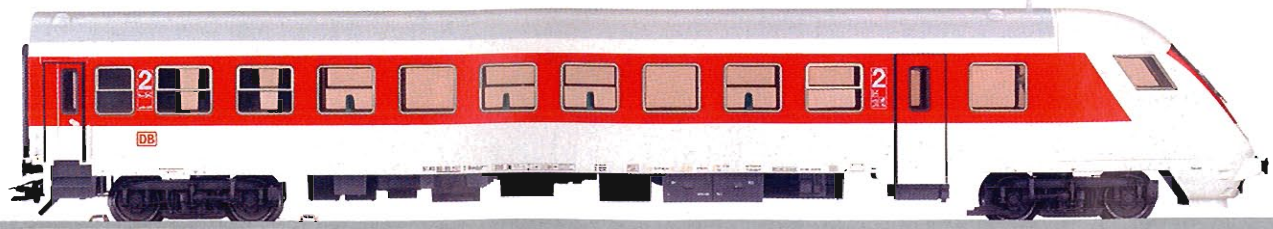
42271
Express Train Passenger Car.

Prototype: German Railroad, Inc. (DB AG) type Bpmz 291.2, 2nd class.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 26.4 cm / 10-3/8".
DC wheel set 4 x 70 0580



43303
Cab Control Car.

Prototype: German Railroad, Inc. (DB AG) type Bimdzf 269.2 cab control car, 2nd class with engineer's cab for push/pull operation.
Model: Engineer's cab with interior details. Detailed buffer beam. Separately applied front cowling. Ready for installation of current-conducting couplers. Length over buffers 27.5 cm / 10-13/16".



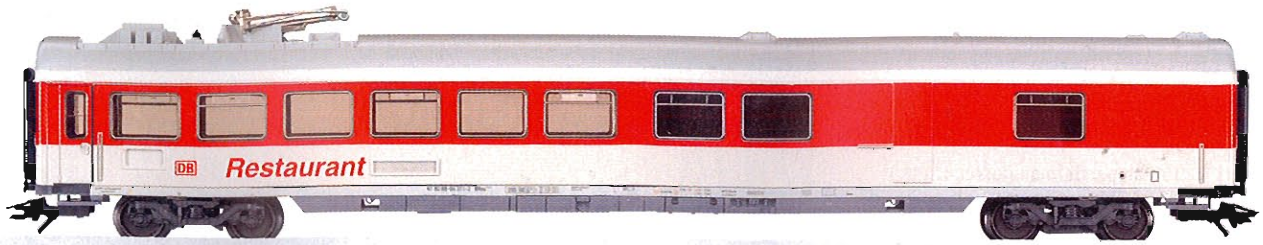
When operated control car first, triple headlights shine.

When operated locomotive first, dual red marker lights shine.

42971
Dining Car.

Prototype: German Railroad, Inc. (DB AG) type WRmz 135.0 InterCity dining car.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Working pantograph. Length over buffers 27.0 cm / 10-5/8".
DC wheel set 4 x 70 0580

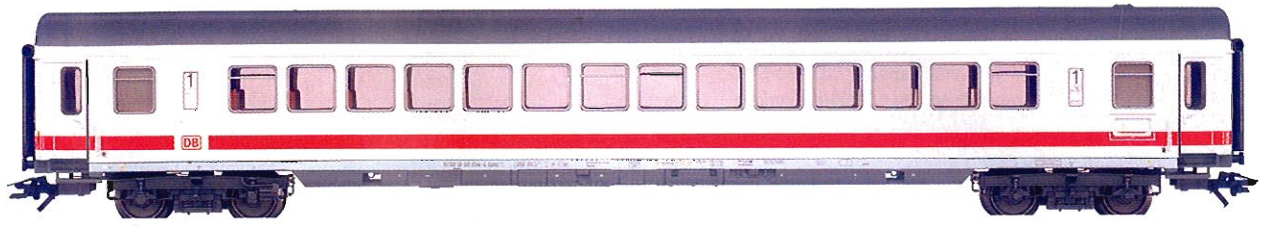
The pantograph on the dining cars provides uninterrupted power for the galley. This is important chiefly when the cars are on a storage siding or when the train's locomotive is being changed and there is no power available from a locomotive.



Passenger Cars.

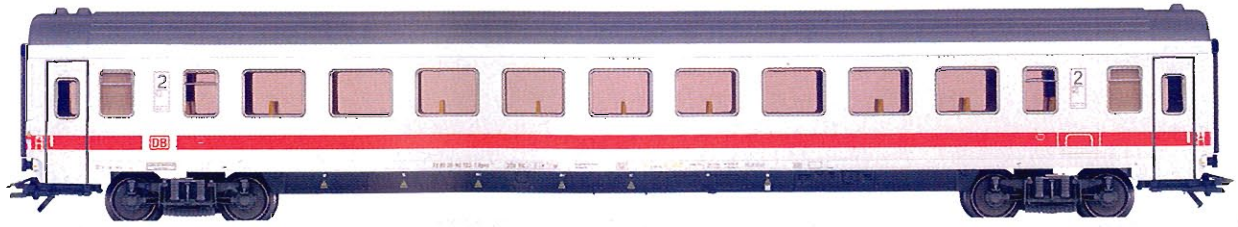
42862
Express Train Passenger Car.

Prototype: German Railroad, Inc. (DB AG) type Apmz 121.2 InterCity open seating car, 1st class.
Model: Car has adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 27.0 cm / 10-5/8".
DC wheel set 4 x 70 0580



42272
Express Train Passenger Car.

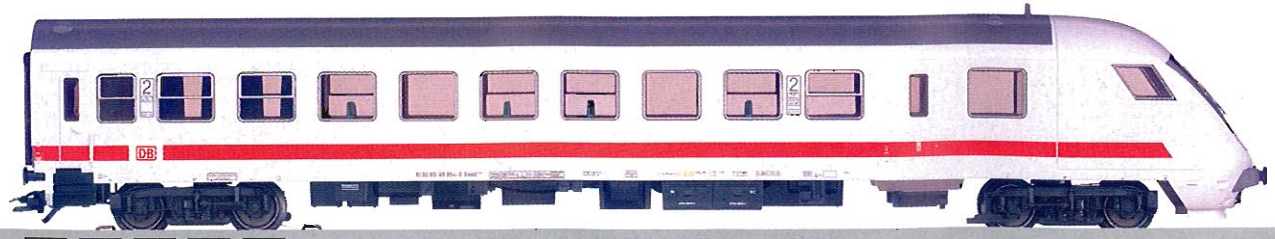
Prototype: German Railroad, Inc. (DB AG) type Bpmz 293.1 InterCity open seating car, 2nd class.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 26.4 cm / 10-3/8".
DC wheel set 4 x 70 0580



43305
Cab Control Car.

Prototype: German Railroad, Inc. (DB AG) type Bimdzf 269.2 InterCity cab control car, 2nd class with engineer's cab for push/pull operation.

Model: Engineer's cab has interior details. Detailed buffer beam. Separately applied front fairing. Ready for installation of 7319 current-conducting couplers. Length over buffers 27.5 cm / 10-13/16".



When operated cab control car first, triple white headlights shine.

When operated locomotive first, dual red marker lights shine.


DB
182 005-9
DB
182 005-9

Passenger Cars.

41774
Express Train Passenger Car Set.

Prototype: German Railroad, Inc. (DB AG) Talgo design hotel cars. Current version for the DB Night Train. 2 sleeping cars (1st class) and 1 slumber coach (2nd class with open seating area).

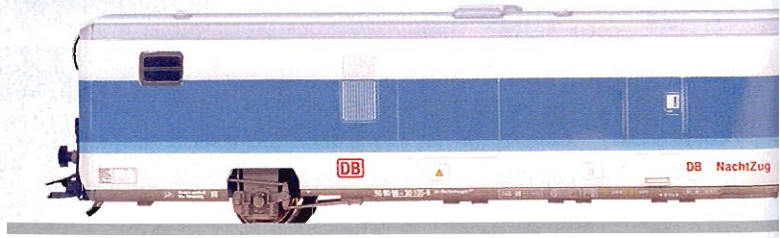
Model: Extension set with 3 cars for the 41773 set. Articulated mount for the axles with snap-in special couplings between the cars. Lengthens the train by 45.1 cm / 17-3/4".
DC wheel set 3 x 70 0580

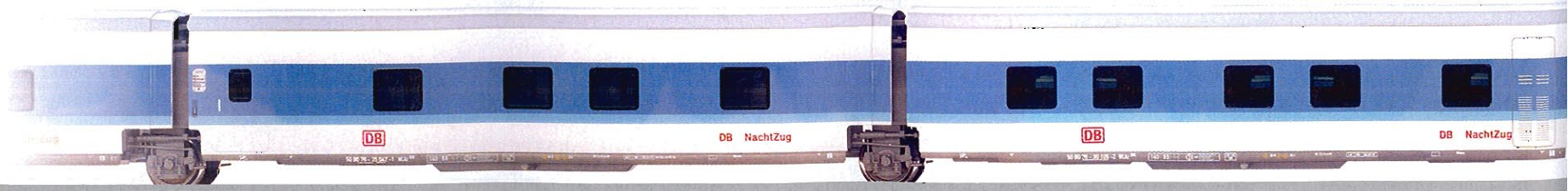
L V

41773
Express Train Passenger Car Set.

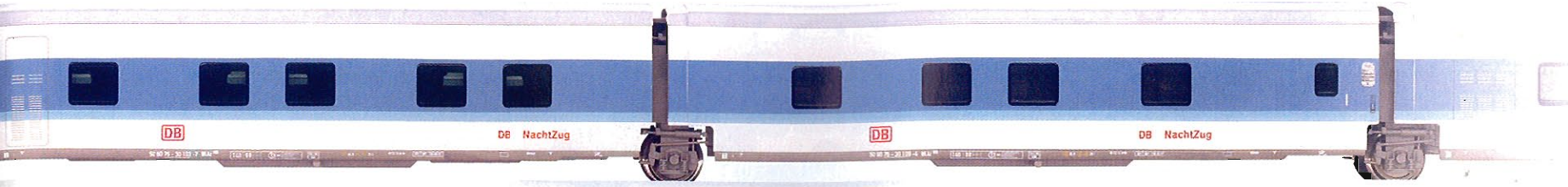
Special running gear with single-axle trucks.

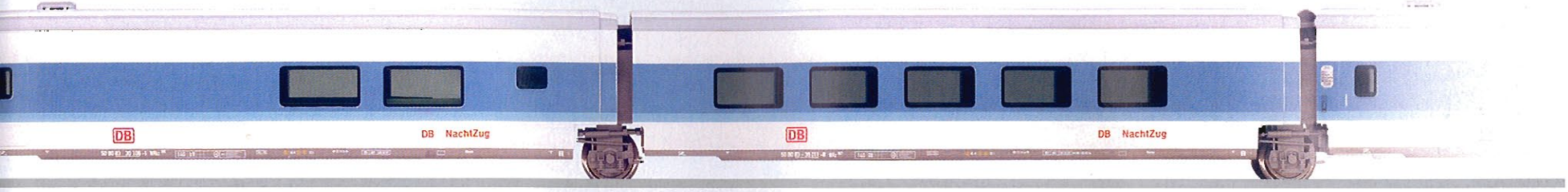
Prototype: German Railroad, Inc. (DB AG) Talgo design hotel cars. Current version for the DB Night Train. 2 end cars (machine cars I and II), 2 dining cars (Lounge and Bistro) and 2 sleeping cars (1st class).
Model: Basic set with 6 cars. Articulated mount for the axles with snap-in special couplings between the cars. Total length over buffers 88.5 cm / 34-15/16". Train can be lengthened with the 41774 car set.
DC wheel set 7 x 70 0580





NEM L V


DB
DB NachtZug
DB
DB NachtZug

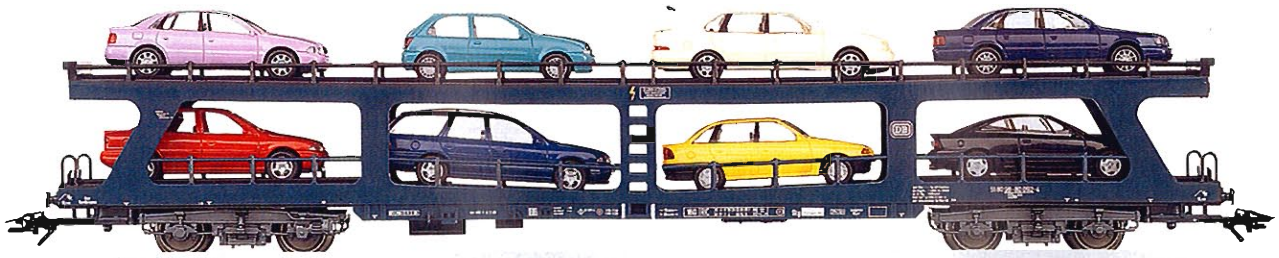

DB
DB NachtZug
DB
DB NachtZug


DB
DB NachtZug

Auto Transport Car.

4234
Passenger Train Auto Transport Car.

Prototype: German Federal Railroad (DB) type DDm 915.
Model: Loaded with 8 model autos.
Length over buffers 26.4 cm / 10-3/8".
DC wheel set 4 x 70 0580

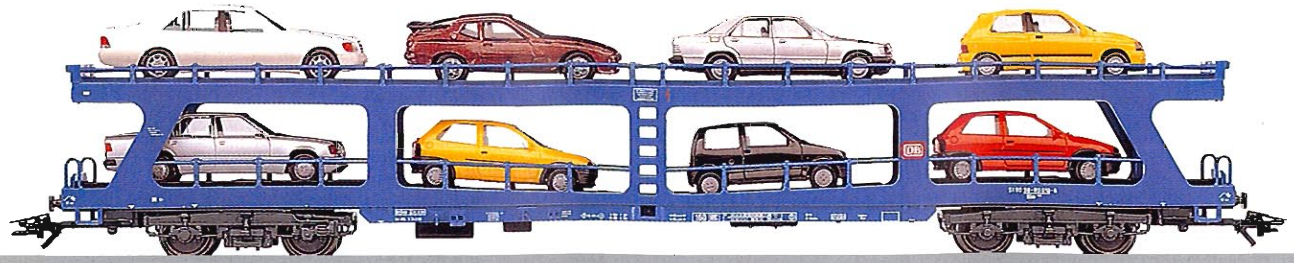


IV

4233
Passenger Train Auto Transport Car.

Prototype: German Federal Railroad (DB) type DDm 915. InterRegio paint scheme.
Model: Loaded with 8 model autos.
Length over buffers 26.4 cm / 10-3/8".
DC wheel set 4 x 70 0580

The entire logistics for the DB's passenger train auto transport is now being handled by the subsidiary firm of DB AutoZug. The improvements in the further development of the system of an "auto on the passenger train" show up in the "traffic red" paint scheme for the cars that matches the DB AG's newest InterCity color scheme.



IV

The autos are safeguarded with chock blocks.

42341
Passenger Train Auto Transport Car.

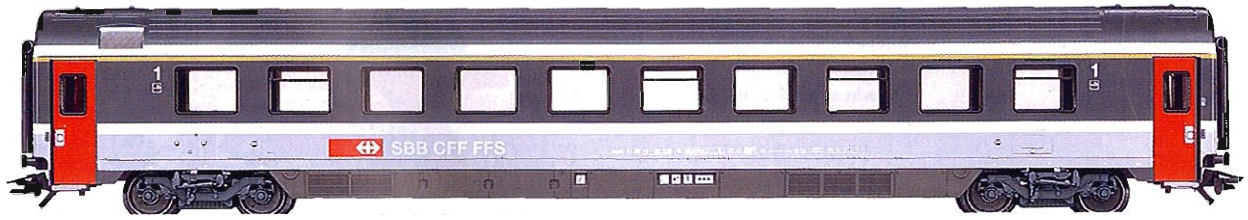
Prototype: German Federal Railroad (DB) type DDm 915. Current version for "DB AutoZug" ("DB Auto Train").
Model: Loaded with 8 modern model autos. Length over buffers 26.4 cm / 10-3/8".
DC wheel set 4 x 70 0580

V

Passenger Cars.

4368
Express Train Passenger Car.

Prototype: Swiss Federal Railways (SBB) type Apm Euro City car. 1st class.
Model: Adjustable buffers. Ready for in- stallation of 7319 current-conducting couplers. Length over buffers 26.7 cm / 10-1/2".
DC wheel set 4 x 70 0580

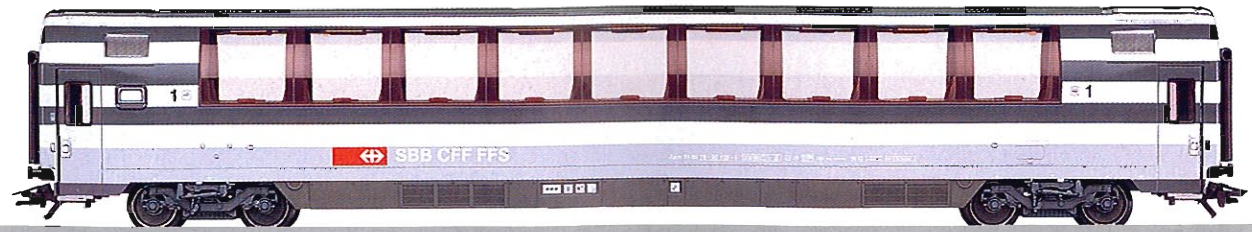


4369
Express Train Passenger Car.

Prototype: Swiss Federal Railways (SBB) type Bpm Euro City car. 2nd class.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 26.7 cm / 10-1/2".
DC wheel set 4 x 70 0580

4365
Express Train Passenger Car.

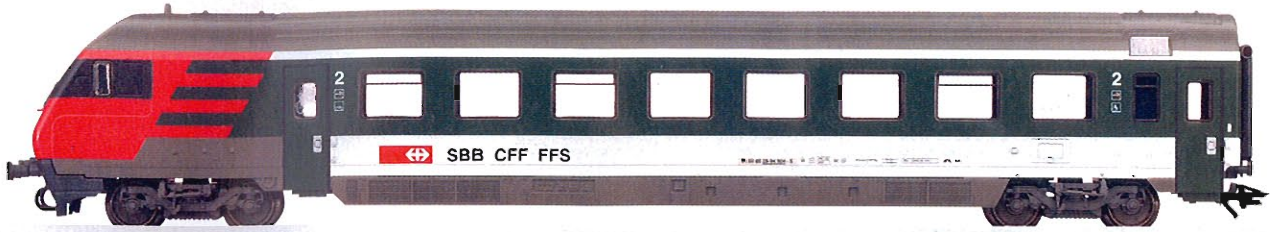
Prototype: Swiss Federal Railways (SBB) type Apm Euro City panorama car. 1st class.
Model: Adjustable buffers. Ready for installation of 7319 current-conducting couplers. Length over buffers 26.7 cm / 10-1/2".
DC wheel set 4 x 70 0580



42178
Express Train Passenger Car.

Prototype: Cab control car for push/pull trains. Swiss Federal Railways (SBB) type Mark IV Bt. 2nd class with engineer's cab similar to that for the class Re 460 locomotive.

Model: Maintenance-free LEDs for headlights and marker light. Engineer's cab with interior details. Coupler at the car end without an engineer's cab. Ready for installation of current-conducting couplers. Adjustable buffers. Length over buffers 27.5 cm / 10-13/16".

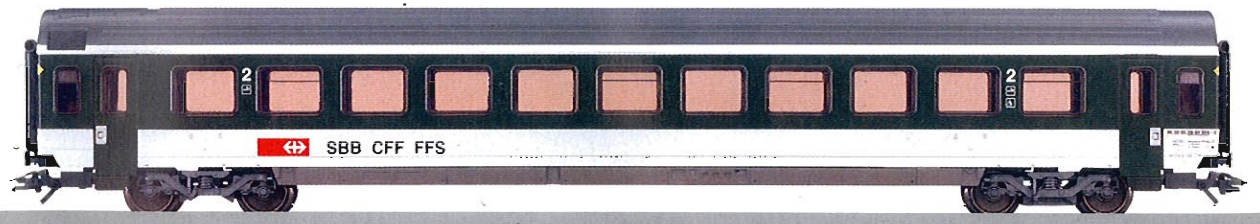


NEM 73150 V

42162
Express Train Passenger Car.

Prototype: Swiss Federal Railways (SBB) type Mark IV B. 2nd class. With push/pull train equipment.
Model: Ready for installation of current-conducting couplers. Adjustable buffers. Length over buffers 26.4 cm / 10-3/8".
DC wheel set 4 x 70 0580

With the Euro City cars the Swiss Federal Railways have placed into service a totally new group of rolling stock for international passenger traffic. In addition to the new open seating cars in 1st and 2nd class with their very modern interiors, there are the so-called panorama cars, which were built on the same basic design. These cars have almost continuous side windows that are curved into the raised roof line, and they offer an incomparable view of the landscape on both sides of the track.



NEM 7330 V

Passenger Cars.

42723
Express Train Car Set.

Prototype: Austrian Federal Railways (ÖBB) type Z1 Eurofima cars. 1 type A9 car, 1st class. 2 type B11 cars, 2nd class.

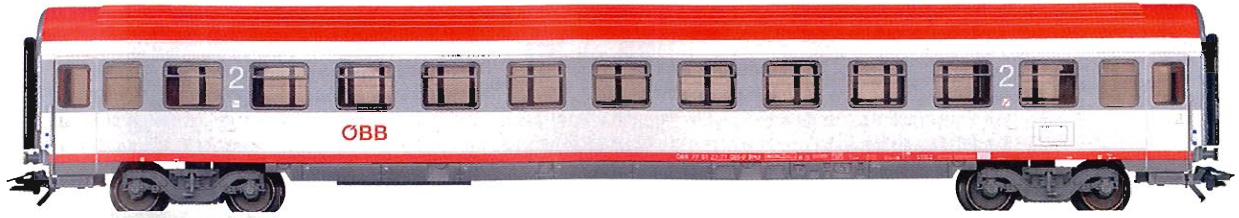
Model: Ready for installation of 7319 current-conducting couplers. An ideal addition to the no. 42724 car set. Total length over buffers 79.5 cm / 31-5/16".
DC wheel sets 12 x 70 0580

NEM 7330 V

42721
Express Train Car.

Export model for Austria.

Prototype: Austrian Federal Railways (ÖBB) Eurofima type Z1 car. Bmz compartment car, 2nd class. New Eurocity color scheme.
Model: Prepared for 7319 current conducting couplers. Suitable for car set item no. 42725. Length over buffers 26.4 cm / 10-13/32".
DC wheel set 4 x 70 0580

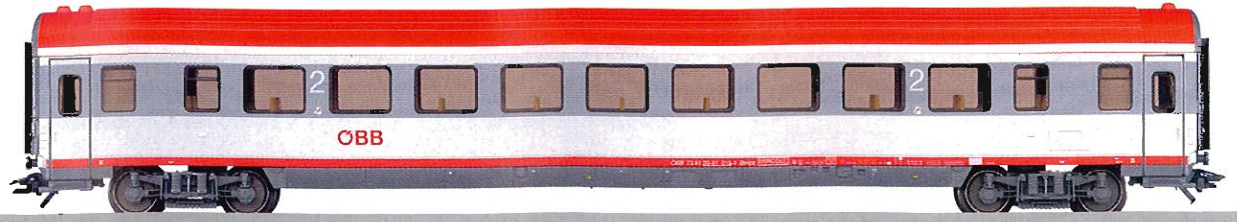


N 7330 V

42722
Express Train Car.

Export model for Austria.

Prototype: Austrian Federal Railways (ÖBB) Eurofima car, type Z1. Open-seating Bmpz, 2nd class. New Eurocity color scheme.
Model: Prepared for 7319 current conducting couplers. Suitable for car set item no. 42725. Length over buffers 26.4 cm / 10-13/32".
DC wheel set 4 x 70 0580



N 7330 V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2
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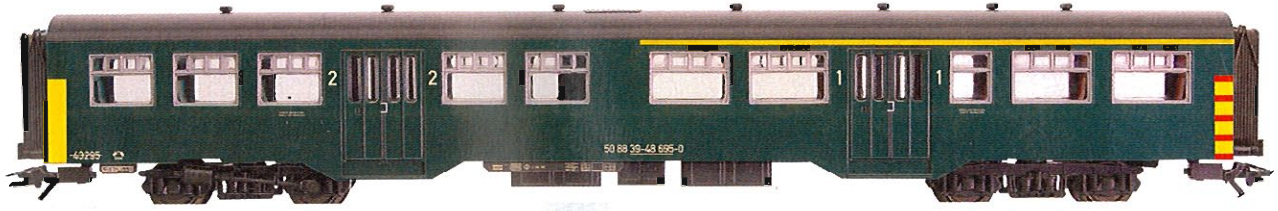
Passenger Cars.

43532
Commuter Car.

Export model for Belgium.

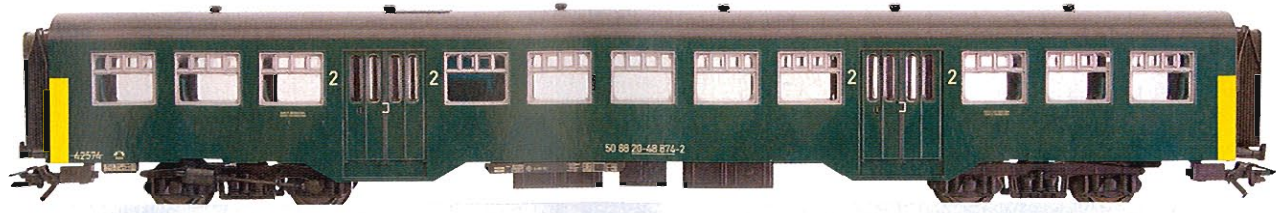
Prototype: Belgian State Railways (SNCB/NMBS) type M2 A5B5, 1st and 2nd class. Authorized for use in push/pull trains.
Model: Separately applied window frames. Ready for installation of current-conducting couplers. Length over buffers 27.5 cm / 10-13/16".
DC wheel set 4 x 70 0580



43534
Commuter Car.

Export model for Belgium.

Prototype: Belgian State Railways (SNCB/NMBS) type M2 B11, 2nd class. Authorized for use in push/pull trains.
Model: Separately applied window frames. Ready for installation of current-conducting couplers. Length over buffers 27.5 cm / 10-13/16".
DC wheel set 4 x 70 0580

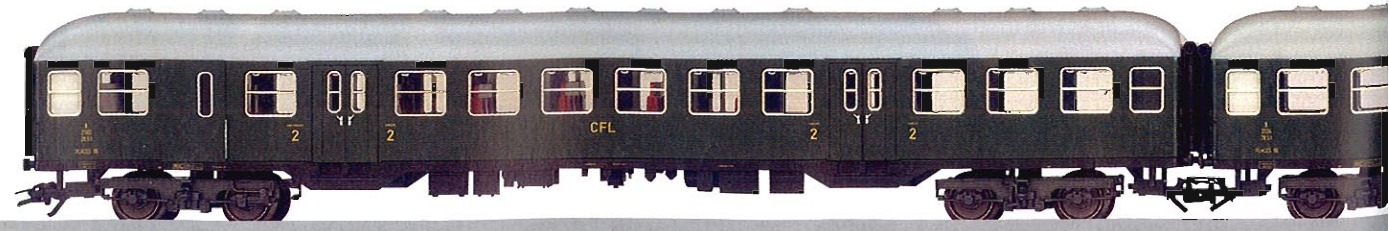


41273
"Commuter Service" Car Set.

Now ready for installation of the no. 73150 interior lighting kit.

Export model for Luxembourg

Prototype: 3 Luxembourg State Railways (CFL) Wegmann design passenger cars. 1 type AB car, 1st and 2nd class. 1 type B car, 2nd class only, and 1 type BD car, 2nd class with baggage area. Car bodies similar to the German "Silberlinge" or "Silver Coins" cars.
Model: Cars have adjustable buffers. Cars can be retrofitted with current-conducting couplers. Total length over buffers 79.4 cm / 31-1/4".
DC wheel set 12 x 70 0580



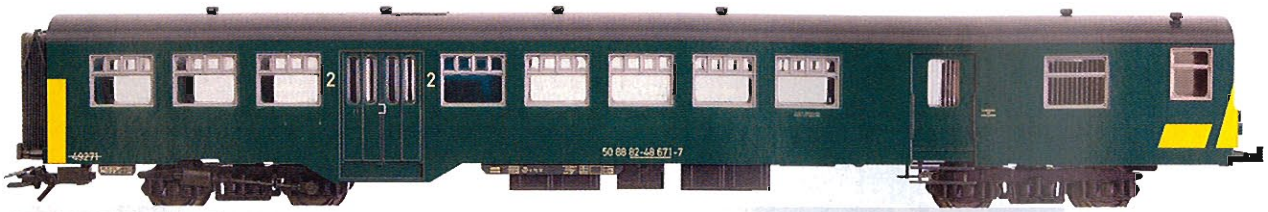
43536
Commuter Car with Engineer's Compartment.

Scale length 1:87.
The no. 37673 locomotive goes well with this car.
Complete push/pull train (without headlight / marker light changeover) can be done with item nos. 43532, 43534 and 43536.
Cab control car, item no. 43536, has the new engineer's cab – "Diesel" version.

Export model for Belgium.

Prototype: Belgian State Railways (SNCB/NMBS) type M2 B8DS, 2nd class with baggage area and engineer's compartment for use in push/pull trains with diesel locomotives.

Model: Separately applied window frames. Engineer's compartment with interior details. Headlights are maintenance-free LED's. Pickup shoe for picking up power for the lighting. Ready for current-conducting couplers. Detailed buffer beam without a Märklin coupler on the end of the car with the engineer's compartment. Length over buffers 27.5 cm / 10-13/16".



Passenger Cars.

42644
Express Train Car.

Prototype: Inter-City Car of the Netherlands Railways (NS). Open seating car ICR-A10, 1st class.
Model: Prepared for 7319 current-conducting couplings. Length over buffers 26.4 cm / 10-13/32".
DC wheel set 4 x 70 0580

42645
Express Train Car.

Prototype: Inter-City Car of the Netherlands Railways (NS). Open seating car ICR-B10, 2nd class.
Model: Prepared for 7319 current-conducting couplings. Length over buffers 26.4 cm / 10-13/32".
DC wheel set 4 x 70 0580

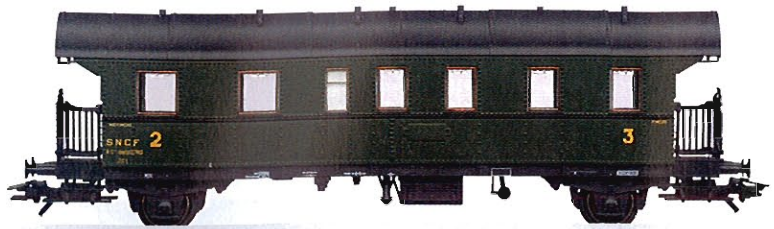
42646
Express Train Car.

Prototype: Inter-City Car of the Netherlands Railways (NS). Combined car ICR-BKD, 2nd class with galley and baggage compartment.
Model: Prepared for 7319 current-conducting couplings. Length over buffers 26.4 cm / 10-13/32".
DC wheel set 4 x 70 0580

43135
Passenger Car.

Export model for France.

Prototype: French National Railways (SNCF) steel car. 2nd and 3rd class with end platforms. German State Railroad "Donnerbüchse" design.
Model: Length over buffers 16.0 cm / 6-5/16".
DC wheel set 2 x 70 0580



N | NEM | III

43145
Passenger Car.

Export model for France.

Prototype: French National Railways (SNCF) steel car. 3rdclass with end platforms. German State Railroad "Donnerbüchse" design.
Model: Length over buffers 16.0 cm / 6-5/16".
DC wheel set 2.x 70 0580

N | NEM | III

43155
Baggage Car.

Export model for France.

Prototype: French National Railways (SNCF) steel car. Baggage area with conductor's compartment. German State Railroad "Donnerbüchse" design.
Model: 4 movable sliding doors. Side walkways. Length over buffers 16.0 cm / 6-5/16".
DC wheel set 2 x 70 0580

N | NEM | III

Passenger Cars.

41895
Italian Express Train Passenger Car Set.

Prototype: Cars are in the current paint scheme.
Goes well with the 37242 locomotive.

Export model for Italy.

Prototype: 3 Italian State Railways (FS) express train passenger cars. Eurofima cars type UIC-z. 1 type A9 car, 1st class. 2 type B11 cars, 2nd class.

Model: Adjustable buffers. Ready for installation of the 7319 current-conducting couplers. Total length over the buffers 79.5 cm / 31-5/16".
DC wheel set 12 x 70 0580

NEM 7330 V

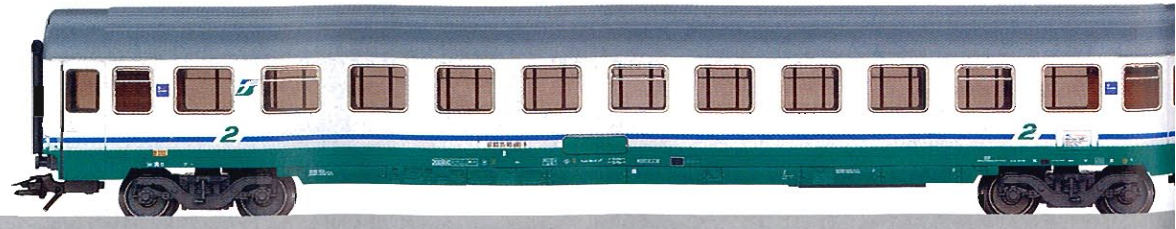
41896
Italian Express Train Passenger Car Set.

Prototype: Cars are in the current paint scheme.
Goes well with the 37242 locomotive.
Lengthens the 41895 set to a realistic train.

Export model for Italy.

Prototype: 2 Italian State Railways (FS) express train passenger cars. Type UIC-x standard cars. 1 car, 2nd class. 1 baggage car.
Model: Roll-down doors can be opened at the baggage area.

Adjustable buffers. Ready for installation of the 7319 current-conducting couplers. Total length over the buffers 54.2 cm / 21-5/16".
DC wheel set 8 x 70 0580



NEM 7330 V

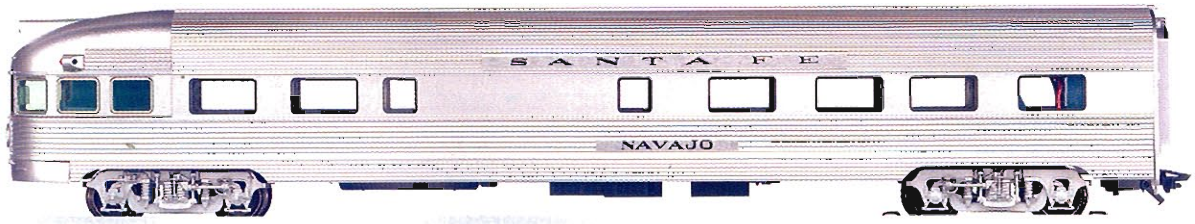

2
1

Passenger Cars.

43604
Express Train Passenger Car.

Goes well with the models of the F7 diesel locomotive.
An ideal add-on to the 43601, 43602, 43603 aluminum cars.
Interior and end lighting built in.

Prototype: Atchison Topeka & Santa Fe Railway (AT & SF) observation car.
Model: Car body is made of extruded aluminum. Maintenance-free LEDs for the lighted drumhead sign and red marker lights on the end of the car. Skirting at the end of the car can be replaced by a coupler. Length 26.0 cm / 10-1/4".

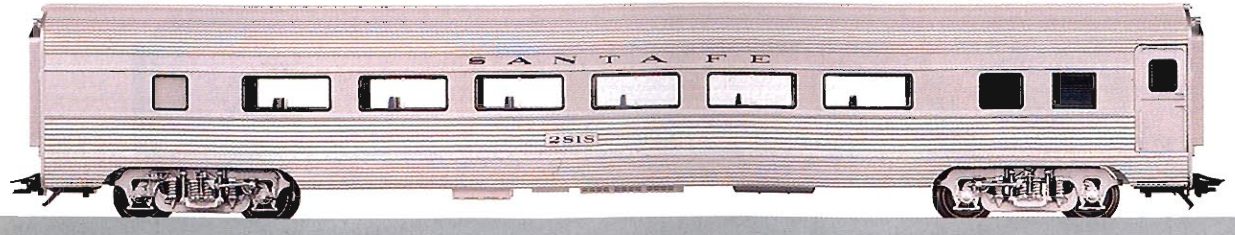


43614
Vista Dome Streamliner Car.

Prototype: Denver & Rio Grande Western (D & RGW) vista dome car.
Model: Extruded aluminum car body. Separately applied vista dome.
Length 26.0 / 10-1/4" cm.
DC wheel set 4 x 70 0580

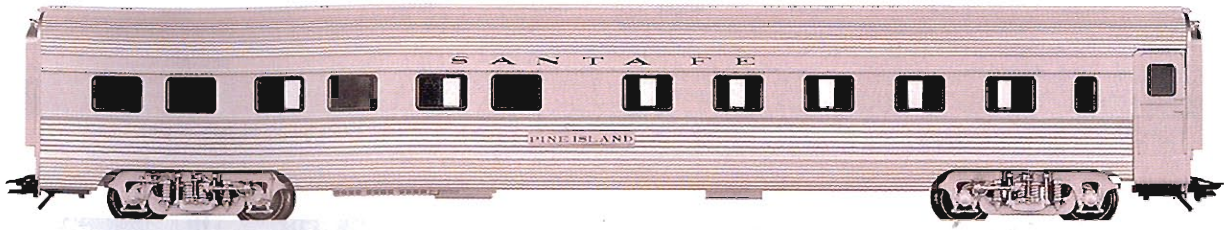
43601
Streamliner Coach.

Prototype: Atchison, Topeka & Santa Fe Railway (AT & SF) coach.
Model: Extruded aluminum body.
Length 26.0 cm / 10-1/4".
DC wheel set 4 x 70 0580



43602
Streamliner Sleeping Car.

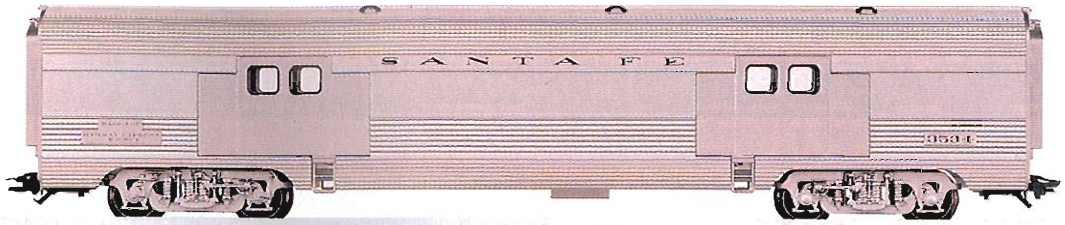
Prototype: Atchison, Topeka & Santa Fe Railway (AT & SF) sleeping car.
Model: Extruded aluminum body.
Length 26.0 cm / 10-1/4".
DC wheel set 4 x 70 0580



NEM 73150 III IV

43603
Streamliner Baggage Car.

Prototype: Atchison, Topeka & Santa Fe Railway (AT & SF) baggage car.
Model: Extruded aluminum body.
Length 22.5 cm / 8-7/8".
DC wheel set 4 x 70 0580



NEM III IV

German passenger trains.

II

43266 43231 43211 43221 43241 43201 37050

III

43020 43010 43030 37724

III

4335 4314 4313 4315 33961

III

43119 43110 43110 43100 37030

IV

42943 26512

IV

42973 42993 37316

IV

4131 4132 4132 4133 3374

V

42571 42561 42551 42932 37725

V

43586 43585 43584 33745

V

43303 42271 42271 42971 42861 42861 37398

International passenger trains.

III

43536 43534 43532 37270

III

43604 43602 43601 43614 43601 43603 49611 37611

III

41273 37669

IV

42995 42997 37510

V

41895 41896 37242

V

42178 42162 42162 42162 39602

41551 29551

Freight Cars.

What is closer than to replicate the freight train paradise USA as a model? The railroad continues to have a high market share on the US market within the freight traffic. The trains blast all dimensions known to us in Europe.

Several, frequently five or six powerful diesel locomotives, haul a kilometer-long line of cars. If a freight train rolls past a railroad crossing, pedestrians and automobile drivers must have a lot of patience and are rewarded with a live presentation of the railroad.

Märklin not only offers suitable powerful locomotives, but also a multitude of finely detailed freight car models for any tranportation purpose. Refrigerator cars, animal transport cars, hopper cars and many others belong into the assortment, of course, with the lettering and logos of various private railroad companies. Remember: A caboose is always at the end of the train.

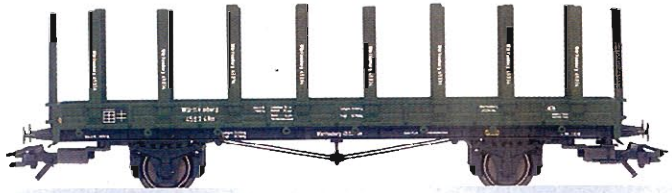
The focus of the Märklin program naturally continues to be in the old world. Freight cars are generally licensed throughout Europe. Planned trains offer therefore generally a colorful picture or at least a diverse combination.

Italian cars are next to French cars, German cars are next to Scandinavian cars. A series of excellent new models according to models from many countries and various eras enrich the fleet of your H0 model railroad. Your Märklin dealer will be happy to show them to you!

Freight Cars.

46360
Stake Car.

Prototype: Royal Württemberg State Railways (K.W.St.E.) type Rm.
Model: Reproduction of version with removable wooden stakes. Car frame has truss rods. Length over buffers 13.8 cm / 5-7/16".
DC wheel set 2 x 70 0580

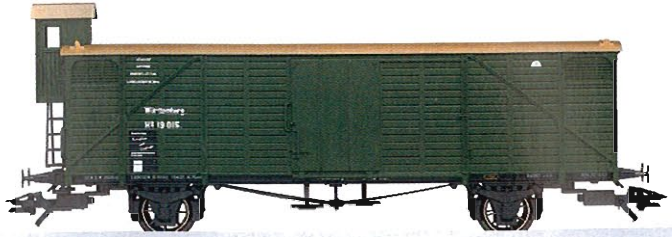


Flat cars of this design were placed into service on the Royal Württemberg State Railways starting in 1895. Flat cars were indispensable for the freight transport common at that time that consisted of many types of bulky freight. Hay was also a form of freight that was often seen on the railroad. The car had wooden stakes that could be in-serted into openings on the car's frame to safeguard the load. The truss rods reinforced the frame and increased the tonnage the car could transport compared to older car designs.

NEM I

46151
Boxcar.

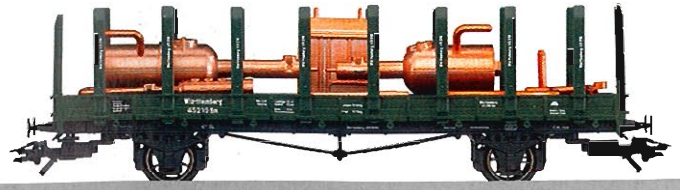
Prototype: Royal Württemberg State Railways (K.W.St.E.) type Gml with brakeman's cab.
Model: Length over the buffers 13.8 cm / 5-7/16".
DC wheel set 2 x 70 0630

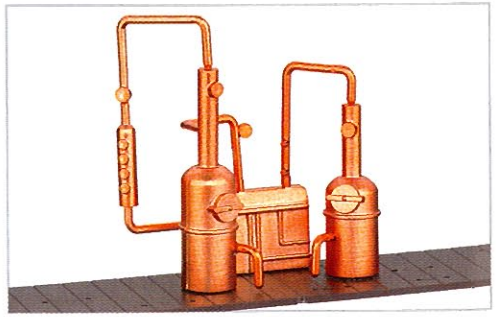


NEM I

46364
Stake Car.

Prototype: Royal Württemberg State Railways (K.W.St.E.) type Rm. For the transport of a small schnapps distillery.
Model: Removable stakes with lettering. Car frame has truss rods. Reproduction of the distillery consisting of the distilling apparatus, cooler, and connecting piping. Length over the buffers 13.8 cm / 5-7/16".
DC wheel set 2 x 70 0630





NEM I

48283
Beer Refrigerator Car.

Prototype: Privately owned car, used on the Royal Württemberg State Railways (K.W.St.E.). The car has brakeman's platforms at both ends.
Model: Reproduction of the ice hatches on the roof. Light traces of soot on the roof. Length over buffers 10.6 cm / 4-3/16".
DC wheel set 2 x 70 0630

NEM I

46039
Gondola.

Prototype: Royal Württemberg State Railways (K.W.St.E.) type Omk(u), with brakeman's cab.
Model: Reproduction of dished sheet metal sidewalls. Loaded with scale sized dolerite ballast. Weathered car body. Length over buffers 8.4 cm / 3-5/16".
DC wheel set 2 x 70 0630

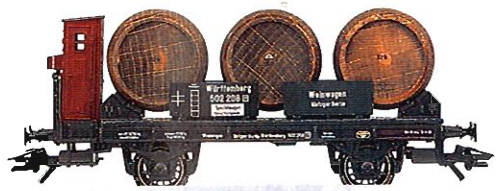
NEM I

Freight Cars.

46743
Wine Barrel Car.

Prototype: Privately owned car, used on the Royal Württemberg State Railways (K.W.St.E.). With brakeman's cab.

Model: Barrels made of real wood. Separately applied destination boards. Length over buffers 10.1 cm / 4".
DC wheel set 2 x 70 0630



NEM I

The land belonging to the Lords of Wirdeberch dates back to the year 1081. 50 years after the first documented mention of the name, the lords received the title of Count. In 1495 Württemberg obtained the rank of dukedom. Friedrich I became Elector Prince in 1803, and ascended to the throne as King in 1805 with the support of Napoléon Bonaparte. In later years he guided his country into the Rhine Confederation. The Württemberg territory doubled in size during the French domination of middle Europe. Parts of Upper Swabia, and the Allgäu came under the Württemberg crown. The royal territory remained unchanged until 1952. At that time Württemberg and Baden joined together to become one state. While the two peoples did not always have an easy time living together, the fusion was considered to be very successful. Today Baden-Württemberg is among the richest Federal States. Many well-known companies are headquartered there, including the software giant SAP, Heidelberger Druckmaschinen, and the world's market leader in model railroading, Märklin. From the beginning, the Kingdom of Württemberg relied on construction of State railways. All main lines were established at State expense. Private initiatives only had a chance on the other side of magisterial authority. Among other reasons, the decision for State Railways was due to his majesty's love of the railroad. Consequently, there were several locomotive factories in the state, among which Maschinen Fabrik Esslingen, obtained the greatest significance.

48808
Car set Württemberger oldtimers.

One-time series for the jubilee celebration "200 years of the Kingdom of Württemberg".

Prototype: 4 different classic freight car types of the Royal Württemberg State Railways (K.W.St.E.).
Open freight cars with high side walls. Gondola for chicory transports. Ice refrigerator car for beverage transport. Stake car for vehicle transport.
Model: High side gondola in association livery. Mineral water car with closed ice hatches in roof and small platform on both ends. Chicory car with closed representation of the gondola hatch and a brakeman's platform. Stake car with removable stakes and detailed freight trailer model as load. All cars with spoked wheels. Total length over buffers 45.5 cm / 17-29/32".
DC wheel set 8 x 70 0630

N NEM I


1802
Teinacher
Hirschquelle

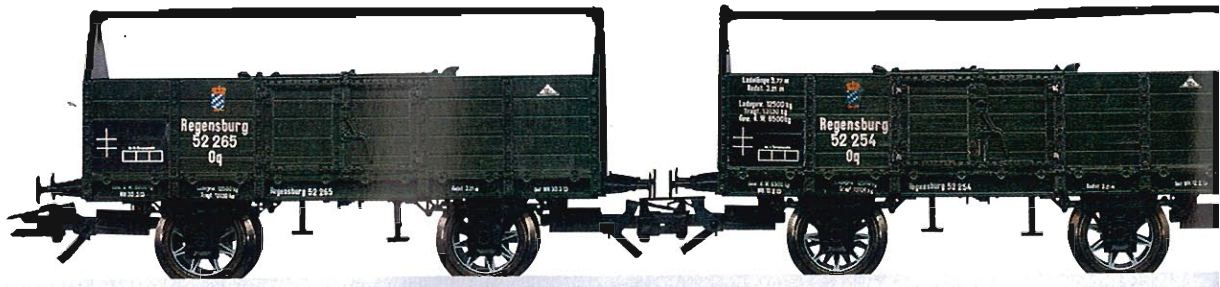
Freight Cars.

46020
Set – 3 Medium-side cars

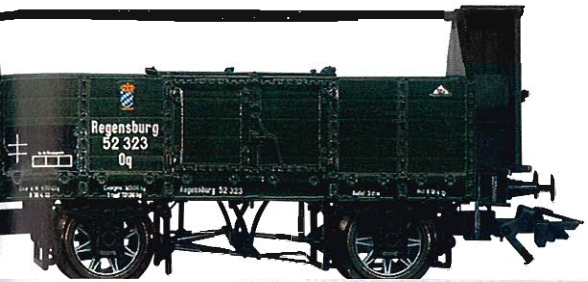
One-time series for the jubilee celebrating "200 years of the Kingdom of Bavaria".

Prototype: Open freight cars of the Royal Bavarian State Railroad (K.Bay.Sts.B.). Older design from the 19th century. Gabel-shaped end walls and side sill above the longitudinal joint. Versions with and without brake.

Model: 1 car with brakeman's cabin, crank box and separately applied brake system. 2 cars based on non-braked prototype. Separately applied steps. Different road numbers. Total length over buffers 24.8 cm / 9-3/4"
DC wheel set 6 x 32 3012 11



N NEM I



The Bavarian ruling family had Napoléon Bonaparte to thank for its royal kingly title. In 1805/06 under the French emperor the duke became King Maximillian I Joseph. Napoléon was quite sympathetic to the Bavarians, who belonged to his Rhine Confederation. As thanks for the support offered in his conquests, Bavaria was able to expand its territorial claims, annexing areas of Swabia, Franconia, and Austria. Then Bavaria changed sides during the Wars of Liberation. It had to return Austrian territories. As compensation however it obtained the Grand Duchy of Würzburg and the Palatinate to the left of the Rhine. In 1849 Prussian troops suppressed the uprising in the Palatinate. In 1866, Bavaria fought on the side Austria against Prussia, however as opposed to other countries, it remained independent after the defeat. In 1871, the German Empire granted Bavaria special rights; for example it retained an independent postal service and the Royal Bavarian State Railway. The house of Wittelsbach was able to maintain its power until the revolution of 1918.

In 1835 the first railroad was built between Nürnberg and Fürth; its locomotives came from England. The Ludwig Railway was a private initiative, and additional routes were also built on private initiative. However the State paid to build the North-South connection from Hof to Lindau, via Nürnberg and Augsburg. After a few years the State again granted priority to private initiative, as the public coffers were empty. The most significant private railway, the East Railway, opened up the Bavarian Forest. Later, as was the case with the other railways, it came under State ownership.

Freight Cars.

45094
Peat Supply Car.

One-time series for the jubilee celebrating "200 years of the Kingdom of Bavaria".

Prototype: Special car of the Royal Bavarian State Railroad (K.Bay.Sts.B.). Medium-side gondola with higher end walls and covered load area. Used as additional tender.

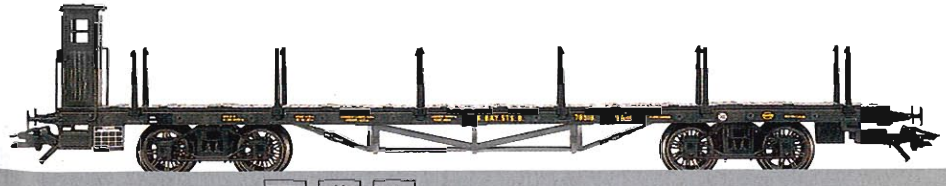
Model: Suitable for locomotive B VI "Klopstock" item no. 37974. Detailed version. Length over buffers 9.1 cm / 3-19/32".
DC wheel set 2 x 32 3012 11

N NEM I

46280
Flat Car.

Prototype: Royal Bavarian State Railroad (K.Bay.Sts.B.) type SSml. With brakeman's cab.

Model: Removable stakes. Finely detailed reproduction of the archbar trucks. Double spoked wheels. Length over buffers 19.6 cm / 7-11/16".
DC wheel set 4 x 20 6852



NEM I

46078
Food Stuffs Car.

Prototype: Privately owned car employed by the Royal Bavarian State Railroad (K.Bay.Sts.B). Box car with open end areas.

Model: Sliding doors that open. Length over buffers 10.6 cm / 4-3/16".
DC wheel set 2 x 32 3012 11

N NEM I

46157
Low Side Gondola.

Prototype: Royal Bavarian State Railroad (K.Bay.Sts.B.) type Hrz Regensburg. With brakeman's cab.

Model: Stakes can be removed. Length over buffers 10.7 cm / 4-3/16".
DC wheel set 2 x 32 3012 11

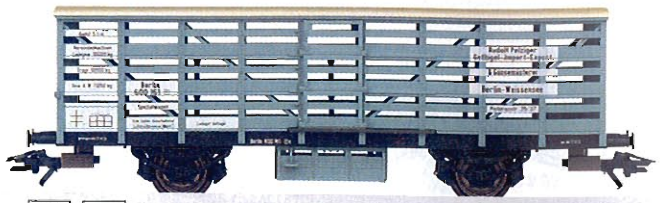
NEM I

46829
"Berlin Commuter Service" Theme Set.

One-time series.

Prototype: Royal Prussian Railroad Administration (KPEV) privately owned livestock car for small animals. Büssing omnibus and 3 outdoor advertising pillars.

Model: Poultry livestock car has sliding doors that can be opened. Open car body with view through the car. Length over buffers 13.3 cm / 5-1/4". Double deck omnibus with metal frame. Length 6.9 cm / 2-11/16". Outdoor advertising pillars made of metal. Design based on historical prototypes.
DC wheel set 2 x 32 3012 11



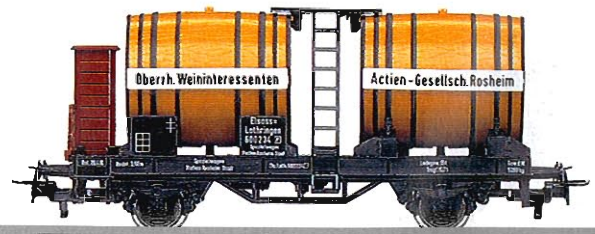
46601
Gas Tank Car.

Prototype: Car privately owned by the firm C.H. Boehringer Sohn, Ingelheim, Germany. Used on the Royal Prussian Railroad Administration (KPEV). With brakeman's platform.

Model: Partially open car frame. Finely detailed reproduction of the fittings and equipment. Length over buffers 10.0 cm / 3-15/16".
DC wheel set 2 x 32 3012 11

4432
Wine Barrel Car.

Prototype: Privately owned car, used on the Imperial State Railways of Alsace-Lorraine.
Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580



Freight Cars.

46076
Car set for cinder transport.

Prototype: 2 German Federal Railroad (DB) type X05 low side cars. Designs with and without brakes. Employed for removing steam locomotive cinders from engine shed.

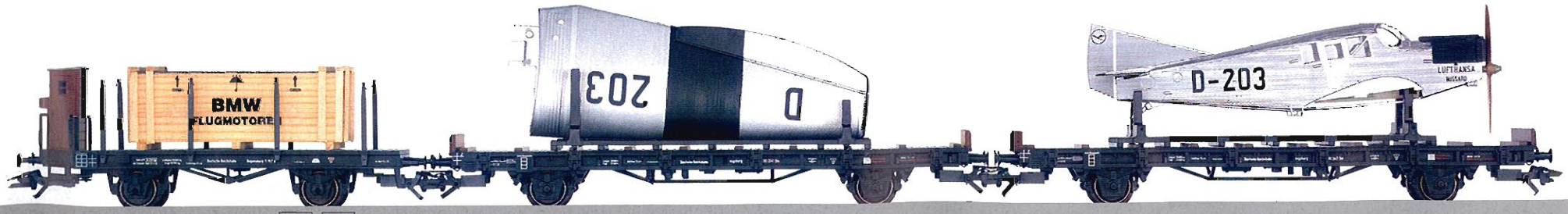
Model: Frames with solebar truss. 1 car with reproduction of the braking system, separately applied platform and brakeman's cab. Load inserts coated with genuine crushed steam locomotive cinder. Total length over buffers 22.4 cm / 8-13/16".
DC wheel set 4 x 70 0580

N NEM III

45093
"Airplane Transport" Car Set.

Prototype: 3 German State Railroad Company (DRG) flat cars. Junkers F-13 airplane, disassembled for transport by rail.

Model: 2 long wheelbase flat cars and 1 shorter car with stakes that can be mounted on it. Airplane model (Wiking). Fuselage and wings pre-assembled and safeguarded with transport frames. Wooden shipping crate. Railroad cars and airplane not available separately. Total length over buffers 43.1 cm / 16-15/16".
DC wheel set 6 x 70 0580



NEM II

4867
Heavy Duty Flat Car.

Prototype: German State Railroad Company (DRG) type SSym "Köln".
Model: Heavy duty trucks.
Length over buffers 15.2 cm / 6".
DC wheel set 6 x 70 0580

In 1942 rolling stock for the heaviest of loads was built parallel to the class 52 locomotives as part of the immense procurement program brought about by military requirements. One result was the six-axle flat car, later classified by the DB as SSym 46. This car had an empty weight of approximately 21.6 metric tons and a loaded weight of up to 80 metric tons, and could be operated at a maximum speed of 80 km/h or about 50 mph. After the war this car class was used, among other things, for transporting dredging equipment and large construction machines as well as for logs, steel products, pre-cast concrete construction parts, and many other heavy, one-piece loads.

NEM II

46426
Tank Car.

Prototype: Privately owned car, used on the German State Railroad Company (DRG).

Model: With brakeman's cab. Numerous separately applied details.
Length over buffers 10.4 cm / 4-1/8".
DC wheel set Trix 2 x 36 6679 00

NEM II

4699
Freight Train Baggage Car.

Prototype: German State Railroad Company (DRG) type Pwg.

Model: Sliding doors that can be opened. Length over buffers 9.8 cm / 3-7/8".
DC wheel set 2 x 70 0580

NEM II

46160
Boxcar.

Prototype: German State Railroad Company (DRG) type GI Dresden. With Bavarian design brakeman's cab.

Model: Sliding doors can be opened. Separately applied ladders and handrails. Length over buffers 13.3 cm / 5-1/4".
DC wheel set 2 x 32 3760 04

NEM II

46161
Livestock Car.

Prototype: German State Railroad Company (DRG) livestock car.
Model: Sliding doors can be opened. Open slat car construction with a clear view through the car.
Length over buffers 13.3 cm / 5-1/4".
DC wheel set 2 x 32 3760 04

NEM II

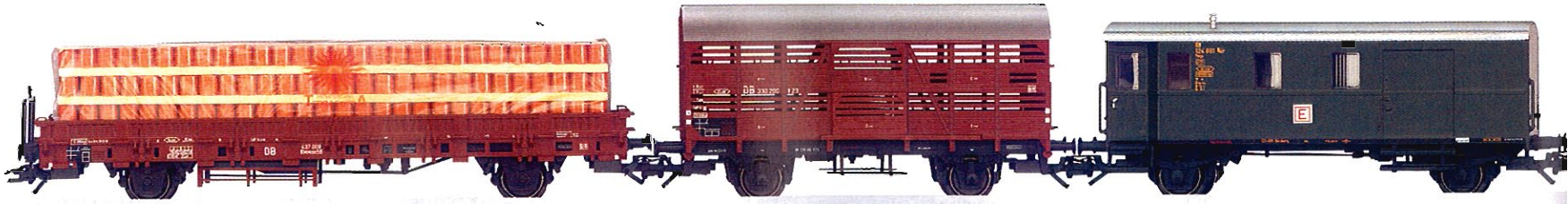
Freight Cars.

48802
"Transfer Train" Car Set.

Models not available separately.

One-time series.

Prototype: 5 different German Federal Railroad (DB) freight cars.
Model: Livestock car with sliding doors that can be opened. Low side car with board walls. Loaded with terracotta tub containers. Flat car with removable stakes. Loaded with 2 truck frames in a load framework. Gondola with hinged roof hatches that can be opened. Freight train baggage car with separately applied brake rigging. Total length over buffers 69.9 cm / 27-1/2".
DC wheel set 12 x 70 0580



NEM III

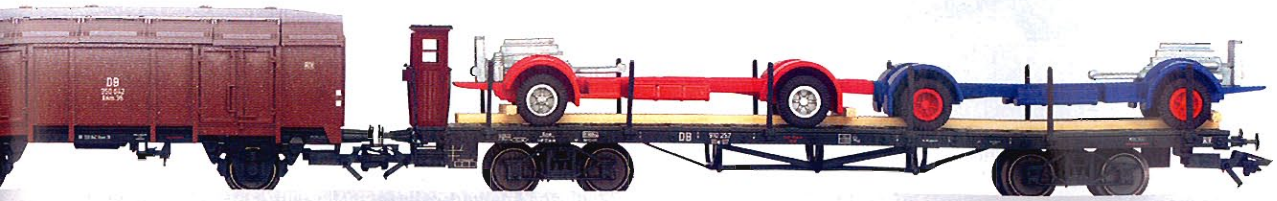
47909
"Industrial Traffic" Car Set.

Models not available separately.

Prototype: 3 different German State Railroad (DR) freight cars.
Model: Silo car with metal ladders and brakeman's platform. Tank car with ladder at the end and with a walkway. Gondola. Total length over buffers 31.9 cm / 12-9/16".
DC wheel set 4 x 70 0580
2 x 70 0270

NEM III

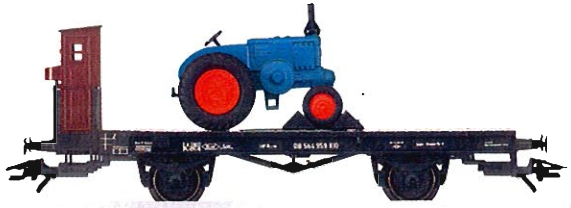
The German State Railroad Company introduced the concept "transfer train" as early as 1928. This is used to designate short freight trains that bring individual cars from industrial railroads, industry sidings or loading ramps to the so-called transfer yards. Several of these short trains are coupled together in these yards to form the long, heavy freight trains that will travel much further, and the freight loads will reach their national and international destinations.



Freight Cars.

46843
Flat Car.

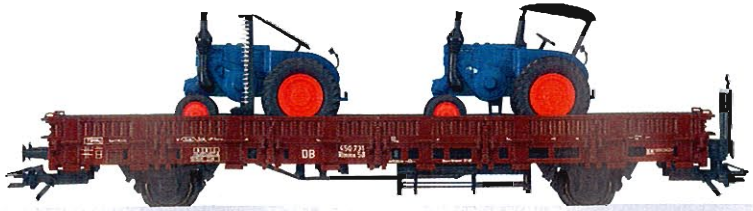
Prototype: German Federal Railroad (DB) type H 10. With brakeman's cab.
Model: Length over buffers 11.5 cm / 4-1/2". Loaded with a model of a Lanz Bulldog. Metal frame and body. Very finely detailed construction. Length 3.8 cm / 1-1/2". Removable wooden overseas crate to protect the tractor during transport.
DC wheel set 2 x 70 0580



The reliability and sturdiness of the Lanz Bulldog HR 7 made it a hit in the export markets. The long journey by rail for these tractors began protected by wooden overseas crates at the factory where they were produced. Large cranes at the ports loaded them into ocean steam ships. There the long voyage began to other continents and foreign lands.

46948
Flat Car.

Prototype: German Federal Railroad (DB) type Rlmms 58.
Model: Version with wooden frame for the load. Length over buffers 15.7 cm / 6-3/16". Loaded with 2 models of the Lanz Bulldog. One vehicle comes with a cutter bar, and one vehicle comes with a canopy top. Metal chassis and superstructure. Very finely detailed construction. Length of each vehicle 3.8 cm / 1-1/2".
DC wheel set 2 x 70 0580



The progressive Lanz Bulldog HR 7 was built as early as 1934 and was continuously improved over the years. A large 1-cylinder motor with a maximum speed of 680 rpm on this vehicle provided a striking background of noise. You could count along with the piston strokes for this motor as they occurred. An immense flywheel reinforced the flow of power.

46363
Stake Car.

Prototype: German Federal Railroad (DB) type R 02. Lanz Bulldog tractor with caterpillar treads.
Model: Removable stakes. Car frame has truss rods. Length over the buffers 13.8 cm / 5-7/16". Loaded with 2 caterpillar tractor models. These vehicles have a metal frame and superstructure. Length of each 3.8 cm / 1-1/2".
DC wheel set 2 x 70 0580

46977
Low Side Car with Load.

Prototype: German Federal Railroad (DB) Rlmmso 56. Used for vehicle transport.
Model: Loaded with 2 tractors, detailed metal model in wooden loading frames. Length over buffers 15.7 cm / 6-3/16".
DC wheel set 2 x 70 0580

N NEM III

45096
Stake Car.

Prototype: German Federal Railroad (DB) type R02. Used for transporting agricultural machines.

Model: Removable stakes. Frame with solebar truss. Length over buffers 13.8 cm / 5-7/16". Loaded with 2 attached thresher models in loading frame. Metal body and frame. Length with applied drawbar each 5.9 cm / 2-5/16".
DC wheel set 2 x 70 0580

N NEM III

Freight Cars.

46040
Gondola.

Prototype: German Federal Railroad (DB) type Om 12, with brakeman's platform.
Model: Version with sheet metal door. Car comes with a load insert representing potatoes. Weathered car body. Length over buffers 11.3 cm / 4-7/16".
DC wheel set 2 x 70 0580

NEM III

46030
Gondola Car Set.

Models not available separately.

Prototype: German Federal Railroad (DB) type O 02 and O 11 cars. "Schwerin" and "Nürnberg" Association designs.
Model: 10 cars, 2 of the group with brakeman's cab and 2 with brakeman's platform. Cars differ from each other in their lettering. Total length over buffers 80.0 cm / 31-1/2".
DC wheel set 20 x 70 0580

Short and to the point.

From about 1910 on the "Schwerin" and "Nürnberg" gondolas were built in large numbers for the State Railroad Freight Car Association and for the German State Railroad. The superstructure of steel construction and the short chassis made the cars very stable and allowed a full load even with heavy bulk freight. Many of these cars with their almost toy-like appearance came into German Federal Railroad ownership after 1945. A large number of them still had the old DR lettering or the Occupation Zone lettering, and they were replaced later with new larger cars that had been rebuilt.

NEM III

48270
"Coal Transport" Car Set.

Models not available separately.

One-time series.

Prototype: German Federal Railroad (DB) type Okmm 38.
Model: 4 cars with different car numbers. Reproduction of the partially open car floor. Separately applied brakeman's platforms. Each car loaded with 3 removable coal tubs. The bottoms of the coal tubs can be opened. Total length over buffers 35.4 cm / 13-15/16".
DC wheel set 8 x 70 0580

The rational, rapid and at the same time careful unloading of these cars at steel plants and coal-fired power plants always was a great challenge for the car building industry. Three tubs can be loaded onto the type Okmm 38 flat cars. The unloading cranes grasp these containers by their hinge bolts in order to lift them, and to unload them they are grasped by the side depressions. These containers open at the bottom and allow a very careful handling of the load, which is particularly important in the case of valuable lump coal and coke.

Only two containers are used per car to transport coke due to the low density of the latter as a freight load.

48271
Set – 2 Container Cars.

Prototype: German Federal Railroad (DB) class Okmm 38 flat cars. Coal tub with 12m³ load capacity.

Model: Partially open car floor and with fine-textured load surface. Separately applied brakeman's platform. Each car has 3 containers that can be removed and opened. Car and containers with different road numbers. Total length over buffers 17.6 cm / 6-15/16".

DC wheel set 4 x 70 0580

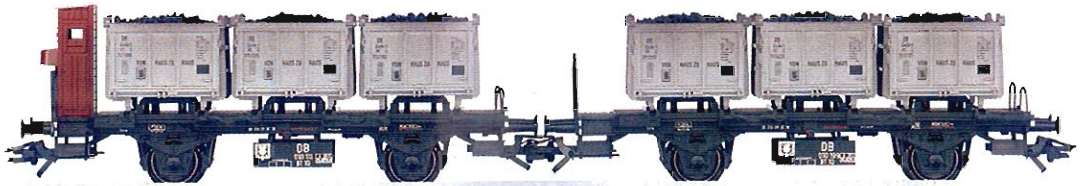
Freight Cars.

48946
Container Transport Car Set.

Models not available separately.

Prototype: 2 German Federal Railroad (DB) type Bt 10 container transport cars. 1 car has a brakeman's cab. 1 car has a brakeman's platform.

Model: Separately applied destination boards. The cars have different car numbers. Removable coal tub containers loaded with real coal and lightly weathered. The tub containers have different registration numbers. Total length over buffers 22.8 cm / 9".
DC wheel set 4 x 70 0580



NEM III

48668
Heavy Duty Flat Car.

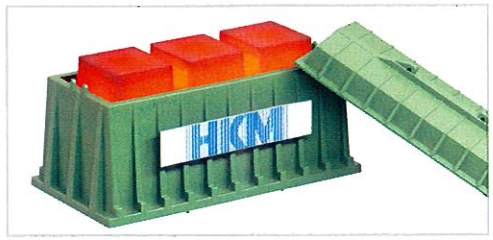
Prototype: German Federal Railroad (DB) type SSym. Loaded with a thermal hood for the transport of glowing steel slabs.

Model: Car comes with removable stakes. Thermal hood has a removable cover. Imitation of the red glowing steel slabs. Built-in battery holder. Length over buffers 15.2 cm / 6".
DC wheel set 6 x 70 0580

Steel slabs should lose as little heat as possible on the way from the steel works to the rolling mill. Otherwise, the slabs would have to be reheated at great expenditure of energy. For that reason the steel slabs are protected to a large extent against heat loss with thermal hoods during the transport process.

Maintenance-free LED's imitate the light given off by the glowing slabs. A built-in movement switch trips the electronic circuit automatically when the car is in motion. After the car has been left on a siding, the glowing light will go out in a few minutes. This keeps the battery from running down unnecessarily in a yard for example. The car can be used on both AC and DC systems. The batteries (type AAA) are not included.

NEM III



Imitation of the glowing slabs.

48664
"Steel Slabs" Heavy Duty Flat Car Set.

Models not available separately.

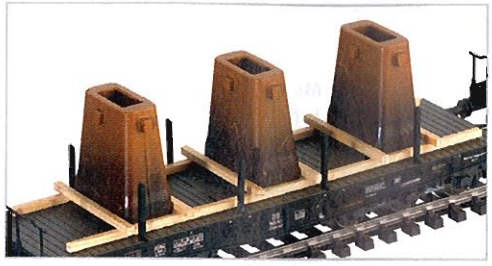
Prototype: German Federal Railroad (DB) type Sammp 705 heavy duty flat car.
Model: 2 cars with different car numbers. Each loaded with 3 removable slabs. Charge numbers printed on the slabs. Load frames made of real wood. Total length over buffers 30.6 cm / 12-1/16".
DC wheel set 12 x 70 0580

NEM IV

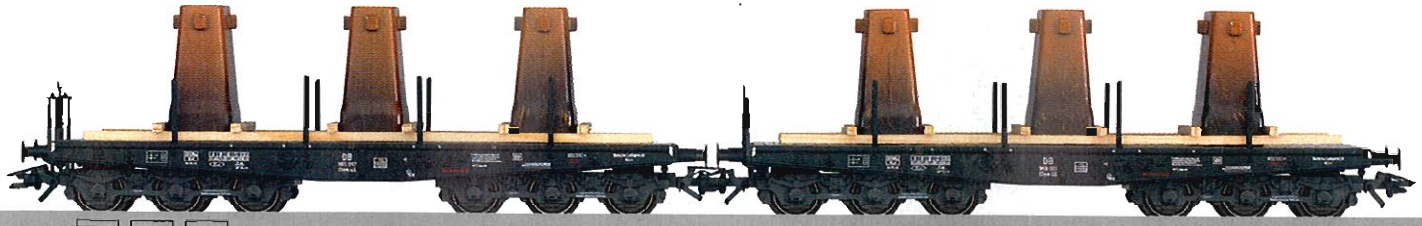
48672
Heavy-duty Flat Car Set.

One-time series.

Prototype: 2 German Federal Railroad (DB) Ssym flat cars. Loaded with "chilled castings".
Model: Different road numbers. 6 metal castings, mounted in wooden holding frames. Removable stakes are included. Total length over buffers 30.5 cm / 1".
DC wheel set 12 x 70 0580



Casting molds are used for manufacturing raw materials such as stainless steel, which then is further processed by rolling or forging. The castings are also made of steel and are consumed by the high thermal stress after approximately 100 cycles. The permanent demand for replacement of these large parts for production is primarily provided over rail.



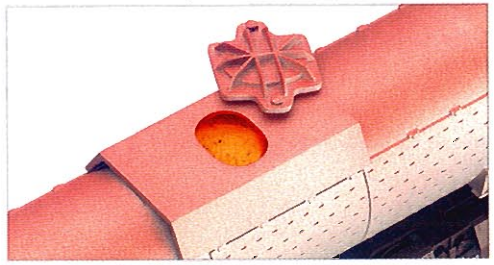
NEM III

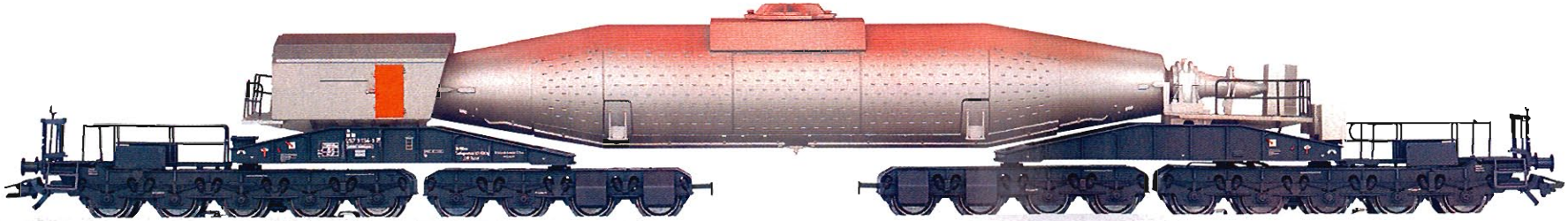
Freight Cars.

48291
Torpedo Ladle Car.

Working digital model.
Realistic effect from glow from the interior.
Torpedo can be turned with a fine touch.

Prototype: Privately owned car, used on the German Federal Railroad (DB). Special car for transporting hot, molten crude iron. **Model:** Metal torpedo and truck bridge assemblies. **Car comes with a built-in digital decoder, mechanism for turning the torpedo and for the glowing light of the interior of the torpedo.** The torpedo can be turned to the right or the left from the locomotive controller. Adjustable delay or direct control can be switched on and off digitally. The glow of the crude iron comes from maintenance-free LED's that are conventionally operated and that can be controlled digitally. Cover for the upper opening on the torpedo can be removed. Finely detailed reproduction of the handrails. Length over buffers 39.0 cm / 15-3/8".





48252
Carbide Container Car.

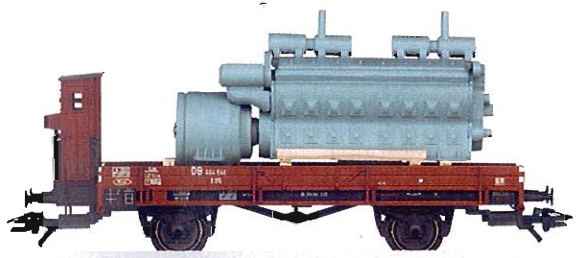
Prototype: Privately owned car painted and lettered for the firm SKW Trostberg, used on the German Federal Railroad (DB). The car has a brakeman's cab.

Model: Metal sills. Finely detailed construction with open car floor. Separately applied data board. Removable carbide container with reproduction of the rivets and openings. Length over buffers 14.3 cm / 5-5/8".
DC wheel set 4 x 70 0580

Freight Cars.

46075
Low Side Car.

Prototype: German Federal Railroad (DB) type X 05, with brakeman's cab.
Model: Loaded with a reproduction of a large locomotive diesel motor in a transport framework. Length over buffers 11.6 cm / 4-9/16".
DC wheel set 2 x 70 0580



NEM III

46361
Stake Car with Load.

Prototype: German Federal Railroad (DB) type R 02. Former Württemberg type Rm. MAN F8 truck with flatbed and tarp cover.
Model: Reproduction of removable wood stakes with lettering. Car frame has truss rods. Detailed truck model with metal driver's cab and flatbed. Tarp cover removable. Load frame made of wood, for safeguarding the load. Length over buffers 13.8 cm / 5-7/16".
DC wheel set 2 x 70 0580

NEM III

46077
Low Side Car.

One-time series.

Prototype: German Federal Railroad (DB) class X05. Version with brakeman's cabin. Used to transport large wheel sets of steam locomotives.
Model: Loaded with a model wheel set (26.5 mm diameter) of the express locomotive class 05. Matching wooden loading rack. Length over buffers 11.6 cm / 4-9/16". **DC wheel set 2 x 70 0580.**

N NEM III

48671
Heavy Duty Flat Car.

One-time series.

Prototype: German Federal Railroad (DB) Ssym flat car. Fire Department Büssing type recovery crane.
Model: Length over buffers 15.2 cm / 5-31/32". Crane car model with metal body and steel cable.
DC wheel set 6 x 70 0580

48755
Heavy-Duty Flat Car.

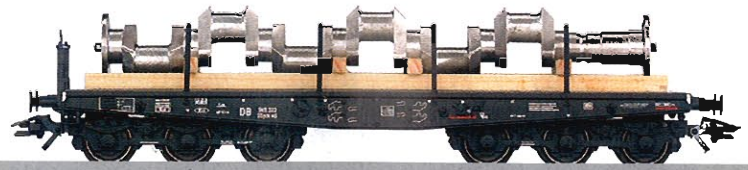
One-time series.

Prototype: German Federal Railroad (DB) Ssym flat car. Fire rescue vehicle, type Büssing.
Model: Length over buffers 15.2 cm / 5-31/32". Box car model with metal body and fire equipment.
DC wheel set 6 x 70 0580

48675
Heavy Duty Flat Car.

One-time series.

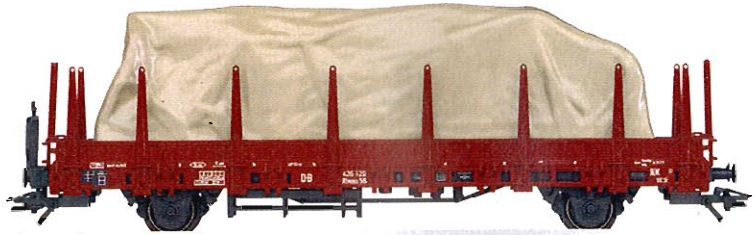
Prototype: German Federal Railroad (DB) class Ssym 46 flat car. Used to transport large machine parts.
Model: With removable stakes and load ties. Loaded with metal imitation of a crankshaft of a diesel motor for a large ship. Suitable loading frame. Length over buffers 15.2 cm / 5-31/32".
DC wheel set 6 x 70 0580



Freight Cars.

46974
Stake Car.

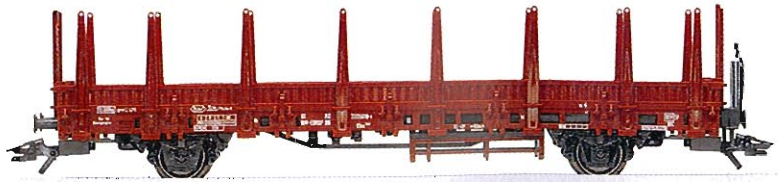
Prototype: German Federal Railroad (DB) type Kbs 443. Version with brakeman's platform and tarp cover.
Model: Removable stakes. Tarp cover is a removable part. Length over the buffers 15.7 cm / 6-3/16".
DC wheel set 2 x 70 0580



NEM III

4694
Stake Car.

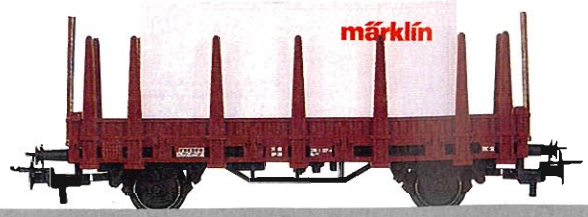
Prototype: German Federal Railroad (DB) type Kbs 443.
Model: Removable stakes. Length over buffers 15.7 cm / 6-3/16".
DC wheel set 2 x 70 0580



NEM IV

44591
Stake Car.

Prototype: German Federal Railroad type Kbs.
Model: Relex couplers. Fixed stakes. Loaded with a removable 20 ft. container. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580



IV

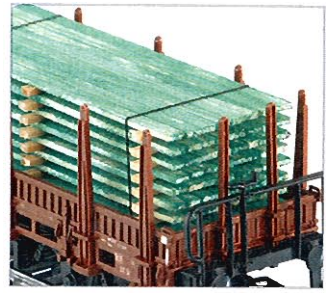
4459
Stake Car.

Prototype: German Federal Railroad (DB) type Kbs.
Model: 18 fixed stakes. Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV

46975
Stake Car.

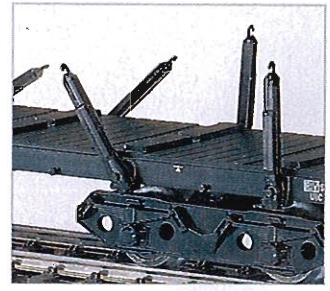
Prototype: German Federal Railroad (DB) type Kbs 443. Used to transport construction lumber.
Model: Removable stakes. Car comes loaded with 2 pallets of real impregnated wooden boards. Length over the buffers 15.7 cm / 6-3/16".
DC wheel set 2 x 70 0270



NEM IV

4663
Flat Car.

Prototype: German Federal Railroad (DB) type Rs 680.
Model: Stakes can be folded down. Length over buffers 22.7 cm / 9".
DC wheel set 4 x 70 0270



NEM IV

Special Design Freight Cars.

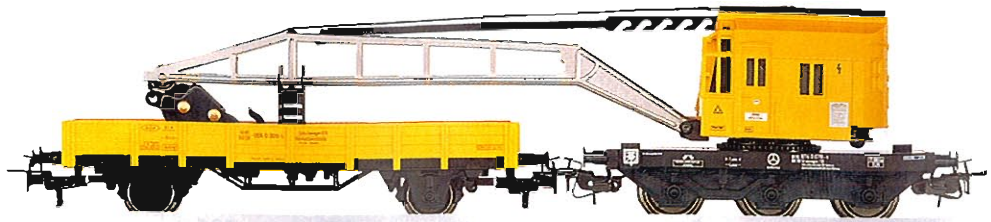
4617
Depressed Center Flat Car.

Prototype: German Federal Railroad (DB) type SSI 53.
Model: Loaded with a removable industrial transformer. Relex couplers. Length over buffers 25.0 cm / 7-7/8".
DC wheel set 6 x 70 0530

4471
Low Side Car.

Prototype: German Federal Railroad (DB) maintenance car.
Model: Goes well with the 4671 crane car as a boom support car. Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV V



4671
Crane Car.

Prototype: Railroad maintenance car.
Model: With rotating crane, adjustable boom and boom support. Crane hook can be raised and lowered with hand crank. Relex couplers. Length over buffers 8.3 cm / 3-1/4".
DC wheel set 3 x 70 0530

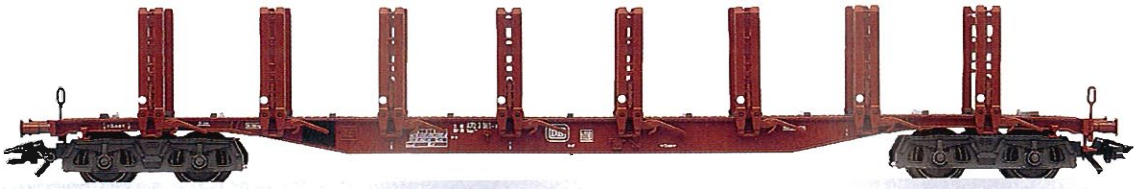
IV V

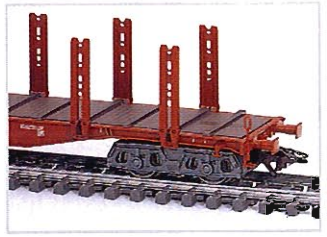
Freight Cars.

4771
Stake Car.

Prototype: German Federal Railroad (DB) type Snps 719.
Model: Finely detailed, fixed double stakes with tiedown levers. Load surface picked out in a different color. Length over buffers 23.9 cm / 9-3/8".
DC wheel set 4 x 70 0580

With the increase in speeds for freight trains the need arose at the end of the 1970s for modern cars for the transport of pipe, logs and lumber. The type Snps 719 has 16 fixed stakes with tiedown equipment, each of which can be operated by hand. Its load weight is 39 – 63 metric tons, depending on the route class, and its maximum speed is 90 – 100 km/h or 56 – 83 mph (120 km/h or 75 mph unloaded).

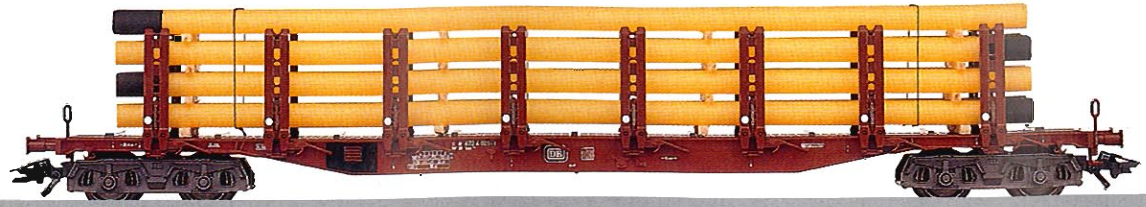




NEM IV

47713
Stake Car.

Prototype: German Federal Railroad (DB) type Snps 719.
Model: Loaded with gas pipe on wooden beams. Finely detailed, fixed double stakes with tiedown levers. Load surface picked out in a different color. Length over buffers 23.9 cm / 9-3/8".
DC wheel set 4 x 70 0580



NEM IV

4423
Low Side Car.

Prototype: German Federal Railroad (DB) type Kklm 505.

Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV

4424
Low Side Car.

Prototype: German Federal Railroad (DB) type Kklm 505.
Model: Loaded with a model of a bulldozer. Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV

44241
Low Side Car.

Prototype: German Federal Railroad (DB) type Kklm 505.

Model: Loaded with a model of a steamroller. Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV

4473
Low Side Car.

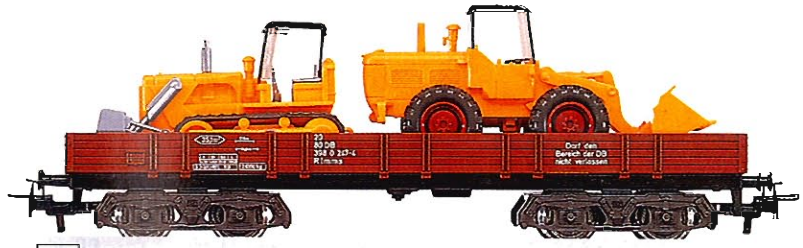
Prototype: German Federal Railroad (DB) type Rlmms.

Model: Relex couplers. Length over buffers 16.0 cm / 6-5/16".
DC wheel set 4 x 70 0580

IV

4474
Low Side Car.

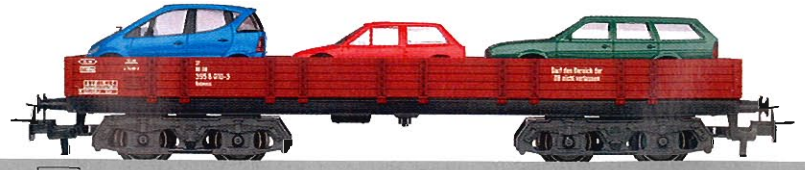
Prototype: German Federal Railroad (DB) type Rlmms.
Model: Loaded with a bulldozer and a skip loader. Relex couplers. Length over buffers 16.0 cm / 6-5/16".
DC wheel set 4 x 70 0580



IV

44732
Auto Transport Car.

Prototype: German Federal Railroad (DB) type Rlmms low side car.
Model: Loaded with 3 model automobiles. Appropriate restraints for the load. Relex couplers. Length over the buffers 16.0 cm / 6-5/16".
DC wheel set 4 x 70 0580



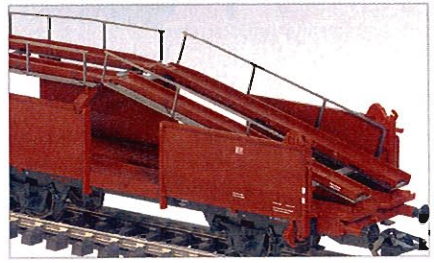
IV

Auto Transport Car.

46121
Auto Transport Car.

Prototype: German Federal Railroad (DB) type Off 52 (Laae 540) double unit. Bilevel design.
Model: Permanent close coupling between the car halves. Upper deck can be lowered. Length over buffers 25.3 cm / 9-15/16".
DC wheel set 4 x 70 0580

With the rebuilding of the German automobile industry, the German Federal Railroad was quick to order suitable rolling stock that could transport these valuable vehicles rationally, reliably, and carefully. Special bilevel transport cars were built on the steel design of the then modern type Omm 52 and Omm 55 high side gondolas, and these cars were permanently coupled together in pairs. The end walls and the side doors were removed. There were crossover plates on both levels so that automobiles could be driven over the entire length of the train from both ends. The upper deck at both ends of a pair of cars could be lowered to make a ramp to drive the cars up onto the railroad car.

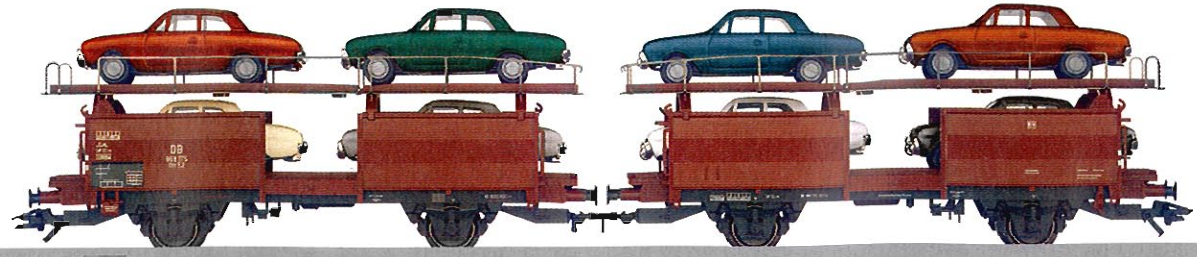


NEM III

46122
Auto Transport Car.

One-time series.

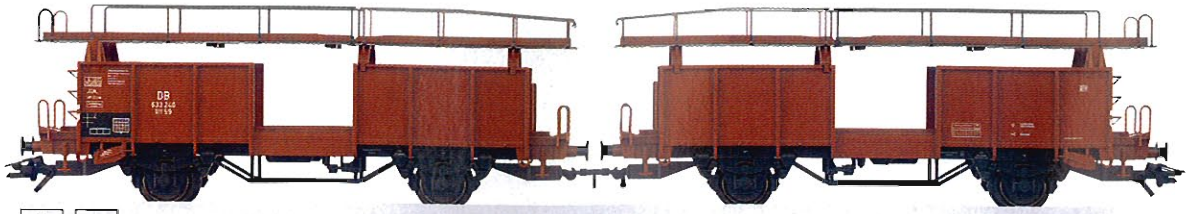
Prototype: German Federal Railroad (DB) type Off 52 (Laae 540) double unit. Bilevel design for automobiles.
Model: Permanent drawbar between the halves. Both upper decks can be lowered. Metal railings. Loaded with 8 models of the Ford Taunus 17M from around 1960. Appropriate chock blocks included. Length over buffers 25.3 cm / 9-15/16".
DC wheel set 4 x 70 0580



NEM III

46131
Auto Transport Car.

Prototype: German Federal Railroad (DB) type Offs 59 (Laaes 541) double unit. Bilevel design.
Model: Permanent close coupling between the car halves. Upper deck can be lowered. Length over buffers 25.3 cm / 9-15/16".
DC wheel set 4 x 70 0580



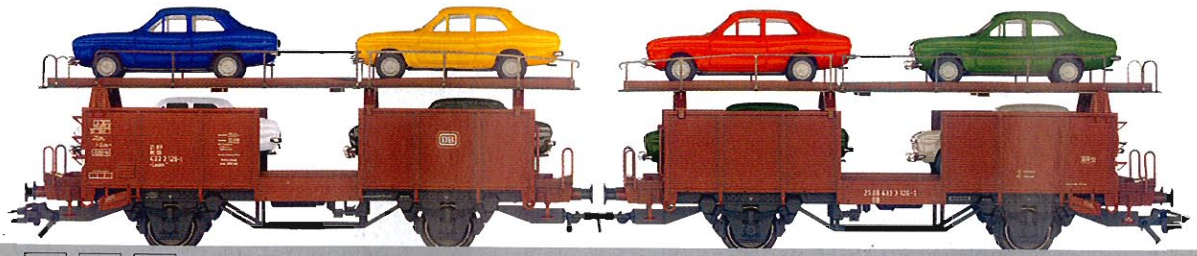
NEM III

46133
Auto Transport Car.

One-time series.

Prototype: German Federal Railroad (DB) type Offs 59 (Laaes 541) double unit. Bilevel design for automobiles.
Model: Permanent drawbar between the halves. Both upper decks can be lowered. Metal railings.

Loaded with 8 models of the Ford Escort from around 1970. Appropriate chock blocks included. Length over buffers 25.3 cm / 9-15/16".
DC wheel set 4 x 70 0580



NEM III IV

Auto Transport Cars.

4712
Double Auto Transport Car.

Prototype: German Federal Railroad (DB) type Laekks 553.
Model: Both upper decks can be lowered at the car ends. Upper and lower access with two movable loading gates. Chock blocks for model autos included. Close-coupled, special connection with standard coupler pocket between the car halves. Length over buffers 31.0 cm / 12-14".
DC wheel set 4 x 70 0580

NEM IV

47124
Auto Transport Car.

One-time series.

Prototype: German Federal Railroad (DB) type Laaeks 553 double unit. Bilevel design for automobiles. Permanent drawbar between the halves.
Model: Both upper decks can be lowered. Hinged drive-over plates at the ends of the cars. Loaded with 5 models of the Ford Granada and 3 models of the Ford Capri from around 1980. Appropriate chock blocks included. Length over buffers 31.0 cm / 12-3/16".
DC wheel set 4 x 70 0580

NEM IV

Freight Cars.

46275
Boxcar.

Prototype: German Federal Railroad type Glmehs 50.
Model: Ventilation hatches picked out in color. Length over buffers 14.2 cm / 5-9/16".
DC wheel set 2 x 70 0580

NEM III

46274
Boxcar.

Prototype: Saar Railroad type Gmhs 54, used on the German Federal Railroad (DB).
Model: Vent hatches picked out in a different color. Length over buffers 11.5 cm / 4-1/2" .
DC wheel set 2 x 70 0580

These two-axle boxcars were acquired for the railroads in Saarland starting in 1955. The side walls were made of spruce and fir wood. The four ventilation openings on the sides were equipped with hatches of galvanized sheet metal.

NEM III

4410
Boxcar.

Prototype: German Federal Railroad (DB) type Gs 210.
Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV

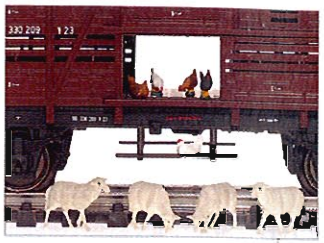
4411
Boxcar.

Prototype: German Federal Railroad (DB) type Gs-uv 213.
Model: With pickup shoe and lighted marker lantern. Relex couplers. Length over buffers 11.5 cm / 4-1/2".

I IV

48881
Livestock Car.

Prototype: German Federal Railroad (DB) type V 23.
Model: Sliding doors that can be opened. Figures of sheep and chickens included. Length over buffers 10.5 cm / 4-1/8".
DC wheel set 2 x 70 0580



NEM III

48770
Thermal Insulated Car.

Prototype: New design as thermal insulated car. Superstructure with lengthwise boards.

Prototype: German Federal Railroad (DB) type G10. Special version with thermal insulation.
Model: Side walls are constructed of boards running horizontally. Fixed doors for the refrigeration area. Length over the buffers 10.6 cm / 4-3/16".
DC wheel set 2 x 70 0270

NEM III

48759
Banana Car.

Prototype: Type Gr 20 banana car, privately owned car, used on the German Federal Railroad (DB). With brakeman's platform.
Model: Comes with sliding doors that can be opened. Special design doors for banana cars. Length over buffers 11.3 cm / 4-7/16".
DC wheel set 2 x 70 0580

NEM III

Freight Cars.

46200
Refrigerator Car.

Prototype: German Federal Railroad (DB) type Tnfhs 38.
Model: Length over the buffers 13.9 cm / 5-1/2".
DC wheel set 2 x 70 0580

NEM III

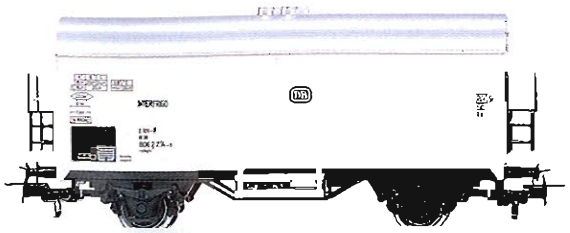
46202
Refrigerator Car.

Prototype: Refrigerator beer car used on the German Federal Railroad (DB). Private car of the Kulmbach Brewery Company. Model with horizontal paneling on the walls.
Model: Length over buffers 13.9 cm / 5-15/32".
DC wheel set 2 x 70 0580

N NEM IV

4415
Refrigerator Car.

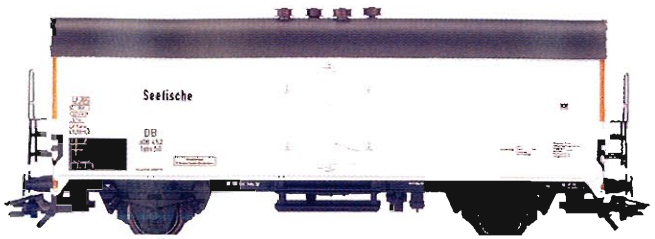
Prototype: German Federal Railroad (DB) Interfrigo type Ichqs-u 377.
Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580



IV V

45020
Refrigerator Car.

Prototype: German Federal Railroad (DB) type Tehs 50.
Model: Separately applied roof vents. Separately applied steps on the ends. Length over buffers 13.4 cm / 5-1/4".
DC wheel set 2 x 32 3760 04



NEM III

45021
Beer Car.

Prototype: German Federal Railroad (DB) type Tehs 50 refrigerator car. Painted, lettered, and used for a large Munich brewery.
Model: Separately applied roof vents. Separately applied ladders at the ends. Length over the buffers 13.4 cm / 5-1/4".
DC wheel set 2 x 32 3760 04

NEM III

Freight Cars.

44188
Refrigerator Car.

Prototype: Type Ihs 377 standard car. Painted and lettered for a private party.

Model: Relex couplers. Length over the buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV V

44181
Refrigerator Car.

Prototype: Painted and lettered for CMA, Bonn, Germany.

Model: Separately applied ladders on the ends. Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

V

44187
Refrigerator Car.

Prototype: Privately owned car painted and lettered for Masterfoods GmbH, Viersen, Germany.

Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

V

44174
Refrigerator Car.

Prototype: Car privately owned, painted and lettered for HARIBO GmbH & Co. KG, Bonn, Germany.

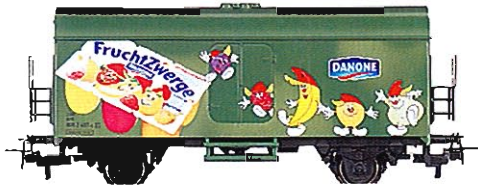
Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

V

44177
Refrigerator Car.

Prototype: Car privately owned, painted and lettered for DANONE GmbH, Munich, Germany.

Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580



V

44190
Refrigerator Car.

Prototype: Private car design of Deutschen Sinalco GmbH Marken-getränke & Co. KG, Duisburg-Walsum.

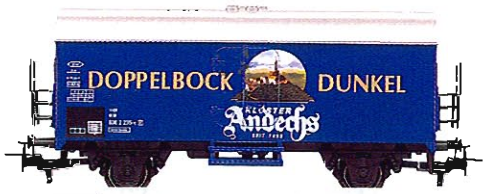
Model: Relex couplers. Length over buffers 11.5 cm / 4-17/32".
DC wheel set 2 x 70 0580

N V

4421
Beer Car.

Prototype: Car privately owned, painted and lettered for Klosterbrauerei Andechs, Andechs, Germany.

Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580



V

44191
Beer Car.

Prototype: Private car design of Erdinger Weißbräu, private brewery in Erding.

Model: Relex couplers. Length over buffers 11.5 cm / 4-17/32".
DC wheel set 2 x 70 0580

N V

44189
Beer Car.

Prototype: Type Ihs 377 standard car. Painted and lettered for a private party.

Model: Relex couplers. Length over the buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV V

44186
Beer Car.

Prototype: Privately owned car painted and lettered for the Frisian brewery Jever GmbH, Jever, Germany.

Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

V

44184
Beer Car.

Prototype: Privately owned car painted and lettered for Karlsberg Brauerei GmbH & Co KG, Homburg, Germany.

Model: Relex couplers. Separately applied ladders on the car's ends. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

V

4417
Beer Car.

Prototype: Car privately owned by Warsteiner Brewery, Warstein, Germany.

Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

V

Freight Cars.

48690
Track Scale Calibration Train Car Set.

Completely new tooling.
Hinged roof hatches can be opened.
Weight can be removed individually.

Prototype: 2 calibration cars and 1 equipment car painted and lettered for the German Federal Railroad (DB). Cars uses a unit to text track scales.

Model: Calibration cars have a 3-axle frame, roof hatches that can be opened, and 8 each removable calibration weights. The cars come with different car numbers.

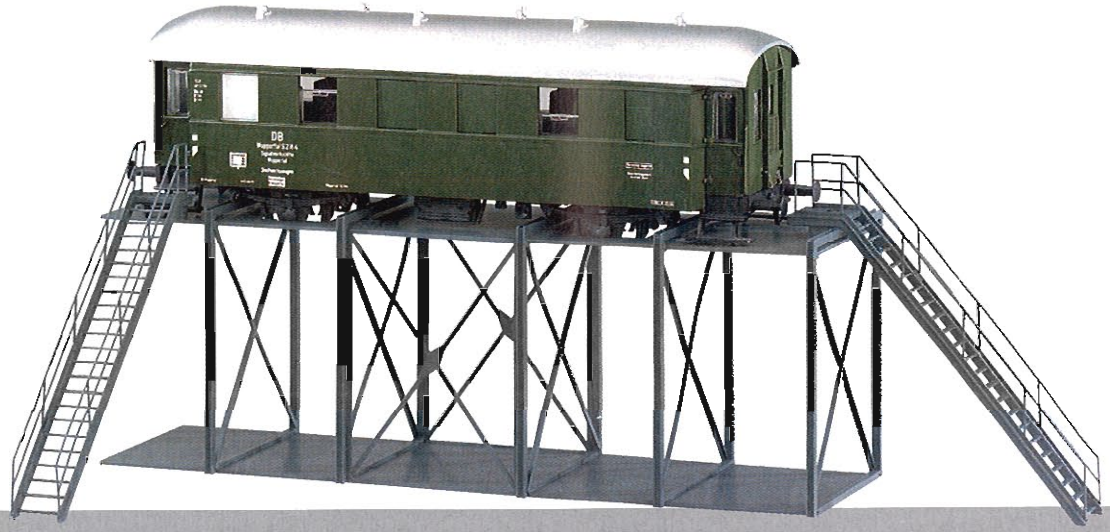
Boxcar painted and lettered as a maintenance car. Total length over the buffers 26.8 cm / 10-9/16".
DC wheel set 8 x 70 0580

NEM IV

42355
Temporary Signal Tower.

One-time series.

Prototype: German Federal Railroad (DB) standard design branch line car. Stationary rebuild on metal framework construction.
Model: Building as a finished model. Underbody has an intermediate floor. Metal steps and railings. Car body with its frame can be removed from the platform. Dimensions without the steps 16.2 x 4.4 cm / 6-3/8" x 1-3/4". Height 9.7 cm / 3-13/16".



45072
Repair Car.

Prototype: German Federal Railroad (DB) maintenance car for use in the depot (Bw). Converted from an older mail car.
Model: Length over buffers 11.0 cm / 4-11/32".
DC wheel set 2 x 70 0580

N NEM III

46980
Freight Train Baggage Car.

Important car for freight trains.
New design: roof with cupola.

Prototype: German Federal Railroad (DB) type Pwgs 41. Version with cupola.
Model: Cupola opens into the interior of the car. Underbody has separately applied brake rods. Length over the buffers 11.9 cm / 4-11/16".
DC wheel set 2 x 70 0580

NEM III

43148
Baggage Car.

One-time series.

Prototype: Former "Shotgun" coach car of the German Federal Railroad (DB). Used as a freight grain baggage car.
Model: Length over buffers 16.0 cm / 6-5/16".
DC wheel set 2 x 70 0580

NEM III

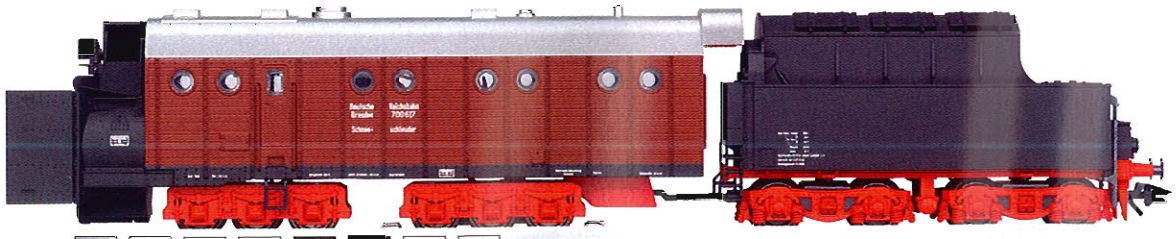
Special Design Freight Cars.

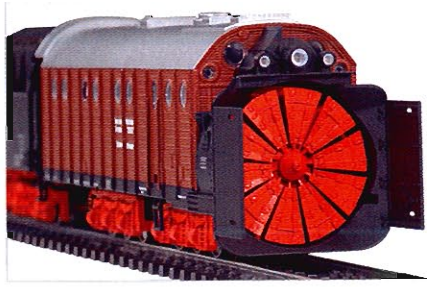
49963
Rotary Snow Plow as Working Model.

Digital working model.
Snow plow spinner rotates.
Work lights
Trackside signal lights.
Steam engine sound effects.
Steam whistle sound effects.

One-time series.

Prototype: German State Railroad (DRG) rotary snow plow. Henschel type. With tender 2´2´T 26.
Model: With digital decoder, powered rotary snow plow and additional functions. Metal superstructure. Separately applied hand rails. Detailed reproduction of the snow plow hood. Movable side arms and guide blades. Illuminated work lights and headlight. 7226 smoke generator can be retrofitted. Smoke generator contact, work lights, steam engine sound effects and snow plow spinner to the right in conventional operation. These functions as well as headlight, whistle, and snow plow spinner to the left can be digitally controlled with the 6021 Control Unit. Length closed 24.2 cm / 9-17/32".





46119
Snowplow.

One-time series.

Prototype: Henschel "Klima" design snowplow for the German Federal Railroad (DB).
Model: Clear view through the operator's cab. Side plow blades are hinged and can be folded to the side of the snowplow. Metal ladders. Separately applied air reservoir and lines. Work lights can be turned on with a sliding switch. Length 11.7 cm / 4-5/8".

In the course of railroad history there have been many attempts to equip locomotives with snowplow blades. Usually these aids fail with snow depths greater than 40 cm or 16". The Austrian railroader Rudolf Klima was the first to make a breakthrough with the snowplows named after him. With an adjustable plow blade and moveable side wings, these plows were quite effective in snow depths up to 1.50 meters or 59 inches. In 1929 the German State Railroad purchased its first Klima plows. The firm of Henschel in Kassel acquired the license to build them in 1931. Of the 250 units built in different designs, the DB acquired about 100 units. Additional Klima snow plows were ordered right up to 1964.

46118
Snow Plow.

One-time series.

Prototype: German Federal Railroad (DB) "Klima" type Henschel snow plow.
Model: Engineer's cabs with clear view. Side plow blades can be folded. Metal ladder. Separately applied air reservoir and lines. Functional work light, can be switched off with slide switch. Length 11.7 cm / 4-19/32".

Freight Cars.

46524
Tank Car.

Prototype: Privately owned car painted and lettered for the firm Henkel KGaA, Düsseldorf, Germany, used on the German Federal Railroad (DB). This car has a brakeman's cab.

Model: Separately applied ladders and walkway. Length over buffers 14.2 cm / 5-9/16".
DC wheel set 4 x 32 3760 04

NEM III

47910
Tank car.

One-time series.

The design of the tank car is reminiscent of the 1969 former Märklin model, item no. 4621.

Prototype: Heavy oil tank car, employed by the German Federal Railroad (DB). Four axle type railroad maintenance car with corporate addresses.

Model: Separately applied deck and ladder on the end of the car. Separately applied side steps and integrated step recesses in the tank cladding. Length over buffers 13.1 cm 5-5/32".
DC wheel set 4 x 70 0580

NEM III

46429
Tank Car.

One-time series.

Prototype: Privately owned car, used on the German Railroad, Inc. (DB AG). Painted and lettered for the firm Henkel KGaA, Düsseldorf, Germany.

Model: Separately applied platform, catwalk, and ladder. Detailed partially open car frame. Length over the buffers 10.0 cm / 3-15/16".
DC wheel set 2 x 32 3760 04

NEM V

46428
Tank Car.

Prototype: Car privately owned by the firm VTG, used on the German Federal Railroad (DB).

Model: Separately applied brakeman's platform with ladders and tank dome platform. Reproduction of the partially open car floor. Length over buffers 10.0 cm / 3-15/16".
DC wheel set 2 x 32 3760 04

NEM III

4442
Petroleum Oil Tank Car.

Prototype: Car privately owned, painted and lettered for German Shell, Inc.
Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV V

4441
Petroleum Oil Tank Car.

Prototype: Car privately owned, painted and lettered for Esso, Inc.
Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV V

4756
Petroleum Oil Tank Car.

Prototype: Car privately owned by and painted and lettered for German Shell, Inc.
Model: Finely detailed open frame. Numerous separately applied details. Length over buffers 18.0 cm / 7".
DC wheel set 4 x 70 0580

NEM IV V

4754
Petroleum Oil Tank Car.

Prototype: Car privately owned by and painted and lettered for Esso, Inc.
Model: Finely detailed open frame. Numerous separately applied details. Length over buffers 18.0 cm / 7".
DC wheel set 4 x 70 0580

NEM IV V

Freight Cars.

4440
Petroleum Oil Tank Car.

Prototype: Car privately owned, painted and lettered for Aral, Inc.
Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV V

44401
Petroleum Oil Tank Car.

Prototype: Privately owned car painted and lettered for the firm AVIA Petroleum Oil AG, Munich, Germany.
Model: Metal end platform and catwalk separately applied. Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

V

47561
Tank Car.

Prototype: Special car for chemical products, employed by the German Federal Railroad Inc. (DB AG). Design with insulated indented tank. Private car owned by KVG Kesselwagen Vermietgesellschaft mbH (tank car leasing company).
Model: Detailed frame with openings. Separately applied details. Length over buffers 18.0 cm / 7-3/32".
DC wheel set 4 x 70 0580

N NEM V

48484
Pressurized Gas Tank Car.

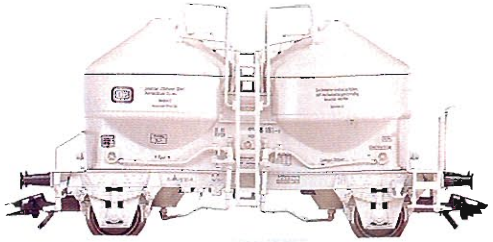
Prototype: Privately owned car painted and lettered for the firm Eisenbahn-Verkehrsmittel GmbH (Eva), used on the German Railroad, Inc. (DB AG). Used for "PiaNOx" from the firm SKW.

Model: Detailed partially open car frame. Separately applied details. Length over the buffers 18.0 cm / 7-1/16".
DC wheel set 4 x 70 0580

NEM V

4661
Silo Container Car.

Prototype: German Federal Railroad (DB) type Ucs 908.
Model: Metal ladders and brakeman's platform. Length over buffers 10.0 cm / 4".
DC wheel set 2 x 70 0580



HEM IV

46615
Silo Container Car.

Prototype: German Federal Railroad (DB) type Uc-54. With brakeman's platform.
Model: Metal ladders and brakeman's platform. Length over buffers 10.0 cm / 4".
DC wheel set 2 x 70 0580

NEM III

48532
Flat Car.

Prototype: German Federal Railroad (DB) type Lbgjs 598.
Model: Loaded with 5 removable spherically shaped containers. Each container has a different registration number. Separately applied metal ladders. Length over buffers 17.0 cm / 6-11/16".
DC wheel set 2 x 70 0580

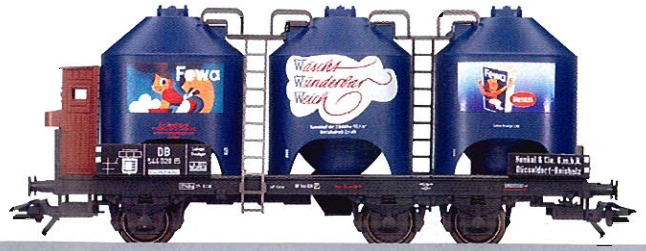
HEM V

48261
Container Coach.

One-time series.

Prototype: Powdered freight silo car, used by German Federal Railroad (DB). Privately owned car of the firm Henkel KgaA.

Model: Detailed frame with asymmetric central axle. Metal ladders and walkways. Length over buffers 13.0 cm / 5-1/8".
DC wheel set 2 x 70 0580
1 x 40 6240



Private cars are often used in the extensive production facilities of the chemical industry, in order to save rental costs due to the long times frequently necessitated by careful loading and unloading at various points of the facility.
They are also used for internal transport. The inscription does not necessarily indicate the product contained, but rather usually shows motifs from the owner's current advertising.

NEM III

Freight Cars.

4610
Ballast Car.

Prototype: German Federal Railroad (DB) Talbot design maintenance car.
Model: Unloading hatches can be opened with hand levers. Relex couplers. Length over buffers 9.5 cm / 3-3/4".
DC wheel set 2 x 70 0500

IV

4431
Gondola.

Prototype: German Federal Railroad (DB) type El-u 061.
Model: With a removable insert as a coal load. Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV

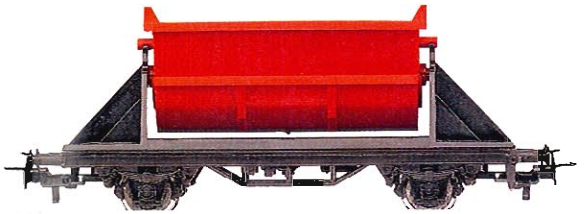
4635
Dump Car.

Prototype: German Federal Railroad (DB) type F-z 120.
Model: Buckets can be tipped after releasing the middle latch. Length over buffers 10.5 cm / 4-1/8".
DC wheel set 2 x 70 0600

NEM III

4413
Dump Car.

Bucket can be tipped to both sides and locked in center position. Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel s2et 2 x 70 0580



IV

4430
Gondola.

Prototype: German Federal Railroad (DB) type El-u 061.
Model: Relex couplers. Length over buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580

IV

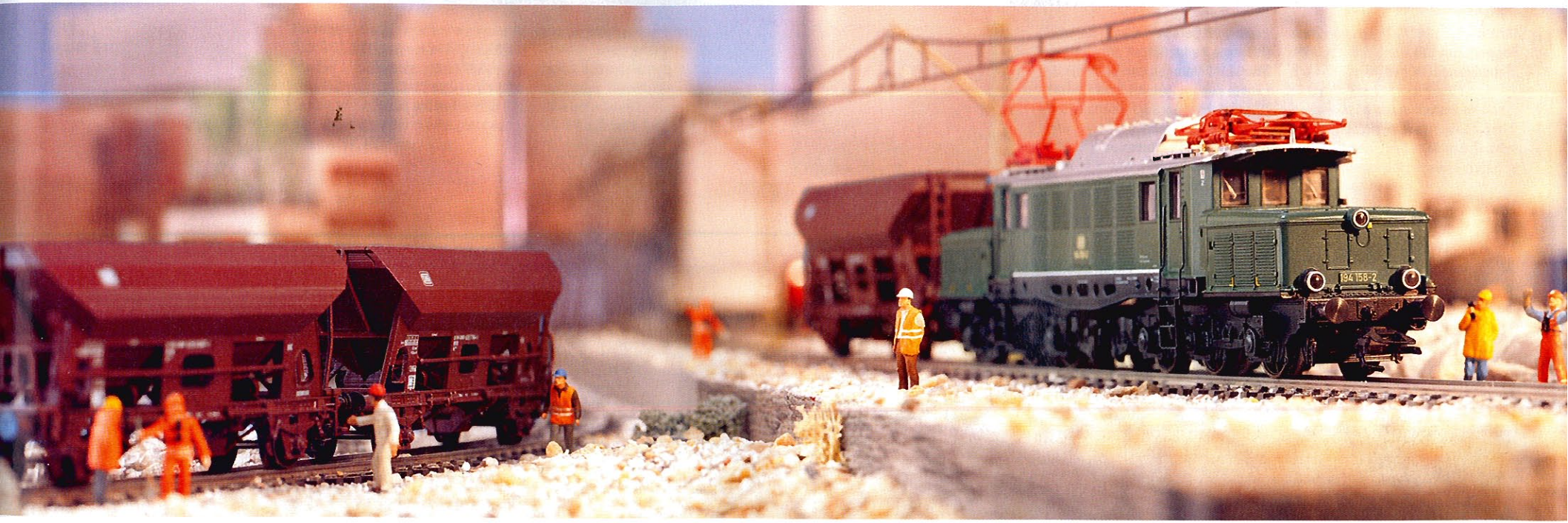
46310
"Side Dump Car" Car Set.

Models not available separately.

Prototype: 3 German Federal Railroad (DB) type Fc 090 dump cars.
Model: Each car has a different car number. Finely detailed construction with numerous separately applied details. Separate applied chute extension. Inner surface of the car body is set off in a different color. Total length over buffers 34.0 cm / 13-3/8".
DC wheel set 6 x 70 0580

Bulk freight that is not weather-sensitive was always important cargo for the railroad. For that reason a total of 16,200 units of the type Otmm 70/Ed 90/Fc 090 were built. This makes them the German Federal Railroad's side dump car built in the largest quantities. With a wheelbase of 6 meters or 19 feet 8/14 inches and a length over the buffers of 9.64 meters or 31 feet 7-1/2 inches, these cars offer a load volume of 40.0 cubic meters or 1,412.4 cubic feet. The car by itself weighs 11.6 metric tons. During unloading the load slides to the openings arranged in the center of the car. These openings are closed off by slide gates that make it possible to measure the rate of unloading. The load is guided from the exit openings via chute extensions to the side of the car.

NEM IV

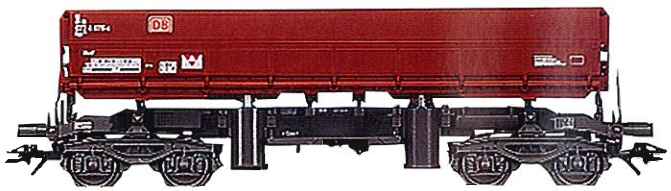


Freight Cars.

48450
Bulk Material Dump Car.

Prototype: German Railroad, Inc. (DB AG) type Fans 126 side dump car.
Model: Hopper can be tipped to both sides and is mounted in a guide mechanism. Compressed air cylinders with moving parts and pneumatic rams. Side walls on both sides as 2 hinged pieces that can be opened for unloading. Length over buffers 14.0 cm / 5-1/2".
DC wheel set 4 x 70 0580

The Blankenburg Research and Development Facility (FEW) recognized early on the need for railroad bulk material cars that were required for the transport of construction materials to modernize the infrastructure in reunited Germany. In 1993 a new design for an efficient unloading car was presented as a prototype, and the German Railroad, Inc. started buying it in 1994 as a regular production model. The rational design – large loading capacity of 59 metric tons, the ability to dump on both sides, built-in pneumatic cylinders and automatic control of the unloading hatches – make this and similar new cars attractive for inclusion in the DB AG's further modernization of its rolling stock. These side dump cars are often used today in unit trains.



NEM V

4626
Hopper Car with Hinged Roof Hatches.

Prototype: German Federal Railroad (DB) type Tad-u 961.
Model: All hatches can be opened. Length over buffers 13.3 cm / 5-1/4".
DC wheel set 4 x 70 0280

4624
Hopper Car.

Prototype: German Federal Railroad (DB) type Fals 176.
Model: Length over buffers 13.3 cm / 5-1/4".
DC wheel set 4 x 70 0580

NEM IV

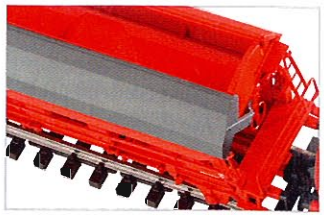
NEM IV

46300
Hopper Car with Hinged Roof Car Set.

New type: version with closed roof.
Hinged roof can be opened.
Ideal for use in unit trains.
Very finely detailed construction.

One-time series.

Prototype: 3 German Railroad, Inc. (DB AG) type Td hopper cars. Version with hinged roof above the load area.
Model: Finely detailed construction with many separately applied details. Separately applied chute extension. Hinged roof can be opened. Cars come with different car numbers. Total length over the buffers 34.0 cm / 13-3/8".
DC wheel set 6 x 70 0580



NEM V

48100
Hopper Car.

Prototype: German Railroad, Inc. (DB AG), DB Cargo type Facns 133.
Model: Metal frame. Very finely detailed construction with numerous separately applied parts. Etched brakeman's platform with pierced treadwork. Ram bars and supplemental chutes separately applied. Load surface picked out in color. Yellow tie bolt for switching purposes. Length over buffers 18.4 cm / 7-1/4".
DC wheel set 4 x 70 0580

Linke-Hoffmann-Busch (LHB) was awarded the development contract in 1993 for a dump car mounted on trucks. The three hoppers on the type Facns 133 are each locked with round ram bars. From 1994 to 1996 LHB delivered a total of 600 of these modern cars in the first production series. The second series starting in 1996 consisted of 400 cars that were delivered from the builder in the "traffic red" paint scheme. The load surface has a volume of 55 cubic meters or approximately 72 cubic yards and the maximum load is 68 metric tons. The maximum permissible speed is 120 km/h or 75 mph.

NEM V

Freight Cars.

46249
"Large Power Plant" Car Set.

Models not available separately.

Prototype: 5 German Railroad, Inc. (DB AG) type Fals 175 hopper cars.
Model: Each car has a different car number. Weathered car bodies. Loaded with scale size real coal. Total length over buffers 67.3 cm / 26-1/2".
DC wheel set 20 x 70 0580

NEM V

46903
Gondola.

Prototype: German Railroad, Inc., DB Cargo (DB AG) type Eaos 106.
Model: Loaded with real scale sized coal. Weathered car body. Separately applied hand wheel. Length over buffers 16.1 cm / 6-5/16".
DC wheel set 4 x 70 0580

NEM V

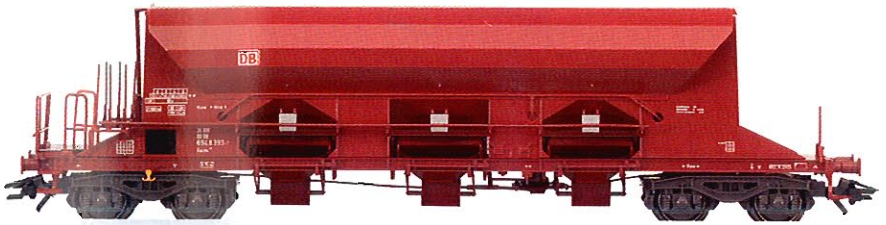
47190
Gondola.

Prototype: German Railroad, Inc. (DB AG) type Eanos-x 055 high side gondola.
Model: Separately applied grab irons. Length over buffers 18.1 cm / 7-1/8".
DC wheel set 4 x 70 0580

NEM V

48102
Hopper Car.

Prototype: German Railroad, Inc. (DB AG) type Facns 133.
Model: Very finely detailed construction with numerous separately applied details. Etched brakeman's platform with open tread work. Piston slide valve and supplementary chutes separately applied. Load area set off in another color. Yellow tie bolt for switching purposes. Length over buffers 18.4 cm / 7-1/4".
DC wheel set 4 x 70 0580



NEM V

46253
Hopper Car.

Prototype: Coal car of the Ruhrkohle AG Bahn und Hafen GmbH (RAG/BuH) (Ruhr Coal/Rail and Harbor companies), approved as Fals by the German Railroad, Inc. (DB AG)
Model: Suitable for locomotive, item no. 36854. Metal saddle, frame and end platforms. Length over buffers 13.3 cm / 5-1/4".
DC wheel set 4 x 70 0580

N NEM V

Freight Cars.

47200
Car for Transporting Coils of Rolled Sheet Steel.

Prototype: German Railroad, Inc., DB Cargo Business Area, type Shimmns 718.
Model: With closed tarp cover. Length over buffers 13.8 cm / 5-7/16".
DC wheel set 4 x 70 0580

NEM V

48012
Sliding Wall Boxcar.

Prototype: German Railroad, Inc. (DB AG), DB Cargo Business Area, type Hbbins.
Model: Separately applied steps. Length over buffers 17.8 cm / 7".
DC wheel set 2 x 70 0580

NEM V

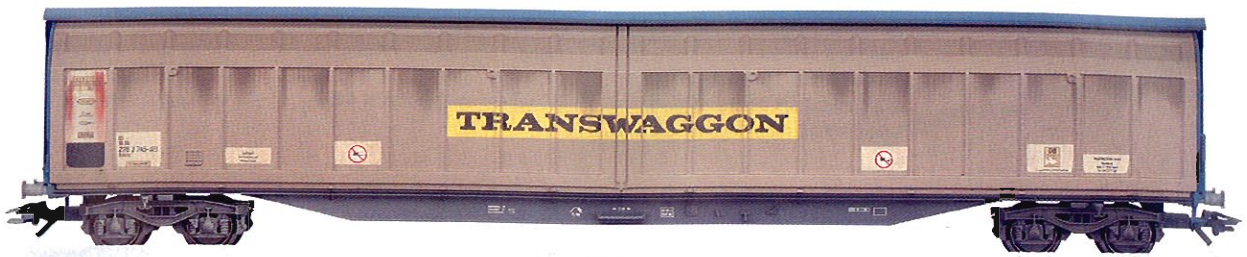
47262
Gondola with Retractable Roof.

Prototype: German Railroad, Inc. (DB AG), DB Cargo type Tamns.
Model: Tarp covering for the load area. Separately applied details. Length over buffers 16.1 cm / 10-7/16".
DC wheel set 4 x 70 0580

NEM V

48052
Sliding Wall Boxcar.

Prototype: Type Habins 12, privately owned, used on the German Railroad, Inc. (DB AG).
Model: Adjustable buffers and trucks. Painted to represent weathering and traces of use. Length over buffers 26.7 cm / 10-1/2" (26.3 cm / 10-3/8").
DC wheel set 4 x 70 0580



48031
High Capacity Sliding Wall Boxcar.

Prototype: Type Habins 12 privately owned car, used on the German Railroad, Inc. (DB AG).
Model: Adjustable buffers and trucks. Length over buffers 26.7 cm / 10-1/2".
DC wheel set 4 x 70 0580

Wheels.

48295
Heavy Duty Car.

One-time series.

Prototype: German Railroad, Inc. (DB Cargo) type Uai 839 "Schnabel" type transport car. Version with 32 axles. Large transformer with transport mounts.
Model: Metal "Schnabel" load arms and truck bolsters. Metal transformer, mounted with side play. Load can be removed. Load arms can be couple directly to one another. Center axles on the trucks are spring mounted. Many separately applied details. Length over the buffers 72.0 cm / 28-/38".
DC wheel set 1 x Set 31 0199

Important:
The running gear geometry of this heavy duty car enables it to be run on normal track curves with a minimum radius of 360 mm / 14-3/16". Since the long load arms swing out very wide with the load, sufficient space is required within the track curve, and this space must be kept clear of masts, trees, or buildings. We recommend that you run this heavy car on well mounted track with the widest possible curves.

NEM V

18820
Heavy Duty Road Vehicle.

New tooling.
Detailed metal construction.
Can be used for the H0 transformer from the 48295 car.

Prototype: Scheuerle type LS 250 heavy duty road vehicle, nicknamed "Heuler" or "Howler" and painted and lettered for the German Railroad, Inc., DB Cargo (DB AG).
Model: 28-axle truck model. 2-unit vehicle. Metal chassis and superstructure. Plastic interior details. Equipped for transporting transformers.

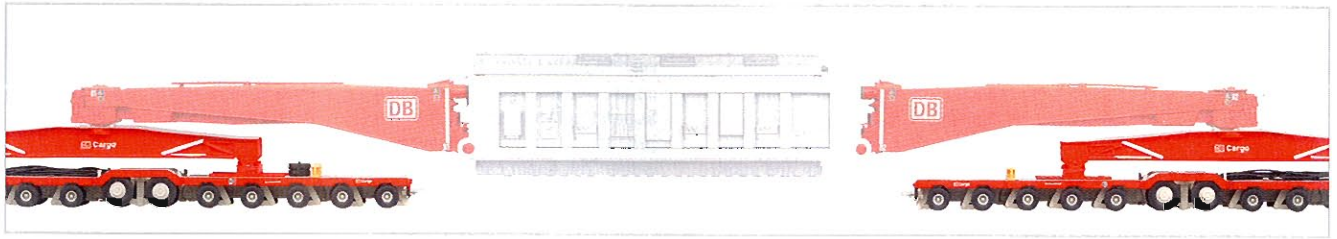
Wheels.

Large transformers for power plants and substations are designed for transport with special heavy duty railroad cars and trucks. Gooseneck support brackets are mounted on both sides of the transformer and are used to set these monsters on the transport framework. The process of moving the transformer for further transport by truck is a particularly delicate act. There are special transfer locations with bases having the appropriate load handling capacity for this operation. Hydraulic presses lift the load on one side, and then the switch is made from the railroad car to the truck or vice versa. After that the load is lowered again with the Gooseneck support brackets. This procedure is repeated for the other side.

The heavy-duty depressed floor trailers no longer have anything in common with the earlier road rollers. The former are self-propelled high-tech platforms, in this case with 52 swing axles and 208 tires. Each swing axle can be turned and lowered individually by hydraulics. This means that every platform can be driven straight, on curves, diagonally, sideways or in

V

circles and move and stop within centimeters. The total weight including the tare weight reaches 1,344 metric tons. The transformer is set on its base at the destination. The gooseneck support brackets are removed and transported back. This special type of combined transport is also a challenge on a model railroad layout. The transport by rail as well as by road must be planned in detail and be monitored. An attractive theme is the transfer process, whereby much model technology comes into play.

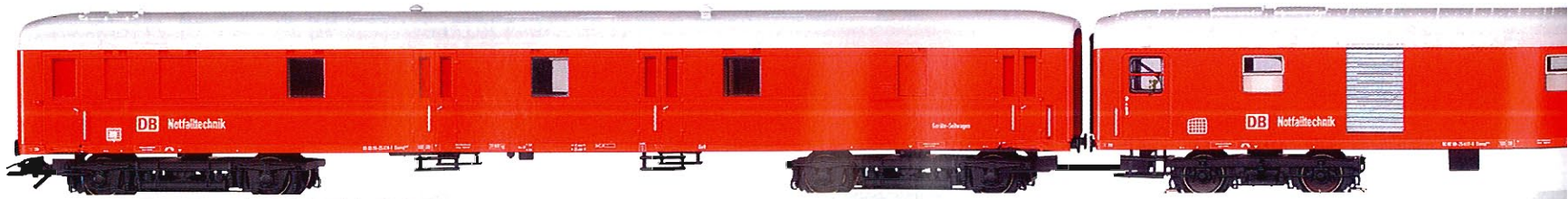


Freight Cars.

49953
Set with 3 crane tender cars for crane car train.

Suitable extension in appearance and function for the railroad crane, item no. 49552.

Prototype: Rope/equipment car, repair/equipment car and crew/sleeping car for the 150 t crane of the German Federal Railroad Inc. (DB AG).
Model: All cars with power conducting couplers and lighting. Repair car with digital decoder and sound effects generator with many functions. Lighting in the crew/sleeping car conventional operation, can be digitally controlled. Lighting of the other cars, typhoon signal as well as various operating sound effects can be controlled with the Control Unit or Systems. Random sequence of operating noises can be selected. Adjustable volume. Total length over buffers 79.1 cm / 31-5/32".



N mfx NEM V

49952
Railroad Crane with Digital Functions Car Set.

Prototype: German Railroad, Inc. (DB AG) crane car train. "Goliath" 150 metric ton crane car, crane tender car and, counterweight car. Current version.
Model: Crane car comes with a metal 8-axle car frame and superstructure. Metal counter weights that can be mounted on the crane. Power supply, 3 motors, and special version digital decoder for remote control with the 6021 Control Unit. Superstructure with boom can be rotated on prototypical crown gear wheel. The boom can be raised and lowered with pulley and double block and tackle. Metal main hook can be raised and lowered with pulley and double block and tackle. 4 support arms can be swung out manually and can be fixed with spindles on the bases included with the crane car train. Length of the superstructure with boom and counterweights is a maximum of 34.0 cm / 13-3/8". Radius range of the hook is up to 21.0 cm / 8-1/4". On curves, the boom can swing to the side prototypically during transport. Crane tender car for supporting the boom, for storing the hooks and the support bases (stacks of ties). Counterweight car with special equipment for the transport and assembly of the counterweights. Total length over the buffers 55.0 cm / 21-5/8".

fx NEM V

Digital Functions	6020	6021	60652	60212
Light in the crew car	x	x	x	x
Light in the rope car		x	x	x
Sequence of 9 operating sound effects		x	x	x
Flashing light in the repair car		x	x	x
Vibrator sound effects		x	x	x
Compressor sound effects			x	x
Welding device sound effect + light			x	x

Digital Functions	6020	6021	60652	60212
Grinding wheel sound effects			x	x
Hammering sound effects			x	x
Compressed air screw driver sound effects				x
Circular saw sound effects				x
Metal saw sound effects				x
Typhoon signal				x

Freight Cars.

The slumber coaches for the "Rollende Landstraße" or "Rolling Road", in which the truck drivers can accompany their rigs, bear the colors of Kombiverkehr, Inc. Since this form of transport takes place mostly at night, a slumber coach is usually included in the train, in which the trucker can sleep to the destination station. This car is located directly behind the locomotive most of the time. The "Rollende Landstraße" trains transport complete trucks ranging from the truck/trailer combination to semi rigs straight across Europe. This reduces the traffic load on the freeways. Next to Germany, Switzerland and Austria with their Alpine through traffic are probably the most important transit countries in Europe. For this reason the Austrian Federal Railways and the Swiss Federal Railways (through the HUPAC Company) participate with the German Federal Railroad in the "Rollende Landstraße" concept for transport by rail between Germany and Italy. Despite this cross border cooperation, the available capacity has been sufficient up till now for only a small part of the truck transit traffic.

4740
Depressed Floor Flat Car for Truck Transport.

Prototype: German Federal Railroad (DB) type Saadkms 690 for the "Rollende Landstraße" Car Association.

Model: End car with 2 hinged and removable buffer beams. Chock blocks for trucks and special coupling for depressed floor flat cars included. 2 special close couplers for coupling to locomotives and cars with the standard coupler. Length over buffers 23.2 cm / 9-1/8" .
DC wheel set 8 x 43 2950

IV V

4741
Depressed Floor Flat Car for Truck Transport.

Prototype: German Federal Railroad (DB) type Saadkms 690 for the "Rollende Landstraße" Car Association.

Model: Intermediate car without buffer beams. Chock blocks for trucks and special coupling for depressed floor flat cars included. Length 21.4 cm / 8-7/16" .
DC wheel set 8 x 43 2950

IV V

47700
Container Car.

Prototype: German Railroad, Inc. (DB AG), DB Cargo type Lgns 570.
Model: Finely detailed construction with open car floor. Loaded with 2 removable flatbed truck trailers with tarp covers, each trailer with a different design on both sides. Hinged supports for the flatbed truck trailers. Length over buffers 19.1 cm / 7-1/2".

DC wheel set 2 x 70 0580

NEM V

DB Cargo possesses very innovative transport cars for containers and flatbed truck trailers in the type Lgns 570. Special features of these cars are the relatively quiet trucks and the electronic brake status inquiry and control equipment (EBAS). All sorts of designs for flatbed truck trailers and containers can be loaded on these cars.

47705
Container Car.

Prototype: German Railroad, Inc. (DB AG) type Lgns 570 flat car. Convertible truck flat beds for transporting parcel post.

Model: Prototypical partially open load surface. Separately applied axle mount. The convertible containers come with different registration numbers. Length over the buffers 19.1 cm / 7-1/2".
DC wheel set 2 x 70 0580

47702
Container Transport Car.

Prototype: German Railroad, Inc. (DB AG) type Lgnss 577.
Model: Finely detailed construction with open car floor. Loaded with a tank container and a box-type container. Length over buffers 19.1 cm / 7-1/2".
DC wheel set 2 x 70 0580

The DB Cargo possesses a very innovative transport car for containers and interchangeable transport units in this type of car. Special features of this car are the quiet running gear and the electronic brake status inquiry and control system (EBAS). All of the current designs for containers and interchangeable transport units can be loaded on these cars.

47440
Deep-well flat car with semi-trailer.

Prototype: German Federal Railroad Inc. (DB AG) type Sdgkms 707 flat car. Intended for transporting truck-interchangeable transport units or semi-trailers.
Model: Metal frame, body and load well. Special trucks in low design. Many separately applied details. Adjustable load retainers. Loaded with a model vehicle semi-trailer. Length over buffers 18.9 cm / 7-7/16".
DC wheel set 4 x 32 0577

47442
Deep Well Flat Car with Interchangeable Transport Unit.

Prototype: German Railroad, Inc. (DB AG) type Sdgkms 707. Designed for transporting interchangeable transport units from trucks or for semi-truck trailers.

Model: Metal frame, floor, and load well. Special trucks with a low-slung design. Many separately applied details. Load restraints can be adjusted. Loaded with 2 models of interchangeable transport units from trucks. Length over buffers 18.9 cm / 7-7/16".
DC wheel set 4 x 32 0557

The prototypes of these interchangeable transport units with a flatbed and a tarp cover are used to transport freight between Märklin's factories. They shuttle back and forth transporting materials between the factories in Göppingen, Sonneberg, and Györ.

Special cars.

48004
Museum Car H0, 2004.

One-time series.

Available in the Märklin Museum.

Prototype: Gas Tank Car with 3 containers and brakeman's cabin. Private car employed by the German State Railroad Company (DRG). MAN SIH6 truck with flatbed, tarp, and roof arch. Version for the Göppinger Mineral Water Springs.

Model: Length over buffers 10.0 cm / 3-15/16". Truck model with metal body. Tarp as solid molded part. Length 11.3 cm / 4-7/16".
DC wheel set 2 x 70 0580

NEM II

48676
Heavy Load Flat Car.

Special model for the Märklin Museum.

Prototype: German Federal Railroad (DB) Ssym 46 flat cars. Used for large vehicles and other loads up to 80 tons.

Model: Load-bearing frame. Suitable for transporting the truck from the Museum Car Sets starting in 1991. Chock block is included. Length over buffers 15.2 cm / 5-31/32".
DC wheel set 6 x 70 0580

N NEM III

48005
Museum Car Set 2005.

One-time series.

Available in the Märklin Museum.

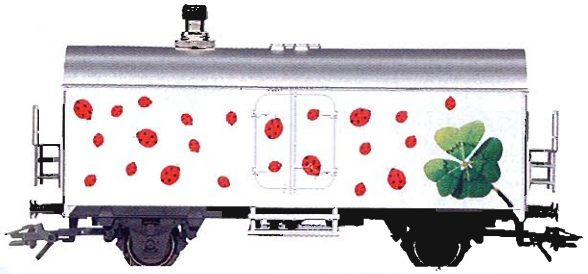
Prototype: Covered freight car Gr 20 with brakeman's cabin. Privately owned car employed by the German State Railroad Company (DRG). Box truck, type Büssing.
Model: Sliding doors that open. Length over buffers 11.3 cm / 4-7/16". Truck model with metal frame and body. Designed on historic motifs of the "Württembergischen Samen-Zentrale" (Württemberg Seed Center).
DC wheel set 2 x 70 0580

A small nostalgic bag of nasturtium seeds is also included.

N NEM II

49150
Congratulations Car.

Prototype: Refrigerator car, standard model.
Model: With electronic sound effects and memory module for a personal greeting of up to 10 seconds. Can be recorded and re-corded via a built-in microphone. Playback via miniature speaker. Push-button control. Built-in long-life battery. Car and package with good luck symbols. Length over buffers 11.5 cm / 14-17/32".

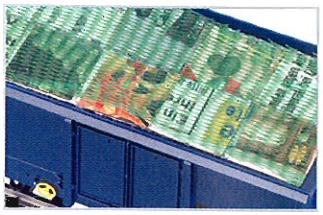


III-V

48504
Märklin Magazine H0 Car of the Year.

One-time series.

Prototype: Eanos high side gondola, European standard model. Used for transporting recycled paper.
Model: Metal insert for low center of gravity. Detailed representation of paper loading. Layout matches the series of the MM car of the year. Length over buffers 18.1 cm / 7-1/8".
DC wheel set 4 x 70 0580

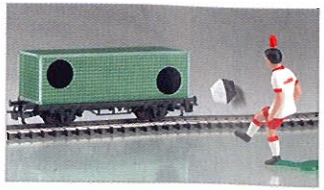


NEM V

44460
Tip-Kick Soccer Car.

One-time series.

Prototype: Universal flat car.
Model: Car superstructure painted and lettered as soccer goal with the openings of the famous TV goal wall. Original Tip-Kick figure made of metal in a special version with the soccer ball for shooting goals. Relex Relex couplers. Length over the buffers 11.5 cm / 4-1/2".
DC wheel set 2 x 70 0580



IV V

44525
Glass Tank Car.

One-time series.

Prototype: Privately owned car design of the firm Semper Idem – Underberg AG.
Model: Standard chassis with close couplers. Tank structure made of real colored glass in a special mount. Container sealed with corks. Length over buffers 11.5 cm / 4-17/32".
DC wheel set 2 x 70 0580

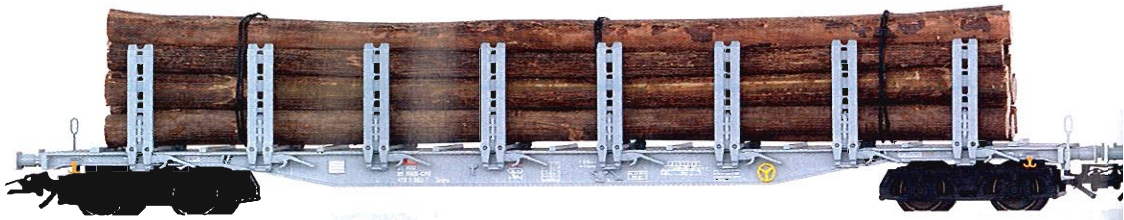
NEM V

Freight Cars.

47149
Stake Car Set.

Export model for Switzerland.

Prototype: 3 Swiss Federal Railways (SBB/CFF/FFS) type Snps double stake cars. Used to transport logs.
Model: Detailed fixed stakes. The cars come with different car numbers. All of the cars have a load of logs. Total length over the buffers 72.0 cm / 28-3/8".
DC wheel set 12 x 70 0580

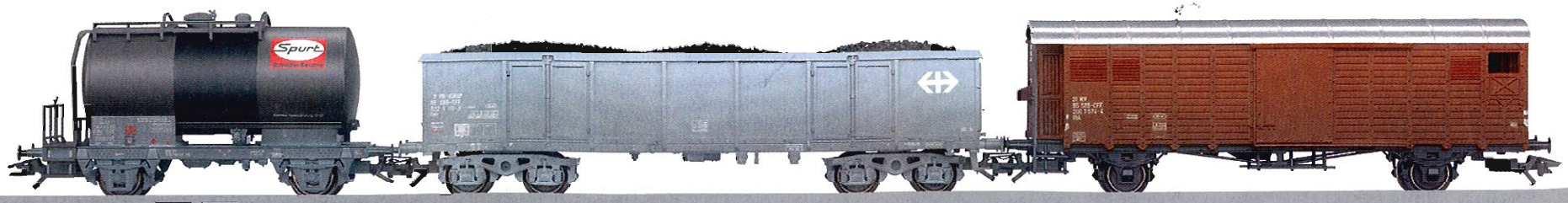


NEM V

48807
Swiss Freight Car Set.

Goes well with the new 36330 switch engine.

Prototype: 3 Swiss Federal Railways (SBB/CFF/FFS) freight cars. 1 type J3 boxcar, 1 type Eaos gondola, and 1 privately owned tank car for gasoline.
Model: The boxcar has sliding doors. The gondola has a load insert with a layer of real coal. The tank car has a detailed frame and separately applied platforms. Total length over the buffers 40.5 cm / 15-15/16".
DC wheel sets 6 x 70 0580
2 x 32 3760 04



NEM IV

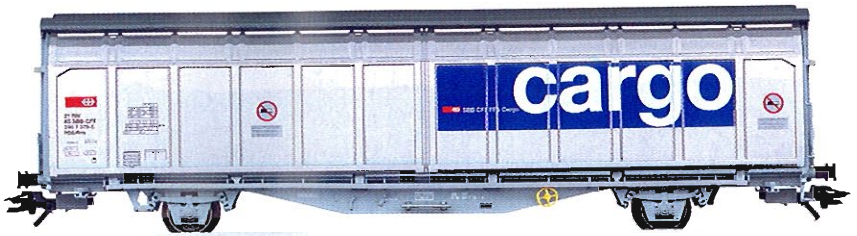
Freight Cars.

48025
Sliding Wall Box Car.

Export model for Switzerland.

Prototype: Swiss Federal Railways (SBB/CFF/FFS) high-capacity car. Standard Hbbillns design with high sliding walls.

Model: Frame with fish-bellied girder and separately applied details. Body in metallic paint scheme. Length over buffers 17.9 cm / 7-1/16".
DC wheel set 2 x 70 0580



N NEM V

47192
Gondola.

Export model for Switzerland.

Prototype: Swiss Federal Railways (SBB-CFF-FFS) type Eanos high side gondola. With a railroad tarp cover.

Model: Separately applied grab irons. Tarp represented as a molded part, removable. Length over buffers 18.1 cm / 7-1/8".
DC wheel set 4 x 70 0580

NEM V

47449
Deep Well (Flat) Car Set.

Export model for Switzerland.

Prototype: Swiss Federal Railways (SBB/CFF/FFS) 2 type Sdgkms flat cars. Intended for transporting containers, truck interchangeable transport units or semi-trailers.
Model: Metal frame, body and load well. Special trucks in low design. Many separately applied details. Adjustable load retainers. Loaded with 1 40-foot model container and 2 truck interchangeable transport units. Length over buffers 38.0 cm / 14-31/32".
DC wheel set 8 x 32 0577

NEM V

47441
Deep Well Flat Car.

Export model for Switzerland.

Prototype: Type Sdkmms painted and lettered for the firm HUPAC, used on the Swiss Federal Railways (SBB-CFF-FFS). Designed for the transport of interchangeable low side beds with tarp covers or semi truck trailers. Low side beds with tarp covers lettered for the firm Dreier.

Model: New car type. Metal frame. Adjustable load restraints. Loaded with 2 removable low side beds with tarp covers. Length over buffers 18.9 cm / 7-7/16"
DC wheel set 4 x 32 0557

NEM IV V

46556
Tank Car.

Prototype: General purpose car for flammable liquids employed by the German Federal Railroad (DB AG). Privately owned car from the Swiss transport firm, Wascosa, in Zug. Design as "euro tank car".

Model: Detailed frame with openings. Separately applied details. Length over buffers 18.0 cm / 7-3/32".
DC wheel set 4 x 70 0580

N NEM V

48485
Tank Car.

Prototype: Crude oil car employed by German Railroad Inc. (DB AG). Design with indented tank. Privately owned car of Wascosa AG.

Model: Detailed frame with openings. Separately applied details. Length over buffers 18.0 cm / 7-3/32".
DC wheel set 4 x 70 0580

N NEM V

Freight Cars.

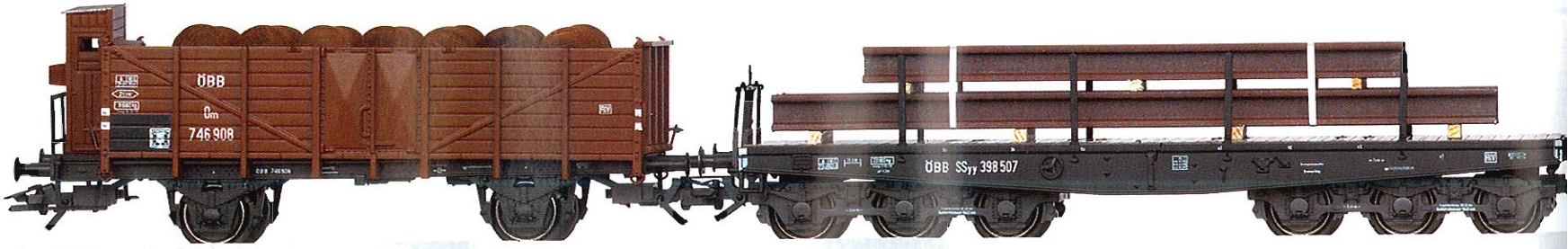
48805
Freight Car Set.

Goes well with the 37056 locomotive. Can be extended with the T24520 Trix car set.

One-time series for the anniversary "150 Years of the Semmering Railroad".

Export model for Austria.

Prototype: 5 older design Austrian Federal Railways (BBÖ/ÖBB) freight cars. 1 boxcar, 1 livestock car, 1 medium height gondola, 1 tank car, and 1 heavy duty flat car. Typical composition from the earlier freight traffic on the Semmering line.
Model: The boxcar has sliding doors that can be opened. The gondola is loaded with wooden barrels. The livestock car has divided sliding doors. The older design tank car has a brakeman's cab. The heavy duty flat car is loaded with steel beams. Total length over the buffers 58.5 cm / 23-1/16".
DC wheel sets 12 x 70 0580
2 x 32 3760 04



NEM III

47908
Car Set – 3 Old-Timer Freight Cars.

Old-timer freight train goes well with no. 37558 locomotive.

Export model for Austria.

Prototype: Different car types painted and lettered for the Austrian Federal Railways (ÖBB). 1 "Klagenfurt" gondola, 1 flat car for containers, with 5 milk tanks, and 1 four-axle tank car for cooking oil.

Model: Milk containers are removable. Total length over buffers 37.4 cm / 14-3/4".
DC wheel set 70 0580 and 60 1329 (4 each)

NEM III


ÖBB
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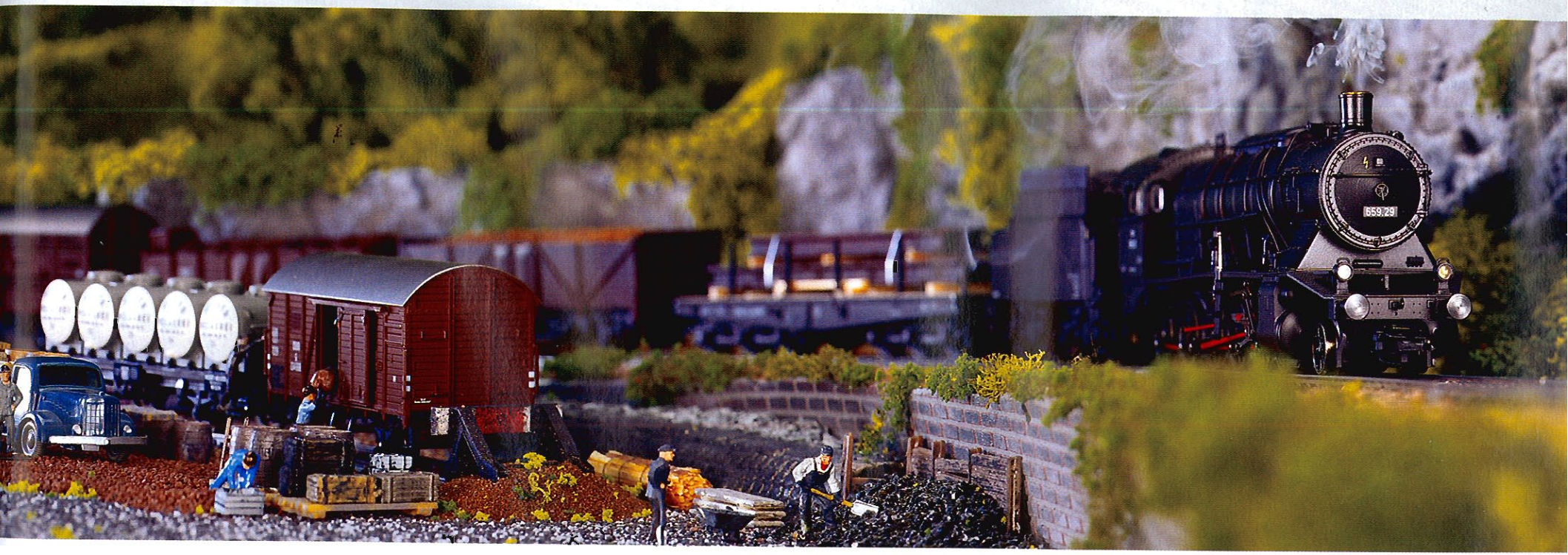
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Freight Cars.

48544
"Water Cars for Dual Purpose Vehicle" Set.

Export model for Austria.

Prototype: 2 Austrian Federal Railways (ÖBB) maintenance tank cars.

Model: Finely detailed partially open frame. Platform for the tank dome and brakeman's platforms separately applied. Total length over buffers 20.3 cm / 8".
DC wheel set 4 x 32 3760 04

NEM V

46555
Set – 2 Tank Cars.

Export model for Austria.

Prototype: Crude oil cars employed by Austrian Railways (ÖBB). Design with indented tank. Privately owned car of KVG and ÖMV

Model: Detailed frame with openings. Separately applied details. Total length over buffers 36.1 cm /14-7/32".
DC wheel set 8 x 70 0580

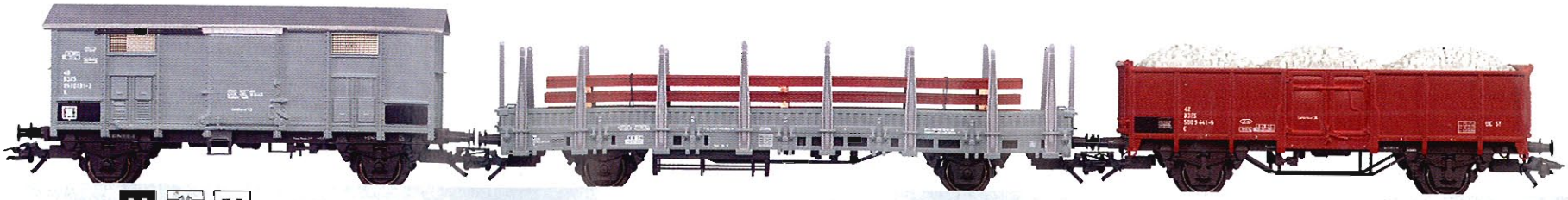
N NEM V

47876
Set with 3 Construction Train Cars.

Export model for Italy.

Prototype: Italian State Railways (FS) Va boxcar, E high-side gondola, and Vkkm low-side gondola. Former freight cars. Version used in construction and work trains.

Model: Metal boxcar with pointed roof. High-side gondola with ballast representation load insert. Low-side gondola loaded with a stack of rail. Total length over buffers 39.0 cm / 15-11/32".
DC wheel set 6 x 70 0580



N NEM V

47878
"Italian Classic II" Car Set.

Goes well with the 37559 and 36806 locomotives.
Good looking freight train can be made up with 47878 and 47879.

Export model for Italy.

Prototype: 3 older Italian State Railways (FS) freight cars. 1 type E gondola. 1 type G boxcar with an arched roof. 1 type F boxcar with a peaked roof.

Model: Metal peaked roof. New car numbers. Total length over the buffers 34.3 cm / 13-1/2".
DC wheel set 6 x 70 0580

NEM III

Freight Cars.

47879
"Italian Classic III"
Car Set.

Prototype: 3 older Italian State Railways (FS) freight cars. 1 type X low side car. 1 type F boxcar with a peaked roof and 1 Swiss barrel car for Italian wine, with brakeman's cab.

Model: Metal peaked roof. Wooden barrels. 2 models of the Fiat 500 automobile as a load, with suitable chock blocks. Total length over the buffers 31.7 cm / 12-1/2".
DC wheel set 6 x 70 0580

Goes well with the 37559 and 36806 locomotives.
Good looking freight train can be made up with 47878 and 47879.

Export model for Italy.

NEM III

48673
Heavy Duty Flat Car.

Prototype: Italian State Railways (FS) type Sammp flat car.
Model: Loaded with steam beams. Length over the buffers 15.2 cm / 6".
DC wheel set 6 x 70 0580

Export model for Italy.

NEM IV

47195
High Side Gondola Set.

Prototype: 2 Italian State Railways (FS) type Eaos gondolas. Used for salvaged material.

Model: The cars come with different car numbers. Load inserts represent scrap iron. Total length over the buffers 32.3 cm / 12-11/16".
DC wheel set 4 x 70 0580

Export model for Italy.

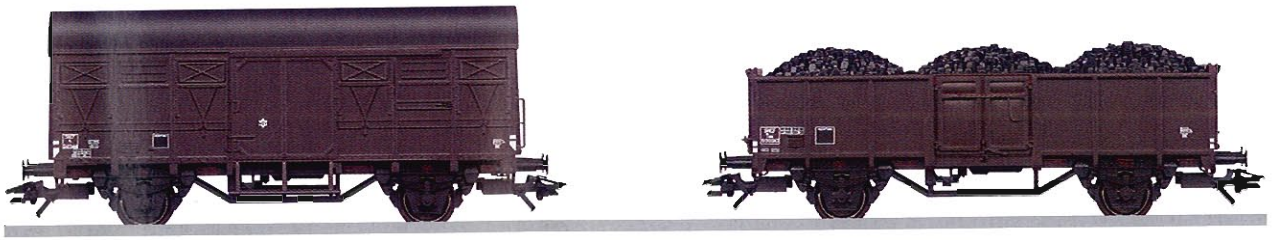
NEM V

Freight Cars.

44900
Set – 12 Freight Cars in Display.

Export model for France.

Prototype: French State Railways (SNCF) 4 classic freight cars. Boxcar freight car type K. High side gondola car type Tow transporting coal. Tank car type SCw. Low side gondola Qw transporting a Citroën H delivery car.
Model: The 4 cars are each included 3 x in the display in the same version. Each car is individually packaged. Length over buffers for each car 11.5 cm / 4-17/32". Total length over buffers 138.0 cm / 54-11/32".
DC wheel set 24 x 70 0580



N NEM III

48449
Car Set – 2 Ore Cars.

Export model for France.

Prototype: Ore transport cars (Mineraliers), used on the French State Railways (SNCF). Special design privately owned cars.
Model: New trucks. Total length over buffers 25.5 cm / 10-1/32".
DC wheel set 8 x 70 0580

NEM III

48821
French Freight Car Set.

These cars go well with the 37332 and 37886 locomotives. Additional suitable cars in the 46752 set.

Export model for France.

Prototype: 3 French State Railways (SNCF) boxcars. Older German types G 10 with and without brakeman's cab and Gr 20.

Model: All of the cars have sliding doors that can be opened. Brakeman's cab has metal handrails. Total length over the buffers 32.3 cm / 12-11/16".
DC wheel sets 4 x 70 0580
2 x 70 0270

NEM III

46752
Tank Car Set.

These cars go well with the 37332 and 37886 locomotives. Other cars that go well with these are in the 48821 set.

Export model for France.

Prototype: 3 French State Railways (SNCF) tank cars. Older design with brakeman's cab.

Model: Platforms and ladders separately applied. Cars come with different car numbers and lettering. Total length over the buffers 30.6 cm / 12-1/16".
DC wheel set 6 x 70 0580

NEM III

Freight Cars.

46322
Set with 3 Silo Cars.

Export model for France.

Prototype: High capacity Uapps car for grain transport (Cerealier), employed by the French State Railways (SNCF) Private car design with all-round loading area cross section.

Model: Metal insert for low center of gravity and quiet operation. Many separately applied details. Total length over buffers 51.5 cm / 20-9/32".
DC wheel set 12 x 70 0580

N NEM V

46323
Grain Hopper Car Set.

1 car is modeled on a new Swiss prototype.
2 cars are in the current paint scheme for the firm Millet.

Export model for Switzerland/France.

Prototype: 3 high-capacity hopper cars for transporting grain (Cerealiers), used on the French State Railways (SNCF) and the Swiss Federal Railways (SBB/CFF/FFS). Standard design cars, privately owned.

Model: Metal insert for low center of gravity and quiet running. Many separately applied details. Cars come with different car numbers and different lettering. Total length over the buffers 51.5 cm / 20-1/14".
DC wheel set 12 x 70 0580

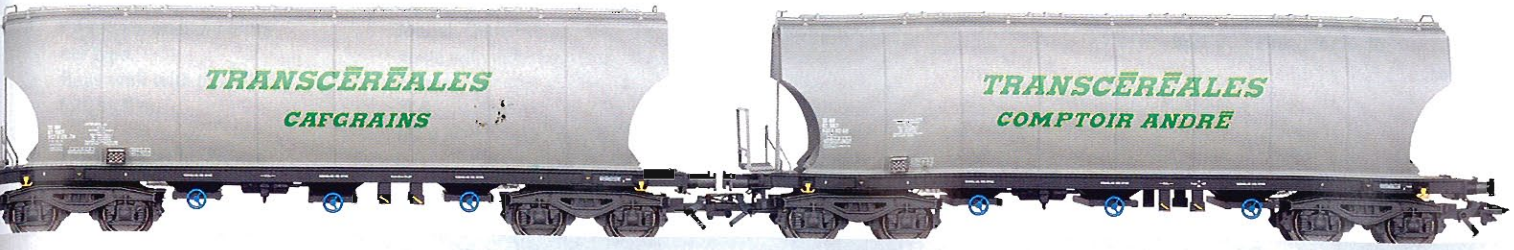
NEM V

46321
Car Set – 3 Covered Hopper Cars.

Prototype: High capacity cars for transporting grain (Cerealiers), used on the French, Belgian and Italian state railways (SNCF, SNCB/ NMBS and FS). Standard design, privately owned cars.

Model: Metal insert for a low center of gravity and for quiet running. Many separately applied details. Different car numbers and lettering. Total length over buffers 51.5 cm / 20-1/4".
DC wheel set 12 x 70 0580

NEM IV V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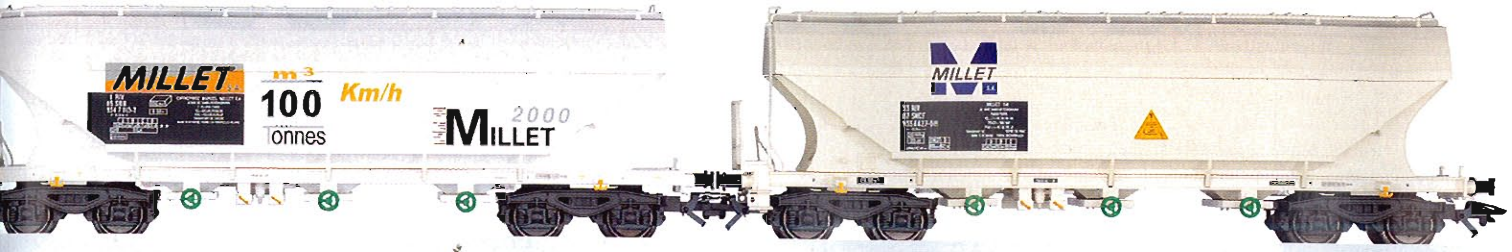
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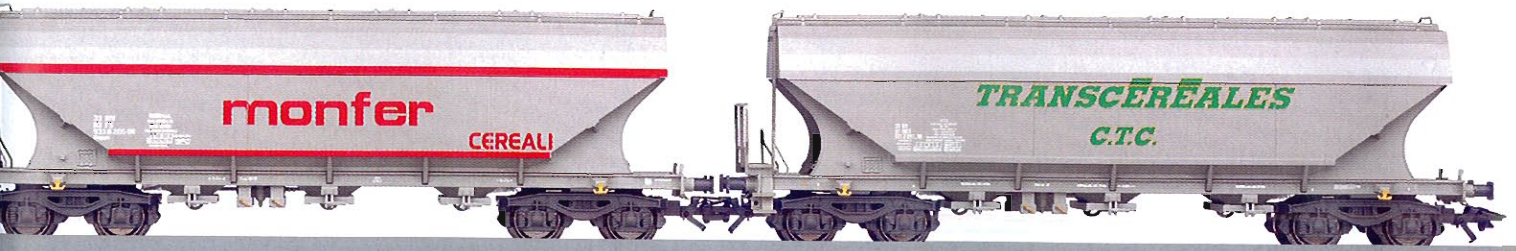
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CEREALI
TRANSCÉRÉALES
C.T.C.

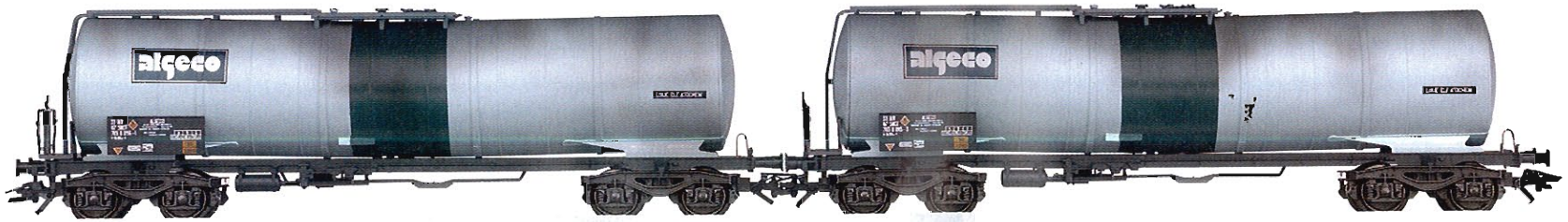
Freight Cars.

46551
Funnel Flow Tank Car Set.

Prototype: current, widely distributed car type.
Goes well with the 37255 locomotive.

Export model for France.

Prototype: 2 tank cars, used on the French State Railways (SNCF). Privately owned car. European standard design with central emptying point.
Model: Detailed partially open car frame. Many separately applied details. Cars come with different car numbers and different lettering. Total length over the buffers 36.4 cm / 14-5/16".
DC wheel set 8 x 70 0580



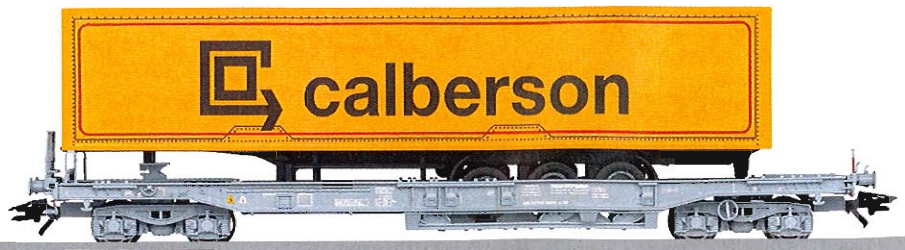
NEM V

47450
Deep Well Flat Car with Semi Truck Trailer.

Prototype: contemporary car type.
Goes well with the 37255 locomotive.

Export model for France.

Prototype: French State Railways (SNCF) type Sdgkms flat car. Also used to transport convertible truck trailers or containers.
Model: Metal frame, floor, and load well. Special low-riding design trucks. Many separately applied details. Load restraints are adjustable. Loaded with a model of a semi truck trailer. Length over the buffers 18.9 cm / 7-7/16".
DC wheel set 4 x 32 0577



NEM V

47211
"Coil Transporter" Car Set.

Prototype: contemporary car type.
Goes well with the 37255 locomotive.

Export model for France.

Prototype: 2 French State Railways (SNCF) flat cars with sliding tarp covers. Special cars for rolled steel coils.
Model: Closed tarp cover. The cars come with different car numbers.
Total length over the buffers 27.8 cm / 10-15/16".
DC wheel set 4 x 70 0580

Freight Cars.

47877
Car Set – 5 Old-Timer Freight Cars.

Export model for Belgium.

Prototype: Different car types painted and lettered for the Belgian State Railways (SNCB/NMBS).
1 boxcar, 1 tank car, 1 flat car for containers, and 1 pair of gondolas with hinged hatches on the roofs.

Model: Sliding doors that can be opened. Tank with multi-part platform assembly. Containers are removable. Hatches on gondolas can be opened. Total length over buffers 48.0 cm / 18-7/8".
DC wheel set 6 x 70 0630
4 x 70 0580

NEM III

46313
Dump Car Set.

Cars with realistic loads.
Operating condition weathered colors.
Goes well with 37270 and 37653 locomotives.

Export model for Belgium.

Prototype: Belgian State Railways (SNCB/NMBS) 3 Fc side dump cars.

Model: Finely detailed construction with many separately applied details. Separately applied chute extension. Load inserts coated with real coal. Car superstructures in weathered colors. Total length over buffers 34.0 cm / 13-3/8".
DC wheel set 6 x 70 0580

NEM III

47198
Set – 2 High Side Gondolas.

Export model for Belgium.

Prototype: Belgian State Railways (SNCB/NMBS) Eanos open freight cars.

Model: Different color schemes and road numbers. Each car is individually packaged. Total length over buffers 36.3 cm / 14-9/32".
DC wheel set 8 x 70 0580

N NEM IV

47210
"Coil Transporter" Car Set.

Export model for Belgium.

Prototype: 2 Belgian State Railways (SNCB/NMBS) flat cars with sliding tarp covers. Special cars for rolled steel coils.

Model: Closed tarp cover. The cars come with different car numbers. Total length over the buffers 27.8 cm / 10-15/16".
DC wheel set 4 x 70 0580

NEM V

Freight Cars.

46324
Silo Container Car.

Export model for Belgium.

Prototype: High capacity car Uapps for grain transport (Cerealier), employed by the Belgian State Railways (SNCB/NMBS) Privately owned car in standard design.

Model: Metal insert for deep center of gravity and quiet running. Many separately applied details. Length over buffers 17.1 cm / 6-23/32".
DC wheel set 4 x 70 0580

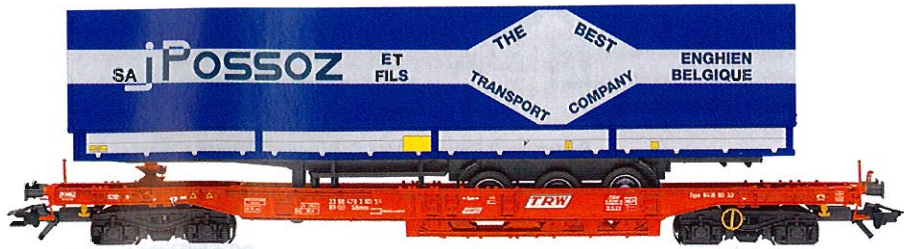
N NEM V

47446
Depressed Well Flat Car with Semi-Truck Trailer.

Export model for Belgium.

Prototype: Belgian State Railways (SNCB/NMBS) type Sdgkms. Also designed for the transport of truck interchangeable flatbed units or containers.

Model: Metal frame, floor, and load well. Special low-slung trucks. Many separately applied details. Adjustable load restraints. Loaded with a model semi-truck trailer with flatbed and tarp cover. Length over buffers 18.9 cm / 7-7/16".
DC wheel set 4 x 32 0557



NEM V

47448
Deep Well Flat Car with Container.

Export model for Belgium.

Prototype: Belgian State Railways (SNCB/NMBS) type Sdgkms flat car. Also used to transport convertible truck trailers and semi-trailers.

Model: Metal frame, floor, and load well. Special low-riding design trucks. Many separately applied details. Load restraints are adjustable. Loaded with a model of a 40 foot container. Length over the buffers 18.9 cm / 7-7/16".
DC wheel set 4 x 32 0577

NEM V

46314
Set – 2 Dump Cars.

Export model for Luxemburg.

Prototype: Luxemburg Railways (CFL) Fcs rotary slide valve, side dump car.
Model: Finely detailed version with many separately applied details. Load insert coated with real coal. Different road numbers. Total length over buffers 22.6 cm /8-29/32"
DC wheel set 4 x 70 0580

N NEM V

46251
Hopper Car Set.

Export model for Luxemburg.

Prototype: 2 Luxembourg State Railways (CFL) type Fals high capacity hopper cars. Version with German design Y25 trucks.
Model: Cars come with different car numbers. Total length over the buffers 26.8 cm / 10-9/16".
DC wheel set 8 x 70 0580

NEM V

Freight Cars.

44333
3 Low Side Cars – Car Set.

Export model for the Netherlands.

Prototype: Dutch State Railways (NS) type E 515. Different paint schemes.

Model: Sturdy construction similar to the original type. Car floors have close coupler mechanism and metal buffers. Total length over buffers 34.7 cm / 13-5/8".
DC wheel set 6 x 70 0580

NEM | III-V

47197
2 High Side Gondolas – Car Set.

Export model for the Netherlands.

Prototype: Dutch State Railways, Freight Traffic business group (NS Cargo), type Eanos standard design car. Originally painted in blue, now in a red paint scheme.
Model: Metal inserts for a low center of gravity. Total length over buffers 36.3 cm / 14-1/4".
DC wheel set 8 x 70 0580

NEM | V

46340
Set – 3 Gondolas.

Export model for the Netherlands.

Prototype: Rotary slide valve, side dump cars of the Netherlands Railways (NS). Version with closable load area.
Model: Finely detailed version with many separately applied details. Hinged lid separately applied as cover. Different road numbers. Total length over buffers 33.8 cm / 13-5/16".
DC wheel set 6 x 70 0580

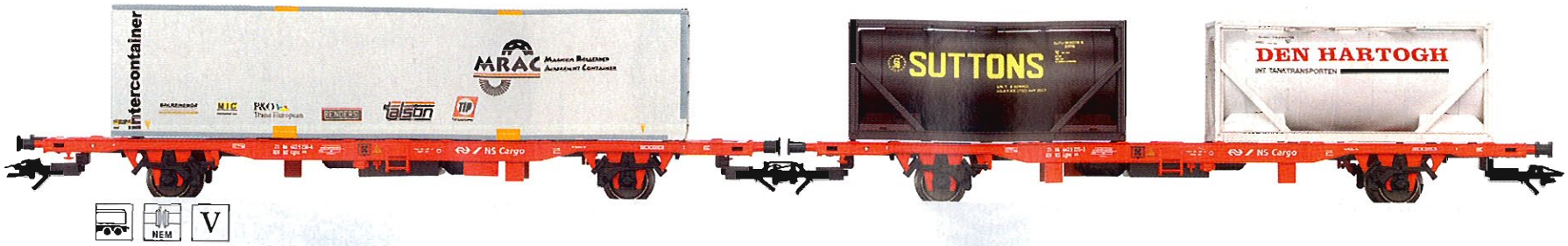
N | NEM | V

47704
"Rotterdam" Container Car Set.

Export model for the Netherlands.

Prototype: 2 Dutch State Railways (NS) type Lgjns flat cars. Used in ocean harbor container traffic.

Model: Detailed partially open car frame. Loaded with one 40 foot box container and two 20 foot tank containers. The cars come with different car numbers. Total length over the buffers 38.4 cm / 15-1/8".
DC wheel set 4 x 70 0580



48545
Tank Car Set for Construction Trains.

Goes well with the 37658 construction train locomotive.

Export model for the Netherlands.

Prototype: 3 tank cars painted and lettered for the Dutch construction firm Strukton. Used on the rail lines of the Dutch State Railways (NS).

Model: Detailed, partially open car frame. Work and brakeman's platforms separately applied. Cars come with different car numbers. Total length over the buffers 30.5 cm / 12".
DC wheel set 6 x 32 3760 04

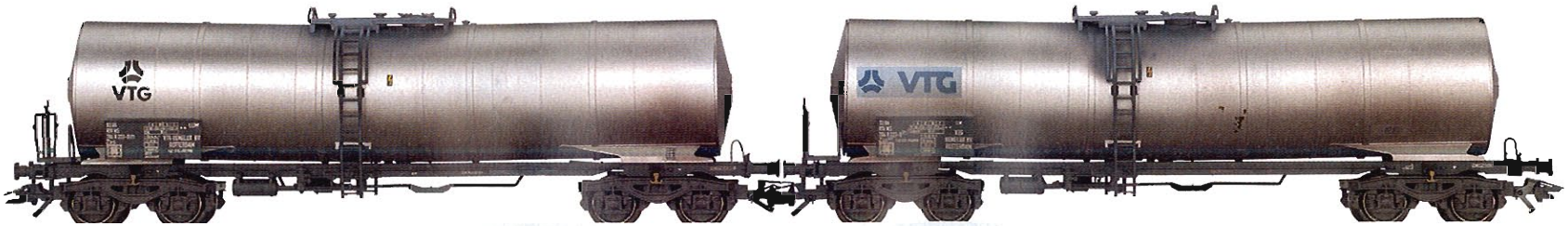
Freight Cars.

47523
"Rotterdam" Tank Car Set.

Export model for Netherlands.

Prototype: 2 tank cars, used on the Dutch State Railways (NS). European standard design privately owned cars.

Model: Detailed partially open car frame. Many separately applied details. The cars come with different car numbers and lettering. Total length over the buffers 36.4 cm / 14-5/16".
DC wheel set 8 x 70 0580



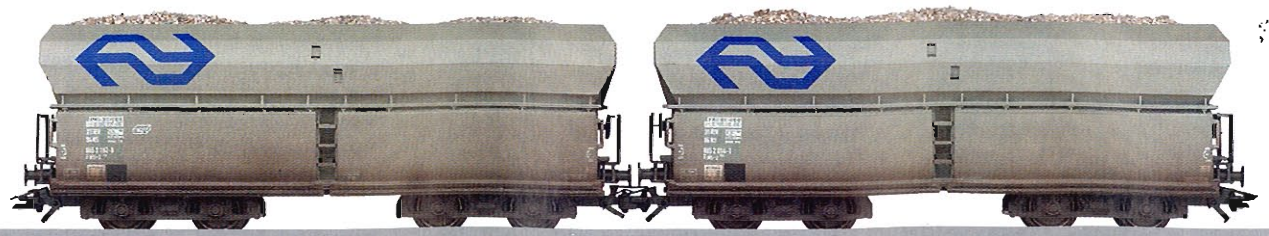
NEM V

46250
Hopper Car Set.

Export model for Netherlands.

Prototype: 2 Dutch State Railways (NS) type Fals high capacity hopper cars. Version with type Y25 trucks.

Model: Cars come with different car numbers. Car bodies are weathered. Load inserts with a layer of real ballast. Total length over the buffers 26.8 cm / 10-9/16".
DC wheel set 8 x 70 0580



NEM V

47314
Freight Car Set.

Export model for Denmark.

Prototype: 2 Danish State Railways (DSB) type Gbs boxcars. Version with built-up board walls.
Model: The cars come with different car numbers. The car bodies are weathered. Total length over the buffers 32.5 cm / 12-13/16".
DC wheel set 4 x 70 0580

NEM IV

46906
Set – 2 High Side Gondolas.

Export model for Denmark.

Prototype: Danish State Railways (DSB) open freight cars, Eaos
Model: Load inserts as representation of ship scrap. Different road numbers. Each car is individually packaged. Total length over buffers 32.3 cm / 12-23/32".
DC wheel set 8 x 70 0580

N NEM V

48546
Set – 2 Tank Cars.

Export model for Denmark.

Prototype: Crude oil car, type ZE, employed by the Danish State Railways (DSB). Private car of the Danish Petroleum Company, (DDPA), Copenhagen. German design.

Model: Detailed frame with openings. Working platform and brakeman's platform separately applied. Different designs and road numbers. Total length over buffers 20.3 cm / 8".
DC wheel set 4 x 60 1151

N NEM III

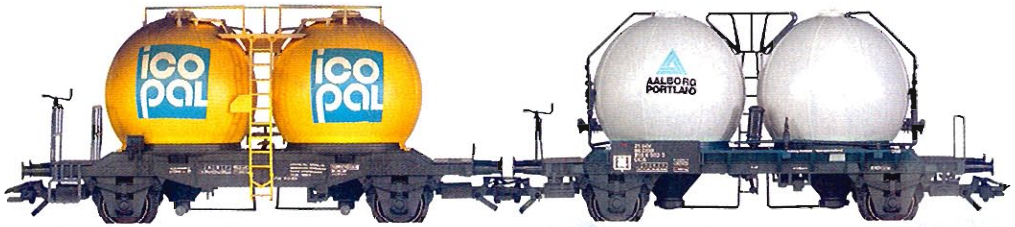
Freight Cars.

46621
2 Silo Cars – Car Set.

Export model for Denmark/Sweden.

Prototype: Type Ucs container cars, one used on the Danish and one on the Swedish State Railways (DSB and SJ). Different designs with 2 spherical containers 34 cubic meters / approximately 1,200 cubic feet capacity. Privately owned cars for construction materials.

Model: Frames have open areas. Piping, platforms, appliances separately applied. Total length over buffers 21.3 cm / 8-3/8".
DC wheel set 4 x 70 0580



NEM IV

47730
Set – 3 Stake Cars.

Export model for Sweden.

Prototype: Swedish State Railways (SJ) Oms flat car with side walls and profiled stakes. Universal and standard car for many years.
Model: Car body with integrated side walls. Stakes can be installed. Car floor with separately applied solebar truss and steps. Different road numbers. Total length over buffers 42.5 cm / 16-23/32".
DC wheel set 6 x 70 0580

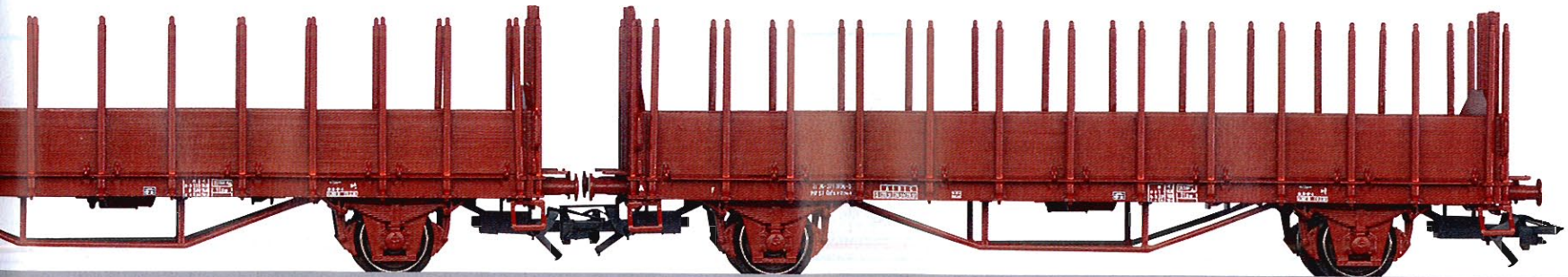
N NEM IV

46624
Silo Container Car Set.

Export model for Sweden.

Prototype: 3 Swedish State Railways (SJ) type Ucs. Design with 2 spherical containers and 34 cubic meters / 8,983 gallons capacity.
Model: Detailed partially open car frame. Piping, platform, equipment separately applied. Total length over the buffers 31.8 cm / 12-1/2".
DC wheel set 6 x 70 0580

NEM IV



Freight Cars.

45648
Car Set – 3 Boxcars.

One-time series.

Prototype: New York Central Railroad (NYC) 40-foot boxcar. "Pacemaker" version.
Model: Metal car floors. Detailed trucks with special wheel sets. Sliding doors that can be opened.

Roof walk, ladders, brake system, and other details separately applied. Cars have different car numbers. Couplers can be replaced by other makes. Total length over couplers 46.7 cm / 18-3/8".

DC wheel set
12 x 32 0552 (NEM)
12 x 32 0389 (RP25)


Pacemaker
FREIGHT SERVICE
NYC
174398
Pacemaker
FREIGHT SERVICE
NYC
174757

Freight Cars.

45650
Set – 3 Boxcars.

Prototype: Pennsylvania Railroad (PRR) type XM boxcar with single door. Version with large logo ("Herald")
Model: Car floor made of metal. Detailed trucks with special wheel sets. Sliding doors that open. Roof walkway, ladders, brake system and other details separately applied. Couplers can be replaced by other couplers. Different road numbers. Each car is individually packaged. Total length over couplers 46.7 cm / 18-3/8".

DC wheel sets
12 x 32 0552 (NEM)
12 x 32 0389 (RP25)

N NEM III

45651
Set – 3 Boxcars.

Prototype: Boxcar with single door, type XM of the Atchison, Topeka & Santa Fe Railway (AT & SF). Version with advertising slogans and map.
Model: Car floor made of metal. Detailed trucks with special wheel sets. Sliding doors that open. Roof walkway, ladders, brake system and other details separately applied. Couplers can be replaced by other couplers. Different road numbers. Each car is individually packaged. Length over couplings 46.7 cm / 18-3/8".

DC wheel sets
12 x 32 0552 (NEM)
12 x 32 0389 (RP25)

N NEM III


VANIA
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PENNSYLVANIA
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LD LMT 170600
LT WT 51400 P 57 124 S

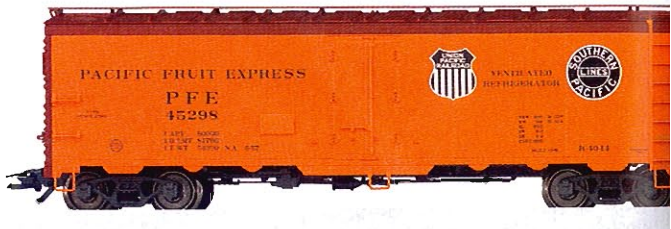

The Scout for ECONOMY TRAVEL West
Bx-36
Santa Fe
A.T.S.F.
6522
CAPY. 100000
LD. LMT. 64800
LT. WT. 64200
THE ROUTE OF
El Capitan
Only All Coach Chicago-Los Angeles Streamliner
Fe-26

Freight Cars.

45680
Car Set – 3 Refrigerator Cars.

Prototype: Union Pacific Railroad (U.P.) and Southern Pacific Lines (S.P.) Pacific Fruit Express (PFE) type R-40-14 reefer (refrigerator car).
Model: Metal frame and floor. Detailed trucks with special wheel sets. 4 sliding doors that can be opened. Roof walk, ladders, brake system and additional details separately applied. Cars come with different lettering. Couplers can be replaced by other types of couplers. Total length over the couplers 46.7 cm / 18-3/8".

DC wheel sets
12 x 32 0552 (NEM)
12 x 32 0389 (RP25)



45690
Car Set – 3 Livestock Cars.

Prototype: Union Pacific Railroad (U.P.) type S-40-12 livestock car. Design widely used in the USA.
Model: Metal car floors. Detailed trucks with special wheel sets. Sliding doors that can be opened. Roof walks, ladders, brake equipment and other details separately applied. Different car numbers. Couplers can be replaced by other makes. Total length over the couplers 46.7 cm / 18-3/8".

DC wheel set
12 x 32 0552 (NEM)
12 x 32 0389 (RP25)

45647
Car Set – 3 Boxcars.

Prototype: Union Pacific Railroad (U.P.) type A-50-19 double door boxcar (Automobile Car).
Model: Metal frame and floor. Detailed trucks with special wheel sets. 4 sliding doors that can be opened. Roof walk, ladders, brake system and additional details separately applied. Cars come with different lettering. Couplers can be replaced by other types of couplers. Total length over the couplers 46.7 cm / 18-3/8".

DC wheel sets
12 x 32 0552 (NEM)
12 x 32 0389 (RP25)


PACIFIC FRUIT EXPRESS
PFE
44954
VENTILATED REFRIGERATOR
PACIFIC FRUIT EXPRESS
P.F.E.
45677
VENTILATED REFRIGERATOR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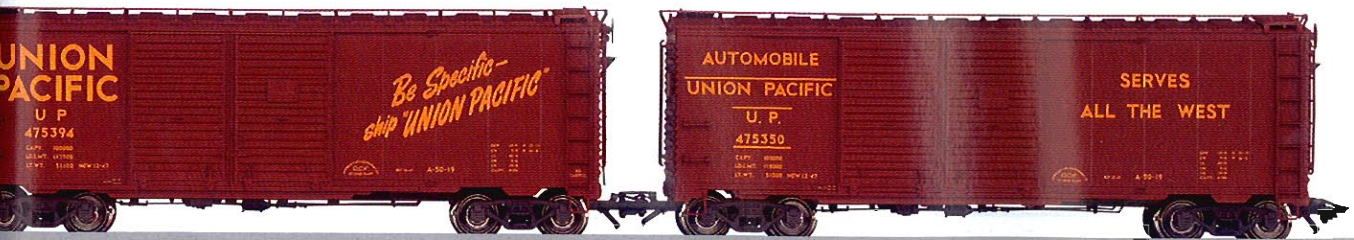
U.P.
47428D
UNION PACIFIC
LIVESTOCK DISPATCH
U.P.
47523D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Be Specific—
ship "UNION PACIFIC"
AUTOMOBILE
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475350
SERVES
ALL THE WEST

Freight Cars.

45646
Boxcar.

Important:
This model is being produced under the same item number with 10 different car numbers.

Prototype: Union Pacific Railroad (U.P.) type B-50-24/B-50-27 boxcar. Standard 40 foot design.
Model: Metal frame and floor. Detailed trucks with special wheel sets. Sliding doors that can be opened. Roof walk, ladders and other details separately applied. Couplers can be replaced with other types. Length over the couplers 15.5 cm / 6-1/8".
DC wheel sets
40 x 32 0552 (NEM)
40 x 32 0389 (RP25)


UNION PACIFIC
ROAD OF The Streamliners
Be Specific- ship "UNION PACIFIC"
SERVES ALL THE WEST


UNION PACIFIC
601

Freight Cars.

45801
Car Set – 4 Hopper Cars.

One-time series.

Prototype: New York Central Railroad (NYC) 40-foot hopper car. 3-bay version.
Model: Metal frames. Detailed trucks with special wheel sets. Ladders and other details separately applied. Cars have different car numbers. Couplers can be replaced by other makes. Total length over couplers 65.0 cm / 25-5/8".
DC wheel set
16 x 32 0552 (NEM),
16 x 32 0389 (RP25)

45800
Car Set – 4 Hopper Cars.

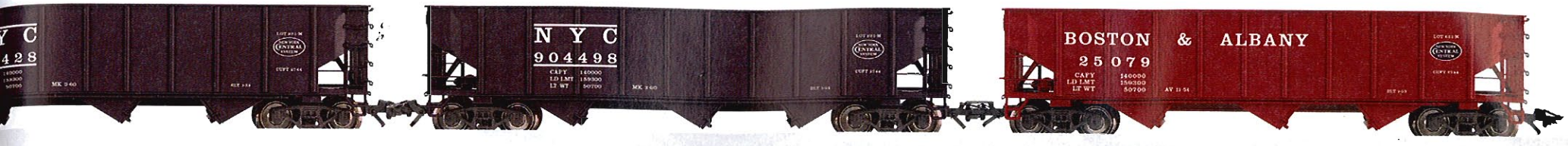
Important:
The 45800 car set contains 4 cars with different car numbers.

Prototype: Union Pacific Railroad (U.P.) type H-70-1 hopper car. Design with 3 bays.
Model: Metal frame. Detailed trucks with special wheel sets. Ladders and other details separately applied. Couplers can be replaced with other types. Length over the couplers 16.2 cm / 6-3/8".
DC wheel sets
16 x 32 0552 (NEM)
16 x 32 0389 (RP25)

45580
Tank Car Set.

One-time series.

Prototype: 3 American design tank cars. American Car & Foundry (ACF) type 105A. Different versions of the the dome, the platforms, and many details.
Model: Detailed metal car frame with partially open areas and with separately applied details. Detailed trucks with special wheel sets. Different car numbers and lettering. Couplers can be replaced with other makes. Total length over the couplers is approximately 42.0 cm / 16-9/16".
DC wheel sets
12 x 32 0552 (NEM)
12 x 32 0389 (RP25)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LD LMT 139300
LT WT 50700
BOSTON & ALBANY
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CAPY 140000
LD LMT 139300
LT WT 50700


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PACIFIC
UNION PACIFIC
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ELECTRO BLEACHING
GAS COMPANY
E.B.G.X.305
NIAGARA FALLS, N.Y.
THE MATHIESON ALKALI WORKS
NIAGARA FALLS, N.Y.
SHPX 3305
MATHIESON
Chemicals

Freight Cars.

45702
Caboose.

Prototype: Union Pacific Railroad (U.P.) type CA 3/CA-4 caboose. Design with center cupola.
Model: Metal frame and floor. Detailed trucks with special wheel sets. Platforms at both ends with hand brakes. Roof walk, ladders and other details separately applied. Couplers can be replaced with other types. Length over the couplers 14.2 cm / 5-9/16".

DC wheel sets
4 x 32 0552 (NEM)
4 x 32 0389 (RP25)

NEM III

45703
Caboose.

Prototype: New York Central System (NYC) series 19000 caboose. Version with walls of built-up boards.
Model: Goes with the model of the "Mikado" steam locomotive, item no. 37970. Metal frame and detailed floor. Brake layout, handrails, grab irons, and many other details separately applied. Detailed trucks with special wheels. Couplers can be replaced with other makes. Total length over the couplers is approx. 14.5 cm / 5-11/16".

DC wheel sets
4 x 32 0552 (NEM)
4 x 32 0389 (RP25

NEM III

45705
Freight Train Caboose.

Prototype: Caboose type N5c of the Pennsylvania Railroad (PRR). Version with streamlined cupola. **Model:** Car floor made of metal. Detailed trucks with special wheel sets. Roof walkway, brake system and other details separately applied. Couplers can be replaced by other couplers. Length over couplings 11.7 cm / 4-19/32".

DC wheel sets
4 x 32 0552 (NEM)
4 x 32 0389 (RP25)

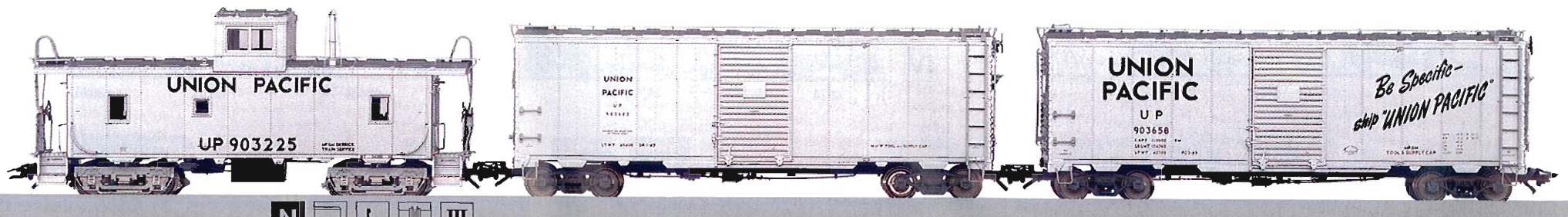
N NEM III

45652
Set – 3 Railroad Maintenance Cars.

Prototype: 2 Box cars and 1 caboose of the Union Pacific Railroad (U.P.). Special versions as work cars for maintenance of the railway track ("maintenance of way").

Model: Car floor made of metal. Detailed trucks with special wheel sets. Box cars with sliding doors that open. Caboose with interior lighting and dual side brakeman's platform. Roof walkway, ladders, brake system and other details separately applied. Couplers can be replaced by other couplers. Different road numbers. Each car is individually packaged. Length over couplings 45.7 cm / 18".

DC wheel sets
12 x 32 0552 (NEM)
12 x 32 0389 (RP25)



N NEM III

German freight trains.

International freight trains.

III

44900 46752 48821 37886

III

36806 47879 47878 37559

III

45702 45680 45690 37973

III

48252 48672 48449 37332

IV

47730 37134

IV

36335 46624 46621 37413

IV

47314 37364

IV

48807 36330

V

44333 48545 37658

V

46556 47149 47441 47192 47449 36851

Accessories.

Signals belong to a proper railroad route and are available in three versions in the Märklin program. The classic semaphore signals with mechanical drive, the hobby signal lights for standard operations and the professional digital light signals with an absolutely to scale appearance and many functions. All signals are attached to the track, the connection is always simple. Technology and function are equipped for all model train applications, the train movement control is standard. The trains stop in front of the signal at red and start when the picture changes to green.

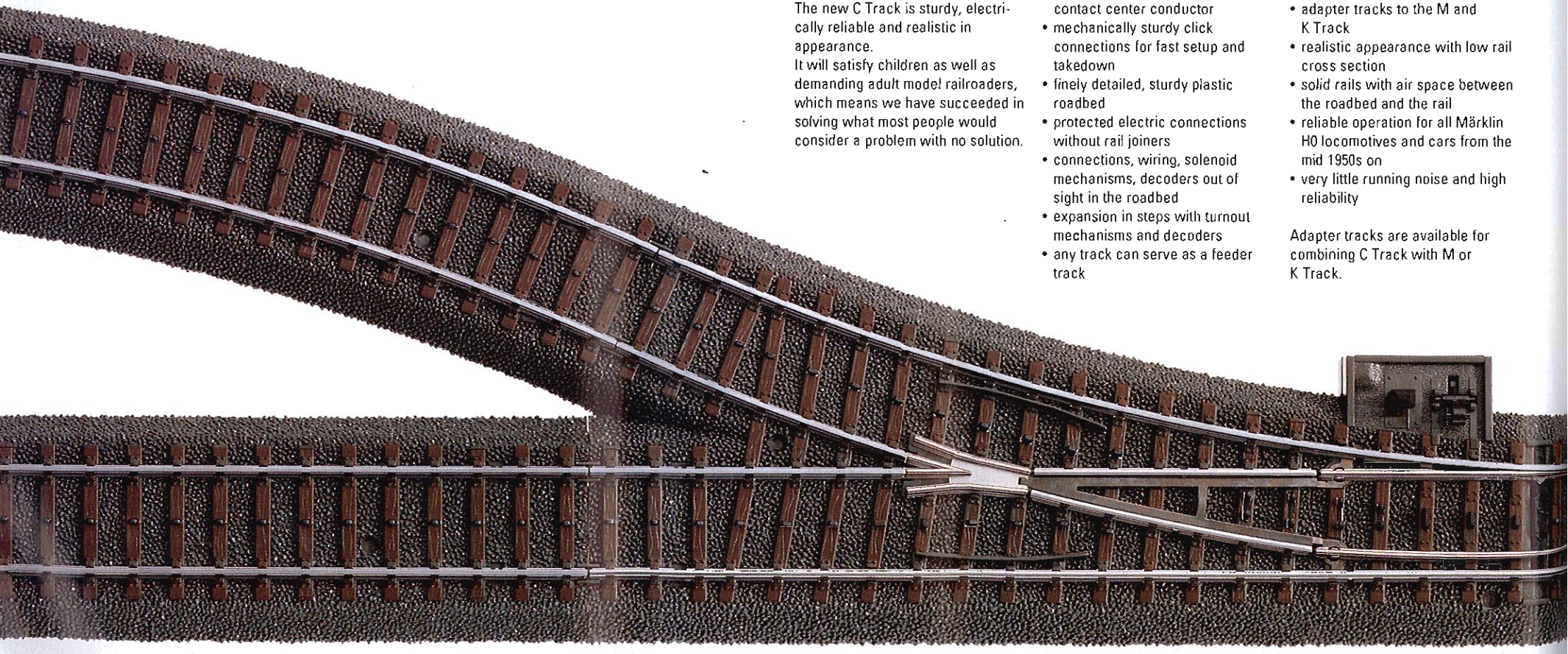
The current Märklin catenary offers more than only "stripping above the rails". The fine wires precisely reflect the catenary-type overhead contact line of the model. The masts may be placed on the C-track with a plug connection. The Märklin catenary also offers a prototypical electrical operation, in addition to the convincing appearance: Many electrical locomotives by Märklin can obtain their power from the track and also from the contact line, if it is carefully installed and then connected to the power supply.

The locomotives roll into the depot after business hours. You will find individual stations for a prototypical depots as functional units with impressive operating possibilities in the accessories program by Märklin: Turntable, transfer table, coal loading facility, locomotive sheds. Self-sufficient layout themes are even offered, especially in combinations. A portal crane is used at the freight station, which is powered by miniature engines and controlled by remote control.

Your Märklin dealer has the accessories program at the ready – but you must set it up and play with it yourself.


Shell
Shell
Raiffeisen

The Solution To An Impossible Task.



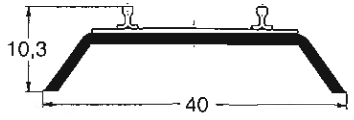
C Track.

The new C Track is sturdy, electrically reliable and realistic in appearance.
It will satisfy children as well as demanding adult model railroaders, which means we have succeeded in solving what most people would consider a problem with no solution.

The details of this solution:

- reliable Märklin system with stud contact center conductor
- mechanically sturdy click connections for fast setup and takedown
- finely detailed, sturdy plastic roadbed
- protected electric connections without rail joiners
- connections, wiring, solenoid mechanisms, decoders out of sight in the roadbed
- expansion in steps with turnout mechanisms and decoders
- any track can serve as a feeder track
- optimal geometry requires fewer parts and adjustment sections
- adapter tracks to the M and K Track
- realistic appearance with low rail cross section
- solid rails with air space between the roadbed and the rail
- reliable operation for all Märklin H0 locomotives and cars from the mid 1950s on
- very little running noise and high reliability

Adapter tracks are available for combining C Track with M or K Track.



The track sections are 40 mm / 1-9/16" wide. 40 mm / 1-9/16" must therefore be subtracted in each instance from the indicated center-to-center spacings to produce clearance.

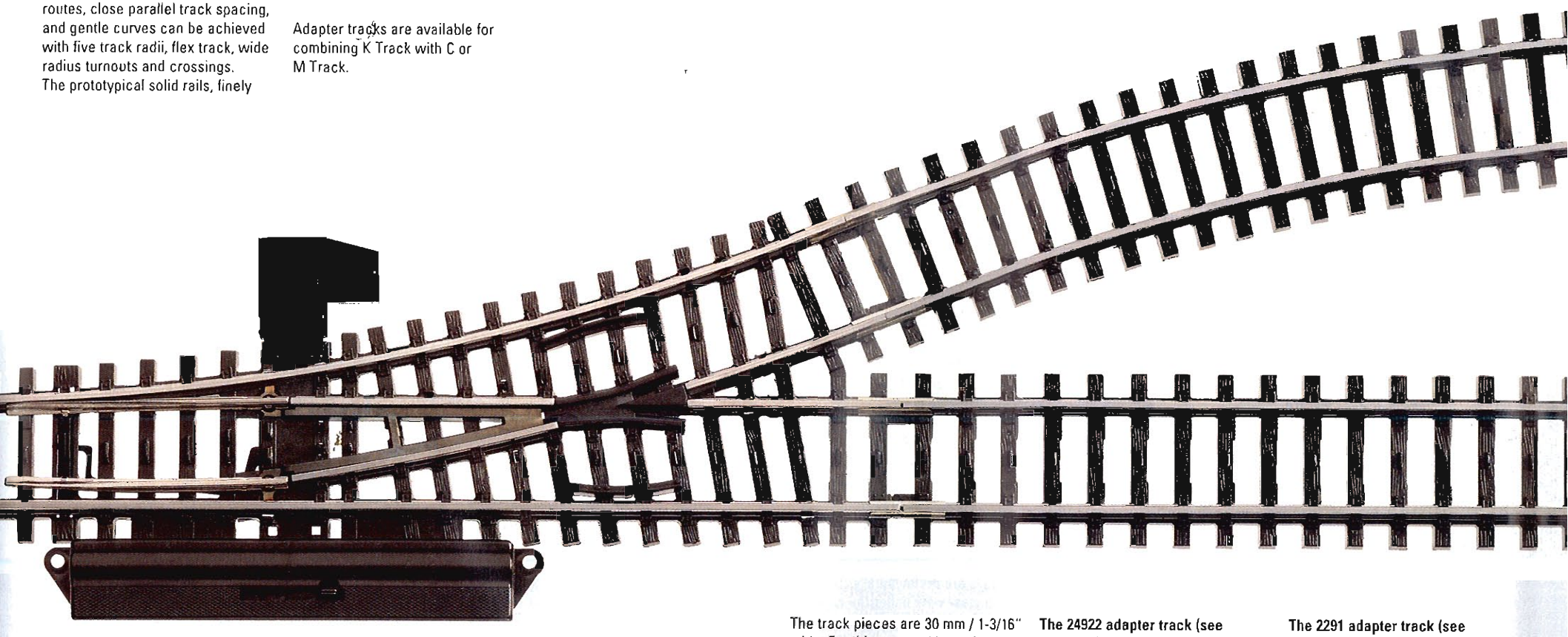
The 24922 adapter track (see page 337) is available for anyone wanting to combine C Track with K Track.

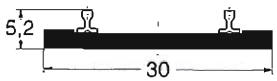
The 24951 adapter track (see pege 337) enables you to combine C Track and M Track.

K Track.

K track offers the demanding model railroader a multitude of possibilities for sweeping main lines and prototypical layout construction. Elegant routes, close parallel track spacing, and gentle curves can be achieved with five track radii, flex track, wide radius turnouts and crossings. The prototypical solid rails, finely detailed ties without roadbed and the ability to install turnout mechanisms below the baseboard offer all of the freedom in the world for creating a model railroad close to the real thing.

Adapter tracks are available for combining K Track with C or M Track.





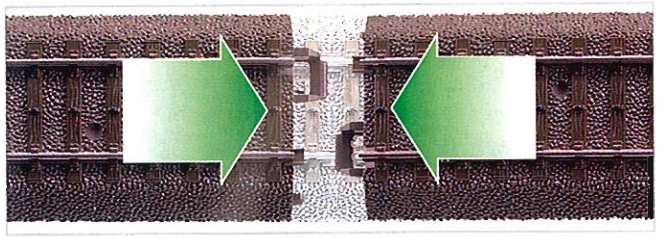
The track pieces are 30 mm / 1-3/16" wide. For this reason 30 mm / 1-3/16" must be subtracted from the indicated track center-to-center distances to maintain a clear spacing.

The 24922 adapter track (see page 337) enables you to combine K Track and C Track.

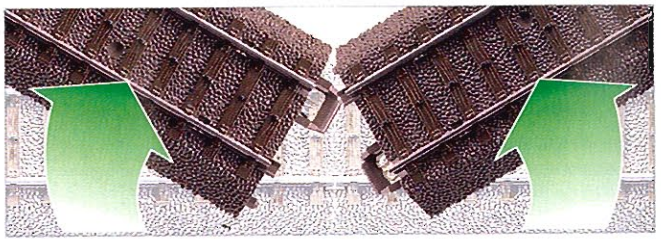
The 2291 adapter track (see page 350) is available for anyone wanting to combine K Track with M Track.

C Track – The Track with the "Click".

The track for building and playing.



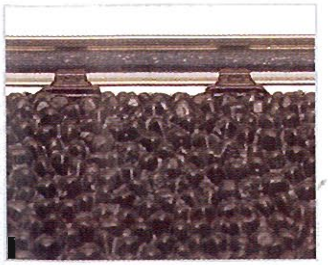
The plug-in connection with the "Click".
The unique plug-in connection is the key feature of C Track: just a slight push with your hands – the mechanical and electrical connection is simultaneously made and safely lokked in place. The locking connection with the "Click" holds the tracks together on the layout in a way that is reliable for operation and geometrically precise. To separate the tracks, simply bend them against one another; the lock connection is undone. This unique plug-in connection is patented (DBP 40 33 440).



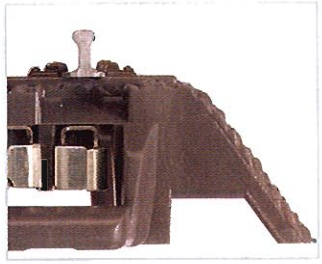
Setup in no time at all.
Even larger layouts can be set up in a few minutes with the ready-to-run track sections and the fast locking connection.

Sturdy and long-lasting.
The track and its roadbed are made of high quality materials designed to keep their shape and sustain heavy loads. C Track is durable and is almost indestructible even when it is put together and taken apart constantly or subjected to the hardest operation.

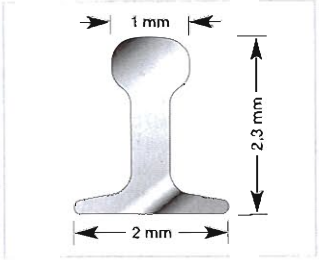
The track to meet most people's demands.

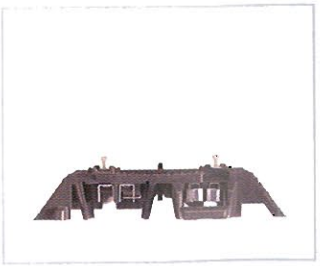


The roadbed.
The roadbed for the track has a striking ballast structure in the color of aged basalt ballast. The width of the roadbed (40 mm / 1-9/16") enables any and all track combinations without the necessity of cutting the slope of the roadbed.

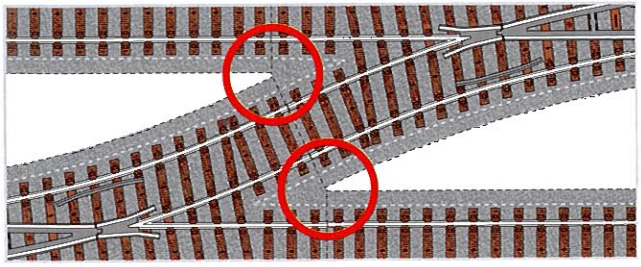


The striking profile.
The profile rails are made of highly stable stainless steel. The cross-section with a profile height of 2.3 mm / 3/32" (code 90) closely corresponds to the scale profile. The rails are prototypically mounted with a clear view under the web of the rail.



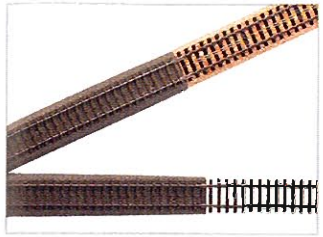


Ideal dimensions for track roadbed.
The cross section of the track provides the proportions for a realistic track roadbed on a rail line. The full width remains preserved even at a turnout or crossing. There is sufficient space between the tracks for catenary or signals.



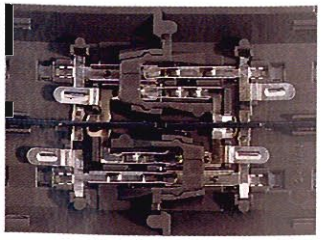
The finished track structure.
All sections of C Track are ready for installation; they require no additional handling or processing. The track structure does not have to be cut and above all does not have to be ballasted.

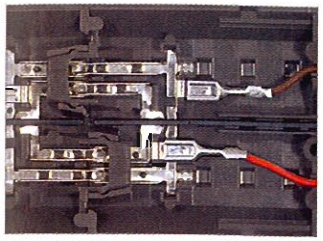
The track that connects.



The Märklin H0 system.
Compatibility of the Märklin track systems with each other (adapter tracks to M and K Track). Reliable center rail operation. Common ground for the running rails and for accessories. Control with conventional Märklin transformers, in the Delta multi-train control system or in the Märklin Digital system. Any track pattern possible without extensive wiring (example: reverse loops and wyes).

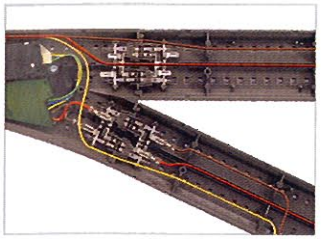
Good connections.
The mechanical and electrical connections for the track sections cannot be seen from the outside. This results in a perfect, complete visual impression. Rail joiners are not needed. The snap-together connection locks the track sections to one another. This keeps the track geometry of a layout in precise alignment without the need to fasten the track down.



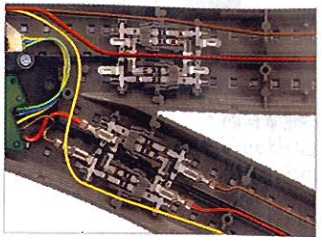


Integrated Feeder Track.
Instead of additional feeder tracks, with C Track each element can be used for track power feed. The feeder wire set with standardized flat plugs can be directly plugged onto the contact fingers on each track end.

The track with "inner values".

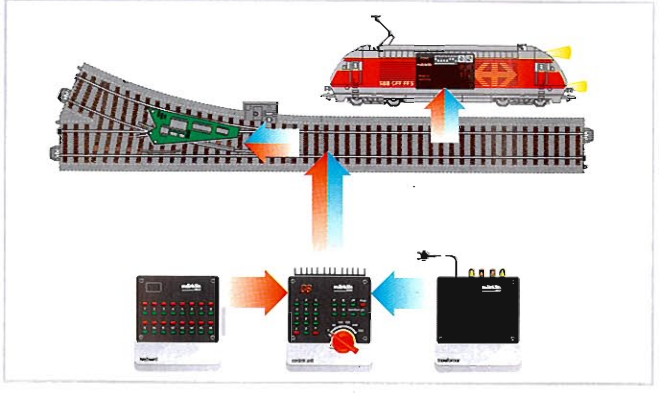


Space for all sorts of uses.
The roadbed for the C Track offers all sorts of useful space which has been prepared for the installation of electrical and mechanical components as well as for incorporation of a layout's wiring.

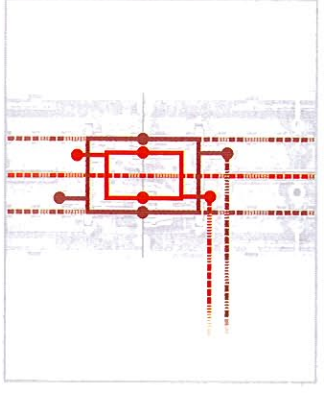


Digital decoders on the spot.
The small installation digital decoders for turnouts, signals and other digitally control accessories can be installed under the roadbed.

The track that conducts your data.



Power and data directly in the track.
C Track is perfectly designed for the way in which the Digital system functions: The electrical power and the digital data are constantly transmitted through the track.



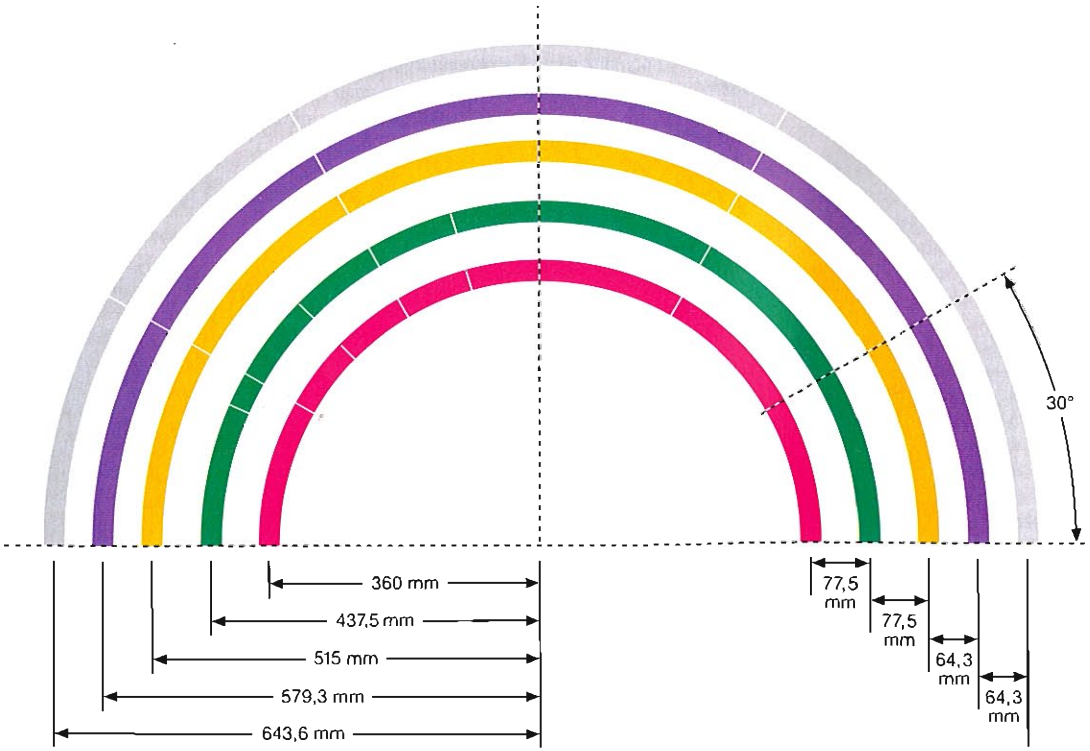
Requirements for digital operation.
The most important requirement for reliable operation of digital layouts was taken into consideration right from the start in the design of C Track: continuous, reliable contact for transmission of rapid digital data.

C Track – The Track with Easy to Understand Geometry.

The Different C Track Curves

The standard C Track curve has the customary radius for H0 of 360 mm / 14-3/16" and an external diameter of 76 cm / 30". The first parallel curve with a radius of 437.5 mm / 17-1/4" forms an external diameter of 91.5 cm / 36". A width of 1 meter or 39" allows you to set up a complete two-track oval.

The second parallel curve with a radius of 515 mm / 20-1/4" has an external diameter of 107 cm / 42-1/8". The parallel curve spacing of 77.5 mm / 3-1/16" offers sufficient space for longer locomotives and cars to pass one another on these curves and enables you to set up signals or catenary masts. This curved track comes as 30° sections and 12 sections form a circle. In addition, there are half and quarter sections (15° and 7.5°). The tracks (24.3° and 5.7°) required for turnout combinations come from the R2 parallel curve. The outer R4 and R5 curved tracks with the radii 579.3 mm / 22-13/16" and 643.6 mm / 25-5/16" are made with a closer track spacing of 64.3 mm / 2-9/16". They form circles with an external diameter of 120 cm / 47-1/4" and 133 cm / 52-3/8" and come in 30° sections.



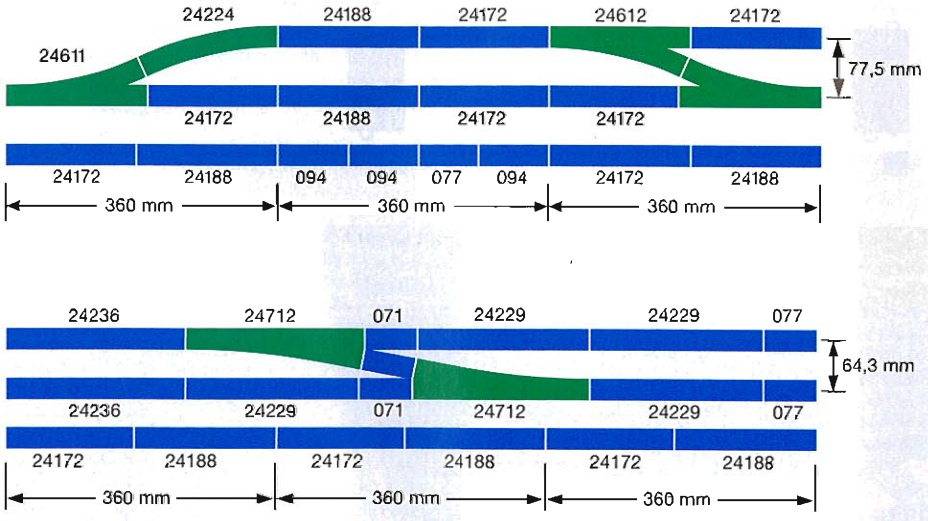
Color Coding:

- Straight track and crossings
- Curved track and turnouts from Radius 1 (R1)
- Curved track and turnouts from Radius 2 (R2)
- Curved track from Radius 3 (R3)
- Curved track from Radius 4 (R4)
- Curved track from Radius 5 (R5)
- Curved track and turnouts from Radius 9 (R9)

The Basic Track Unit: 360 mm / 14-3/16".

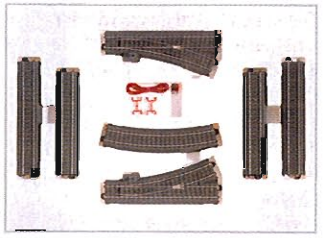
A generous and space-saving basic track unit of 360 mm / 14-3/16" was used for route construction with C Track. This corresponds to the length of a turnout combination and equals the length of the turnouts (188.3 / 7-13/32") and the length of the complementary curve (171.7 mm / 6-3/4"). Both lengths are present as straight tracks.

In addition two partial lengths are provided: 94,2 mm / 3-23/32" (1/2 of 188,3 mm / 7-13/32") and 77.5 mm / 3-1/16" (extension 94.2 mm / 3-23/32" to 171.7 mm / 6-3/4"). The function tracks (e.g. uncoupler track) are also 94.2 mm / 3-23/32" long. The second partial length precisely corresponds to the parallel curve spacing (77.5 mm 3-1/16") The 236.1mm / 9-9/32" long wide radius turnouts form combinations of 536.2 mm / 21-1/8" in length. There are other appropriate lengths for this, and for adding to the 360 mm / 14-3/16" basic track unit: 229.3 mm / 9-1/32", 70.8 mm / 2-25/32" and 64.3 mm 2-17/32".

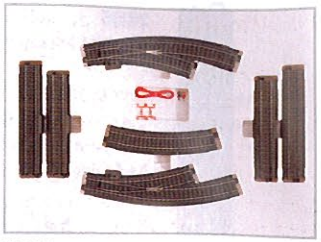


C x C Extension program.

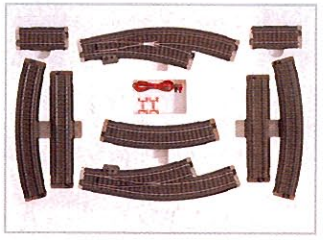
Extension sets for step-by-step extension of a track layout from the basic equipment to private railway. Items 24902, 24903, 24904 and 24905 are on page 38.



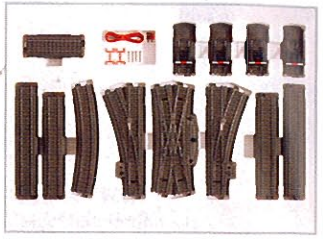
24902



24903



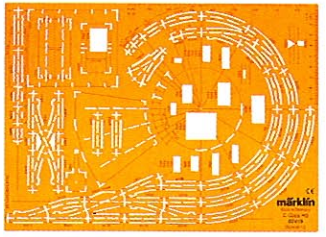
24904



24905

02415
Track Planning Stencil for C-Track.

For individual planning of track layouts. The most important normal geometry tracks, turnouts and intersections (radius R1, R2, and R3) are marked in 1:5 scale. The elements can be transferred to paper with a sharp pencil (a fine pencil lead 0.5 mm / 1/32" is recommended) and placed together. Representation of the track pitch line and the space required by the tracks Detailed instructions.



Planning Aids.

Track planning on your computer.

60521 Märklin 2D/3D Track Planning Software
(CD ROM)
see page 423.

Advisors in print.

07455 Track Planning Book C Track
see page 421.
07459 Track Planning Book C Track
see page 421.
188987 Märklin Magazine – C Track Special
see page 421.

Straight Track.

24236
Straight Track.

Length 236.1 mm / 9-5/16".
Corresponds to the length of the wide radius turnout and wide angle crossing.

24229
Straight Track.

Length 229.3 mm / 9".
Serves as the complement to the length of the complementary curve on the wide adius turnouts and wide angle crossing.

24188
Straight Track.

188.3 mm / 7-13/32".

24172
Straight Track.

171.7 mm / 6-3/4".

24094
Straight Track.

94.2 mm / 3-3/4".

24077
Straight Track.

77.5 mm / 3-1/16".

24071
Straight Track.

Length 70.8 mm / 2-13/16".
Roadbed slope removable.
This track is used on both branches of the wide radius turnouts and wide angle crossing.

24064
Straight Track.

Length 64.3 mm / 2-9/16".
Corresponds to the parallel track spacing for the wide radius turnouts and wide angle crossing.

Function Tracks.

24951
Adapter Track to M Track.

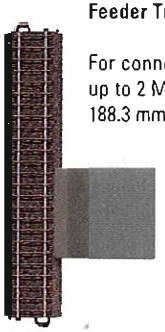
180 mm / 7-3/32".
Enables the transition from M to C Track.

24922
Adapter Track for K Track.

180 mm / 7-3/32".
Enables transition from plastic track to C Track.

24995
Contact Track Set.

Two straight track sections, each 94.2 mm / 3-3/4". Continuous contact through wheel sets. With insulated section of rail for track occupation feedback when traversed by train. Can be extended with regular straight or curved track sections.



24088
Feeder Track.

For connecting a transformer and up to 2 Mobile Stations. Length 188.3 mm /7-13/32".

24994
Straight Circuit Track.

Length 94.2 mm / 3-3/4".
Momentary contact by means of locomotive/car pickup shoe.

24997
Uncoupler Track.

94.2 mm / 3-3/4",
electric.

24978
Track End with Bumper.

77.5 mm + 5 mm /
3-1/16" + 3/16",
with lantern.

24977
Track End with Bumper.

77.5 mm + 5 mm /
3-1/16" + 3/16".

24001
End Piece with Track Roadbed.

Snap-in end piece for the C Track roadbed. For the end of a train line, sidings, display bases, and display cases. Length 16.5 mm / 5/8".
10 pieces in a package.

24294
Curved Circuit Track.

R2 = 437.5 mm / 17-1/4" / 15°.
Momentary contact by means of locomotive/ car pickup shoe.

24194
Curved Circuit Track.

R1 = 360 mm / 14-3/16" / 15°.
Momentary contact by means of locomotive/ car pickup shoe.

Curved Track.

24130
Curved Track.

R1 = 360 mm / 14-3/16" / 30°.

24115
Curved Track.

R1 = 360 mm / 14-3/16" / 15°.

24107
Curved Track.

R1 = 360 mm / 14-3/16" / 7.5°.

24230
Curved Track.

R2 = 437.5 mm / 17-1/4" / 30°.

24224
Curved Track.

R2 = 437.5 mm / 17-1/4" / 24.3° (turnout branch).

24215
Curved Track.

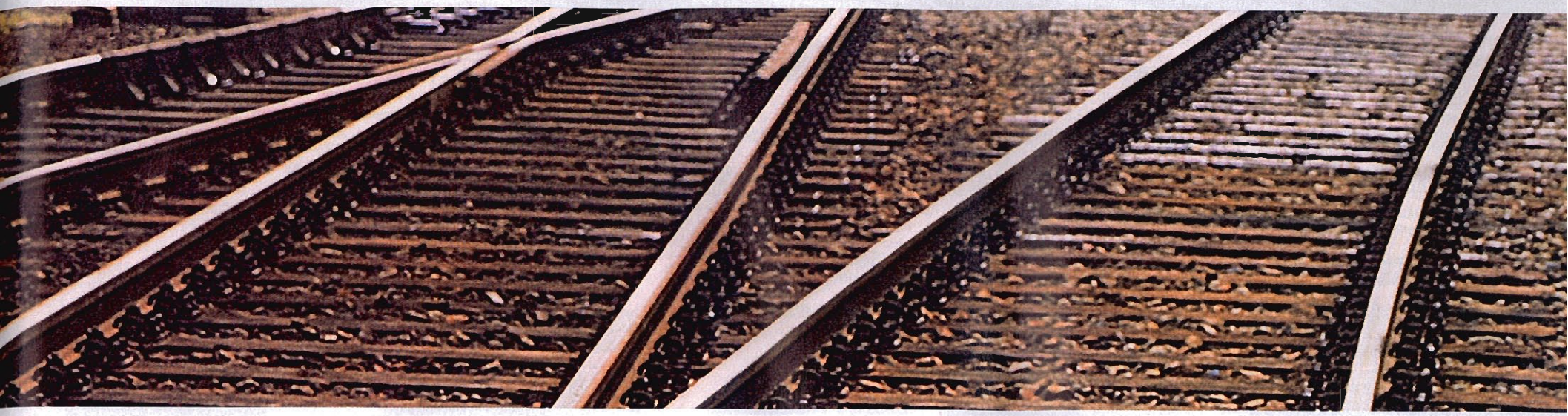
R2 = 437.5 mm / 17-1/4" / 15°.

24207
Curved Track.

R2 = 437.5 mm / 17-1/4" / 7.5°.

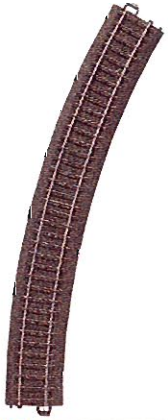
24206
Curved Track.

R2 = 437.5 mm / 17-1/4" / 5.7° (extends turnouts to 30°).



24330
Curved Track.

R3 = 515 mm / 20-1/4" / 30°.

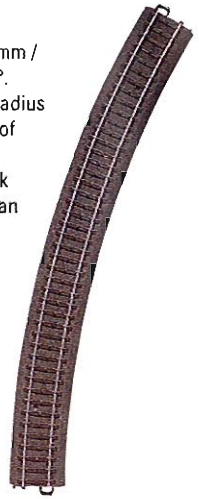


24430
Curved Track.

Radius R4 = 579.3 mm / 22-13/16". Curve 30°. Parallel curve to Radius R3 with a spacing of 64.3 mm / 2-9/16". 12 sections of track form a circle with an outer diameter of 120 cm / 47-1/4".

24530
Curved Track.

Radius R5 = 643.6 mm / 25-5/16". Curve 30°. Parallel curve to Radius R4 with a spacing of 64.3 mm / 2-9/16". 12 sections of track form a circle with an outer diameter of 133 cm / 52-3/8".



24912
Curved Track.

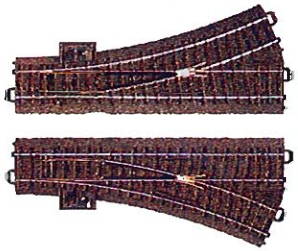
Radius 1114.6 mm / 43-7/8". Curve 12.1°. Complementary curve for the wide radius turnouts and wide angle crossing. Also suitable for use in constructing main lines.

Turnouts and Crossings.

24611
Left Turnout.

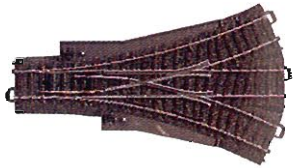
24612
Right Turnout.

188.3 mm / 7-13/32" / R2 = 437.5 mm / 17-1/4" / 24.3°. With manual hand lever. Can be retrofitted with the 74490 turnout mechanism, 74460 digital decoder and 74470 turnout lanterns.



24630
Three-Way Turnout.

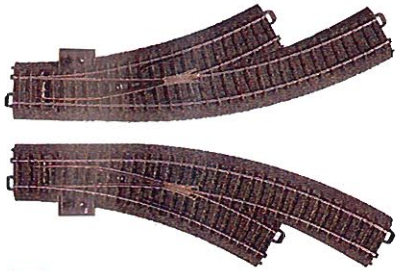
Length 188.3 mm / 7-13/32" / 2 x 24.3°. Connection dimensions on both sides are the same as 24611 / 24612 turnouts. Asymmetrical frog area with offset switch rails. Two hand levers. Can be retrofitted with two 74490 electric mechanisms and two 74470 turnout lanterns. Digital operation possible with 60830 decoder.



24671
Left Curved Turnout.

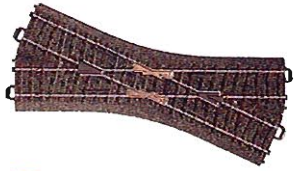
24672
Right Curved Turnout.

Inner curve: R1 = 360 mm / 14-3/16" / 30°. Outer curve: 30° in the parallel curve spacing of 77.5 mm / 3-1/16". With manual hand lever. Can be retrofitted with the 74490 turnout mechanism, 74460 digital decoder and 74470 turnout lanterns.



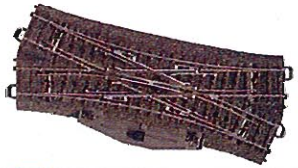
24640
Crossing.

188.3 mm / 7-13/32" / 24.3°.



24624
Double Slip Switch.

188.3 mm / 7-13/32" / 24.3°. **Comes with electric mechanism and lighted double slip switch lantern.** Can be retrofitted with 74460 digital decoder.

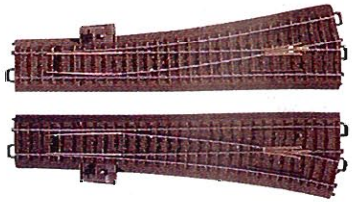


24711
Left Hand Wide Radius Turnout.

24712
Right Hand Wide Radius Turnout.

Length 236.1 mm / 9-5/16". Branch track radius 1,114.6 mm / 43-7/8". Turnout curve 12.1°. 10° metal frog.

2 sections 24701 track required at the ends of the turnout, suitable roadbed slope piece included. With hand lever. Can be retrofitted with 74490 electric turnout motor, 74470 turnout lantern, and 74460 turnout decoder.

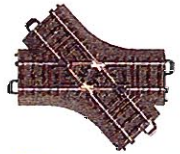


24740
Wide Angle Crossing.

Length 236.1 mm / 9-5/16". Crossing angle 12.1°. Crossing legs electrically isolated from each other. 4 sections of 24071 track are required at the ends of the crossing (not included with 24740). 2 suitable roadbed fill-in pieces included.

24649
Crossing.

103.3 mm / 4-1/16". 48.6°. For double crossovers or intersecting parallel routes.



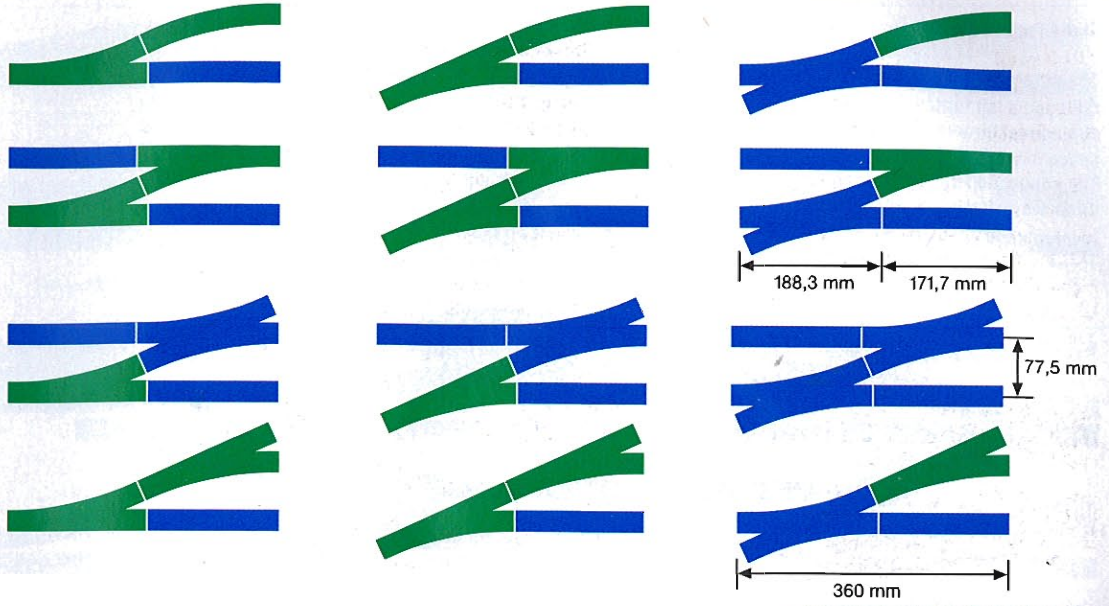
Turnouts and Crossings.

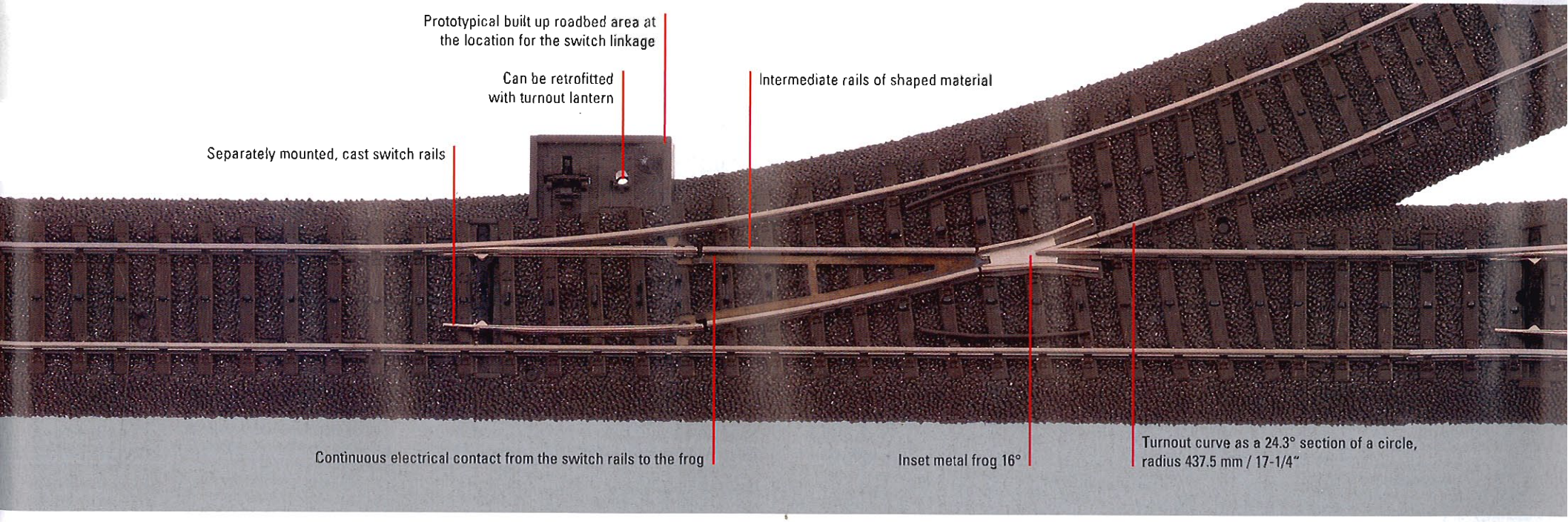
The Geometry of Turnouts and Crossings.

The turnouts and crossings in the C Track program have the same length (188.3 mm / 7-13/32") and the same angle (24.3°), and the same connection dimensions with symmetrical legs. This allows you to install turnouts either straight or diagonal to a length of track or to exchange them with crossings or double slip switches without having to make changes to the rest of the track layout.

Right and left crossings are identical and do not require any additional extension sections on the diagonal side. This means a smaller number of track sections compared to the M Track.

The length of the complementary curve is counterbalanced in all combinations with the same straight track (171.7 mm / 6-3/4"). Additional special adjustment sections are not needed.



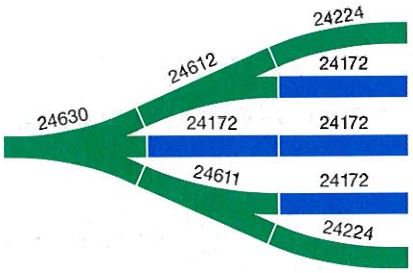


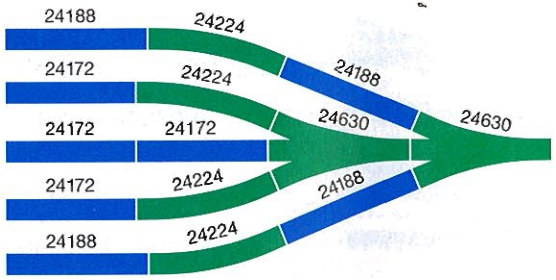
Turnouts and Crossings.

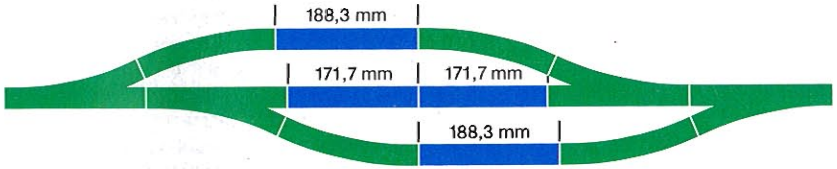
Three Paths Save Space.

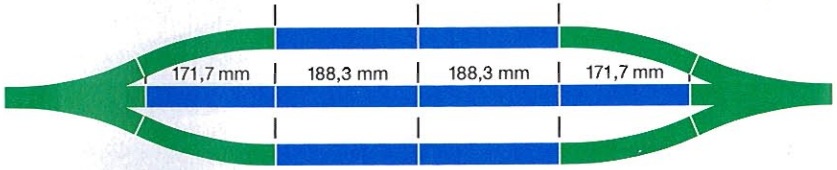
The three-way turnout combines a right and a left turnout in the space of a normal turnout. This saves space in yards and station areas. The connection dimensions for the three-way turnout are the same on both sides as a normal turnout; the layout of the branch tracks is however prototypically asymmetrical. The offset frogs and switch rails prevent joints at the same point of both sides of the track and guarantee a high level of operating reliability in all directions.

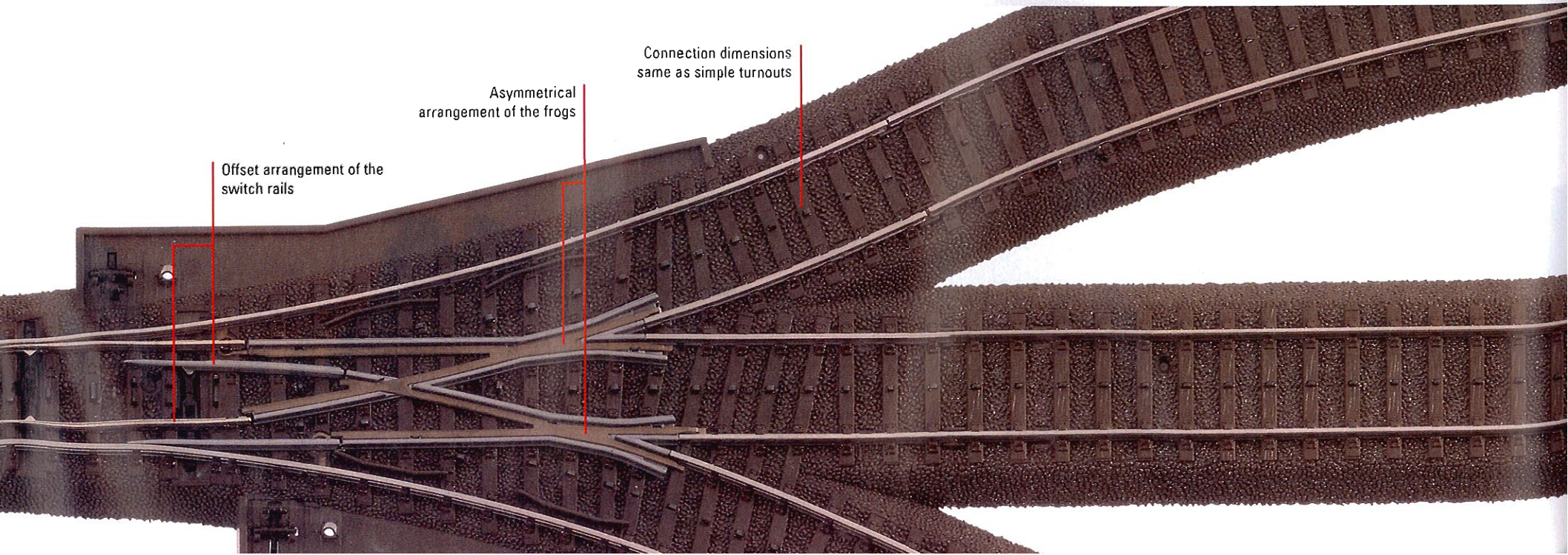
Corresponding to the three-way turnouts design as a "double turnout", it is equipped with two independent hand levers that can be replaced by two 74490 electric turnout mechanisms and a pair of 74470 lanterns.











The wide radius turnouts for C Track.

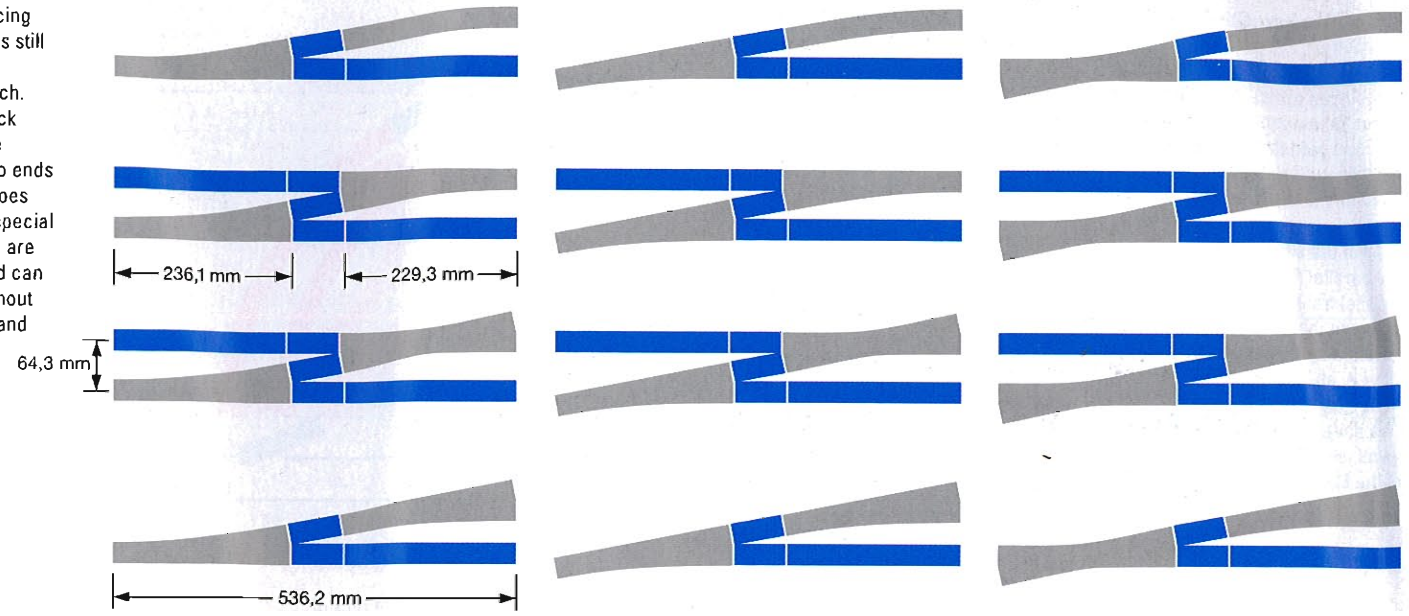
The purposeful continued development of the C Track program is also giving the demanding model railroader a generous track geometry for a prototypical appearance.

The specifics on the wide radius turnouts can be seen below:

- turnout length 236.1 mm / 9-5/16"
- branch track radius 1,114.6 mm / 43-7/8"
- turnout curve 12.1°
- frog angle 10°
- track spacing 64.3 mm / 2-9/16"

As with the compact 24° turnouts, the turnout ends in the 12° system are also symmetrical in their design; the connection dimensions are the same in every installation situation.

Even with a narrow track spacing and an acute turnout angle it is still possible to have continuous roadbed on the turnout's branch. One section each of 24071 track with removable roadbed slope pieces are installed on the two ends of the turnout; the track bed does not have to be altered in any special way. The wide radius turnouts are equipped with hand levers and can be retrofitted with electric turnout motors, installation decoders and turnout lanterns.



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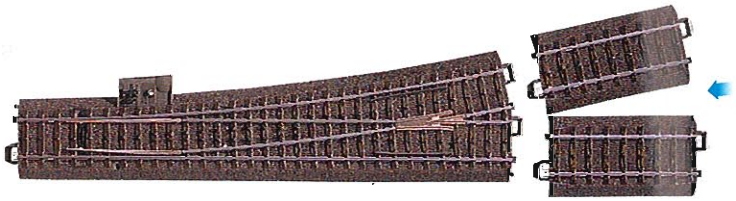

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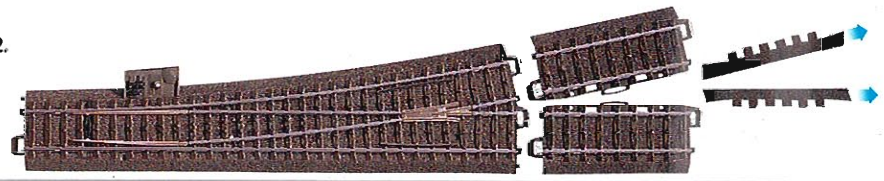

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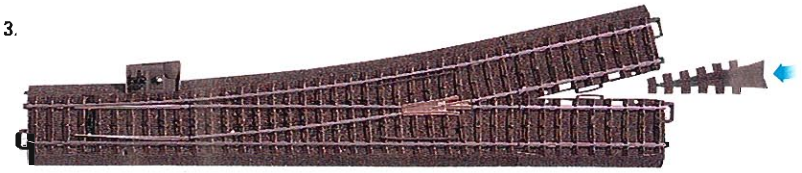

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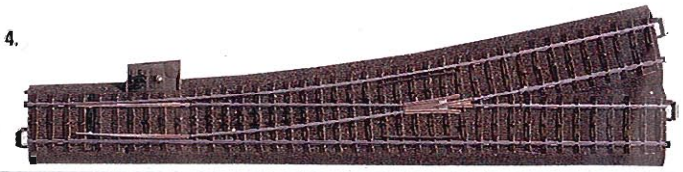
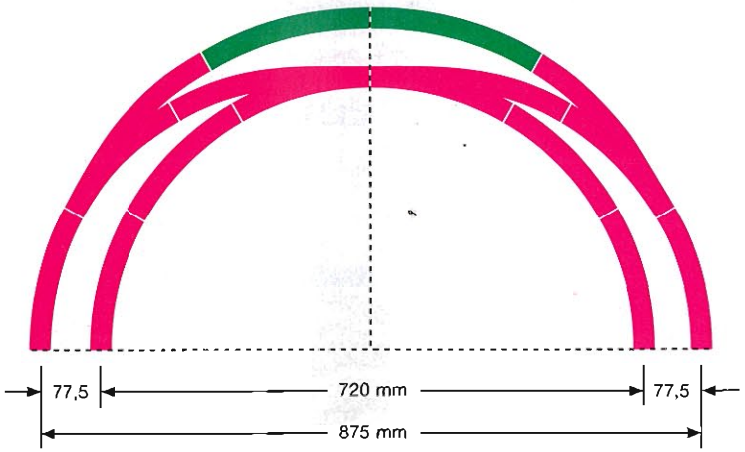


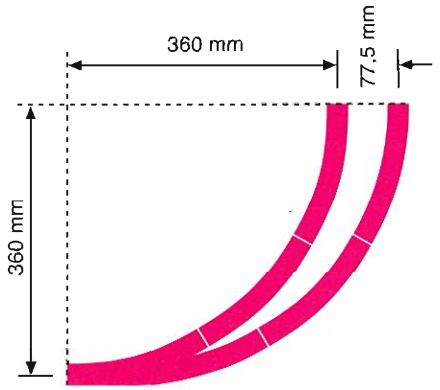
Curved Turnouts.

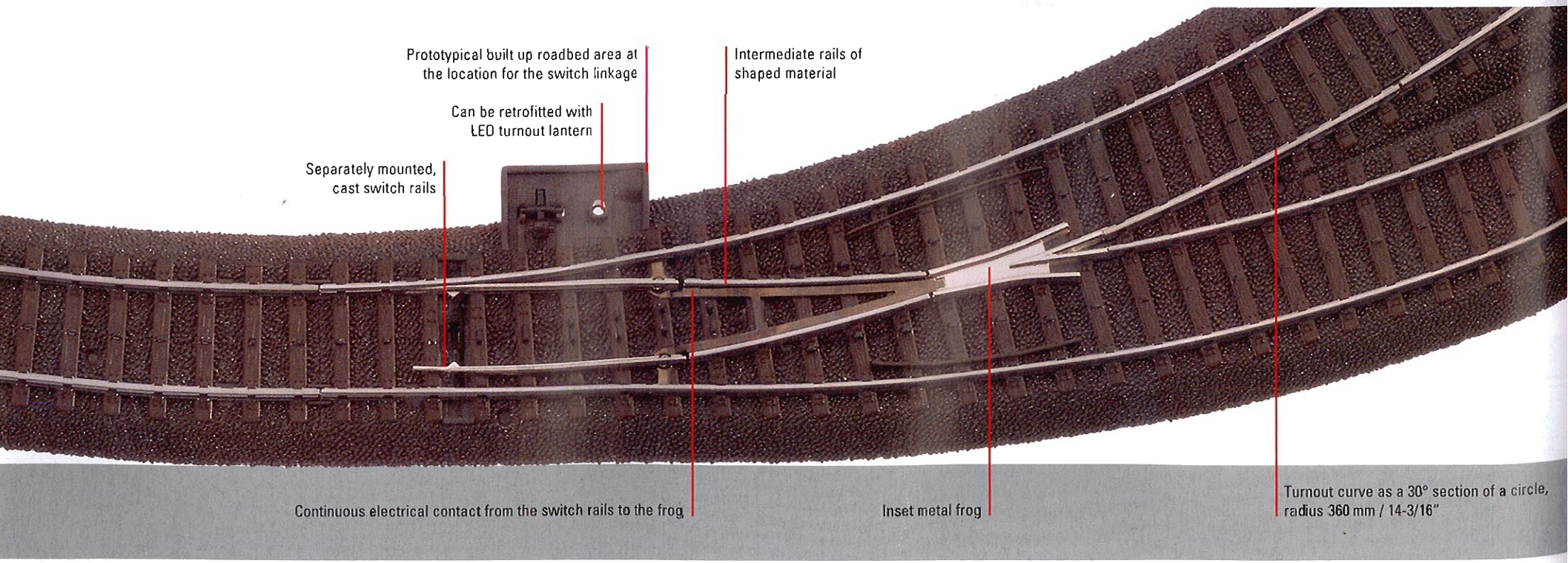
Curved Turnouts with Round Geometry.

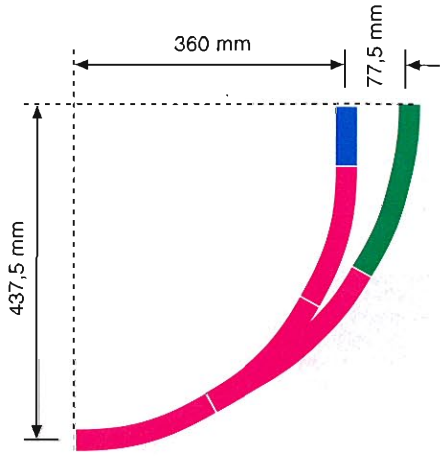
The curved turnouts consist of two offset 30° curved sections from Radius 1, and the main branch of the turnout is extended in length by 77.5 mm / 3-1/16". This means that the same turnout geometry can be used in the standard R1 curve and in the parallel R2 curve. Sidings with a parallel track spacing or crossovers between the R1 and R2 curves are possible as simple combinations at 60°, i.e. at 1/6 of a circle.

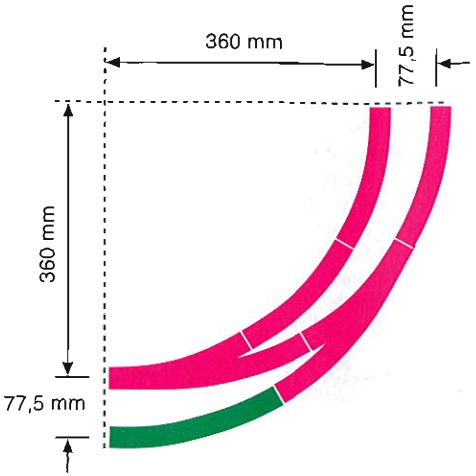
This saves space in curves and gains length in the straight areas of the layout.

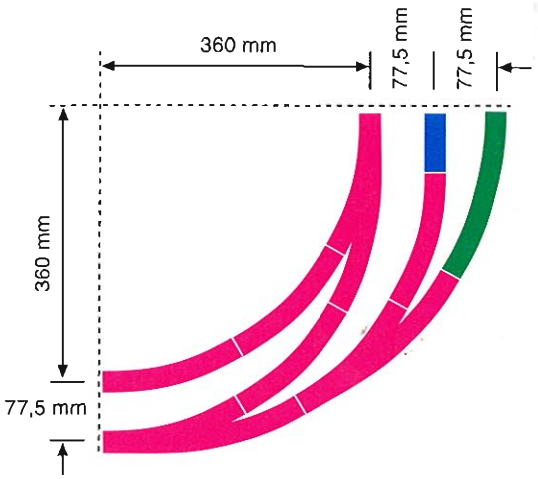


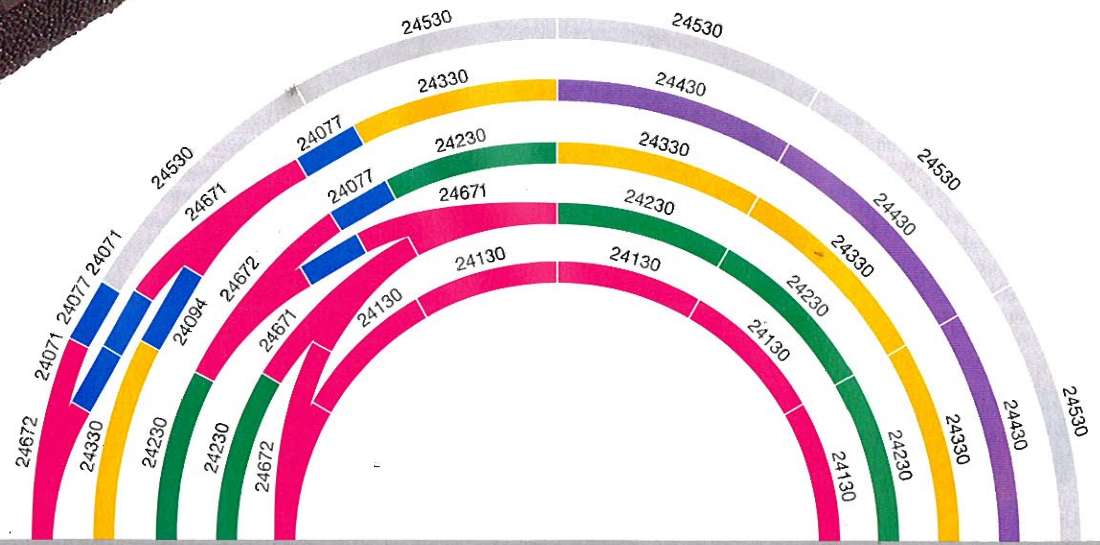












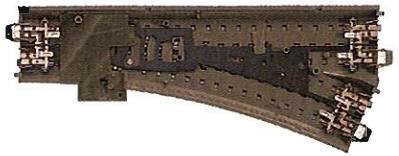
Curved turnouts in all curves.

With the universal curved turnouts even 2-track or 3-track connections can be produced for the larger 24330 parallel curve. The roadbeds for the curved turnouts are cut-out accordingly. Even the transition between the two large 24430 and 24530 curves is possible with practical fitting connection dimensions. As the elasticity of the roadbed is used up with the inserted straight tracks, we recommend these combinations for permenantly fastened layouts.

Turnout accessories.

Practical Mechanism.

The turnouts are equipped at the factory with a metal turnout lever for setting them by hand. A locking feature for the turnout setting is integrated into the turnout linkage mechanism. The turnout point rails are spring loaded, thus allowing a train to travel "against" the turnout setting.



74490
Electric Turnout Mechanism.

Retrofit kit for C Track turnouts, double solenoid mechanism with end shutoff contacts. Can be operated with a control box or a digital decoder. Feedback signal possible with the 7271/72710 control box.

This electric mechanism can be retrofitted and connected to turnouts very easily and without special tools. The mechanism sits concealed in the roadbed; below baseboard mounting is not necessary. It is sealed against dirt and has an end shutoff feature to protect against overloads. It can be controlled with the standard control box, the control box with a feedback feature, or with a digital decoder. The hand lever can remain on turnout.

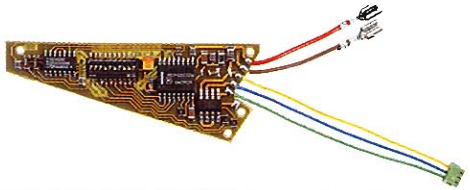
Tip: A special mechanism is already built into the 24624 double slip switch.

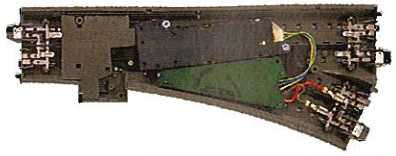
74460
Digital Installation Decoder.

Can be retrofitted to all C Track turnouts with an electric mechanism. Electrical connections are made with plug contacts. Address of 1 to 256 can be set with coding switches.

A digital decoder can be built into a turnout or double slip switch along with the electric mechanism or can be retrofitted. The decoder is easily connected to the mechanism with plug contacts and can have an individual address (addresses 1 to 256) set on it for each turnout. Special tools or special knowledge are not required for the installation of this decoder. The digital power supply can be taken directly from the track power contacts on the turnout or double slip switch. This gives you a complete digital turnout or double slip switch that is ready for use on temporary layouts.

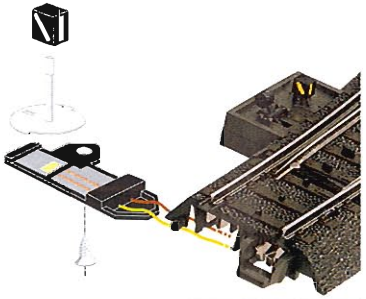
Tip: The 24630 three-way turnout uses 2 of the no. 74490 electric mechanism, and a 6083 digital decoder installed outside of this turnout must be used to convert it to digital operation.





74470
Turnout Lantern Kit.

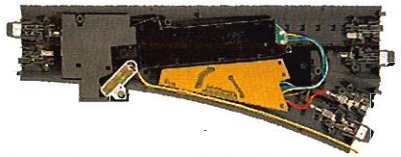
For retrofitting 2 C Track turnouts. Can be used for right, left or three-way turnouts. Can be used with a manual hand lever and/or with the 74490 electric turnout mechanism. Lighting with maintenance-free LEDs.



Turnout Lanterns with LED Lighting.

All C Track turnouts and the double slip switch, with hand levers or electric mechanisms, conventionally or digitally controlled, can be equipped with lighted turnout lanterns. The installation is easy; the lighting insert will also work with the fixed lantern for the double slip switches. Maintenance-free miniature LEDs make it possible to keep the size of the lanterns to scale.

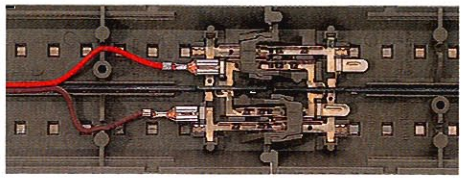
Tip: A permanent lantern with prototypical lighting is already built into the 24624 double slip switch.



Electrical accessories.

74040
Feeder Wire Set

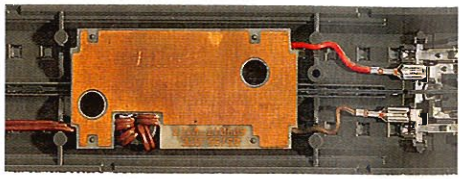
with spade connectors for C Track. Two-conductor. Red and brown wires. Length 1 meter / 39".



74046
Feeder Wire Set

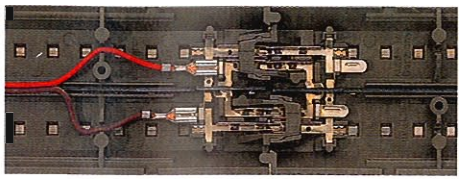
with Noise Suppressor and Overload Protection. Circuit board with spade connectors for C Track, and with a red and brown feeder wire. One needed for each conventional track circuit.

One 74046 feeder wire set should be installed in each **track power circuit** to protect against possible radio and television interference caused by locomotives in operation. This feeder wire set also offers effective protection against overloads and short circuits, protection that responds very quickly, even with older transformers. The protective functions remain in effect when you use the 74042 Supplemental Feeder Wire Set for additional connections to the track in the same power circuit.



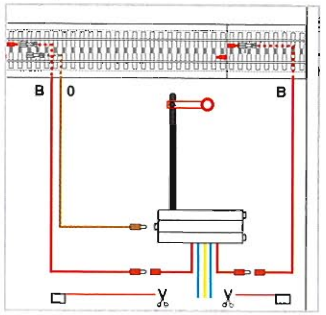
74042
Supplemental Feeder Wire Set.

Red and brown feeder wires with spade connectors at both ends, for C Track. Length 2 meters / 78-3/4".



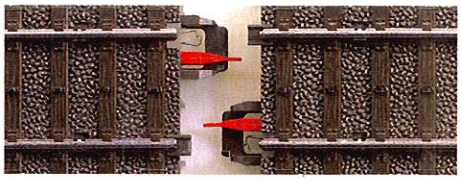
74043
Signal Feeder Wire Set for C Track.

For older light signals (item no. 7239 to item no. 7242) and semaphores (item no. 7039 to item no. 7042), that are equipped for K Track or M Track. Includes insulation, connecting cable, and connections for one signal section.



74030
Center Rail Insulators.

To separate power circuits or signal blocks. 8 pieces for 4 insulation points.



74990
Track Screws.

For mounting C Track. 1.6 x 13 mm / 1/16" x 1/2" with cross point head. Contents 200 pieces.

74997
Light Mast for the Uncoupler Track.

Can be plugged into the 24997 C Track. Mast signal lights up when the uncoupler track is activated. Metal mast. Height 85 mm / 3-38". This light mast is technically the same as the earlier 5113 mast.

7555
Switch Contact.

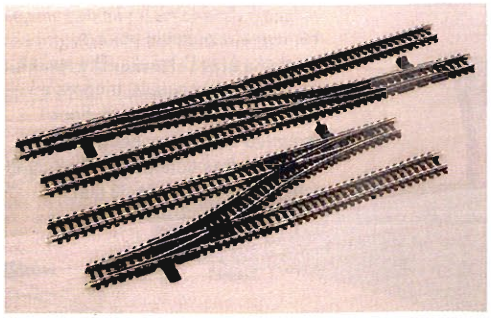
For use at a suitable point in K Tracks or in C Tracks. The switch contact (reed contact) triggers a pulse when a vehicle with floor-mounted switch magnet passes by. Potential-free connection. Switching current to 2 A. Length 38 mm / 1-1/2".

You will find suitable vehicle magnets 7556, 7557 and 7558 on page 399.

K Track – the track with many possibilities.

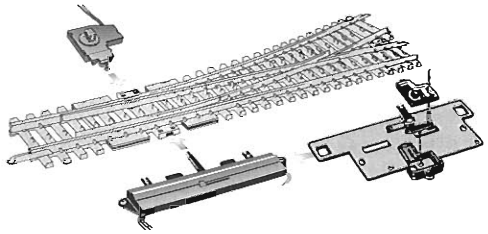
The extensive geometry and broad selection of track elements offer generous layout possibilities.

The compact turnout program offers a lot of action in a small area – the wide radius turnout program and flex track enable generous line designs.



The flat track work is ideal for extended multi-track station layouts on the same level.

The mechanical fittings of the turnouts can be variably determined: mountable electric drives, under-baseboard install, mountable turnout lanterns.

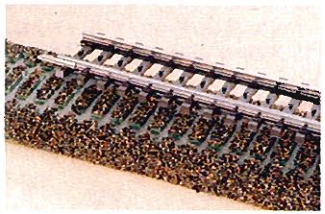


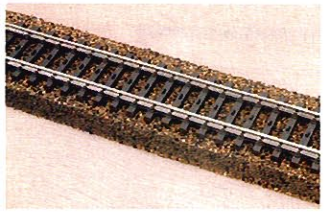
Individual design possibilities for the line roadbed:

- rational: a pre-fabricated hard foam roadbed with layered surface is available as an accessory.
- fast: flat install on a pre-treated structured corridor.
- professional: real ballasting with granulate from accessory suppliers in suitable adhesive.

Important:
For "wet" ballasting, use a normal, pH-neutral, wood glue. Glues with particular characteristics like "water-resistant", "express" can contain additives that attack the metal parts of the track.

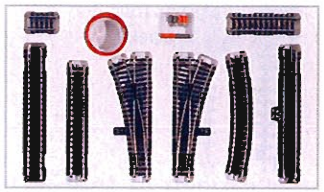
Movable parts of turnouts, circuit tracks, etc. must be kept free of glues and granulate.



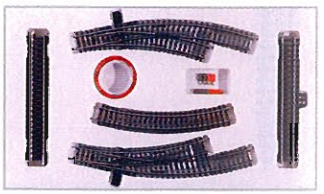


KOMBI – Track Extension Set Program.

Extension sets for step-by-step extension of a track layout from the basic equipment to private railway. Items 2215, 2216, 2217 and 2218 are on page 39.



2215



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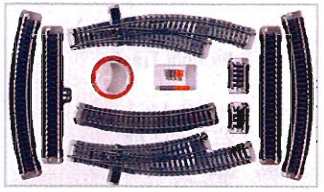
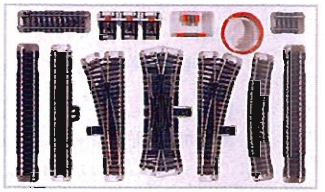


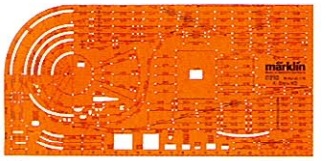
2217



2218

Planning Aids.

0210
Track Planning Stencil for K Track.
Allows you to plan your own layouts for 2200 series K track. All track sections on the stencil are in a scale of 1:10 and can be transferred easily to paper with a sharp pencil.
Instructions included



Track planning on your computer.

60521 Märklin 2D/3D Track Planning Software (CD ROM) –
see page 423

Advisors in print.

07450 KOMBI Step-by-Step.
for Model Railroading with K Track –
see page 422

07455 Track Planning Book C Track
(with track plans for K Track) –
see page 421

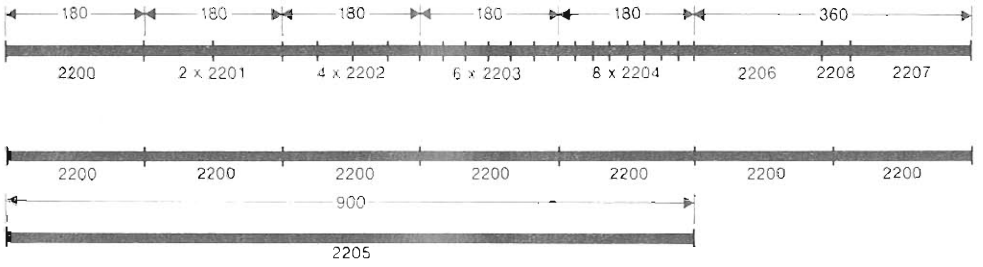
07459 Track Planning Book C Track
(with track plans for K Track) –
see page 421

Straight Track.

The K Track geometry starts with the grid of the standard straight length of 180 mm / 7-3/32". The partial length track sections are used to set up track patterns of any length, but are chiefly used for filling in odd lengths in combination with turnouts and crossings and to supplement the standard track grid.

On straight track the length of the rails is measured. On curved track the radius out to the middle of the track bed and the angle of the curve are given.

Comparison of K Track Lengths.



2201
Straight Track.

Length 1/2 =
90 mm / 3-9/16".

2207
Straight Track.

Length 156 mm / 6-1/8".

2206
Straight Track.

Length 168.9 mm / 6-5/8". Same in length as 2262, 2263, 2265 and 2266 turnouts.

2200
Straight Track.

Length 1/1 =
180 mm / 7-3/32"
(standard length).

2291
Straight Adapter Track.

Length 1/1 = 180 mm / 7-3/32". Facilitates transition from K to M track.

2209
Straight Track.

Length
217.9 mm /
8-9/16".

2202
Straight Track.

Length 1/4 =
45 mm / 1-3/4".

2293
Straight Track.

Length 41.3 mm /
1-5/8".

2208
Straight Track.

Length 35.1 mm /
1-3/8".

2203
Straight Track.

Length 1/6 =
30 mm / 1-3/16".

2204
Straight Track.

Length 1/8 =
22.5 mm / 7/8".

Function Tracks.

Feeder Track.

Feeder tracks conduct power to the center stud and from the running rails. Feeder tracks or 7500 and 7504 feeder terminals should be installed about every 2 meters or approx. 6-7 feet on longer stretches of track to supply current to the track. To prevent interference with radio and television reception a 2292 feeder track with interference suppression capacitor should be used in each track power circuit (not required in Delta or digital operation).

Contact Tracks.

An isolated length of running rail receives contact by means of every locomotive/car that passes over it. The track occupation feedback signal made possible by this takes place through the wheel sets. The contact area can be lengthened with straight and curved track sections.

Circuit Tracks.

The circuit tracks (2229, 2239, 2299) enable automatic control of turnouts and signals by a train in operation. Activated by the pickup shoe on a locomotive or car, they can start different circuit switching functions independently in both directions of travel.

Uncoupler Track.

Locomotives and cars with standard couplers and close couplers can be uncoupled from the train by remote control with the uncoupler track. The solenoid mechanism can be operated from the 7272 control box or with the hand lever.

2292
Straight Feeder Track.

Length 1/1 = 180 mm / 7-3/32". 2 feeder wires. Built-in capacitor for interference suppression.

2290
Straight Feeder Track.

Length 1/1 = 180 mm / 7-3/32". 2 feeder wires. Also for Delta and Digital.

2295
Contact Track Set.

Length 2 x 1/2 = 2 x 90 mm / 3-9/16". Continuous contact through wheel sets. Has insulated rail section for track occupation feedback signal when train is passing over. Can be lengthened with the straight and curved track sections.

2229
Curved Circuit Track.

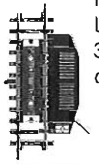
Length 1/2 = 15°.
Radius 360 mm / 14-3/16".
Momentary contact with locomotive/car pickup shoe.

2239
Curved Circuit Track.

Length 1/2 = 15°.
Radius 424.6 mm / 16-3/4".
Momentary contact with locomotive/car pickup shoe.

2299
Straight Circuit Track.

Length 1/2 = 90 mm / 3-9/16". Momentary contact with locomotive/car pickup shoe.

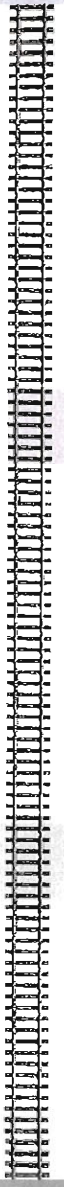


2297
Straight Uncoupler Track.

Has solenoid mechanism.
Length 1/2 = 90 mm / 3-9/16". 2 wires for connections.

2205
Flex Track.

Length 5 x 1/1 = 900 mm / 35-7/16". Curves with different radii can be made with this track. It can be cut using a coping saw.
The 7595 rail joiners and clips are installed at the cut ends.



Curved Track.

Standard Curve I.
Radius 360 mm /
14-3/16"

2221
Curved Track.

Length 1/1 = 30°.

2223
Curved Track.

Length 1/2 = 15°

2224
Curved Track.

Length 1/4 = 7° 30'.

Industrial Curve.
Radius 295.4 mm /
11-5/8"

2210
Curved Track.

Length 1/1 = 45°. Small radius for branch lines and industrial trackage. Cannot be used for long locomotives and cars.

Standard Curve II.
Radius 424.6 mm /
16-3/4"

2231
Curved Track.

Length 1/1 = 30°.

2232
Curved Track.

Length 3/4 = 22° 30'.

2233
Curved Track.

Length 1/2 = 15°.

2234
Curved Track.

Length 1/4 = 7° 30'.

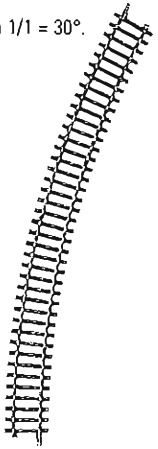
2235
Curved Track.

Length 1/8 = 3° 45'.

Large Curve I.
Radius 553.9 mm /
21-13/16"

2241
Curved Track.

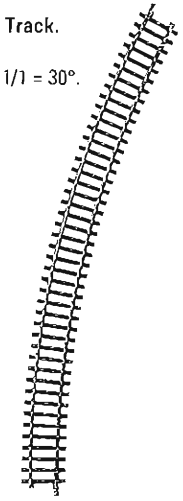
Length 1/1 = 30°.



Large Curve II.
Radius 618.5 mm /
24-3/8"

2251
Curved Track.

Length 1/1 = 30°.



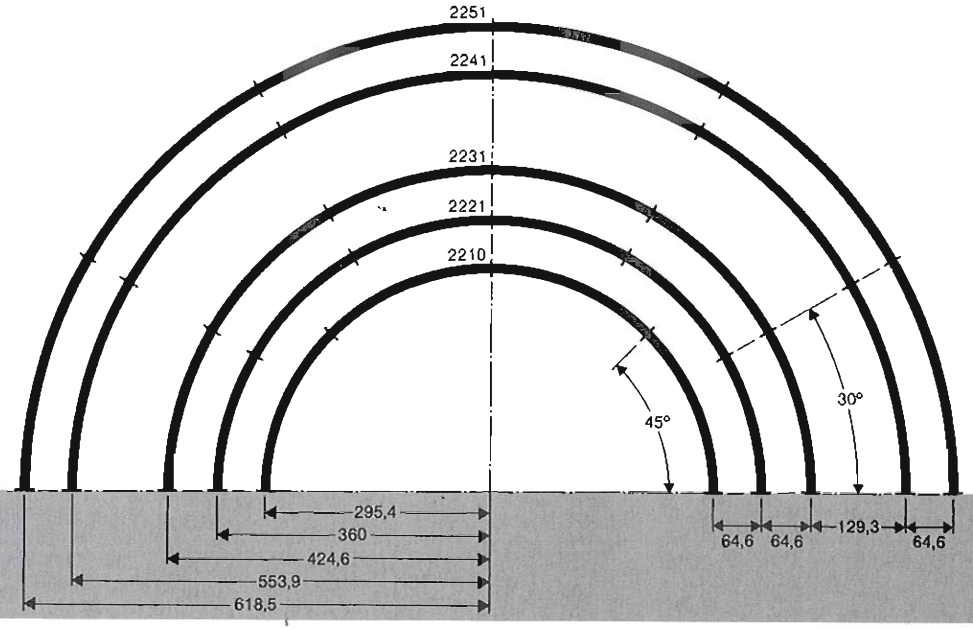
2274
Curved Track.

Length 14° 26'.
Complementary
curve for 2272/2273
turnout.

2251 Circle = 12 sections
2241 Circle = 12 sections
2231 Circle = 12 sections
2221 Circle = 12 sections
2210 Circle = 8 sections

The 5 Track Radii.

In addition to the Standard Curve I with a radius of 360 mm / 14-3/16", there is also the larger Standard Curve II with a radius of 424.6 mm / 16-3/4". The catalog number for each track of a particular radius has the corresponding second digit for the Standard Curve I (2221, 2223, 2224) or II (2231, 2232, 2233, 2234, 2235). The Large Curve I 2241 with a radius of 553.9 mm / 21-13/16" and the Large Curve II 2251 with a radius of 618.5 mm / 24-3/8" are available for wide radius main lines. The Industrial Curve 2210 with a radius of 295.4 mm / 11-5/8" is intended for branch lines.



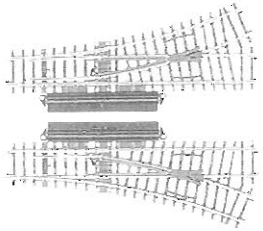
Turnouts and Crossings.

All of the turnouts shown are laid out for a standard parallel track spacing of 64.6 mm / 2-1/2". This short design saves space for yard tracks. All turnouts and crossings are interchangeable. They can be installed either straight or on the diagonal. The turnouts are equipped with sprung points and a train can thus run "against" a turnout setting. The electric turnouts, the double slip switch, the three-way turnout and the curved turnouts have double solenoids for remote control. These turnouts can be operated with the 7271/72710 or 7272/72720 control boxes, 2229, 2239 or 2299 circuit tracks or the 7555 reed contact. The 7271/72710 control box enables automatic feedback of the setting for the 2260, 2262, 2263, 2268 and 2269 (new versions) turnouts and double slip switch. All of these turnouts can be used in the Märklin Digital system.

2262 (2261 L)
Left Turnout.

2263 (2261 R)
Right Turnout.

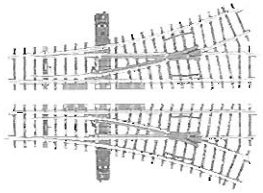
With detachable solenoid mechanism (7549). Turnout branch 22° 30'. Branch same as 2232. Length of straight side 168.9 mm / 6-5/8".



2265 (2264 L)
Left Turnout.

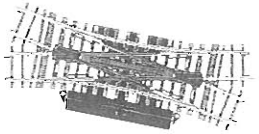
2266 (2264 R)
Right Turnout.

With detachable hand levers. Turnout branch 22° 30'. Branch same as 2232. Length of straight side 168.9 mm / 6-5/8". 7549 solenoid mechanism can be installed on these turnouts.



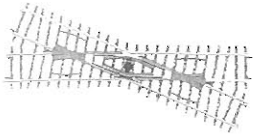
2260
Double Slip Switch.

With detachable solenoid mechanism (7549). Crossing angle 22° 30'. Curve same as 2232. Length of straight side 168.9 mm / 6-5/8".



2259
Crossing.

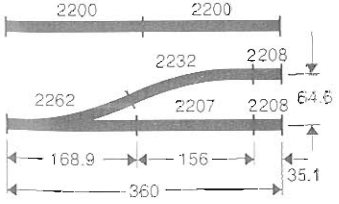
Crossing angle 22° 30°. Length of straight side 168.9 mm / 6-5/8".

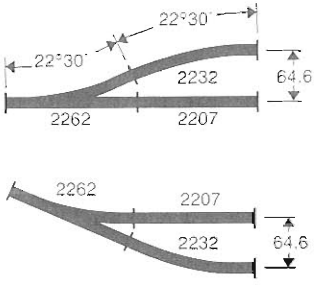


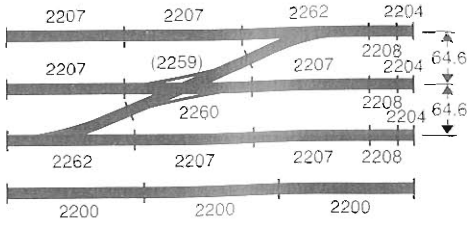
2258
Crossing.

Crossing angle 45°. Length of straight side 90 mm / 3-9/16".

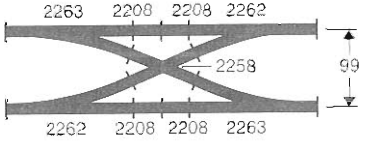
Turnouts for Standard Curve II







Crossings for Standard Curve II



Wide radius turnouts and crossings.

The wide radius turnouts and crossings with a turnout angle of 14° 26' and parallel curve spacing of 57 mm / 2-1/4", enable the elegant, extended track design, that discerning model railroaders desire. The hand levers of the turnouts as well as the slip turnout, can be plugged in on the right or left and can easily be replaced by the 7549 electromagnetic turnout mechanism. The 22715, 22716 turnouts are set-up conventionally with guard rails.

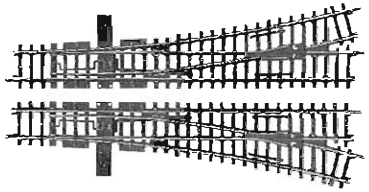
The 2275 double slip switch offers four different communication tracks through the separately adjustable switch rails.

Wide Radius Turnouts and Crossings
Radius 902.4 mm / 35-1/2"

22715
Left Turnout.

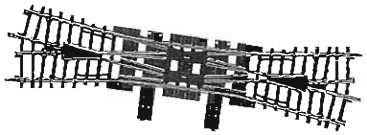
22716
Right Turnout.

With detachable hand levers.
Fixed frog and guard rails. Length of straight side 225 mm / 8-7/8".
Turnout branch 14° 26'. Branch radius 902.4 mm / 35-1/2".
7549 electric turnout mechanism can be installed on these turnouts.



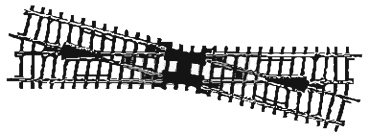
2275
Double Slip Switch.

With 2 detachable hand levers.
Crossing angle 14° 26'. Curve radius 902.4 mm / 35-1/2". Length of straight side 225 mm / 8-7/8".
2 each 7549 solenoid mechanism can be installed on this unit.
Separate paths can be set.

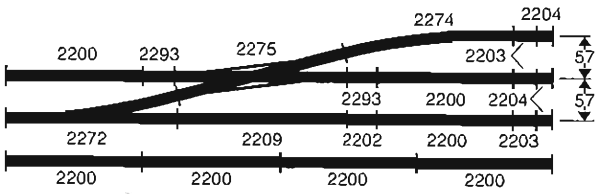


2257
Crossing.

Crossing angle 14° 26'.
Track length 225 mm / 8-7/8".



2275 Wide Radius Double Slip Switch or 2257 Crossing



Curved Turnouts and Three-Way Turnout.

Curved turnouts.

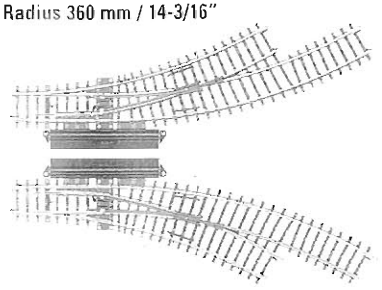
Branches can be started on curves with the curved turnouts. This increases the usable area on straight track considerably. The curved turnout enables a harmonious transition between the two Standard Curves (radius 360 mm / 14-3/16" and 424.6 mm 16-3/4"). With adjustment sections 2202, 2203, and 2204 the curved turnouts can be also be used between the large curves I and II.

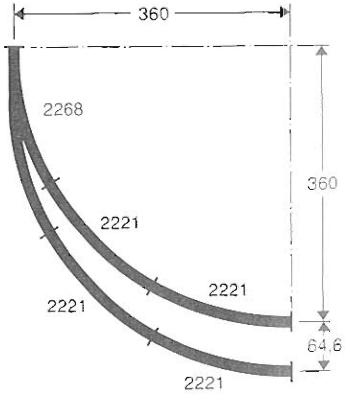
2268 (2267 L)
Left Curved Turnout.

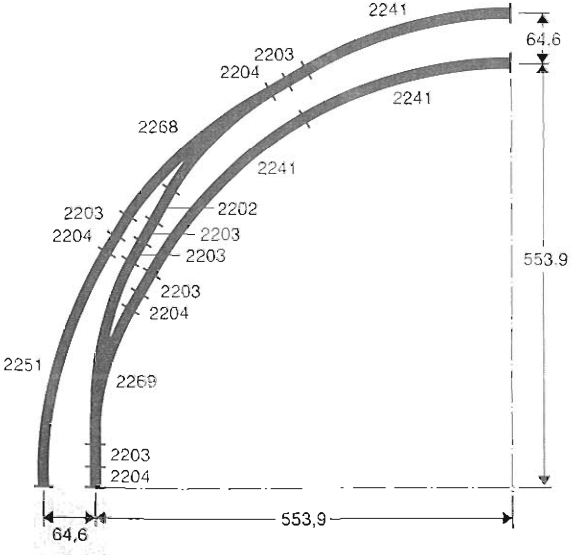
2269 (2267 R)
Right Curved Turnout.

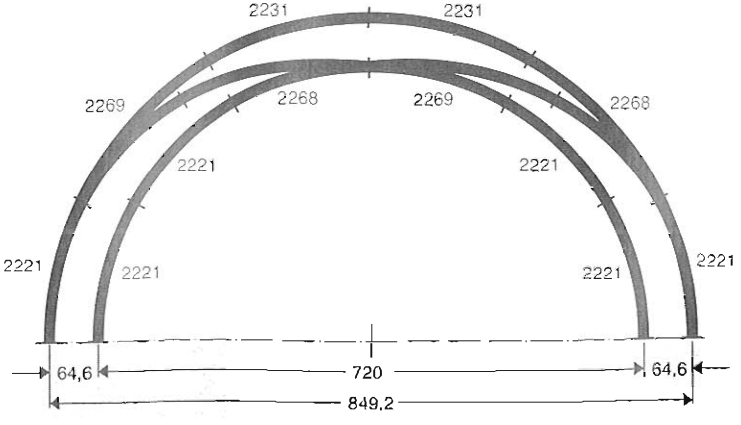
With detachable solenoid mechanism (7549). Inner curve 30°. Outer curve 30° in the parallel curve spacing of 64.6 mm / 2-1/2". Length and radius of the inner curve are the same as 2221

Standard Curve I.
Radius 360 mm / 14-3/16"









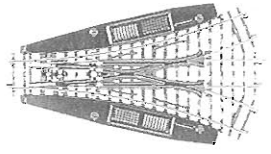
Three-Way Turnout.

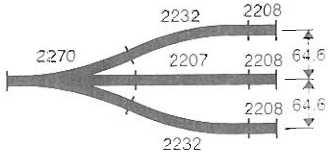
The three-way turnout combines a right and left turnout in the space of a normal turnout. This saves space in yards and station areas. The three-way turnout has two double solenoids for remote control. Both branches are the same in length and radius as the 2262 and 2263 turnout. The three-way turnout can be used for direct entry into the 7288/72881 locomotive shed.

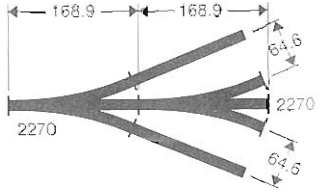
2270
Symmetrical Three-Way Turnout.

Has 2 solenoid mechanisms. Length of straight side 168.9 mm / 6-5/8" Turnout branches 2 x 22° 30'. Branch radius 424 6 mm / 16-3/4". Curve same as 2232 2 additional hand levers. 6 wires for connections.

Standard Curve II.
Radius 424.6 mm / 16-3/4"







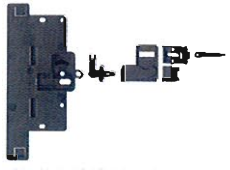
K-Track-Accessories.

7547
Turnout Lantern Kit.

One each right and left turnout lantern for installation on turnouts with the detachable mechanism. Can be used with hand levers, 7549 turnout mechanism or 7548 below baseboard mounting kit with 7549. Lighting with maintenance-free LEDs.

7548
Below Baseboard Mounting Kit.

For mounting two 7549 turnout mechanisms. Can be adjusted for boards from 8 to 25 mm /approx. 5/16" to 1". Mounting Track template included.



7549
Electromagnetic Turnout Mechanism.

Suitable for turnouts 2265 and 2266 (new design), 22715 and 22716, and the 2275 double slip switch, as well as for the KOMBI Track Extension program (see page 39). Automatic end switch-off. Automatic response possible with 7271/72710 control box. Under-baseboard mounting with the 7548 Retrofit Kit.

7555
Switch Contact.

For use at a suitable point in K Tracks or in C Tracks. The switch contact (reed contact) triggers a pulse when a vehicle with floor-mounted switch magnet passes by. Potential-free connection. Switching current to 2 A. Length 38 mm / 1-1/2".

You will find suitable vehicle magnets 7556, 7557 and 7558 on page 399.

7500
Ground Terminal Clip.

Can be installed anywhere on the layout under the rails.

7504
Third Rail Terminal Clip.

Is installed between the third rail clips at the ends of the track.

7522
Third Rail Insulator.

Is installed between the third rail clips between the track sections to separate track circuits.

7391
Track Bumper.

Length 38 mm / 1-1/2". Can be clipped onto the rails. Wood screw for mounting included.

7389
Track Bumper.

With lighted lantern. Maintenance-free LED. Length 38 mm /1-1/2". Can be clipped onto the rails. Wood screw for mounting included.

7599
Wood Screws.

200 pieces 1.4 x 10 mm (approx. 1/16" x 3/8"), size 00. For mounting bridge sections on bridge pillars.

7595
Rail Joiners and Third Rail Clips.

Contents: 10 pieces of each. For joints with other track when the 2205 flex track is cut.

Catenary.

The Third Dimension Newly Discovered.

The first electrified railroad routes in Germany go back around 100 years. Individual provincial railroads made use of the very promising advantages of electric motive power on their mountain routes; moreover they lacked their own supplies of coal for steam locomotives. Initially there were still different systems, yet in 1912 the states came to an agreement on uniform current system, and in 1928 the German State Railroad standardized the different designs for catenary wire into one type.

This principle still holds true today, but has been adapted in technical details several times to increasing demands and higher speeds.

For many model railroad enthusiasts catenary is a must. Like the prototype, the model also draws its current from the catenary wire, and the additional circuit expands the operation possibilities in a type of third dimension. At the same time, there was always a compromise between delicate appearance and practical robustness – the Märklin catenary has proven itself with the latter for decades.

Now we have developed a new system from the ground up. Our goal was to offer a visually and technically convincing catenary with the possibilities of modern material and production technology, a catenary that is as easy to set as you are used to from Märklin. When you look at the photographs, you'll immediately notice the essential new features.

The finely detailed masts are made of metal and are scaled down exactly from the prototype. Straight and curved track can now be spanned with catenary prototypically with the regular masts, bridge masts, and concrete masts. The catenary wires are made of welded, dark nickel-plated round wire and are no longer bent for curves. The cross spans can be adapted like the prototype to the number of tracks being spanned.

The new Märklin catenary system is – despite its fine appearance – robust enough for operation and fully functioning. The setup is electrically and mechanically as simple as in the past; the catenary wire does not have to be braced. Positioning jigs facilitate the mounting of masts and catenary wire. All of the important system parts – masts, cross spans, catenary wire for ordinary track, turnouts, and crossings / double slip switches – as well as other accessories such as separation points, bases, and adjustment sections are complete.

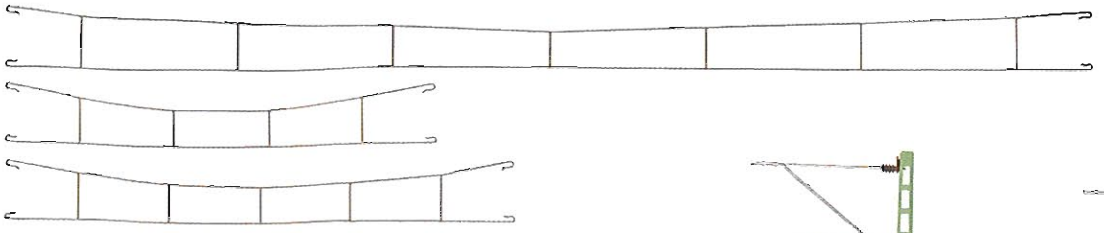
The new starter set for catenary "electrifies" the complete track layout for the larger starter sets. This means that you are immediately in a position to get to know the advantages of the new system and be convinced of the outstanding visual effect and the practical functions. As with the new H0 color light signals, with the catenary we have brought the system technology to a point that will convince many H0 gauge enthusiasts beyond the Märklin system.

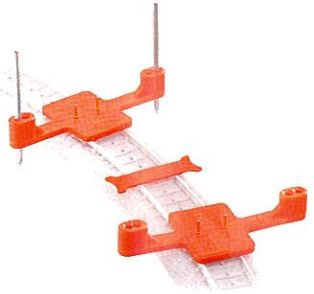
Foto: Klaus Eckert

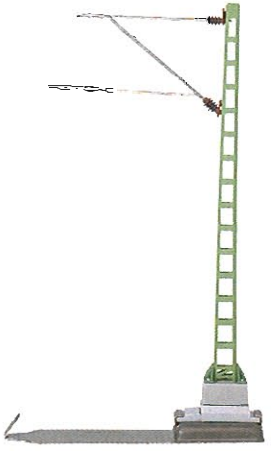
70000
Basic Catenary Assortment.

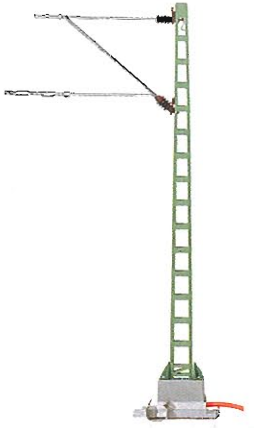
New catenary system.
Complete for the track layout from the current starter sets.
Easy setup, even for temporary layouts.
Clip on the masts – hand the wires – connect the catenary to the transformer or digital controller.
No bending and no stretching of the catenary wires.

For equipping a track plan consisting of an oval with a passing siding as found in the larger starter sets. **Contents:**
9 sections of wire 360 mm / 14-3/16" for straight lengths of track.
18 section of wire 142 mm / 5-9/16" for the standard curve. 6 sections of wire 167.5 mm / 6-5/8" for the parallel curve. 31 regular masts, 1 feeder mast. The masts come with outrigger arms, base, and clip for C Track. 1 mast positioning jig set. 1 installation jig for the catenary wire. Instructions with a description of the system and with tips for setup.









70012
Catenary Installation Jig.

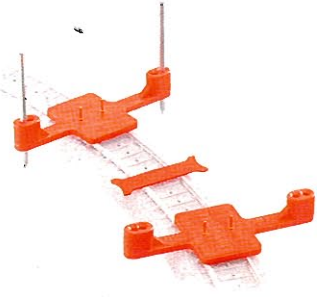
Aid for installing catenary wire.

Tool for determining the height and side position of the catenary wire. Can be adapted to all track systems. Package with 5 pieces.

70011
Mast Positioning Jig Set.

Aid for installing catenary masts.

Tool for determining the position of regular and tower span masts and catenary wire lengths on curves. This set consists of 2 positioning jigs, 1 catenary branch-off jig, and 2 marking pens.



Catenary.

Lattice masts made of metal.
Metal outrigger arms that can be changed.
The same outrigger arm can be used long and short.
Base for screwing or clipping the mast to C Track.
Plug-in connection between mast and base.

74121
Feeder Mast.

For supplying power to an area of catenary and for signal blocks. Metal lattice mast and outrigger arm. Base with mounting screw and plug-in connection. Additional base as a mounting bracket for C Track. Feeder wire for C Track. Height 100 mm / 3-15/16". 1 piece.

74101
Standard Mast.

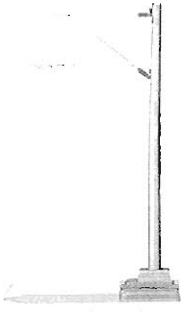
Metal lattice mast and outrigger arm. Base with mounting screw and plug-in connection. Additional base as a mounting bracket for C Track. Height 100 mm / 3-15/16". Package comes with 5 pieces.

74104
Bridge Mast.

Metal lattice mast and outrigger arm. Base with plug-in connection. Additional mast mounting bracket for the Märklin-bridge system. Height 100 mm / 3-15/16". Package comes with 5 pieces.

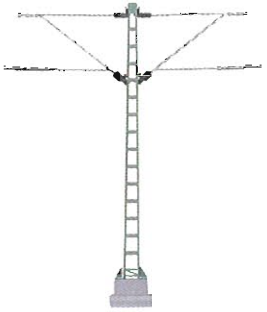
74103
Concrete Mast.

Metal round mast with outrigger arm. Base with mounting screw and plug-in connection. Additional base as a mounting bracket for C Track. Height 100 mm / 3-15/16" Package comes with 5 pieces.



74105
Center mast.

Metal mast and two arms. Both arms are electrically insulated. Base with anchoring screw and plug connection, as well as additional holder on the C Track. Height 100 mm / 3-15/16". Pack with one unit.

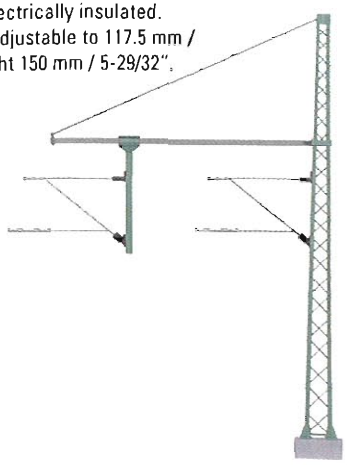


N

Metal outrigger arm for good electrical contact.

74106
Tubular Arms.

Tower mast with additional metal truss and 2 mounted arms. Both arms are electrically insulated. Outer arm adjustable to 117.5 mm / 4-5/8". Height 150 mm / 5-29/32".



N

74151
Single Outrigger Arm.

Outrigger arm made of steel wire with hanger for contact and messenger wire. Can be installed on regular masts and on tower masts. Package comes with 5 pieces.

74142
Tower Mast.

Metal lattice mast. Base with anchoring screw and plug connection. Suitable for transverse span wire or single arm. Receptacles on all four sides. Can be used for all track systems. Height 170 mm / 6-11/16" Pack with one unit.

Same tower mast with attached lamp: Item no. 75141, see page 368

N

74110
Mast Base.

Replacement base for standard masts. Can be shortened for all available H0 track systems with or without roadbed. Comes with a screw suitable for mounting. Package comes with 20 pieces.

Catenary.

The contact wires for H0 catenary are manufactured of welded steel wire. The galvanic surface looks realistic and protects from corrosion. The contact wire sections are prefabricated and easy to install.

70360
Catenary Wire.

Made of welded steel wire. Length 360.0 mm / 14-3/16". Standard length. Designed for straight lengths of track. Package comes with 5 pieces.

70142
Catenary Wire.

Made of welded steel wire. Length 142.0 mm / 5-9/16". Designed for curved track with a radius of 360 mm / 14-3/16" (C Track, K Track, M Track). 16 pieces of catenary wire required for a circle, each piece with 22.5° of curvature. Package comes with 5 pieces.

70172
Catenary Wire.

Made of welded steel wire. Length 172.5 mm / 6-13/16". Designed for curved track with a radius of 437.5 mm / 17-1/4" (C Track, M Track). 16 pieces of catenary wire required for a circle, each piece with 22.5° of curvature. Package comes with 5 pieces.

70167
Catenary Wire.

Made of welded steel wire. Length 167.5 mm / 6-5/8". Designed for curved track with a radius of 424.6 mm / 16-11/16" (K Track). 16 pieces of catenary wire required for a circle, each piece with 22.5° of curvature. Package comes with 5 pieces.

70203
Contact Wire.

Made of welded steel wire.
Length 205.5 mm / 8-3/32". Designed for curved routes with 515 mm / 20-9/32" radius (C Track). For a circle, 16 contact wires are required, each with 22.5°.
Set with 5 wires.

N

70228
Contact Wire.

Made of welded steel wire.
Length 227.5 mm / 8-31/32".
Designed for curved routes with 579.3 mm / 22-13/16" radius (C Track). For a circle, 16 contact wires are required, each with 22.5°.
Set with 5 wires.

N

70253
Contact Wire.

Made of welded steel wire.
Length 252.7 mm / 9-15/16".
Designed for curved routes with 643.6 mm / 25-11/32" radius (C Track). For a circle, 16 contact wires are required, each with 22.5°.
Set with 5 wires.

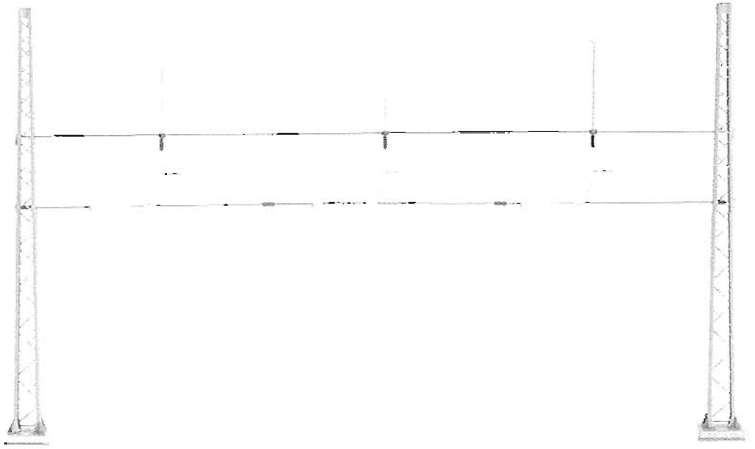
N

Catenary.

The transverse carrier wires are realistic, stable and are universal in set-up. Clearance of the metal tower masts is adjustable, as is the position of the contact wire hangers over the track. The doubled transverse carrier wires are elastic and are prototypically tensioned as a polygon.

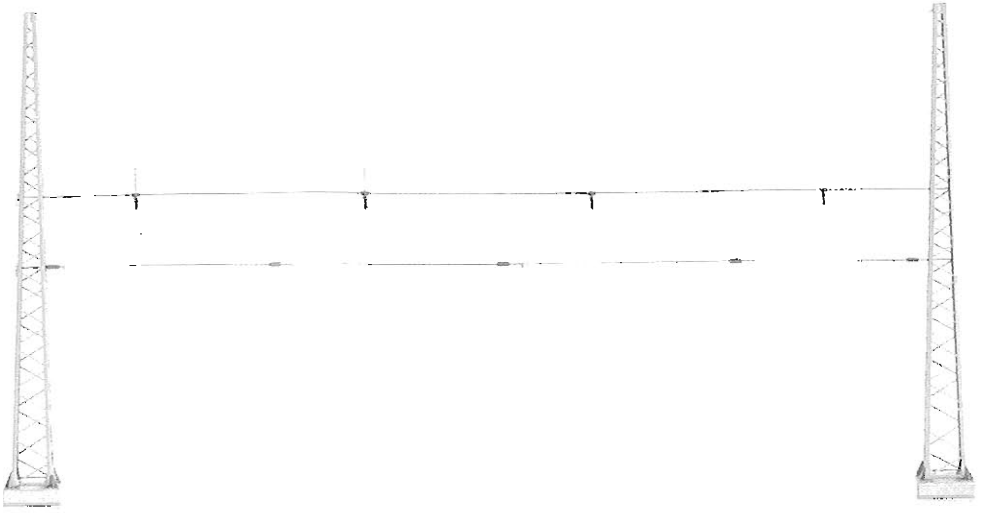
74131
Cross Span Assembly for 3 Tracks.

Pre-assembled unit consisting of cross span adjusters, cross span wires, and 3 adjustable catenary wire hangers. 2 metal tower masts on bases with mounting screws and plug-in connection. Mast spacing can be adjusted up to 235 mm / 9-1/4". Cross span adjuster made of welded steel wire, cross span wires are elastic, masts and catenary wire hangers are electrically separated. Mast height 150 mm / 5-7/8".



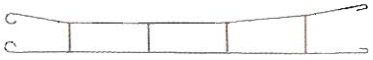
74132
Cross Span Assembly for 4 Tracks.

Pre-assembled unit consisting of cross span adjusters, cross span wires, and 3 adjustable catenary wire hangers. 2 metal tower masts on bases with mounting screws and plug-in connection. Mast spacing can be adjusted up to 312.5 mm / 12-5/16". Cross span adjuster made of welded steel wire, cross span wires are elastic, masts and catenary wire hangers are electrically separated. Mast height 170 mm / 6-11/16".



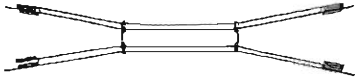
70143
Catenary Transition Piece.

Made of welded steel wire. Length approximately 142.0 mm / 5-9/16". Designed for the transition from the old Märklin catenary to the new catenary system. Package comes with 3 pieces.



70131
Catenary Wire for Crossings.

Made of welded steel wire. Pre-finished unit for crossings and double slip switches with a crossing angle of 22.5° (examples: 2259, 2260) and 24.3° (examples: 24624, 24640). Length 140.2 mm / 5-1/2". 1 piece. 4 each of the 70231 adjustment sections required at the ends.

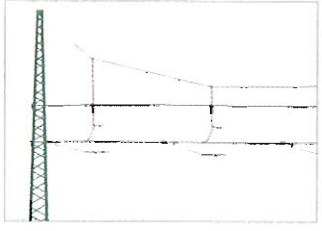


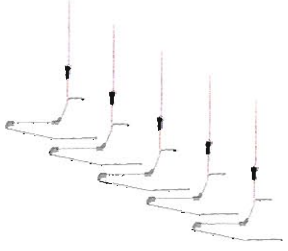
70231
Catenary Wire Adjustment Section.

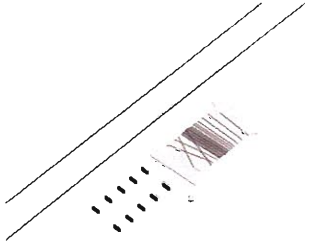
For adjustment of individual track lengths. One end with the standard suspension, the other end with receptacle for a cut catenary wire with an open end. Precise length adjustment during installation. Package comes with 5 pieces.

74133
Transverse Carrier Wire as Building Set.

For individual set-up. Consisting of span wires, transverse carrrier wires, insulators and 5 contact wire hangers. 2 tower masts are required at distance of up to 500 mm / 19-11/16". Transverse carrier wires made of steel, span wires for realistic spanning. Contact wire holders electrically insulated. With set-up instructions.







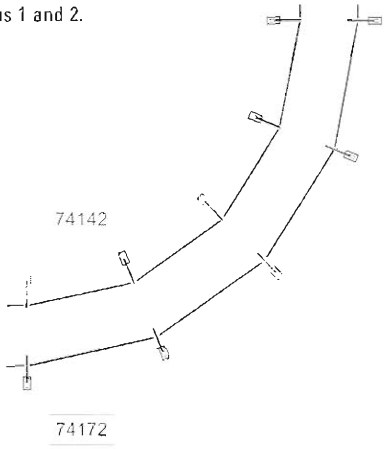
70221
Contact Wire Interrupter.

For electrical separation of the power circuit in the catenary. Install at any point by separating the contact wire and fixing in place in the insulation. Skids for a continuous voltage pick-up with variable holders. Set with 1 unit.

N

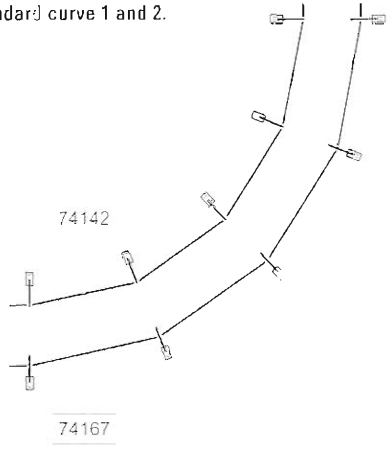
Catenary Geometry.

C-track curve radius 1 and 2.

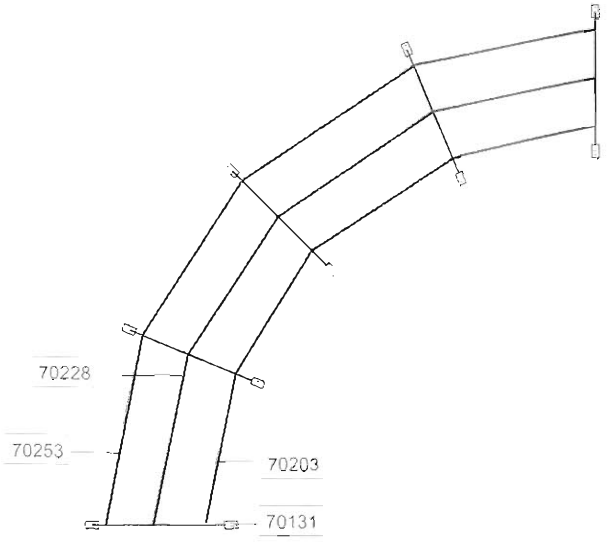


Straight route with conductor wire.

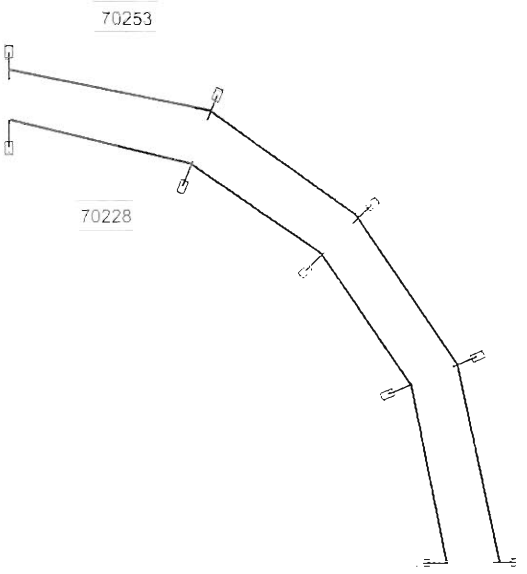
C-track curve, standard curve 1 and 2.



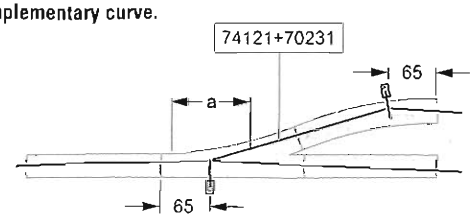
C-track curve radius 3, 4 and 5.



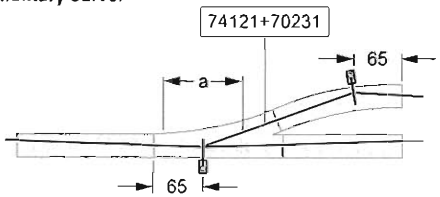
C-track curve radius 4 and 5.



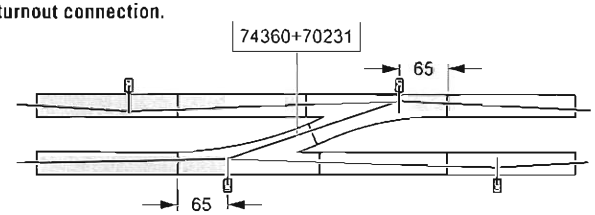
C-track turnout with complementary curve.



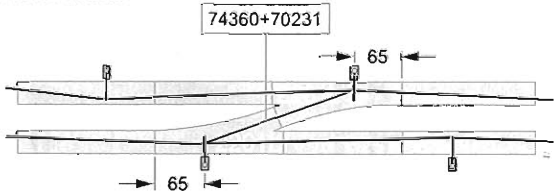
K-track turnout with complementary curve.



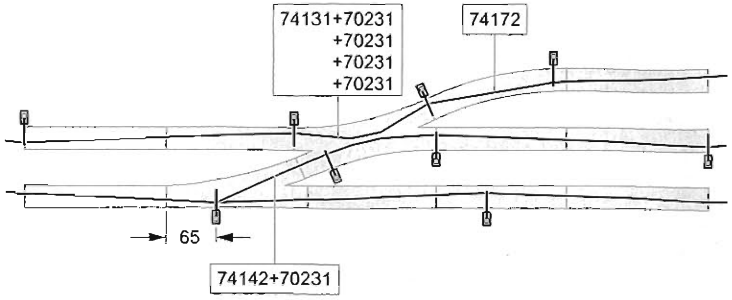
C track, turnout connection.



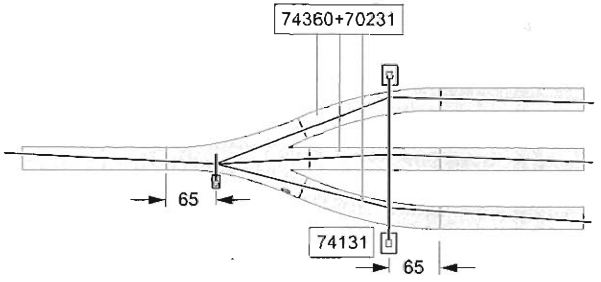
K track, turnout connection.



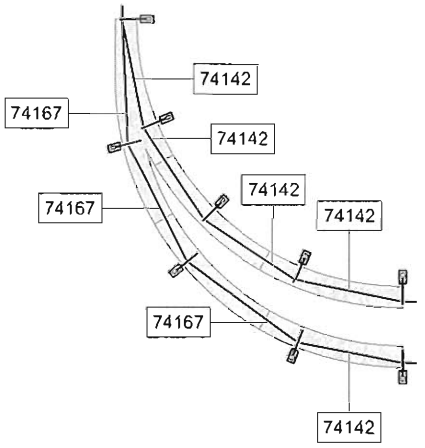
C track, crossing.



C track, three-way turnout.



C track, curved turnout.



Lamps and lights.

74141
Tower Mast with Light.

Metal mast.
4 mounting points for outrigger arms.

Metal lattice mast. Base with mounting screw and plug-in connection. Suitable for cross spans or individual outrigger arms. Can be used with all track systems. Lighting with a clear light bulb. Mast height without light 170 mm / 6-11/16".

7283
Tower Mast Lamp.

Placed on tower mast. Retaining base for height adjustment for C Track, M Track, and K Track. Suitable for the former catenary system (before 2003).
Height 170 mm / 6-11/16".

Finely crafted reproduction of important prototypes.
Metal masts.
Miniature bulbs for good illumination.
Maintenance-friendly light sockets.
Plug-in base for easy install and removal.

72811
Engine Shed Single Light.

Height 124 mm / 4-7/8".

72813
Engine Shed Double Light.

Height 124 mm / 4-7/8".

72810
Station Platform Double Light.

Height 70 mm / 2-3/4".

N

72800
Simple Streetlight.

Height 100 mm / 3-15/16".

N

72801
Double Streetlight.

Height 100 mm / 3-15/16".

N

72809
Small Streetlight.

Height 49 mm / 1-15/16".

N

72802
Simple Streetlight.

Height 100 mm / 3-15/16".

N

72803
Double Streetlight.

Height 100 mm / 3-15/16".

N

72804
Single Park Light.

Height 56 mm / 2-7/32".

N

72805
Double Park Light.

Height 65 mm / 2-9/16".

N

72815
Illuminated Railway Station Platform Clock.

Height 56 mm / 2-7/32".

N

72814
Lattice Mast Light.

Height 140 mm / 5-1/2".

N

Lamps and lights.

These lamps and lights are delicate in design and yet sturdily made. All of the round masts are metal. The lattice masts are the same in dimensions and design as the catenary tower masts.

7284
Park Light.

Height 63 mm / 2-1/2".
Base diameter
15 mm / 1/2".

7048
Arc Lamp.

Height 156 mm / 6-1/8".
Base diameter
29 mm / 1-1/8".

7047
Lamp.

Height 127 mm / 5".
Base diameter
27 mm / 1-1/16".

7281
Station Platform Light.

Twin lights. Height
97 mm / 3-13/16". Base
diameter 25 mm / 1".

7280
Street Light.

Height 117 mm / 4-5/8".
Base diameter
25 mm / 1".

7282
Street Light.

Twin lights. Height
120 mm / 4-3/4". Base
diameter 25 mm / 1".

Light Bulbs.

Accessory	Catalog Number	Approx. Power Use	
Rotary crane	7051	60 0000	19 V 0,8 VA
Lamps	7280, 7281, 7282, 7283, 7284		
Track bumper	7191		
Signals	7036, 7038, 7039, 7040, 7041, 7042		
Car lighting	7077		
Turnouts	2262, 2263, 5128, 5137, 5140, 5202		
Signals	7188, 7339	60 0010	19 V 0,8 VA
Car lighting	7079		
Signals	7188, 7339	60 0020	19 V 0,8 VA
Car lighting	73150*, 7330*, 7333*, 7335*, 73155*	60 0080	19 V 0,9 VA
Lamps	7046, 7047, 7048	60 0100	19 V 0,8 VA
Light mast	5113, 74997		
Car lighting	7323		
Car lighting	7197, 7318, 7320, 7322, 7329	60 0150	19 V 1,0 VA
Car lighting	7074	60 0200	19 V 0,8 VA
Signals	7242	60 2000	19 V 0,5 VA
Crossing gates	7292, 74920, 7592	60 2010	19 V 0,5 VA
Signals	7239, 7240, 7241		
Signals	7236, 7237, 7238, 7239, 7240, 7241	60 2020	19 V 0,5 VA
Signals	7236, 7237, 7238, 7240, 7241	60 2040	19 V 0,5 VA
Car lighting	73140	60 2100	10 V 0,3 VA
Car lighting	7317	61 0080	22 V 0,7 VA

The power consumption figures given refer to a current of 16 volts available at the accessory terminals/sockets of Märklin transformers. The total power required for lighting in a circuit is figured by adding the watts for each of the lamps in that circuit. Note: 1 VA = 1 watt.

* The 61 0080 is recommended as a replacement for continuous operation in the Digital system.

Color Light Signals.

Signals have always been at the heart of the Märklin assortment. Their play, control, and safety functions, as well as the colorful changing lights, make an essential contribution to the fascination of model railroading.

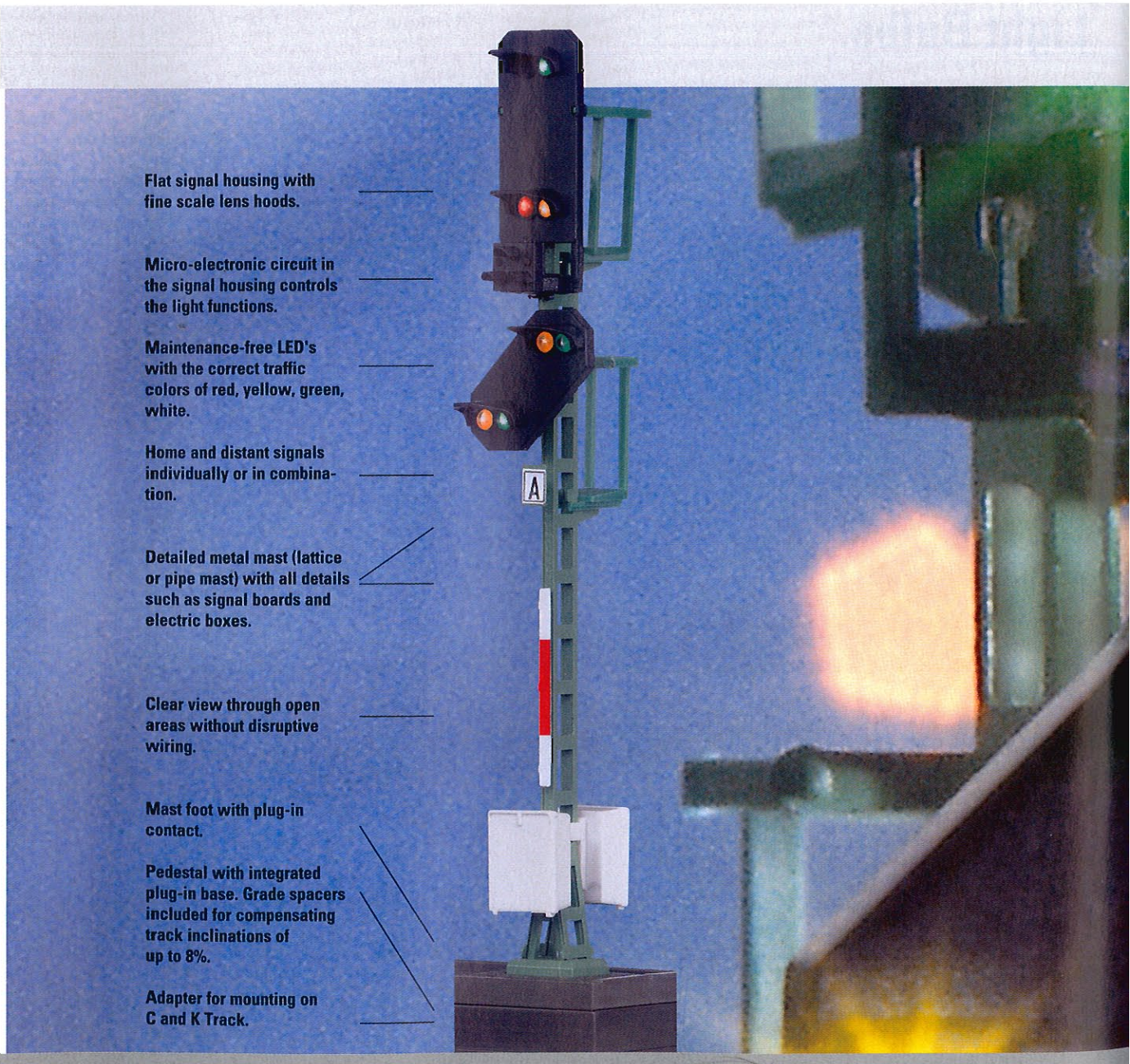
Now we have developed a new generation of light signals, which exploits all the possibilities of miniaturization. Their features can be described in a few words: Appearance and function are virtually identical to the prototype; and they are simple to integrate in conventional or digital layouts. A close look will reveal an abundance of details to the specialist. No visible wires disturb the appearance of the finely detailed masts.

Everything is true to scale – the flat signal housings, the super-fine lens hoods, the subsidiary signals, the mini- LEDs. Each signal housing contains its own electronics for controlling the LED. Thus the signal aspects do not change abruptly, rather they softly fade on and off, like the prototype. Even the light colors of the maintenance-free LEDs correspond to the prototype – cold green, powerful red, warm yellow – and genuine white.

Each home signal has a signal decoder as a separate component. It can be connected to the Märklin digital system, or to conventional AC power system or DC power system control boxes, via the included wire. Each signal decoder controls 1 home signal and up to 2 distant signals, as well as the train stop. It can be mounted so that it is hidden under the C Track or under the layout baseboard.

The signal masts, including their electrical connections, are designed with plug-in features. The counter-pieces are in the form of signal foundations for the plug-in base designed for C Track and K Track.

With these features, the new signals leave nothing to be desired – they are state of the art for discerning model railroaders. Route with digital current feed.



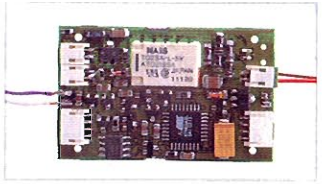
Get ready.
Simply take a look. A good look.
You can rotate them and turn them any way you want: The new Märklin signals are convincing from all sides. Whether lens hoods, replacement signals, or the tiny LED – everything is true to scale and has the same finely detailed effect as the prototype.

What happened to the wires?
Spontaneous enthusiasm mounts to amazement, when you look at the models from the side: Where other signals fill the mast with bundles of wires; with Märklin you maintain a clear view. Whether behind the signal housing, on the lattice mast or the round mast, there is no wire, or even a solder joint, to disturb the fine appearance. Nevertheless, the entry signal and distant signal, for example, display seven different signal aspects – with seven mini-LEDs – on one mast.

Twice the intelligence:
In the signal housing and in the roadbed.
This much innovation requires a lot of ideas, and many of them are in the signal housing. An extremely flat electronic circuit is integrated directly behind the signal housing. It stores the signal aspects, and supplies and controls the LED. When the light changes, the LED first slowly fades, and the new signal aspect slowly appears – like watching in slow motion – and like it is in the prototype. The electronic circuit in the signal housing communicates with a second electronic circuit, the microchip in a separate signal decoder. Each home signal has such a signal decoder; it is mounted near the signal in the C Track bed, or under the layout baseboard. The decoder communicates with conventional control boxes, and well as with digital keyboards. The signal decoder forwards switching commands (with the corresponding code for the signal aspect) to a home signal and a distant signal (if connected).

The Decoder Principle.
The electronic circuit in the signal housing decodes the command. It then knows for itself which LED it must switch off and on for this particular signal aspect. Thanks to this decoder function, which is integrated directly in the signal housing, we no longer need the many wires to control the LED. Power supply and command transmission between decoder and signal housing run over 2 wires.

LED with correct traffic signal colors.
The mini LEDs are maintenance-free, they have a long service life and a bright light opening. As in the standard regulations for the prototype, the LEDs correspond to the correct traffic signal colors: Red (powerful), yellow (warm), green (cold) and white (genuine white). The white LEDs signal that switching is free; they have an unbelievable diameter of 1.2 mm / 1/16"



The separate signal decoder includes all connections for digital and conventional signal control.

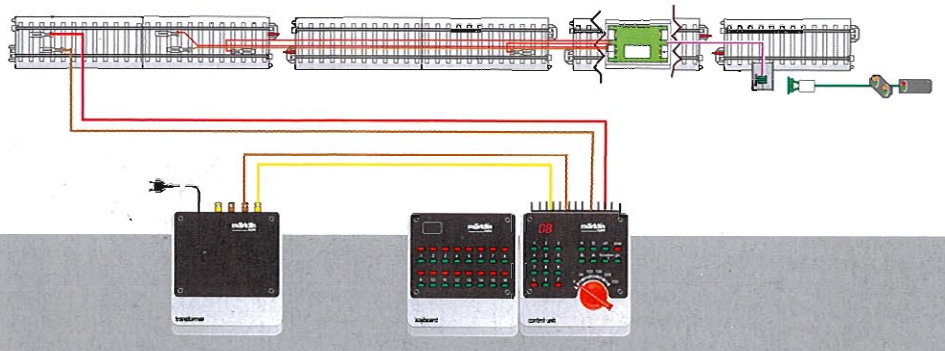
The base with the plug system for the signal can simply be clipped onto the C Track. The few required connections and the signal decoder are hidden in the roadbed.

It is quite simple to integrate the signal decoder, including control of train movements, into the Märklin digital system:

The signal decoder gets its commands directly over the track. A control wire to the digital control box (keyboard) is not required.

The standard address of the signal decoder can be adjusted prior to installation. There are only 4 contacts to the track and 1 wire to the signal that must be plugged in for the connection.

Note that control wires to the control box are required for conventional layouts.



Color Light Signals.

76391
Color Light Home Signal.

Block signal for use on main lines. Appropriate distant signal by itself is item no. 76383 or on block signal, item no. 76395.

Prototype: German Federal Railroad (DB) standard design block signal. 2 settings: "Stop" – red (Hp0) and "Running" – green (Hp1).

Model: With integrated electronic signal circuit and 1 separate signal decoder. Control of all functions is possible via the associated signal decoder in the digital system, or with a conventional control box. Signal decoder can be installed under the C Track or under the layout. For digital operation, the configuration and the address can be assigned and tested before the installation. Connections for controlling train movements and for 1 distant signal on the signal decoder. Height without base 78.0 mm /3-1/16".

Hp0
Red
Stop

Hp1
Green
Proceed

76393
Color Light Home Signal.

Entry signal for use before stations. Appropriate distant signal by itself is item no. 76383 or on block signal, item no. 76395.

Prototype: German Federal Railroad (DB) standard design entry signal. 3 settings: "Stop" – red (Hp0), "Running" – green (Hp1) and "Restricted speed running" – green/yellow (Hp2).

Model: With integrated electronic signal circuit and 1 separate signal decoder. Control of all functions is possible via the associated signal decoder in the digital system, or with a conventional control box. Signal decoder can be installed under the C Track or under the layout. For digital operation, the configuration and the address can be assigned and tested before the installation. Connections for controlling train movements and for 1 distant signal on the signal decoder. Height without base 78.0 mm /3-1/16".

Hp0
Red
Stop

Hp1
Green
Proceed

Hp2
Green/Yellow
Proceed
slowly

76394
Color Light Home Signal.

Exit signal for use in station areas. Appropriate distant signal by itself is item no. 76383 or on entry signal, item no. 76397. Integrated yard signal with white light.

Prototype: German Federal Railroad (DB) standard design exit signal. 4 settings: "Stop" – red/red (Hp00), "Running" – green (Hp1) and "Restricted speed running" – green/yellow (Hp2,) as well as train stop, switching permitted" – red/white/white (Hp0/Sh1).

Model: With integrated electronic signal circuit and 1 separate signal decoder. Control of all functions is possible via the associated signal decoder in the digital system, or with a conventional control box. Signal decoder can be installed under the C Track or under the layout. For digital operation, the configuration and the address can be assigned and tested before the installation. Connections for controlling train movements and for 1 distant signal on the signal decoder. Height without base 78.0 mm /3-1/16".

Hp00
Red/Red
Stop, no
switching

Hp0 + Sh1
Red + White/White
Stop,
switching allowed

Hp1
Green
Proceed

Hp2
Green/Yellow
Proceed slowly

76383
Color Light Distant Signal.

Distant signal can be used with all home signals.
Signal aspects for this signal automatically assigned when it is connected to signal control module.

Prototype: German Federal Railroad (DB) standard design distant signal. Distant signal with 3 settings: "Expect stop" – yellow/yellow (Vr0), "Expect running" – green/green (Vr1), and "expect restricted speed running" – green/yellow

Model: With integrated electronic signal circuit. Connection to the separate signal decoder of the associated home signal. Can be used for all home signals. Control of all functions via the signal decoder of the home signal. For digital operation the signal decoder of the home signal assigns the configuration and the address. Height without base 61.0 mm / 2-13/32".

controlled by home signal that follows

Vr0
Yellow/Yellow
Prepare to stop

Vr1
Green/Green
Prepare to proceed

Vr2
Green/Yellow
Prepare to proceed slowly

76395
Color light home signal with color light distant signal.

2 signals on one mast without additional connections.
Block signal for use on main lines.
Distant signal for use before a block signal or an entry signal.

Prototype: German Federal Railway (DB) standard design block signal with distant signal on the same signal mast. Home signal with 2 settings like item no. 76391. Distant signal with 3 settings like item no. 76383.

Hp0
Red
Stop

Off

Model: With 2 integrated electronic signal circuits and 1 separate signal decoder. Can be used for all home signals. Control of all functions of both signals is possible via associated signal decoders in the digital system or with a conventional control box. Signal decoder can be installed under the C Track or under the layout. For digital operation the configuration and the address of both signals can be assigned and tested before the installation. Connections for controlling train movements and for 1 additional distant signal are on the signal decoder. Height without base 78.0 mm /3-1/16".

Hp1
Green
Proceed

controlled by home signal that follows

Vr0
Yellow/Yellow
Expect to stop

Vr1
Green/Yellow
Expect to proceed

Vr2
Green/Yellow
Expect to proceed slowly

76397
Color light home signal with color light distant signal.

2 signals on one mast without additional connections.
Entry signal for use before stations.
Distant signal for use before an exit signal.

Prototype: German Federal Railway (DB) standard design entry signal with distant signal on the same signal mast. Home signal with 3 settings like item no. 76393. Distant signal with 3 settings like item no. 76383.

Hp0
Red
Stop

Off

Model: With 2 integrated electronic signal circuits and 1 separate signal decoder. Can be used for all home signals. Control of all functions of both signals is possible via associated signal decoders in the digital system or with a conventional control box. Signal decoder can be installed under the C Track or under the layout. For digital operation the configuration and the addresses of both signals can be assigned and tested before the installation. Connections for controlling train movements and for 1 additional distant signal are on the signal decoder. Height without base 78.0 mm /3-1/16".

Hp1
Green
Proceed

Hp2
Green/Yellow
Proceed slowly

controlled by home signal that follows

Vr0
Yellow/Yellow
Expect to stop

Vr1
Green/Yellow
Expect to proceed

Vr2
Green/Yellow
Expect to proceed slowly

Color Light Signals.

76371
Color Light Yard Signal.

Yard signal for use in switching areas.
Signal housing on proto-typically narrow stand.
Sh1 aspect correct with 2 white lights.

Prototype: German Federal Railroad (DB) standard design yard signal. Dwarf signal without mast.
2 settings: "Stop, not to be moved in traffic" – red/red (Sh0) and "not to be moved in traffic, cancelled – white/white" (Sh1).
Model: With integrated electronic signal circuit and 1 separate signal decoder. Plug contact on the narrow foot of the signal housing. Signal housing with small lens hood. Control of all functions is possible via associated signal decoder in the digital system, or with a conventional control box. Signal decoder can be installed under the C Track or under the layout. For digital operation, the configuration and the address can be assigned and tested before the installation. Connections for controlling train movements are on the signal decoder. Height without base 10.0 mm /13/32".

76372
Color Light Yard Signal.

Yard signal for use in switching areas.
Prototypical thin pipe mast.
Sh1 aspect correct with 2 white lights.

Prototype: German Federal Railroad (DB) standard design yard signal. High signal with tubular mast.
2 settings: "Stop, not to be moved in traffic" – red/red (Sh0) and "not to be moved in traffic, cancelled – white/white" (Sh1).
Model: With integrated electronic signal circuit and 1 separate signal decoder. Control of all functions is possible via associated signal decoder in the digital system or with conventional control box. Signal decoder can be installed under the C Track or under the layout. For digital operation, the configuration and the address can be assigned and tested before the installation. Connections for controlling train movements are on the signal decoder. Height without base 50.0 mm /1-31/32".

74371
Color Light Track Block / Yard Signal.

New generation of Hobby color light signals.
Train control feature.

Simple track block signal without a mast for use in switch yards and station areas. Changes from Sh0 (red/red) to Sh1 (yellow/yellow). Track current can be controlled by means of the 72750 control box. Maintenance-free LED's. Height without base approximately 10 mm / 3/8".
Suitable control box is 72750.

Sh0
Red/Red
Stop

Sh1
White/White
Switching allowed

Sh0
Red/Red
Stop

Sh1
White/White
Switching allowed

Sh0
Red/Red
Stop

Sh1
Yellow/Yellow
Switching allowed

74380
Color Light Distant Signal.

New generation of Hobby color light signals.
Train control feature.

Simple distant signal for use in front of home signals. Changes from Vr0 (yellow/yellow) to Vr1 (green/green). Track current can be controlled by means of the 72750 control box. Maintenance-free LED's. Height without base approximately 61 mm / 2-3/8".
Suitable control box is 72750.

74391
Color Light Block Signal.

New generation of Hobby color light signals.
Train control feature.

Simple block signal for use on rail lines away from station areas. Changes from Hp0 (red) to Hp1 (green). Track current can be controlled by means of the 72750 control box. Maintenance-free LED's. Height without base approximately 78 mm / 3-1/16".
Suitable control box is 72750.

7244
Universal Relay.

With 4 single pole switches. Contacts have 2 amp capacity. Can be activated by control box, circuit track, contact track, reed switch or digital decoder.

72441
Brake Module.

Signal mechanism with integrated switching for controlled stopping of digital locomotives with high-efficiency propulsion. Connections for a two-aspect light signal for the required 3 track sections, for safe stopping of the locomotive. The brake module is switched either via a k 83 Decoder or via a conventional 7272/72720 Control Box. Dimensions 100 x 54 x 22 mm / 3-15/16" x 2-1/8" x 7/8".

The brake module requires three insulated track sections in the signal area. The first part is a transition area, which corresponds to the length of a ski-shaped pick-up shoe (app. 70 - 90 mm / 2-3/4" - 3-17/32"). The second section is the actual braking area, in which the locomotive comes to a controlled stop.

The length of the braking area is specified by the brake delay setting on the locomotive decoder. This second area should be at least 40 - 50 cm / 15-3/4" - 19-11/16". The third section is a safety section in which the operating voltage is switched off in signal sections, as before. This prevents the locomotive from "slipping through" the signal area unintentionally. The brake module is suitable for light signals and semaphores.

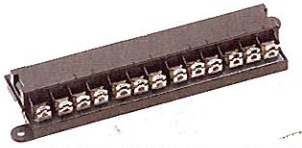
Locomotives with built-in digital electronic circuits without a control feature, or Delta electronic circuits sometimes come to a stop in the brake section or even in the safety section. A clear specification is not possible. Consequently, using the 72441 brake module, together with propulsion systems that do not have a control feature, is not recommended.

Vr0
Yellow/Yellow
Expect to stop

Vr1
Green/Green
Expect to proceed

Hp0
Red
Stop

Hp1
Green
Proceed



Semaphore/Target Signals.

Stop and Go on the Rails.

Model signals fulfill important control and safety functions just like those of the prototype.

Märklin signals control traffic, because they not only show prototypical signal indications, they also directly influence the movement of trains. When set for "stop" they turn off current in their area to the center rail and to the catenary – the train remains stopped. When set for "slow" or "full speed" they turn the current on – the train travels through the area or starts up again.

Anyone wanting to be even more realistic can set up distant signals at the proper intervals; these are coupled with their home signals and show the same signal settings. Color light and semaphore/target signals are controlled with the 7272/72720 control box and in the Digital system with the accessory decoders.

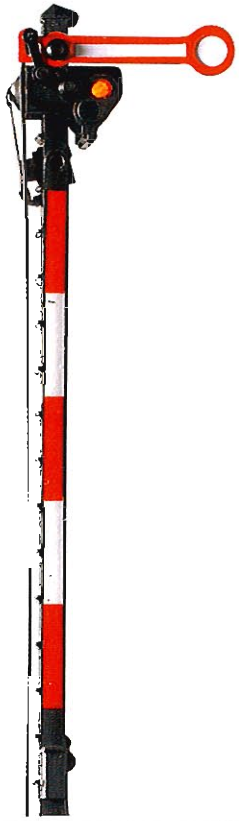
In conjunction with circuit tracks or switching contacts, signals can also be controlled by trains in operation, thereby automating many operating procedures.

7036
Distant Signal.

Has movable disk. Changes from yellow/yellow to green/green. Double solenoid. With base plate. Width 28 mm / 1-1/8". Length 65 mm / 2-9/16". Height 73 mm / 2-7/8".

7039
Home Signal.

Single semaphore. Changes from red to green. Double solenoid. With base plate. Width 27 mm / 1-1/16". Length 70 mm / 2-3/4". Height 125 mm / 5".



7038
Distant Signal.

Has movable arm and movable disk. Changes either as the 7036 or from yellow/yellow to yellow/yellow/green. 2 double solenoids. With base plate. Width 28 mm / 1-1/8". Length 65 mm / 2-9/16". Height 73 mm / 2-7/8".

7040
Home Signal.

Has 2 coupled semaphores. Changes from red to green/yellow. Double solenoid. With base plate. Width 27 mm / 1-1/16". Length 70 mm / 2-3/4". Height 125 mm / 5".

7041
Home Signal.

Has 2 independent semaphores. Changes from red to green or red to green/yellow. 3 solenoids. With base plate. Width 27 mm / 1-1/16". Length 97 mm / 2-9/16". Height 125 mm / 5".

7042
Yard Signal.

Mast with movable front and rear lens. Double solenoid. With base plate. Width 28 mm / 1-1/8". Length 70 mm / 2-3/4". Height 70 mm / 2-3/4".

Usually on main lines or at stations with no turnouts/crossings.

7036
Distant Signal:
Prepare to stop
Vr0

7039
Home Signal:
Stop
Hp0

7036
Distant Signal:
Prepare to proceed
Vr1

7039
Home Signal:
Proceed
Hp1

Usually at or near stations with turnouts/crossings.

7038
Distant Signal:
Prepare to stop
Vr0

7040
Home Signal:
Stop
Hp0

7038
Distant Signal:
Prepare to proceed slowly
Vr2

7040
Home Signal:
Proceed slowly
Hp2

At or near stations with turnouts/crossings or straight through operation.

7038
Distant Signal:
Prepare to stop
Vr0

7041
Home Signal:
Stop
Hp0

7038
Distant Signal:
Prepare to proceed slowly
Vr2

7041
Home Signal:
Proceed slowly
Hp2

Controls switching movements in a station/yard.

7038
Distant Signal:
Prepare to proceed
Vr1

7041
Home Signal:
Proceed
Hp1

7042
Yard Signal:
Stop!
Sh0

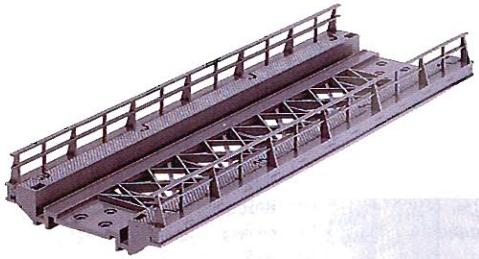
7042
Yard Signal:
Proceed
Sh1

Bridges.

Bridges and approach ramps bring the third dimension to a model railroad layout: from flatness to a sense of height.
From the simple bridging of a road or river, to crossing several tracks, to realistically linking different levels on the layout – the Märklin accessory program offers the right solution for each task.

7268
Straight Ramp.

For K or M Track. 3 clips for mounting K Track. Length 180 mm / 7-3/32".

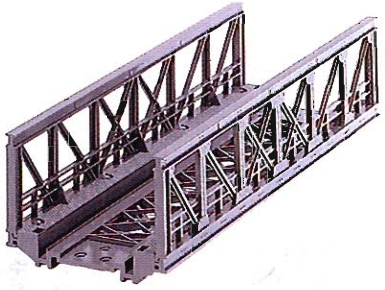


7263
Arched Bridge.

For K or M Track. 6 clips for mounting K Track and instructions for setting up bridges. Arch height 117 mm / 4-5/8". Length 360 mm / 14-3/16".

7262
Truss Bridge.

Can be used alone or with 7263 arched bridge. For K or M Track. 3 clips for mounting K Track and instructions for setting up bridges. Height 45 mm / 1-3/4". Length 180 mm / 7-3/32".



7250
Base Plate.

2.5 mm / 3/32" high. Used as pillar foundation.

7251
Base plate.

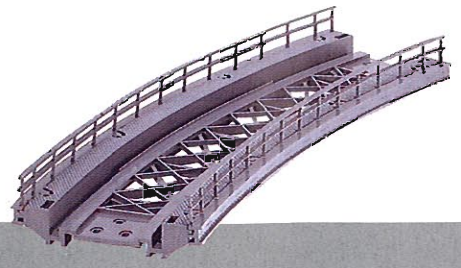
3 mm / 1/8" high. Can be used only in conjunction with 7250.

7252
Pillar.

6 mm / 1/4" high. For building ramps in 6 mm / 1/4" increments.

7267
Curved Ramp.

Radius 360 mm / 14-3/16". For K or M Track. 3 clips for mounting K Track. Length and radius same as 2221 and 5100 track.



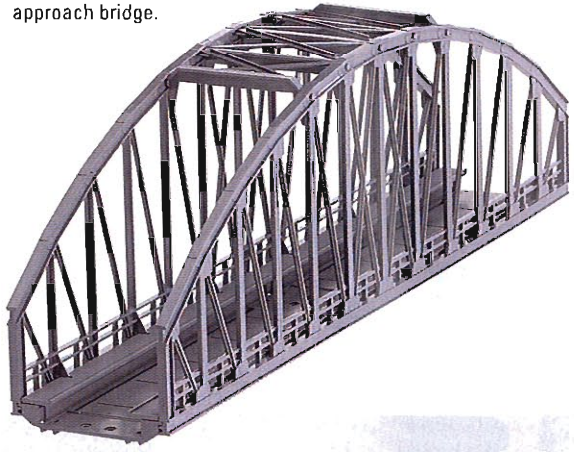
7569
Curved Ramp.

Radius 424.6 mm / 16-3/4". For K Track only (standard curve II). 3 clips for mounting track. Length and radius same as 2231 track.

The bridge program with the look of steel girders takes C Track into the third dimension. Ramps, approaches and overpasses can be built systematically with the sturdy superstructures and 7250 to 7253 pillars. The C Track lies in the bridge and can be slid back and forth, thus enabling you to have a custom installation of the bridges on a layout. The width of the bridges takes into account parallel approaches even in the track spacing used by the wide radius turnout geometry of 64.3 mm / 2-9/16". Suitable bases are available for catenary masts and color lights in the bridge area.

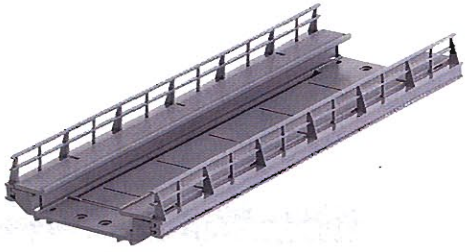
74636
Arched Bridge.

Length 360 mm / 14-3/16". Width 64 mm / 1-5/16". Height 117 mm / 4-5/8". For straight sections of C track. One arched bridge is the same length as the 24188 + 24172. The 74620 is suitable as an approach bridge.



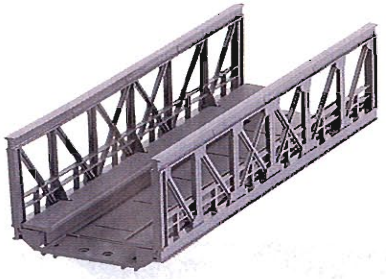
74618
Straight Ramp.

Length 180 mm / 7-3/32". Width 64 mm / 1-5/16". For straight sections of C track. Two ramp sections are the same length as the 24188 + 24172.



74620
Truss Bridge.

Length 180 mm / 7-3/32". Width 64 mm / 1-5/16". For straight sections of C track. Two truss bridges are the same length as the 24188 + 24172. Can also be used as an approach bridge to the 74636.



7253
Pillar.

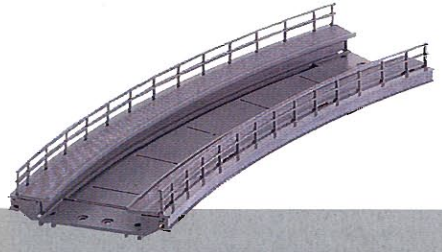
30 mm / 1-3/16" high.

7234
Base Plate.

For mounting masts of 7200 signals on bridges.

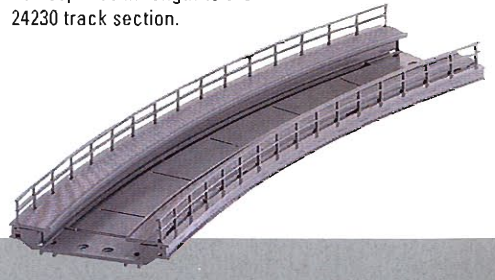
74613
Curved Ramp.

Radius 360 mm / 14-3/16". Curve 30°. Width 64 mm / 1-5/16". For R1 radius C track curved sections. One ramp section corresponds in length to the 24130 track section.



74623
Curved Ramp.

Radius 437.5 mm / 17-1/4". Curve 30°. Width 64 mm / 1-5/16". For R2 radius C track curved sections. One ramp section corresponds in length to the 24230 track section.



Railroad Grade Crossings.

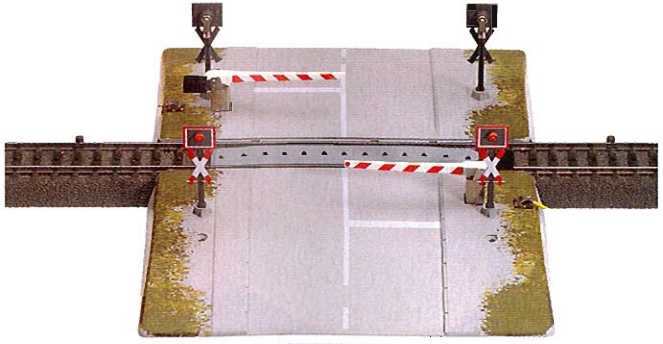
The gates for the fully automatic railroad grade crossings descend the minute an oncoming train reaches the contact area, and do not go back up until the last car has left the contact area. The contact area can be extended to any length desired. Any straight or curved track can be used with K Track. With C Track an existing electrical connection on the track sections must be separated. On the M Track that is no longer available only the 5115, 5116, and 5145 contact tracks can be used.

74920
Fully Automatic Railroad Grade Crossing.

24922
Adapter track for K Track
see page 337

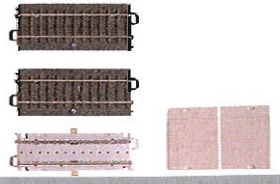
24951
Adapter track for M Track
see page 337

Comes with half gates. For direct connection to C Track. 2 solenoid activated gates with 2 warning signals and 2 red warning lights which come on when the gates come down. Ready to be connected to the layout, easy installation. Contact track set: 3 straight tracks each 94.2 mm / 3-3/4". Dimensions for each base half 137 x 95 mm / 5-3/8" x 3-3/4".



74930
Add-On Set.

For 74920 railroad grade crossings for C Track. Required for each additional parallel track. Contact track set: 3 straight tracks each 94.2 mm / 3-3/4". No other connections required. Road section can be adjusted for a spacing of 26 to 61 mm / 1" to 2-3/8" (track spacing of 66 to 101 mm / 2-5/8" to 4".

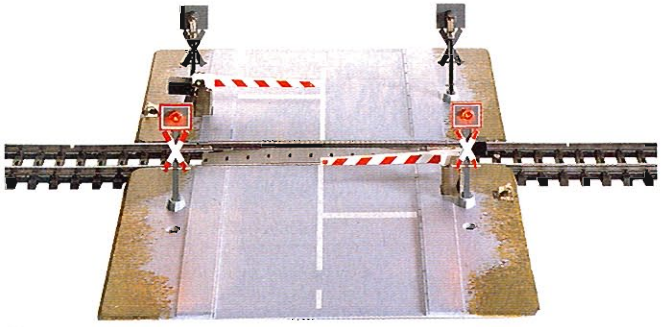


7592
Fully Automatic Railroad Grade Crossings.

24922
Adapter track for C Track
see page 337

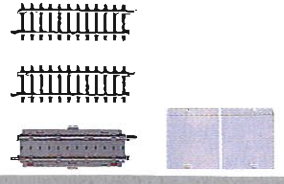
2291
Adapter track for M Track
see page 350

With half gates. For K Track. 2 solenoid activated gates with 2 warning signs and 2 red warning lights which come on when the gates go down. Contact track set: 3 straight tracks each 90 mm / 3-9/16". Dimensions for each base half 137 x 95 mm / 5-3/8"x 3-3/4".



7593
Add-On Set.

For 7592 railroad grade crossing. For K Track. Required for each additional parallel track. Contact track set: 3 straight tracks each 90 mm / 3-9/16". Road section can be adjusted for spacing of 33 to 68 mm / 1-5/16" to 2-11/16" / track spacing of 64 to 99 mm/2-1/2" to 3-7/8".



Vehicles.

18871
Bulldozer.

Prototype: CAT D5M LGP Crawler.
Model: Profiled crawler chain. Blade swings up and to the side. Representation of the hydraulic cylinder, interior details. Separately applied details. Length 56 to 62 mm / 2-7/32" to 2-7/16".

V

18872
Excavator.

Prototype: CAT 315C Excavator.
Model: Profiled crawler chain. Rotating crane cab. Boom, arm and bucket are movable. Action radius up to 100 mm / 3-15/16". Representation of the hydraulic cylinder, interior details. Separately applied details. Length 66 to 120 mm / 2-19/32" to 4-23/32".

V

18873
Wheel Loader.

Prototype: CAT 966G Wheel Loader.
Model: Large cleated tires, articulated frame. Arm swings upward. Movable bucket. Representation of the hydraulic cylinder, interior details. Separately applied details. Length 105 mm / 4-1/8".

V

18874
Dump Truck.

Prototype: CAT 730 Articulated Truck.
Model: Large cleated tires, articulated frame. Dumping body tilts back. Representation of the hydraulic cylinder on the central joint and on the lift device, interior details. Separately applied details. Length 116 mm / 4-9/16".

V

18300
Model Car Set "Gravel Works" – 2 classic truck models.

Prototype: MAN SIH6 with deep set flatbed and double axle. MAN F8 with high flatbed, long wheel base, and twin tires.
Model: Metal body and load surfaces. Boarded side wall representation Load of genuine sandy limestone in true-to-scale grain. Each vehicle is 110 mm / 4-11/32" in length.

The truck set is the thematically matched supplement for the Insider Car of the Year 2005.

N

Layout Accessories.

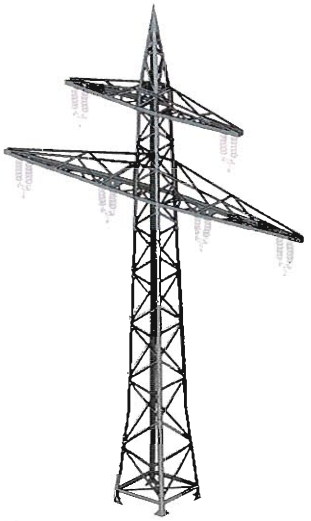
The street-front of "Plant 1" is approximately 200 m / 656 ft. long, and from the Filstal rail line, it forms the silhouette of Göppingen. The main building with the famous "little tower" and almost classic façade was built in 1908, and for a long time carried the artistically worked company name above the roof girder. In 1926 a extension was built in similar style, with what was originally a free clinker brick façade. Modern architecture came in the during the so-called "Economic Miracle" period: In 1957 a functional 6-story extension was built, which also housed the museum until 1979. For the 1984 Jubilee the plant building was painted white – since then white has been the Märklin "house color".

72895
Backdrop.

For designing a model railroad backdrop for layout or showcase. Colorful depiction with depth effect on strong paper. Scale representation of the historic "Märklin Plant 1" factory building. Format app. 240 cm x 36 cm / 7'10-1/2" x 14-3/16" cm, in two parts.

74730
High Voltage Mast.

Mast with 2 metal cross girders in lattice girder design. 6 doubled suspension insulators with eyes (0.8 mm / 1/32") for penetration of a thread as aerial conductor. Height 292 mm /11-1/2", width 205 mm / 8-1/16".



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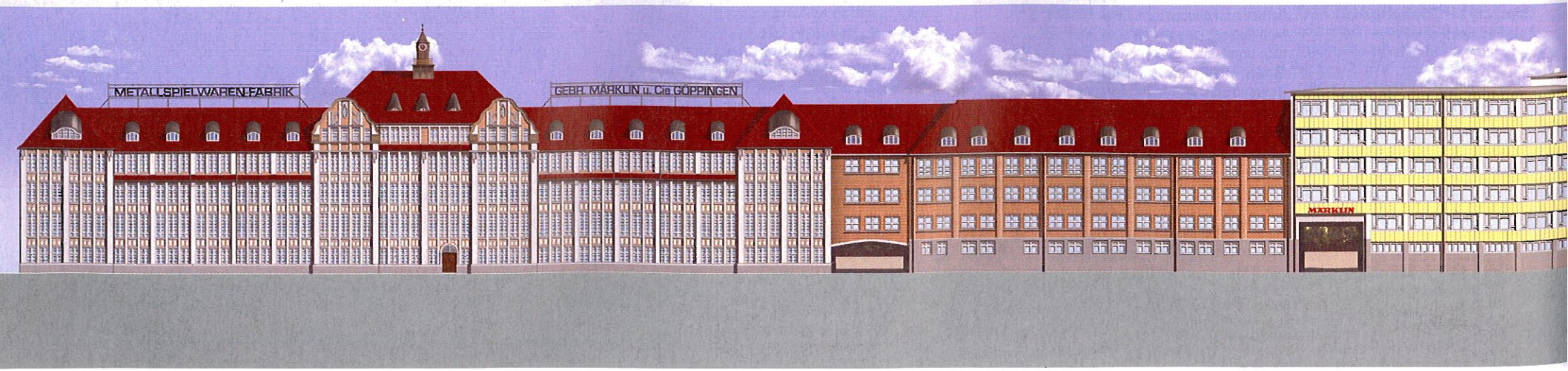
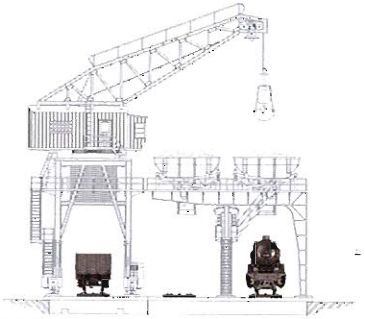


Coal-loading facility.

The operating expense for a steam locomotive is much greater then for diesel or electric locomotives. Taking on coal and water, sanding, firing up, lubricating, removing ashes and slag, turning in the direction of travel – the infrastructure for these tasks is concentrated in the railroad maintenance facility.

Coal is delivered to the coaling station, unloaded, stored, and loaded into the locomotive tender. Depending on the number and size of the locomotives to be serviced, standard designs define the type and features of the coaling station. An ingenious coal management is required at larger coaling stations. Depending on the locomotives being used, coal in different qualities and sizes must be made available. The coaling procedure should take place as quickly as possible; the standard design tenders take up to 10 metric tons. Large coaling stations therefore have elevated bunkers or weighing bunkers. These are for fuel storage and are mounted over the tracks. They are loaded with the appropriate coal mixture and empty their fuel directly into the tender of the locomotive waiting underneath.

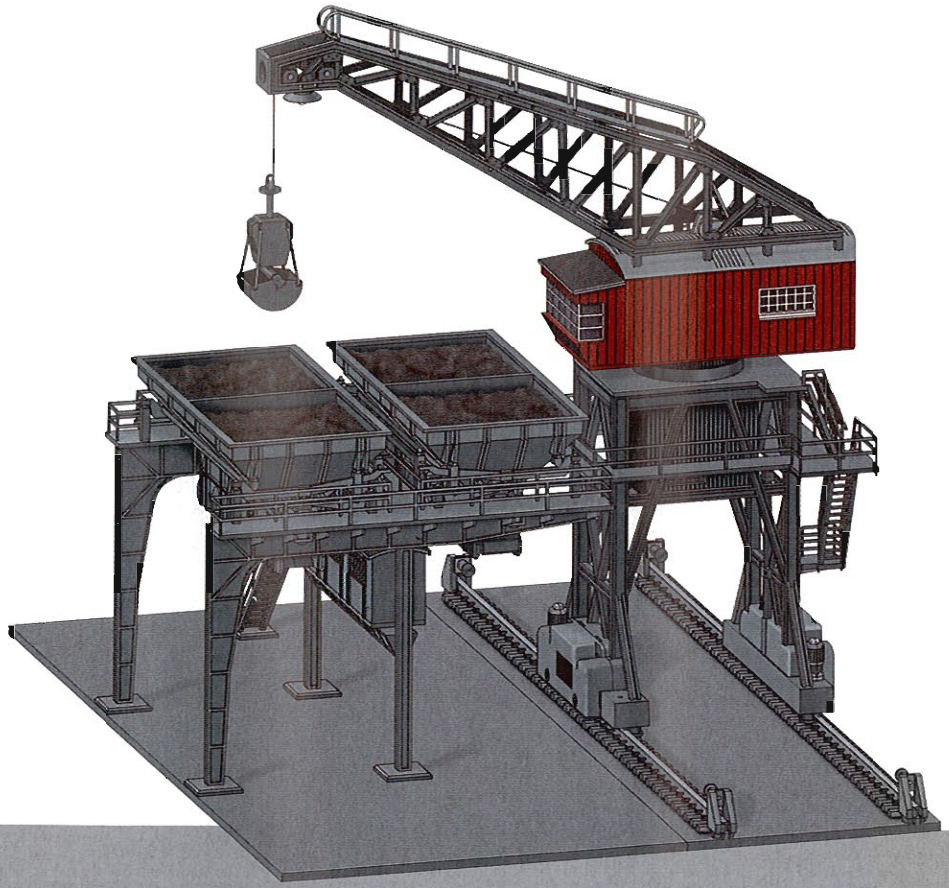
The loading platform for a rotary crane with a clamshell bucket runs parallel to the tracks. It loads the coal from the freight cars into a large bunker, and it loads the weighing bunkers from this supply. The number of weighing bunkers and the capacity of the large bunker depends on the demand. In our prototype there are 4 weighing bunkers, each holding 20 metric tons of coal.



76510
Large Coaling Station.

New tooling.
Many working functions,
Basis for every railroad maintenance facility.

Prototype: German Federal Railroad standard design weighing bunker with traveling rotary crane with a clamshell bucket, for railroad maintenance facilities.
Model: Detailed coaling station and suitable digital crane for use in railroad maintenance facilities. Base and superstructure made of high quality plastic, many separately applied details. Divided base for weighing bunker and for crane, can be set up in different ways. Power connections for the crane in the base. Crane is powered by miniature motors. Rotary crane can travel forwards and backwards, crane cab can be rotated 360°, working clamshell bucket can be raised and lowered. Work light on the boom and cab lighting both work. Crane functions can be controlled with the 6021 Control Unit 6021, the sender and receiver for item no. 76500, or the new 60652 Mobile Station. Weighing bunker has 4 bunker compartments, bunker hatches that can be opened. Bunker spacing is the same as a track spacing of approximately 64.5 mm / 2-9/16". Track spacing to the crane is approximately 64.5 mm / 2-9/16". Freight car clearance by the crane follows NEM standards.
Dimensions: 300 x 220 x 243 mm / 11-13/16" x 8-11/16" x 9-9/16".

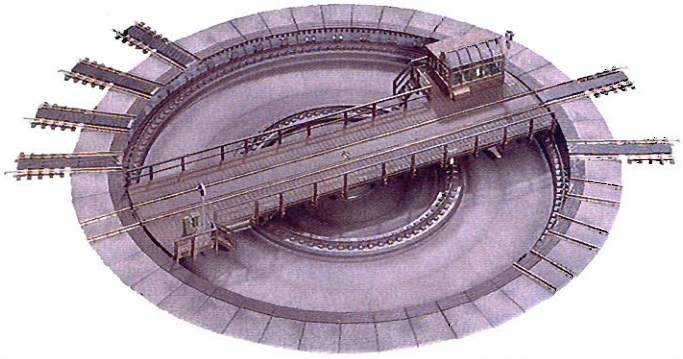


fx III-V

Turntable.

7286
Remote Control Turntable.

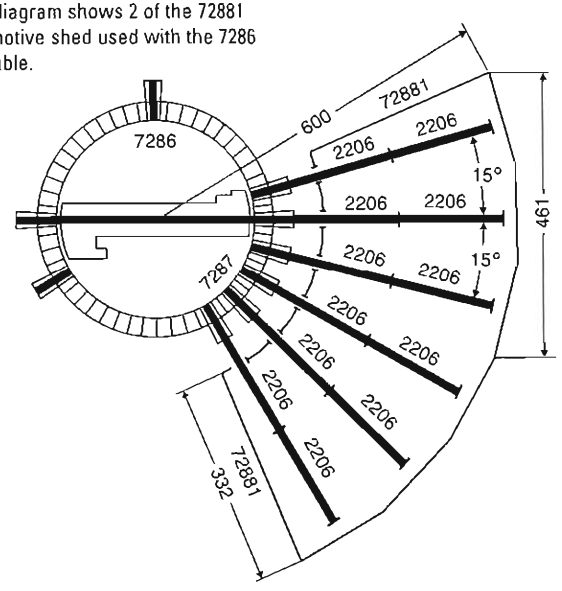
Standard DB 27 meter / 88 feet 6 inch design. Suitable for conventional and digital train operation. Remote controlled deck with built-in motor. Conventional controller included.



Function: Deck turns right/left in single steps and continuously to a stop. Can be retrofitted with the 7687 digital set for easy digital control. Turntable pit for inset installation on a layout. 6 spoke tracks for K Track which can be installed at any spot on the perimeter of the turntable. Can also be used with C Track and M Track in conjunction with adapter tracks. Can be expanded to a maximum of 48 spoke tracks at 7.5° intervals with the 7287 extension kit. Track power to spoke tracks comes through the turntable deck. External diameter 386 mm / 15-3/16". Deck length 310 mm / 12-1/4". Can be used with the 7288/72881 locomotive shed.

This model is a joint project with the Fleischmann Company, Nürnberg, Germany.

This diagram shows 2 of the 72881 locomotive shed used with the 7286 turntable.



24922
Adapter track for C Track.
see page 337

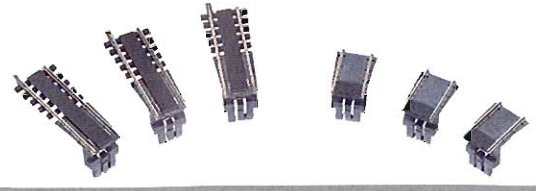
2291
Adapter track for M Track.
see page 350

7687
Digital Retrofit Set for 7286 Turntable.

Enables easy control of the turntable with track indexing in the Digital system. Deck turns to the right/left in single steps and continuously. Consists of electronic control circuit with digital decoder, all necessary hardware and complete instructions. In addition to a central unit (6021 Control Unit), a digital accessory controller (6040 Keyboard) is required to control the digital turntable (7286 with 7687). It is also possible to control the turntable with a computer (with 6051 Interface). This digital control is independent of the conventional or digital control of the trains.

7287
Extension Set for the 7286 Turntable.

3 spoke tracks for K track and 3 dummy tracks. Can be installed anywhere on the turntable. Built-in track power contacts.



Transfer Table.

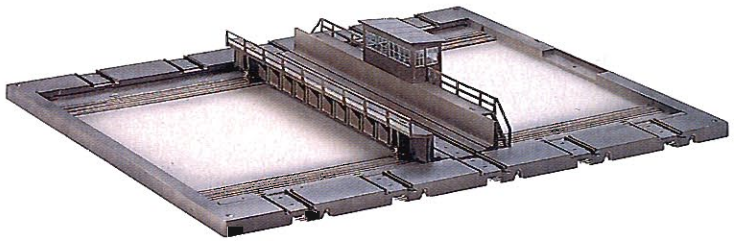
7294
Remote Control Transfer Table.

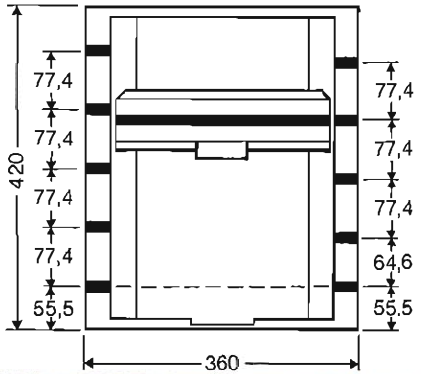
Base plate with 2 approach tracks and 8 stall tracks. Track connections for M Track. Can also be used with C Track and K Track in conjunction with adapter tracks. Can be used with 7289 locomotive shed. Deck with motor in engine shed for forward and reverse operation. Control box and cable for remote control. Deck stops automatically at the tracks. Track power to the stall tracks through the deck. Additional connections for catenary. Dimensions of base 360 x 420 mm / 14-3/16" x 16-1/2". Deck length 288 mm / 11-3/8".

The transfer table can also be controlled with Märklin Digital using a k 84 decoder. The connections for the transfer table are described in the instructions for the k 84 decoder and in the 0308 Digital book.

24951
Adapter track for C Track.
see page 337

2291
Adapter track for K Track.
see page 350





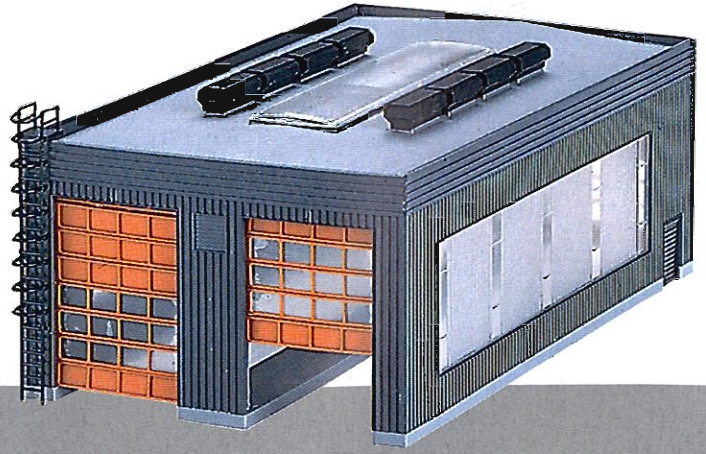
Model sets.

72891
Locomotive Shed Kit.

Single-stall locomotive shed. Doors close automatically after a locomotive enters the shed. Suitable for all H0 track. Size approximately 320 x 120 mm / 12-5/8" x 4-3/4".

7289
Locomotive Shed Kit.

Two-stall shed with 4 manually operated roll doors for run-through operation. For M and K Track (track not included). Can be used with 7294 transfer table. Size 280 x 150 mm / 11" x 6".

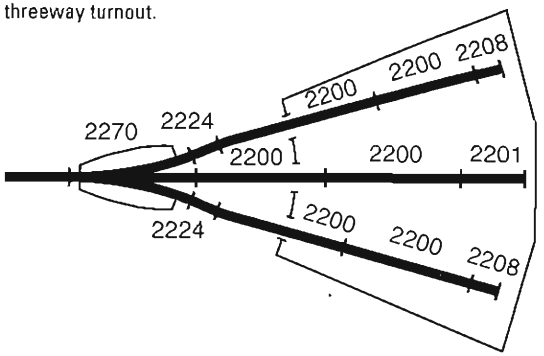


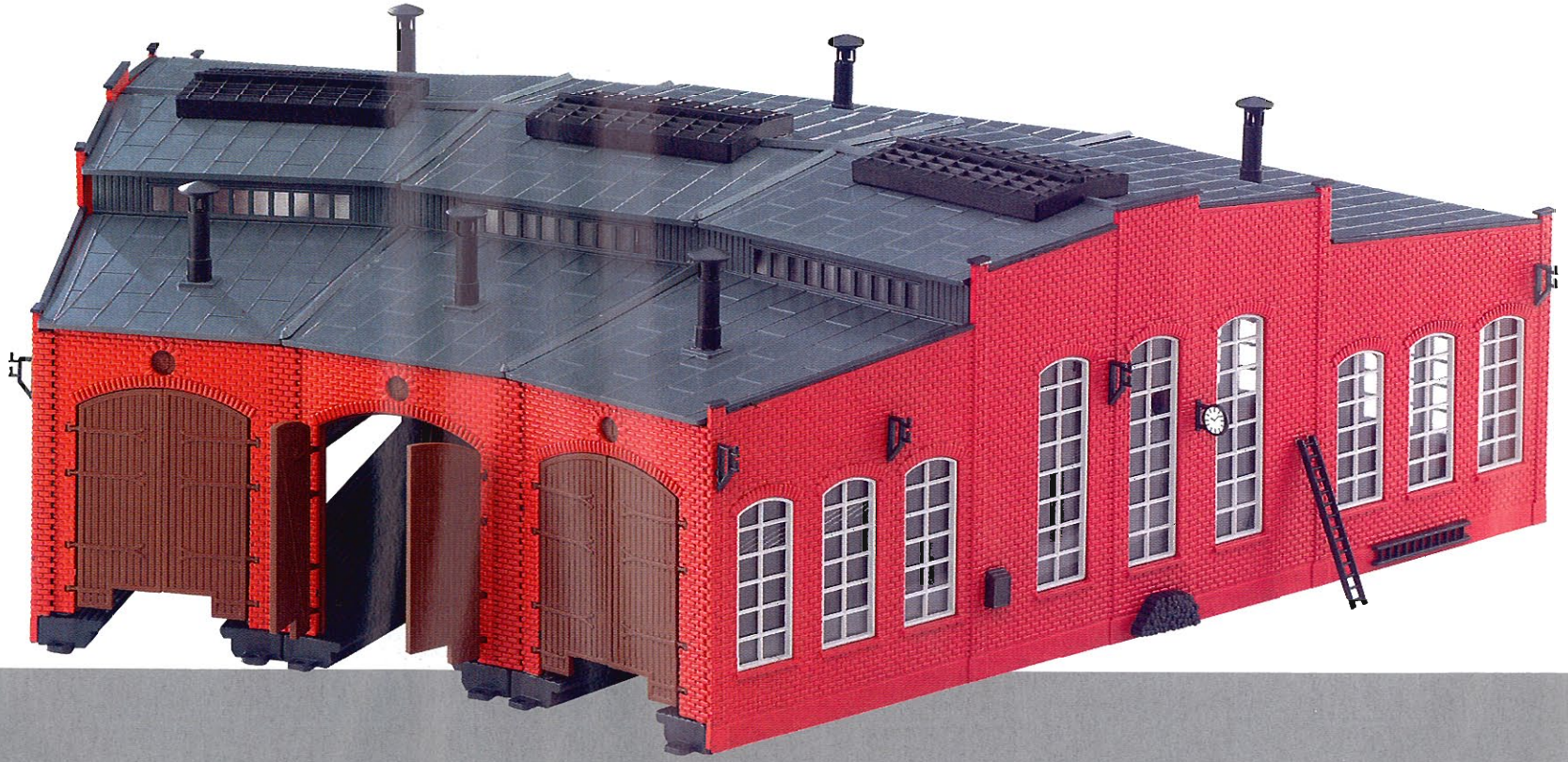
72881
Locomotive Shed Set.

New development.
also suitable for two-conductor DC current track system.
Interior details with lighting.

Prototype: 3-place brick construction roundhouse. Early 20th century construction style. In use until current museum operation.
Model: Each place arranged at a 15° angle. Works well with 7286 Turntable. Suitable for C track and K track (track not included). 30 cm / 11-13/16" inside usable track length. Gates close automatically when the locomotives enter. Lighting set with 6 maintenance-free LED's, pre-wired, ready-to-install. Additional intermediate support set included for direct connection of multiple engine sheds without intermediate wall. Size 350 x 461 mm / 13-25/32" x 18-5/32", height 128 mm / 5-1/32".

Suggestion for combining the 7288 locomotive shed with a 2270 threeway turnout.





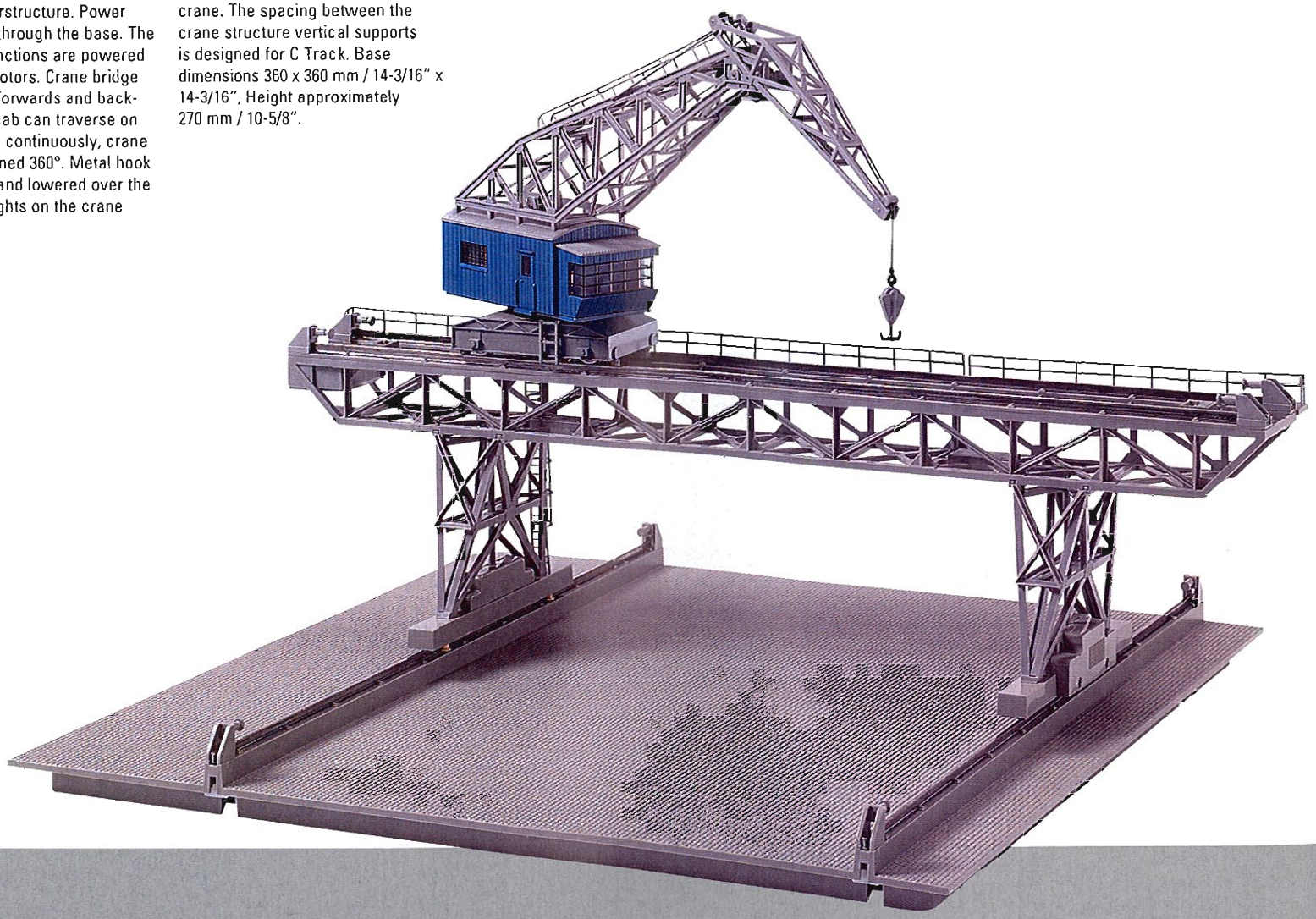
I - V

Gantry Crane.

76500
Gantry Crane.

6 special functions.
Miniature motors to power the mechanical functions.
Work lights that can be turned on and off.
Connections for an electro-magnet.
Conventional and digital operation are both possible.

Prototype: Typical gantry crane, mainly used at industrial, harbor and other freight loading/ unloading locations.
Model: Gantry crane comes with digital operating functions. Plastic base and superstructure. Power supply comes through the base. The mechanical functions are powered by miniature motors. Crane bridge can be driven forwards and backwards, crane cab can traverse on the crane slots continuously, crane cab can be turned 360°. Metal hook can be raised and lowered over the pulley. Work lights on the crane boom can be turned on and off. There are connections for an electro-magnet. The crane's functions can be controlled with the 6021 Control Unit or with the controller that comes with the crane. The spacing between the crane structure vertical supports is designed for C Track. Base dimensions 360 x 360 mm / 14-3/16" x 14-3/16", Height approximately 270 mm / 10-5/8".

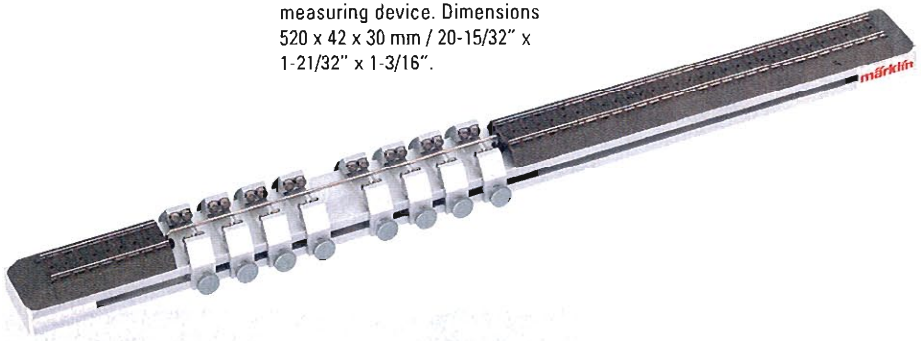


fx III-V

Accessories.

78101
Chassis Dynamometer.

For service and presentation of locomotives with up to 8 driving axles and coupled axles. Also suitable for the Big Boy. Eight adjustable roller bracket pairs with precision ball bearings. Structure and technical design same as 78100. Can be retrofitted with 78111 measuring device. Dimensions 520 x 42 x 30 mm / 20-15/32" x 1-21/32" x 1-3/16".



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78100
Chassis Dynamometer.

For service and presentation of locomotives with up to 4 driving axles and coupled axles. Ideally suited for class 03, 41 models, Mikado. Structure is made of anodized aluminum sections. Four adjustable roller bracket pairs with precision ball bearings. C Tracks for positioning the non-powered axles. Locomotive power connection for conventional transformers, Delta or Digital System.

Removable center conductor in the roller area. Outer tracks can be separately connected so that the unit is also suitable for two-conductor locomotives. Up to two 78110 roller bracket pairs or 78111 measuring device can be retrofitted. Dimensions 400 x 42 x 30 mm / 15-3/4" x 1-21/32" x 1-3/16".

78110
Roller Bracket Pair.

For retrofitting the 78100 test rig by one coupling axle. With 4 precision ball bearings. Two 78110 roller bracket pairs can be retrofitted. With guide carriage and adjusting screws. Dimensions 60 x 27 x 13 mm / 2-3/8" x 1-1/16" x 1/2".

78111
Measurement Device.

For installation in the 78100 and 78110 Chassis Dynamometers. Enables wireless measurement of speed, time, and duration of operation. Special roller bracket pair with measurement transducer and transmitter. Display device with receiver and LCD display. Operation with 3 type AA/LR6 batteries (not included). Dimensions 80 x 70 x 120 mm / 3-5/32" x 2-3/4" x 4-23/32".

72600
Universal Speed Measurement Tool.

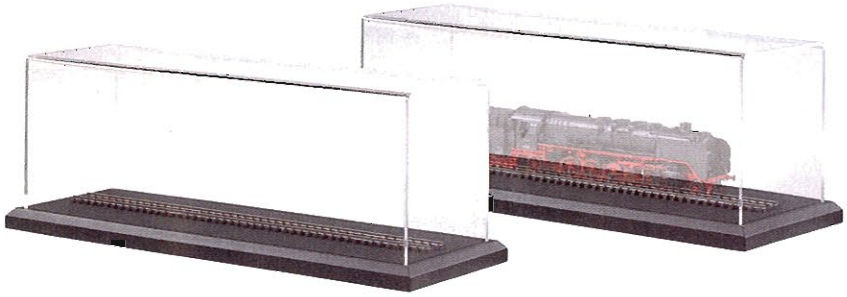
Universal speed measurement unit for many applications.
Choice of scales (1:220 – 1:22).
Measurement with photoelectric beam.
Data transmission by radio wave.

Tool for non-contact measuring of model speeds with a photoelectric beam sensor. Transmission of the data from the sensor to the display unit by radio waves (433 MHz).
Up to 16 can be overseen by a measurement unit. Easy to read liquid crystal display with the option of showing the actual speed, maximum, and minimum speed. Display of the scale, optional adjustment of m/s, mph and km/h and display of the address of the sensor. Additional display of the laps run. Sensor circuit board approximately 80 x 50 mm / 3-1/8" x 1-15/16".
Display unit approximately 80 x 70 x 120 mm / 3-1/8" x 2-3/4" x 4-3/4".
Operation 4.5 volts (3 x 1.5 volt penlight battery).

78200
Display Case.

High quality display case.
Can be used for locomotives and cars up to a length of approximately 34.0 cm / 13-3/8".

Display case for presentation of models. Wooden base with high quality acrylic cover. One length of K Track, 36.0 cm / 14-3/16", mounted. Can be used for locomotives and cars up to a length of approximately 34.0 cm / 13-3/8". Interior dimensions of the display case 37.0 x 11.0 x 12.5 cm / 14-9/16" x 4-5/16" x 4-15/16".



7226
Smoke generator, diameter 5 mm / 3/16".

Consists of smoke generator insert, replacement smoke tube, cleaning wire, and tweezers. Install from above.

72270
Smoke generator, diameter 3.5 mm / 1/8".

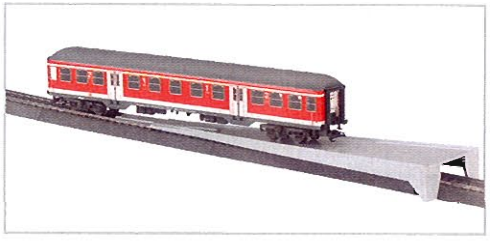
Install from below on locomotive.

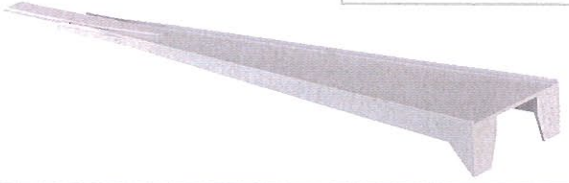
02420
Smoke Fluid.

Large 50 milliliter or 1.67 oz. for refilling all smoke generators.

7224
Rerailer.

Facilitates placing multi-axle locomotives/cars on the track.
Length 30.0 cm / 11-1/16".
Height 2.5 cm / 1".

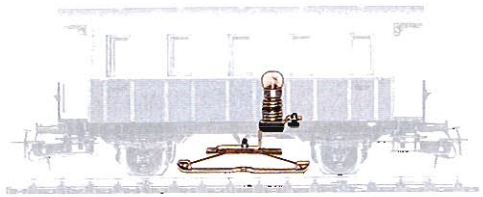




Interior lighting.

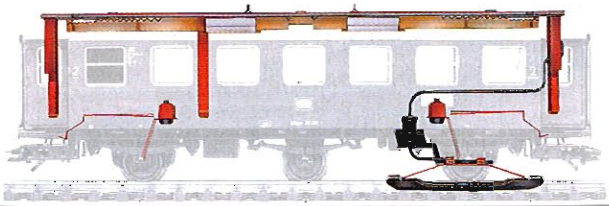
7323
Lighting Kit.

For cars 4035, 4038, 4039, 4107 and 4108. Consists of pickup shoe with light socket and light bulb.



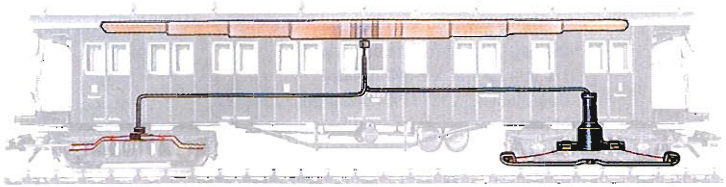
7317
Lighting Kit.

For cars 4317–4319. Installation kit for 1 pair of cars. Consists of pickup shoe, current-conducting close coupler, 2 light diffusers and 4 light bulbs.



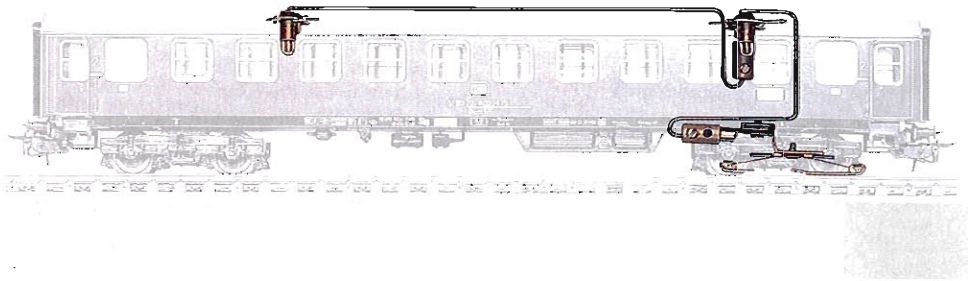
7333
Lighting Kit.

For cars 42101, 42131, 4214, 42141, 42142 and 4229. Consists of pickup shoe, light diffuser, lamp socket and light bulb.



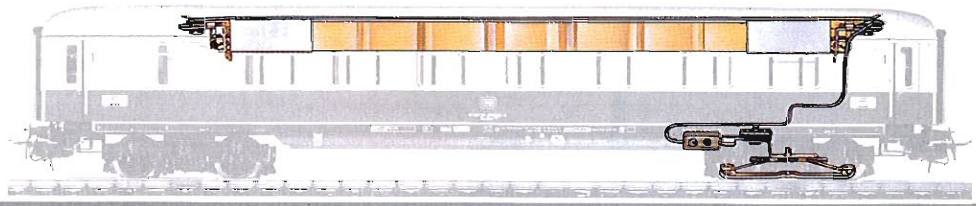
7077
Lighting Kit.

For cars 4026, 4027, 4032, 4044, 4051, 4052, 4111 and 4112. Connecting socket for additional lights. With light bulb.



7320
Lighting Kit.

For cars 4085 and 4087. Consists of pickup shoe, light diffuser, 2 lamp sockets, and 2 light bulbs.



7198
Pickup Shoe.

For 7077 lighting kit.

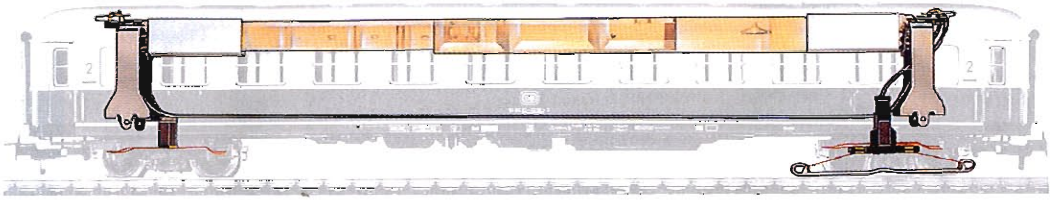
7322
Lighting Kit.

Same as 7320, but without light diffuser. For 4090 car.

Interior lighting.

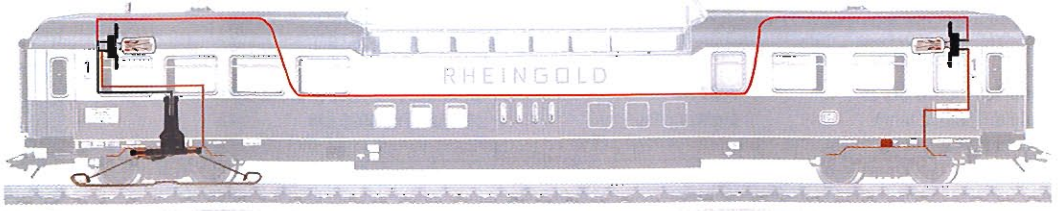
7329
Lighting Kit.

For cars 4131, 4132 and 4133. Consists of pickup shoe, adjustable light diffuser, 2 light sockets and 2 light bulbs.



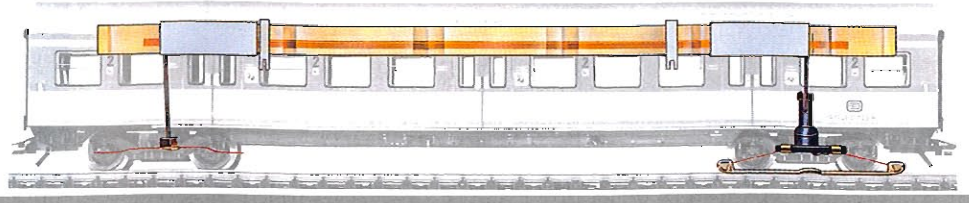
73161
Interior Lighting Kit.

Can be used with the models of the TEE/IC vista dome cars in the 26727 train and in the 42995 car set. Suitable only for cars produced since 2002. Consists of pickup shoe, 2 light bulb sockets, 2 light bulbs, and connecting wires. The light diffuser is already present in the cars.



7330
Lighting Kit.

For cars 42168, 42171, 4227, 4255–4257, 42551–42571, 4264, 4265, 4282, 4285, 4286, 4327, 4368, 4369 and 4384. Consists of pickup shoe, light diffuser with lamp sockets and 2 light bulbs, Can be used with 7319 current-conducting close coupler.

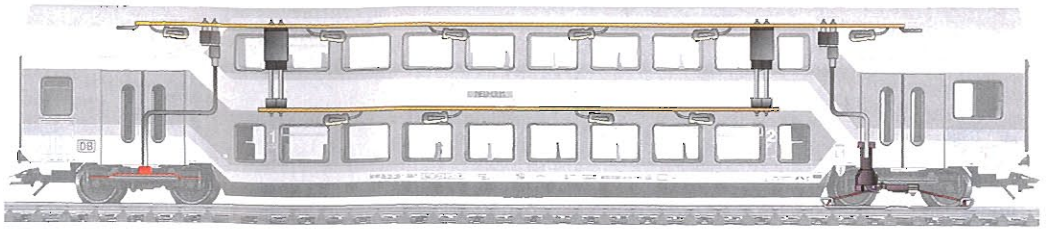


7335
Lighting Kit.

Same as 7330, but for shorter express train passenger cars. For cars 41351, 41361, 42383 and 42751.

73140
Lighting Kit.

For cars 43581-43586. Consists of pickup shoe, circuit board with 10 light bulbs and current-conducting coupler.

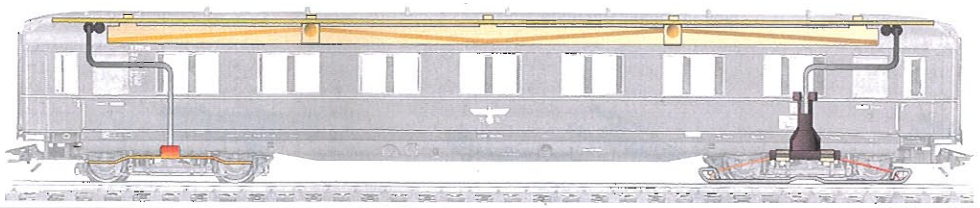


7316
Lighting Kit.

For the 4365 car and the panorama cars from the 4367 car set. Consists of pickup shoe, light diffuser with light sockets and 2 light bulbs. Can be used with 7319 current-conducting close coupler.

73150
Lighting Kit.

For cars 43200, 43201, 43206, 43210, 43211, 43221, 43226, 43231, 43240, 43300, 43301, 43601 and 43602. Consists of pickup shoe, light diffuser with lamp sockets, 2 light bulbs, and current-conducting close coupler.



73155
Lighting Kit.

For cars 43241, 43250, 43251, 43260 and 43261. Consists of pickup shoe, light diffuser with lamp sockets, 2 light bulbs, and current-conducting close coupler.

Accessories and Spare Parts.

7207
Double-Arm Pantograph.

Type SBS 10 for older design locomotives. Interchangeable with 7218.

7247
Single-Arm Pantograph.

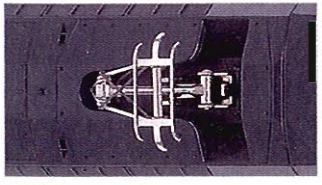
Type SBS 65 for modern locomotives. Interchangeable with 7218.

7194
Reverse Unit Springs.

Package of 5 springs for reverse units in all conventional locomotives.

446500
Narrow wiper.

for SBB pantograph. Suitable for display models.



7203
Close Couplers.

Contents: 50 no. 70 1630 close coupler heads. For installation on cars with standard coupler pockets (NEM 362) and guide mechanisms. Compatible with standard couplers (NEM 360).

72060
Relex Couplers.

Contents: 10 Relex coupler heads. Can be used on locomotives and cars with standard coupler pockets (NEM 362).

7205
Close couplers for vehicles without guide mechanism.

Replacements for the standard Märklin plastic coupling. 10 couplings for locomotives (for 70 1560 and 70 4120) and 40 couplings for cars (for 70 1570 and 70 1580). Decreased coupling play for pulled vehicles.

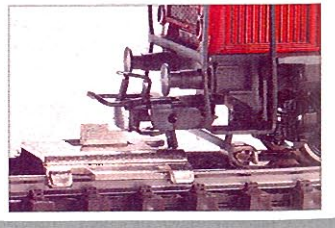
7319
Current-Conducting Close Couplers.

Retrofit kit for all modern 26.4 cm / 10-3/8", and 27.0 cm / 10-5/8" long Märklin H0 cars with guide mechanisms.

Contents: 10 special, rigid drawbars, can be inserted into standard coupler pockets. 20 contact elements for hookup to the 7330 lighting kit. Coupling jig for installing the drawbars. Complete installation instructions. Only one pickup shoe is required for each composition of lighted cars with the current-conducting close couplers.

7001
Coupler Gauge.

For checking and adjusting couplers. Can be placed on track.



02280
Set of Figures.

11 different locomotive engineers and firemen. All of the figures are painted in several colors. Steam locomotives as well as diesel and electric locomotives can be manned with the appropriate personnel with this set of figures.

I - V

0226
Set of Figures.

To add to passenger cars. 10 seated passengers. All figures hand painted in several colors.

7555
Switch Contact.

For use at a suitable point in K Tracks or in C Tracks. The switch contact (reed contact) triggers a pulse when a vehicle with floor-mounted switch magnet passes by. Potential-free connection. Switching current to 2 A. Length 38 mm / 1-1/2".

7195
Number Sign Set.

12 bases. Signs for 1 – 24. For identifying turnouts and signals.

7558
Car Magnet.

2 pieces. 10 x 10 x 3 mm / approx. 3/8" x 3/8" x 1/8". For freight and passenger cars.

7556
Locomotive Magnets.

6 pieces. 10 x 5 x 1.5 mm / approx. 25/64" x 3/16" x 1/16". For activating 7555 reed contacts. For locomotives with little ground clearance.

7557
Locomotive Magnets.

3 pieces. 13 x 7 x 2.5 mm (approx. 1/2" x 9/32" x 3/32"). For activating 7555 reed contacts. For locomotives with greater ground clearance.

Märklin Systems

is more than a leap in generations. Märklin Systems means the new definition of digital model railroad control beyond the system limits.

This is a big step for Märklin. And a big step for the world of model railroading. Dear Märklin Enthusiast, allow us to make a small change in the revolutionary quotation for a revolutionary technology:

Starting now the newly presented, larger Märklin starter sets in the scales H0 and 1 come digitally equipped – with Märklin Systems, the third generation of the Märklin Digital systems.

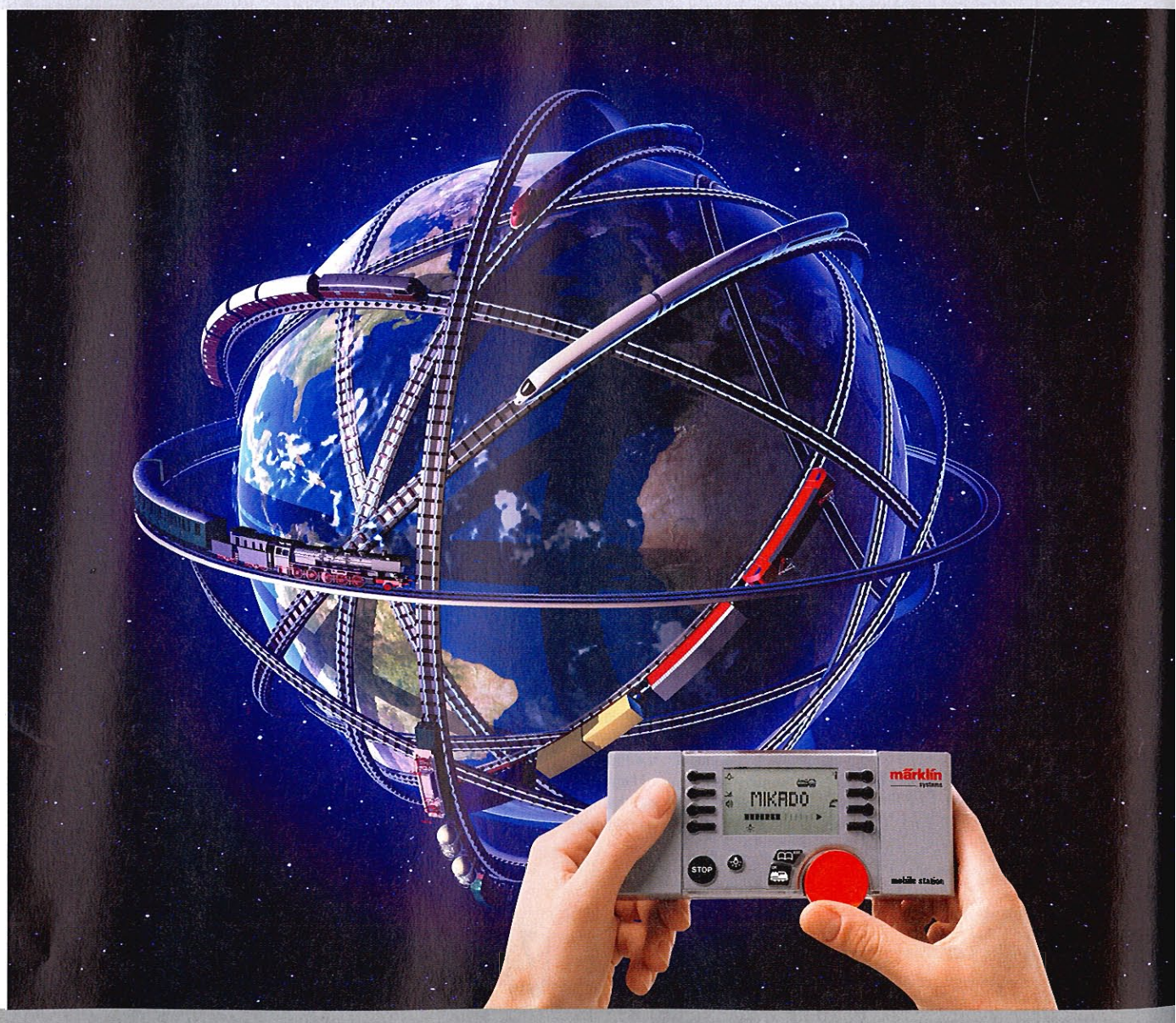
With the digital Mobile Station. And with the Plug & Play connector box to the track system. This is the final step to digital operation with its prototypical possibilities and technology that will be here in the future.

Why do we dare to take this step what will you as the longtime or new Märklin enthusiast get from it:

Twenty years ago the Märklin Digital system was brought out onto the market. In the area of digital technology, 20 years is an immense span of time: It speaks for the great performance and the high quality of this system, for its ease of use, and for the great acceptance by the customer, when such a system establishes itself in the market as a quasi-standard. The system was constantly improved over the years.

Four auxiliary functions were introduced. Many models with a high level of play value and with technologically high quality auxiliary functions were brought out. Measurement car, crane car, sound effects, long distance headlights, pantographs with the Piezo mechanism, infrared remote control, ... just to name a few of the highlights. Compatibility with the existing components was always in the foreground of the new developments, the "investment protection" for the customer, so to speak.

The multiple uses of Märklin Digital for the model railroader are a recognized fact. Yet, the increasing number of important and desired functions makes the system increasingly complex. Fast, manageable, and easy use is becoming increasingly difficult to achieve with the customary control components. Operating with several menu levels that are not immediately visible and with multiple manipulations of buttons are not options for Märklin. It was the time for us to develop a new system and operating technology from the ground up for Märklin Digital, which would be fully compatible with the previous system. This new system technology has a new name, under which we will gather all components in the future: Märklin Systems.



Märklin Systems:
8 Good Pieces of News for Model Railroaders.

The 1st good piece of news:
Even getting started in Märklin Systems is exciting.

All of the larger Digital starter sets for 2004 come with the new Märklin Mobile Station in place of the Delta Control or Control Unit. It surpasses by a wide margin the functionality of the previous digital starter set controllers. The Mobile Station combines the functions of 3 units:

- Easy-to-use controller for locomotives,
- Booster for supplying power to the layout,
- Central electronic circuit, which gathers all of the train control commands and sends them to the track as a data signal.

The 2nd good piece of news:
Even with the starter set you have the capacity for additional expansion.

The Mobile Station has individual access to up to 10 locomotives. Depending on their current draw, 3-4 locomotives can be controlled at the same time. Of course, these 10 locomotives can be selected as desired. With this characteristic, the Mobile Station completely covers the operating possibilities for many small and medium size layouts.

The 3rd good piece of news:
Mobile Station with top-of-the-line design and ergonomic ease of use.

The design is as innovative as it is ergonomic. The large control knob, buttons for selecting locomotives, menu, emergency halt as well as headlights and 8 function buttons and a large display make using this unit simple, logical, and easy to understand. With the Mobile Station you have up to 10 locomotives and their functions safely in hand in the truest since of the word.

The 4th good piece of news:
The Mobile Station shows clear text and pictograms.

The Mobile Station can display the locomotives with their names. Instead of an anonymous address, class 44, for example, can be seen on the large display. You can also assign your own names or numbers. Next to the buttons self-explanatory pictograms show the functions for the active locomotive. So for example, you can turn on and off headlights, horn, or Telex couplers directly and with no confusion and you don't have to remember what is assigned to f1 and other buttons. The direction of travel and the speed that has been set are also represented on the display for the active locomotive.

The 5th good piece of news:
Integrated data base contains practically all of the previous Delta and Digital locomotives and powered units.

The Mobile Station can also control you older Delta and Digital locomotives and powered units, of course with only the functions for the decoder built into that unit. However, you can do this with greater ease: You enter the item number for your Delta or Digital locomotive into the Mobile Station. The Mobile Station searches its data base and then shows the name of the locomotive in clear text on the display as well as the functions for the locomotive as pictograms. This process becomes even easier with future multi-function decoders. They can send back feedback signals and report the locomotive to the system on their own. Simple place the locomotive on the track, and it appears with its name and functions on the display.

The 6th good piece of news:
Plug & Play is still easier.

A feeder track once again belongs to the new Digital system, or more precisely: a track with a connection box. The connection box has 3 plug contacts: a 10-pin socket for the Mobile Station, a 7-pin socket, can't be confused with others, for a second Mobile Station as well as a socket for the transformer. You no longer have to fiddle with individual wires in the transformer's sockets or attach the spade connectors to the tongues on the underside of the track. We have also made sure of the correct polarity for the connections. Thanks to the well thought out plug contacts, all of the connections are automatically configured correctly.

The 7th good piece of news:
Still better than just one Mobile Station is using two.

You can use a second Mobile Station as and additional speed control knob for a second operator or as a local monitoring station, placed directly at a station for example. The connections for the second Mobile Station are done in the so-called Master-Slave-Mode to the same feeder track. The first Station as a locomotive controller, Booster, and central electronic circuit the boss of the layout, the second unit serves only as a locomotive controller. It is connected to the system with a 7-pin adapter cable.

The 8th good piece of news:
This is the beginning of a revolutionary technology. Everything will get even better with the Central Station.

The heart of Märklin Systems is the Central Station, a professional quality unit, designed to meet the wishes of the experienced model railroader as an all-in-one-unit:

Operating locomotives and accessories will enrich the adventure of model railroading with an ease that has been unknown until now. Sixteen buttons for direct access to auxiliary functions, 2 speed control knobs as well as a large graphics-capable touch screen set standards for the operating surface of a unique controller.

Beautiful Outlook: The most important corner data for Märklin Systems.

The Mobile Station and Central Station make use of a totally new data format. Of course, you can continue to use your existing Märklin locomotives with the Motorola processor with the new controllers. The new mfx locomotive decoder controls more functions and has an integrated feedback feature. It reports the locomotive in clear text on its own. Of course, you can also set individual characteristics for the new decoder such as speed and acceleration behavior from the Central Station. The number of addresses?: Enough, over 16,000.
The number of speed levels?: Enough, 128. The control functions can be selected directly with the function buttons and the graphics-capable touch screen with its self-explanatory symbols.

Two locomotives or powered units can be controlled simultaneously with 2 speed control knobs. In addition, turnouts, signals, and other solenoid accessories can be operated from the touch screen. Mobile Stations can be connected to the Central Station as additional locomotive controllers. The modular setup of the unit allows future development and functions to be retrofitted as hardware or software. An Ethernet interface connection offer connections to PC-supported controls.

All of the digital control units are connected to the system by means of a bus system and are connected with each other in the same way. The track system is connected with this bus system by means of the connection box. The new Märklin Systems is a genuine network in the sense of the digital signal processing, a network in which all participants – controllers, turnout decodes, signals, braking modules, working models, and naturally the locomotive and powered unit models – send and receive data. This two-way communication creates all of the possibilities for manual and automatic layout control with genuine Plug & Play.

Märklin Systems.

60212
Central Station.

- Professional quality controller with a large touch screen and almost unlimited possibilities for operating the layout.
- Intelligent screen, reacts to different train operation situations.
- 2 locomotive speed control knobs.
- Simple, innovative operation with speaking names for locomotives.
- Integrated Märklin Digital locomotive data bank.
- Up to 16 controllable functions with self-explanatory pictograms and graphic display of the control status.
- Solenoid accessories can be controlled with the integrated Keyboard.

The new Central Station combines 2 locomotive controllers for simple, easy control of locomotives, an integrated, powerful booster for supplying power to the layout with track current and accessory current, the central electronic circuit, which gathers all of the locomotive and accessory commands and sends them to the track as data, a Keyboard with which solenoid accessories can be operated and whose position can be displayed, and an Interface for communication with a personal computer.

60652
Mobile Station.

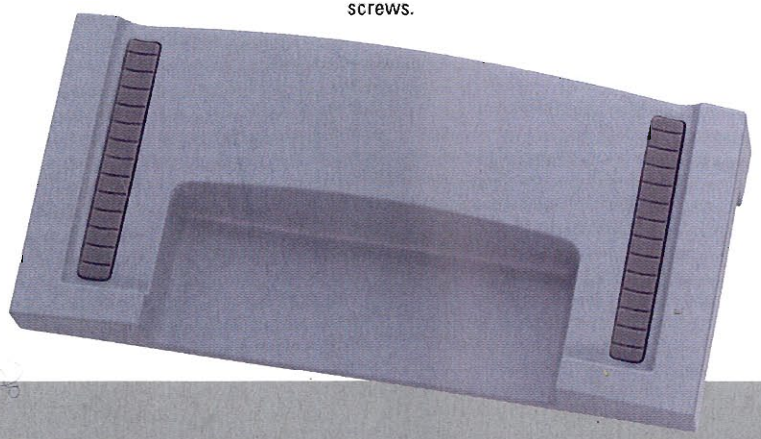
New development.
Simple convenient operation.
Innovative operating concept with spoken names for locomotives.
Graphic display with self-explanatory pictograms.
Up to 9 switchable functions.
Simple cabling (plug & play) connection to the feeder track.
Integrated Märklin digital locomotive database.

Hand-control unit with 1.9 A. Direct access to 10 locomotives. Locomotive selection via spoken locomotive designations. Select from either the integrated Märklin digital locomotive database, or two-digit addresses. 9 buttons for additional functions.

Integrated graphic display shows automatic function status through self-explanatory pictograms for locomotives with mfx decoder, or for locomotive selection from the integrated digital database. Locomotive selection button, menu button, and emergency stop button. With integrated connecting cable and plug for connecting to Märklin H0 layouts (via feeder track or connection box), or to the 60212 Central Station.
Dimensions 165 x 69 x 35 mm / 6-1/2" x 2-23/32" x 1-3/8".

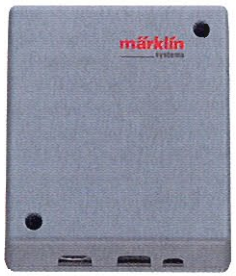
60659
Base for Mobile Station.

Holder for the Mobile Station. Serves as a convenient holder for the mobile station, or a stationary control point. The holder can be placed on the layout, or it can be fixed in place with the included screws.



60115
Connection Box.

For the K Track. For connecting a transformer and up to 2 Mobile Stations. Dimensions 96 x 85 x 40 mm /3-25/32" x 3-11/32" x 1-9/16".



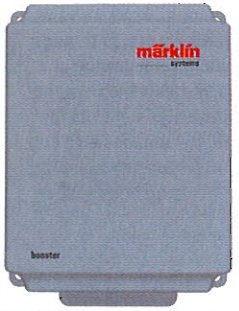
Märklin Systems.

60052 230 Volt. 60 VA.
60 VA Transformer.

Transformer for supplying the 60651 or 60652 Mobile Station. Transformer with new connection socket and power cord with plug. For supplying conventionally controlled Märklin magnetic items. 16 V alternating current output. Plastic housing.
Dimensions 150 x 110 x 80 mm / 5-29/32" x 3-15/16" x 3-5/32".
Safety tested.

The 60052 Transformer is not designed for outdoor use. It must be protected from moisture.

60172
Booster with acknowledgement.



Power booster to supply the operating current to larger layouts (H0 or 1), which are controlled by Märklin systems. Connection to a system transformer. 48 VA maximum starting power, 3 A maximum current. Connection with the central station through a 9-pin data bus line. Automatic announcement and addressing to the central system. Acknowledgement to the central system from the track and from up to 8 additional connecting acknowledgement module decoders s88 (decoder s88 is not included). Status display by two-tone LED's and in the central system display. Several boosters may be used in one system. Plastic housing. Dimensions: 150 x 110 x 80 mm / 5-29/32" x 4-11/32" x 3-5/32".

N

610479
Adapter Cable.

10-pin to 7-pin adapter cable for connecting a second mobile station to the 60115 Connection Box.

60125
Terminal.

Potential connection for additional devices from the systems program for Central Station. Fixed 9-pin lead cable, 60 cm / 23.5/8" long and 9-pin socket for an additional terminal or other devices on the data bus system. 4 7-pin sockets for a connection with the mobile station or other pheripherials. Dimensions 96 x 85 x 40 mm / 3-25/32 x 3-11/32 x 1-9/16".

N

60126
Extension cable.

With a 9-pin socket and a 9-pin plug to connect a distantly located terminal or another device to the data bus system. Length of approximately 2 m / 6.6 ft.

N

Upgrade and rebuild.

mfx Decoders with High-Efficiency Propulsion.
The mfx Decoders for retrofitting have several functions that can be switched. The "function" output is intended for lighting that is dependant on the direction of travel. Outputs "f1" and "f2" can be used for other switch processes, such as telex coupler or smoke generator. The "f4" function enables shutting-off the acceleration and braking delay for easier switching. The additional functions can be switched via the Mobile Station, Central Station or the Control Unit; and can also be switched with connected 80 f Locomotive Controller. The "function" and "f1" functions are switched on in alternating current operation.

After installation in the locomotives, the mfx electronic circuit automatically establishes the link to the Mobile Station or the Central Station. Then maximum speed, acceleration, and the braking delay can be changed. The motor is controlled for different load conditions, e.g. ascending and descending. A "spoken" name (road number, type designation, nickname) or one of the 80 two-digit digital addresses can be selected for the locomotives.

Important Information!

Märklin digital decoders and components are complex electronic systems designed for Märklin models. We can guarantee compatibility and functional reliability only when original Märklin parts and components are used. The warranty becomes invalid if non-original Märklin parts or other makes of parts not authorized by Märklin are used.

The manufacturer's guarantee can only be granted if the high-efficiency propulsion sets 60901, 60903, 60904, 60921, 60923, 60924, and the high efficiency decoders 60902, 60905, 60922, 60931, 60932, 60933, 60955, and the function decoders 60960, 60961 are installed by dealers who are authorized for this.

mfx

60921
mfx High-Efficiency Propulsion Set.

For upgrading many Märklin H0 locomotives **with drum commutator motors** to the current high-efficiency propulsion with acknowledgement. Consisting of mfx locomotive decoder, high-efficiency motor and installation material.

mfx

60922
mfx High-Performance Electronic Circuit.

For upgrading Märklin H0 locomotives with **built-in high-efficiency propulsion** 6090, 60901, 60903, 60904, to the new version with acknowledgement. The existing high-efficiency motor is retained, the locomotive decoder is replaced.

mfx

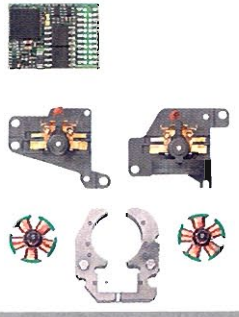
60923
mfx High-Efficiency Propulsion Set.

For upgrading many Märklin H0 locomotives **with smaller design flat commutator motors** to the current high-efficiency propulsion with acknowledgement. Consisting of mfx locomotive decoder, high-efficiency motor and installation material.

mfx

60924
mfx High-Efficiency Propulsion Set.

For upgrading many Märklin H0 **locomotives with large design flat commutator motors** to the current high-efficiency propulsion with acknowledgement. Consisting of mfx decoder, high-efficiency motor in various forms and installation material.



mfx

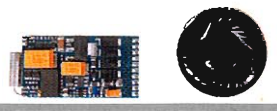
mfx Decoders with Sound Effects Generator.
The mfx decoders with integrated sound effects circuit and additional speaker are designed for retrofitting Märklin locomotives that already have digital high-efficiency propulsion – the decoder is replaced and the speaker with sound capsule is installed at a suitable location. Due to spatial requirements in the respective locomotives, the install possibilities must be researched individually. If space is insufficient, then installation in an accompanying working car is also possible.

Each mfx sound decoder has 12 typical operating sound effects. Decoders are provided in special versions for steam locomotives, diesel locomotives, and electric locomotives. An audible backdrop can already be implemented with the Mobile Station; all sound effects are ready to be called up with the Central Station. In addition, digital functions, "function", "f1", "f2", "f3", for switching and "f4" for acceleration and braking delay are available. The convenience in acknowledgement, programming and addressing, as well as in controlling the high-efficiency propulsion is standard with all mfx decoders.

60931
mfx High-efficiency Electronic Circuit with Sound Effects Generator.

For steam locomotives. For upgrading Märklin H0 locomotives with **built-in high-efficiency propulsion** 6090, 60901, 60903, 60904, to the new version with acknowledgement and sound effects. The existing high-efficiency motor is retained, the locomotive decoder is replaced, and in addition the speaker is installed.
12 typical steam engine locomotive operating sound effects are pre-programmed and can be digitally selected with Systems. There are 4 functions that can be switched, one of which is direction-of-travel dependent, direct control without delay can also be switched.

Digital Functions	6020	6021	60652	60212
Switch function V/R	x	x	x	x
Switch function F1	(x)	x	x	x
Switch function F2		x	x	x
Switch function F3		x	x	x
Direct control		x	x	x
Steam locomotive sound effects			x	x
Long whistle signal			x	x
Short whistle signal			x	x
Bell 1 x			x	x
Bell 2 x				x
Bell 3 x				x
Air pump sound effect				x
Braking sound effect				x
Steam discharge sound effect				x
Shoveling coal sound effect				x
Sliding superstructure sound effect				x
Injector sound effect				x

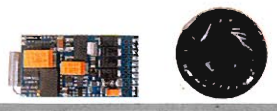


N mfx

60932
mfx High-efficiency Electronic Circuit with Sound Effects Generator.

For diesel locomotives. For upgrading Märklin H0 locomotives with **built-in high-efficiency propulsion** 6090, 60901, 60903, 60904, to the new version with acknowledgement and sound effects. The existing high-efficiency motor is retained, the locomotive decoder is replaced, and in addition the speaker is installed.
12 typical diesel locomotive operating sound effects are pre-programmed and can be digitally selected with Systems. There are 4 functions that can be switched, one of which is direction-of-travel dependent, direct control without delay can also be switched.

Digital Functions	6020	6021	60652	60212
Switch function V/R	x	x	x	x
Switch function F1	(x)	x	x	x
Switch function F2		x	x	x
Switch function F3		x	x	x
Direct control		x	x	x
Diesel locomotive operating sound effects			x	x
Long whistle signal			x	x
Short whistle signal			x	x
Horn high tone			x	x
Horn low tone				x
Auxiliary diesel sound effect				x
Compressed air burst sound effect				x
Compressed air hiss sound effect				x
Braking sound effect				x
Closing doors sound effect				x
Starter sound effect				x
Oil pump sound effect				x



N mfx

60933
mfx High-efficiency Electronic Circuit with Sound Effects Generator.

For electric locomotives. For upgrading Märklin H0 locomotives with **built-in high-efficiency propulsion** 6090, 60901, 60903, 60904, to the new version with acknowledgement and sound effects. The existing high-efficiency motor is retained, the locomotive decoder is replaced, and in addition the speaker is installed.
12 typical electric locomotive operating sound effects are pre-programmed and can be digitally selected with Systems. There are 4 functions that can be switched, one of which is direction-of-travel dependent, direct control without delay can also be switched.

Digital Functions	6020	6021	60652	60212
Switch function V/R	x	x	x	x
Switch function F1	(x)	x	x	x
Switch function F2		x	x	x
Switch function F3		x	x	x
Direct control		x	x	x
Electric locomotive sound effects			x	x
Long whistle signal			x	x
Short whistle signal			x	x
Horn			x	x
Contactor sound effects				x
Fan sound effects				x
Compressor sound effects				x
Compressed air bursts sound effect				x
Compressed air hiss sound effect				x
Braking sound effect				x
Closing doors sound effect				x
Departure whistle				x

N mfx

Digital Train Operation.

6021
Control Unit.

Central unit with built-in locomotive controller. Supplies the layout with power and control commands. The built-in locomotive controller has the same performance range as the Control 80 f. Connecting terminals for transformer and track layout. 1 connection socket for booster (item no. 6017). Operating display through LED. Output power max. 2.5 A. Dimensions 135 x 120 x 80 mm / 5-5/16" x 4-23/32" x 3-5/32".

It combines the functions of 3 devices:
First it is a locomotive controller, second a booster for supplying the layout with locomotive and switching power, third it is the central electronics unit, and all commands of other control devices run through it. The control unit collects and stores all locomotive power and switch commands and sends them as information signals into the track.

The control unit can individually address 80 locomotives. With the 10-digit keypad you can call-up the locomotive addressee from 01 to 80, whose number is displayed on the 2-digit display. If desired you can drive these locomotives manually, and manually switch the built-in, locomotive-specific functions, such as lighting, telex couplers, or smoke generators. When you call up a new address, the locomotive continues to run at the last speed set. For safety reasons the supply of power to the layout via the Control Unit is limited.

6017
Booster.

Output supply unit for large layouts that are digitally controlled. Output current max. 2.5 A. LED operating display. With switchable voltage reduction for slow speed sections as with the 6021 Control Unit. Track and transformer each have 2 connecting terminals. Control Unit and additional booster (item no. 6017) each have one connection socket. 1 adapter cable for connecting to the Control Unit. Dimensions 135 x 120 x 80 mm / 5-5/16" x 4-23/32" x 3-5/32".

6036
Control 80 f.

Locomotive controller. Access to 80 locomotive and function addresses. Address entry using 10 button keypad. Two-digit display of the locomotive address currently called up. On and off buttons for the locomotive auxiliary function. 4 combined on/off buttons for additional functions. Function status shown by LEDs. Emergency halt and release buttons. Can be connected to Control Unit or another Control 80 f. Dimensions 135 x 120 x 80 mm / 5-1/2" x 4-7/8" x 3-1/2".

6038
Adapter 180.

Extension cable for remote setup of the Control 80 f, Keyboard, Memory or Interface. Ribbon cable with 2 plug-in sockets for the Digital system. Length 180 cm / 71".

6039
Adapter 60.

Connection extension for remote setup of Control 80 f keyboard, memory, or interface. Ribbon cable with 2 connector jacks for the digital system. Length 60 cm / 23-5/8".

6040
Keyboard.

Controller for 16 solenoid accessories. LEDs show settings for turnouts and signals. Coding switches for setting the Keyboard address (1–16). Memory storage for the last valid turnout and signal settings after power is shut off. Can be connected to Control Unit or another Keyboard or Memory. Dimensions 135 x 120 x 80 mm / 5-1/2" x 4-7/8" x 3-1/2".

6043
Memory.

Route controller. Several solenoid accessories can be switched with the press of a button. Stores in each of 24 routes the position commands for up to 20 turnouts or signals. A maximum of 4 Memory units can be used with a Control Unit. Position commands are entered with a Keyboard or Interface. Operation is also possible without the accessory controllers. Routes currently called up indicated by LEDs. The routes and the last current status for the unit remain in memory storage after the power is shut off. Suitable for automatic operation. Dimensions 135 x 120 x 80 mm / 5-1/2" x 4-7/8" x 3-1/2".

6051
Interface.

Link to a computer. 80 locomotive addresses and 256 accessories can be controlled though this unit. Connector for s 88 (6088) feedback module decoder. Output features are the same as the previous 6050 Interface. A cable for a computer (RS-232-C, 9 pole connection) and a diskette with demo programs are included with this unit. Can be connected to Control Unit or Control 80 f. Dimensions 135 x 120 x 80 mm / 5-1/2" x 4-7/8" x 3-1/2".

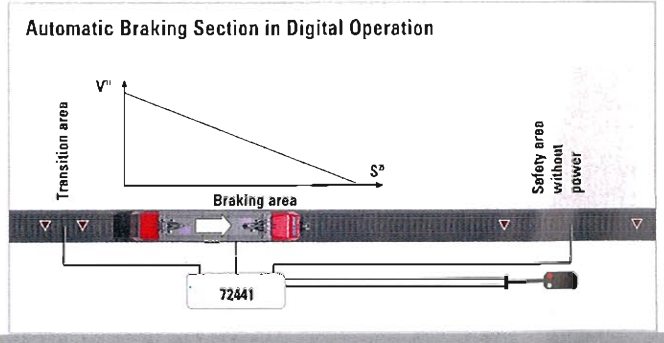
72441
Brake Module.

Signal mechanism with integrated switching for controlled stopping of digital locomotives with high-efficiency propulsion. Connections for a two-aspect light signal for the required 3 track sections, for safe stopping of the locomotive. The brake module is switched either via a k 83 Decoder or via a conventional 7272/72720 Control Box. Dimensions 100 x 54 x 22 mm / 3-15/16" x 2-1/8" x 7/8".

The brake module requires three insulated track sections in the signal area. The first part is a transition area, which corresponds to the length of a ski-shaped pick-up shoe (app. 70-90 mm / 2-3/4" – 3-17/32"). The second section is the actual braking area, in which the locomotive comes to a controlled stop. The length of the braking area is specified by the brake delay setting on the locomotive decoder. This second area should be at least 40-50 cm / 15-3/4" – 19-11/16". The third section is a safety section in which the operating voltage is switched off in signal sections, as before. This prevents the locomotive from "slipping through" the signal area unintentionally. The brake module is suitable for light signals and semaphores.

Locomotives with built-in digital electronic circuits without a control feature, or Delta electronic circuits sometimes come to a stop in the brake section or even in the safety section. A clear specification is not possible. Consequently, using the 72441 brake module, together with propulsion systems that do not have a control feature, is not recommended.

Gentle stop in front of signals.
For signals that are switched to "Stop", the brake module gives a command to the digital decoder of locomotives that are passing by. The decoder then controls the braking process set on the locomotive until the stop in front of the signal. There is a safety area without power which prevents the locomotive from traveling through if the brake path is set too long.

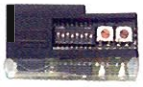


[1] V = speed

[2] S = route traveled

Upgrade and rebuild.

60903
High-Efficiency
Propulsion Conversion Kit.



Consists of a locomotive decoder, a 5-pole high-efficiency motor, and hardware for con-verting specific older Märklin H0 locomotives with the smaller size flat commutator motor to digital high-efficiency propulsion. The electronic circuit has 4 controllable functions (headlights from the "function" button, smoke generator and Telex couplers, for example, from "f1" and "f2", minimal setting for the acceleration and braking delay from "f4"). The Control Unit (item no. 6021) must be used as the central unit to control functions "f1", "f2", and "f4".

Adjustable maximum speed. Adjustable acceleration and braking delay. 80 digital addresses can be set. The functions "function" and "f1" are turned on in conventional operation with AC power.

Information about the 60904 and 60903 Products:

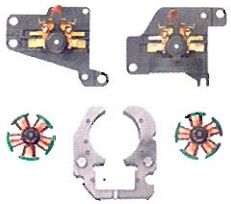
We differentiate roughtly 2 different types of motors among the univeral current motors used with Märklin H0: The newer drum-style commutator motor and the flat commutatior motor that used to be the standard moitor. The easiest way to tell the two types of motors apart is by the type of brushes they use.

Drum-style commutator motors have 2 carbon brushes, while th flat commutator motor has a carbon brush and a copper mesh brush (spare part number 600300).

The familiar 60901 conversion kit can be used for drum-style motors.

With the flat commutator motor there are a number of variations due to different aramture diameters and brush plates. The 60904 or 60903 conversion kit can therefore only be used for certain models.

60904
High-Efficiency
Propulsion Conversion Kit.



Features: Consists of a locomotive decoder, a five-pole, high-efficiency motor and installation hardware for converting certain older Märklin H0 locomotives with the flat commutator motor to digital high-efficiency propulsion. The electronic circuit in this kit has 4 controllable functions (headlights from "function", smoke generator and Telex couplers, for example, from "f1" and "f2", minimal setting for the acceleration and braking delay from "f4"). The Control Unit (no. 6021) must be used as the central unit to control functions "f1", "f2" and "f4".

Adjustable maximum speed. Adjustable acceleration and braking delay. 80 digital addresses can be set. In conventional operation with AC power the functions "function" and "f1" are turned on.

Important Information!

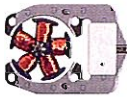
Märklin digital decoders and components are complex electronic systems designed for Märklin models.

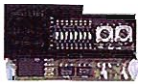
We can guarantee compatibility and functional reliability only when original Märklin parts and components are used.

The warranty becomes invalid if non-original Märklin parts or other makes of parts not authorized by Märklin are used.

The manufacturer's guarantee can only be granted if the high-efficiency propulsion sets 60901, 60903, 60904, 60921, 60923, 60924, and the high efficiency decoders 60902, 60905, 60922, 60931, 60932, 60933, 60955, and the function decoders 60960, 60961 are installed by dealers who are authorized for this.

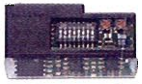
60901
High-Efficiency Propulsion Set.





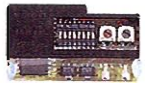
Consists of locomotive decoder and high-efficiency motor as well as installation hardware for converting most Märklin H0 locomotives with drum commutator motors to the current high-efficiency propulsion system. The electronic circuit has a total of 4 controllable functions. The "function" output is intended for the locomotive's headlights. The "f1" and "f2" outputs can be used for other functions such as Telex couplers or a smoke unit. The "f4" function allows you to turn the controlled motor functions off for easier switching of cars. The "f1", "f2" and "f4" functions can be controlled only with the Control Unit (6021), a Control 80 f locomotive controller connected to this central unit, or the Interface. The electronic circuit in this set allows you to adjust maximum speed as well as acceleration and braking delay. Controlled motor functions under different load conditions such as on ascending and descending grades. Can be coded for 80 different locomotive addresses. The "function" and "f1" functions are turned on when the locomotive is operated conventionally with AC power. Decoder dimensions 36 x 21 x 9 mm / 1-3/8" x 13/16" x 3/8".

60905
High-Efficiency Electronic Circuit.



High-efficiency decoder for converting locomotives with can motors with bell-shaped armatures to Märklin Digital high-efficiency propulsion. The motor outputs on this electronic circuit are specially designed for the requirements of can motors with bell-shaped armatures. The other technical featurs such as controllable functions, current load, etc. are the same as the electronic circuit in the 60901 conversion kit.

60902
High-Efficiency Electronic Circuit.



High-efficiency decoder for converting Märklin H0 locomotives with built-in 6090 high-efficiency propulsion to the new version with more functions. The electronic circuit has a total of 4 controllable functions. The "function" output is intended for the locomotive's headlights. The "f1" and "f2" outputs can be used for other functions such as Telex couplers or a smoke unit. The "f4" function allows you to turn the controlled motor functions off for easier switching of cars. The "f1", "f2" and "f4" functions can be controlled only with the Control Unit (6021), a Control 80 f locomotive controller connected to this central unit, or the Interface. This electronic circuit allows you to adjust maximum speed as well as acceleration and braking delay. Controlled motor functions under different load conditions such as on ascending and descending grades. Can be coded for 80 different locomotive addresses. The "function" and "f1" functions are turned on when the locomotive is operated conventionally with AC power. Decoder dimensions 36 x 21 x 9 mm / 1-3/8" x 13/16" x 3/8".

Controlling Accessories Digitally.

All connections designed for the new plugs.
Appropriate plugs included.
Function is the same as the 6083, 6084, and 6088 decoders.

60830
k 83 Decoder.

Receiver for switching turnouts, signals, and uncoupler tracks. Can be activated by the Keyboard, Memory, or Interface. Coding switches for setting the digital address. 4 two-way switching outputs. **All connections are designed for the new plugs from the 71400 set.** 8 appropriate plugs included.
Dimensions 100 x 54 x 22 mm / 3-15/16" x 2-1/8" x 7/8".

60840
k 84 Decoder.

Receiver for turning continuous current on and off for lighting, motors, and other electrical accessories. Can be activated by the Keyboard, Memory, or Interface. Coding switches for setting the digital address. 4 different potential-free switching outputs. **All connections are designed for the new plugs from the 71400 set.**
8 appropriate plugs included.
Dimensions 100 x 54 x 22 mm / 3-15/16" x 2-1/8" x 7/8".

6084
Decoder k 84.

Same function as 60840, however with connections for older plugs
Plugs not included.

60880
s 88 Decoder.

Feedback module for contact generators on digitally controlled layouts. Comes with a connecting cable that can be plugged into the Memory or Interface. Connecting sockets for 2 additional s 88 decoders. 16 inputs for contact generators. **All connections are designed for the new plugs from the 71400 set.** 8 appropriate plugs included.
Dimensions 124 x 54 x 22 mm / 4-7/8" x 2-1/8" x 7/8".

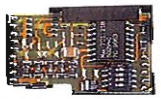
6089
Adapter s 88.

Longer connecting cable for s 88 decoder. Length 200 cm / 78-3/4".

66031
Delta Module with Auxiliary Function.

Electronic component for converting conventional Märklin H0 locomotives to the Delta multi-train control system. Suitable for locomotives with the Märklin standard motor (flat-commutator motor or drum-style commutator motor), specially for locomotives with Märklin Telex couplers. Locomotive converted with this module can be operated with a conventional transformer, the, Delta Control, Delta Control 4 f, Delta Station or Märklin Digital.

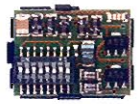
Coding switches for setting the model of operation and the address for multi-train operation. Electronic direction reversing. Auxiliary function (example: Telex couplers) can be turned on and off when the direction is changed twice.



60961
c 96-1 Function Deceder.

Function decoder with a direction-dependent function as well as those switching functions present in the 60960 function decoder. This additional function is switched on with the "function" button on the 6021 Control Unit or the Control 80 f locomotive controller or the 66045 Delta Control 4 f. The maximum current load for the different functions outputs varies between 200 milliamps and 500 milliamps.

The maximum total current load for this component is 1 amp. It can be coded for 80 different addresses. Uses for this electronic circuit: Retrofitting universal locomotives with digitally controlled functions, converting a cab control car to headlights / marker lights that can be controlled simultaneously with the same lights on a locomotive, other direction-dependent functions in cars.



66032
Delta Module with Automatic System Recognition.

The manufacturer warranty is covered only when Delta modules are installed by an authorized Märklin dealer.

Electronic component for converting conventional Märklin H0 locomotives to Delta multi-train control. Suitable for locomotives with Märklin standard motors (flat commutator or drum-style commutator), especially for locomotives with Märklin Telex couplers. Can be operated with conventional transformers, the Delta Control, the Delta Station or with Märklin Digital.

Automatic recognition of the mode of operation. 80 different addresses can be set on this module. Electronic direction reversing. An auxiliary function (example: Telex couplers) can be turned on and off with 2 changes of the locomotive's direction. Locomotive's headlights are turned on when it is in motion and can be wired to this module so that they change over with the direction of travel.

60960
c 96 Function Decoder.

Decoder for controlling up to 4 auxiliary functions (f1 to f4) from the Control Unit (6021), a Control 80 f locomotive controller connected to this central unit, or the Interface. This function decoder can either be installed in locomotives along with a locomotive decoder or by itself in cars. Can be coded for 80 different addresses.

When sufficient space is available, any Märklin digital locomotive or any locomotive with a built-in Delta module can be equipped with additional controllable functions such as a smoke unit or Telex couplers (where the locomotive already has these couplers). On passenger cars interior lighting can be a controllable function.

Transformers.

6645 100 volts Japan. 32 VA
6646 120 volts USA.
32 VA. UL/CSA tested.
6647 230 volts. 32 VA
Transformer 32 VA / 2 Amps

Track current adjustable between 4 and 16 volts. Accessory current 16 volts. Plastic housing.
Dimensions 140 x 120 x 80 cm / 5-1/2" x 4-3/4" x 3-1/8".
VDE/UL/CSA tested.

6001 110 Volt USA.
42 VA. UL approved.
Lighting transformer for lighting and electromagnetic items.

LED operating display. Output 42 VA.
Output 16 Volt AC voltage.
Plastic casing.
Dimensions 120 x 135 x 80 mm / 4-23/32" x 5-5/16" x 3-5/32".
VDE approved.

Tested safety.
We can only guarantee problem-free operating of our trains with original Märklin transformers. The transformers must be safeguarded from moisture and are not approved for outdoor operation. Only connect to AC power.

Please also observe the operating instructions for the systems (refer to "General References" on page 452).

Multi-train operation with separate power circuits.
In conventional train operation if several trains are to be operated independently of each other, the layout is divided into several power circuits. A transformer and at least one feeder track are assigned to each power circuit and are easily separated electrically from other power circuits with a center conductor insulator (74030, 5022 or 7522). In the Märklin H0 system the running rails have the same polarity everywhere on a layout and do not need to be interrupted.

Power circuits can be closed routes like most main routes or other areas of track with their own operation. Examples of the latter would be branch lines, station areas, storage sidings, switching yards or railroad maintenance areas. In this way you have the possibility of controlling individual locomotives for specific purposes simultaneously with fully automatic route operations.

As a rule catenary for electrified routes is connected to its own transformer as an additional power circuit. This allows you to control locomotives used in catenary operation independently of locomotives or rail cars powered from the track. Catenary power circuits can be separated from each other with the 7022 insulated section.

Power Consumption of Locomotives and Accessories.
The output indicated on the transformer (in VA/watts) is available for the power consumption of all users in the power circuit.

Some sample power use calculations: With a load, smaller locomotives (ex. 3000 tank locomotive) require about 9 watts, larger locomotives (ex. 33803 diesel locomotive) about 12 watts. The power consumption for train lighting is based on light bulbs built into the cars and is usually less than 2 watts per car.

After subtracting the output required by trains, the remaining reserve in the transformer can be used at the accessory outputs for electric accessories. Here, light bulbs use between 0.5 and 1 watt (see table "Light Bulbs for Accessories" on page 371 and turnout or signal mechanisms use about 6 watts when activated. Additional electric accessories should be connected to an additional accessory transformer.

Cable and plugs.

The Common Colors in the Märklin H0 Wiring System.

Red = locomotive power connection (transformer to third rail or catenary).

Brown = ground from track roadbed or control box to transformer.

Yellow = lights and solenoid accessories.

Blue = ground return from solenoid accessories to the control box or circuit track (with green, red, and orange plugs).

Wire
The copper conductor in this wire consists of 24 separate strands each 0.10 mm / 0.004" in diameter with a total cross section of 0.19 sq. mm / 0.0003 sq. in. This is sufficient even in the event of a short circuit with a 52 watt transformer.

7100 Wire.
Single conductor. Gray.
10 m / 33'.

7101 Wire.
Single conductor. Blue.
10 m / 33'.

7102 Wire.
Single conductor. Brown.
10 m / 33'.

7103 Wire.
Single conductor. Yellow.
10 m / 33'.

7105 Wire.
Single conductor. Red.
10 m / 33'.

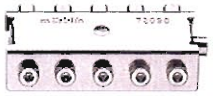
71060
Wire.

Dealer package assortment with 10 rolls each of red, brown, blue and yellow wire. Length of each roll 10 meters / 33 feet. Wire cross section 0.75 sq. mm / 0.001 sq. in. Rolls of wire can also be sold separately.

The wire in this dealerpackage assortment with a cross section of 0.75 sq. mm / 0.001 sq. in. is recommended for large H0 layouts and for Märklin 1.

72090
Distribution strip.

For 11 plugs and 1 socket in accordance with the new standard. All 12 connections are electrically connected. Wire also possible via 1 plug of the earlier version.
Size 47 x 26 mm /1-27/32" x 1-1/32".



New plugs and sockets.

The new standard corresponds to current safety guidelines and offers additional application advantages.

Fine contact pins and sockets for secure contact.
Plugs and sockets with covered contacts.
Plugged connection is seamlessly protected.
Plug and socket with transverse hole for branching.
6 colors for clear cabling.

The plugs and sockets cannot be combined with the earlier version (set item no. 7130). With limitations, sockets fit in sockets of the earlier version of control boxes. Many control devices and decoders in the Märklin product line have already been switched to the new standard.

71411
Plugs, Brown.
Set with 10 plugs.

71412
Plugs, Yellow.
Set with 10 plugs.

71413
Plugs, Green.
Set with 10 plugs.

71414
Plugs, Orange.
Set with 10 plugs.

71415
Plugs, Red.
Set with 10 plugs.

71416
Plugs, Gray.
Set with 10 plugs.

71400
Plug and Socket Set.

Contains 100 units.
66 plugs and 34 sockets.
Colored assortment based on average needs.

74995
Spade Connectors.

Can be used for the contact fingers on C Track. For all Märklin wire from 0.19 sq. mm / 0.0003 sq. in. or 0.02 in. dia. to 0.75 sq. mm / 0.001 sq. in. or 0.04 in. dia. 1 package contains 20 spade connectors.

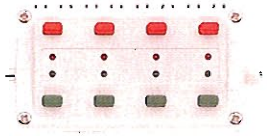
N N

Control boxes.

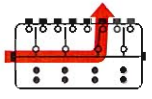
All of the connections with the new plugs and sockets. Appropriate plugs included. Works in the same way as the 7271, 7272, 7273, and 7274 control boxes.

72710
Control Box with Feedback Function.

For operating 4 double solenoid accessories with end shutoff contacts. Automatic feedback of the accessory setting with LED's when used with the 7549 turnout mechanism (K) or the 74490 turnout mechanism (C). Unit comes with 8 sockets on the back and 2 sockets on the ends. **All of the connections are for the new plugs from the 71400** sets. 8 appropriate plugs included. Dimensions 80 x 40 mm / 3-1/8" x 1-9/16".

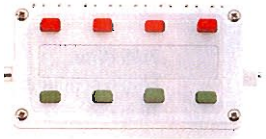


Schematic of 72710
(Button 3 pushed)

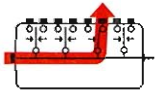


72720
Control Box.

For operating 4 double solenoid accessories such as turnouts and signals or up to 8 uncoupler tracks. The position of the buttons shows the settings for accessories connected to the sockets for those buttons. Unit comes with 8 sockets on the back and 2 sockets on the ends. **All of the connections are for the new plugs from the 71400 sets.** 8 appropriate plugs included. Dimensions 80 x 40 mm / 3-1/8" x 1-9/16".

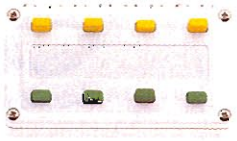


Schematic of 72720
(Button 3 pushed)

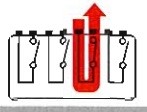


72730
Control Box.

For turning 4 different track or accessory circuits on and off. For example, power can be controlled in 4 storage sidings in 4 different track circuits. Unit comes with 8 sockets on the back and 2 sockets on the ends. **All of the connections are for the new plugs from the 71400 sets.** 8 appropriate plugs included. Dimensions 80 x 40 mm / 3-1/8" x 1-9/16".



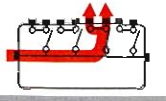
Schematic of 72730
(Button 3 pushed)



72740
Control Box.

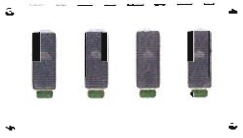
For dividing a track or accessory circuit into 4 different circuits, each with two connections. For example, 4 storage sidings in the same track circuit or 4 users in the same accessory circuit can be turned on and off. Unit comes with 8 sockets on the back and 2 sockets on the ends. **All of the connections are for the new plugs from the 71400 sets.** 8 appropriate plugs included. Dimensions 80 x 40 mm / 3-1/8" x 1-9/16".

Schematic of 72740

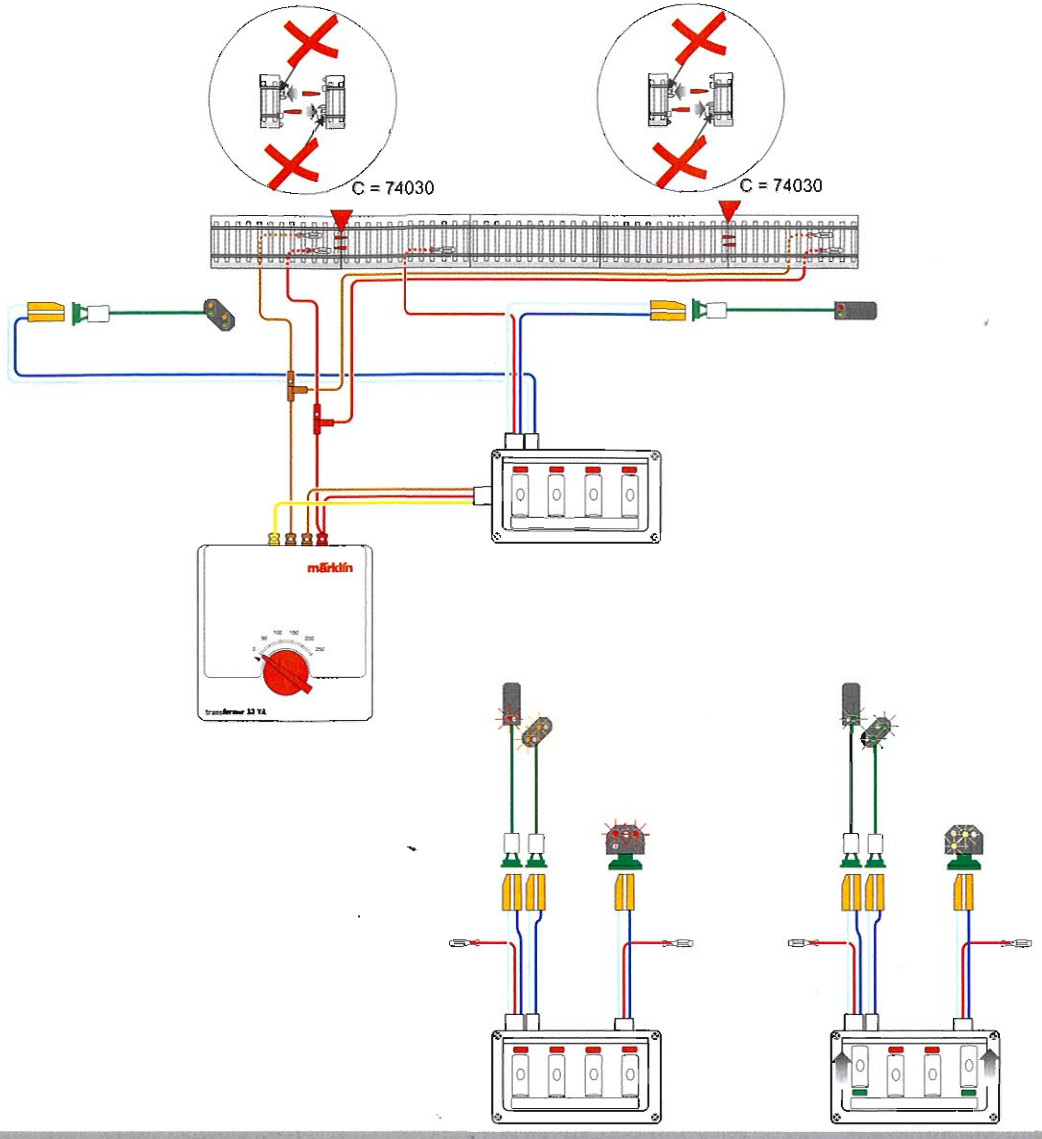


72750
Signal Control Box.

New tooling.
Suitable for the new Hobby color light signals.
4 home and 4 distant signals can be controlled.
High quality sliding switches.



Signal control box for the 74391, 74380, and 74371 Hobby signals. For switching 4 home and 4 distant signals as well as for controlling the track current appropriate to these signals. Dimensions approximately 93 x 50 mm / 3-11/16" x 1-15/16".



Useful information.

70900
Tool Set.

Suitable for maintenance work on H0 and Z models.
Contents: 1 each PH 00, PH 0 and PH 1 Philips screwdrivers. 1 each 2.0 mm and 3.0 mm flat blade screwdrivers. 1 each 2.5 mm, 3.0 mm and 3.5 mm nut drivers. 1 tweezers and 1 compression tweezers.

603361
Crimping Pliers.

For mounting 74995 spade connectors securely to wire. Sturdy metal construction with insulated handles. Comes with illustrated instructions.

7149
Oiler with Narrow Applicator Opening.

Contains 10 ml special oil for lubricating locomotives and cars.

603026
Automatic Wire Stripper.

For stripping insulation from all single conductor wire 0.19 to 6.0 square millimeters in size. Wire stripper mechanism automatically adjusts itself to the size of the wire. Length of wire insulation to be stripped can be adjusted from 5 to 12 mm. Side cutter integrated into the wire stripper.

74999
Screwdriver.

with cross point size 00 (Ph). For 74990 (C) and 7599 (K) track screws.

70910
Märklin Soldering Station Set.

48 watts heating capacity.
Soldering temperature
150°C to 450°C.
3 temperatures can be
preprogrammed.
Multi-function display.

Programmable soldering station includes powerful 48 watt soldering iron and holder stand with sponge. The processor provides the actual value by means of the integrated temperature sensor and controls the output. Temperature adjustment by means of Up/Down button, up to 3 temperatures can be preprogrammed and called up by means of buttons. Constant temperature control. Liquid crystal multi-function display to give you an overview of the temperature programmed into the unit, the actual temperature, and the heat output supplied. Adjustable stand-by/ auto-power off function.

Technical Data:
Soldering temperature 150°C to 450°C. Dispersal 1°C. Soldering iron 24 volts / 48 watts. Input voltage 230 volts / 50 Hz / 70 VA.

70950
Model Railroad Multi-Function Kit.

Double ball-bearing motor shaft.
Power: 125 watts.
Drill chuck and collet chucks.
Accessories especially for the
model railroad builder.

Small multi-purpose drill, also suitable for model railroad layouts. Precision drilling, milling, sawing, cutting, polishing or engraving with many useful tools adapted for model railroads.
Drill: Spindle lock for easy changing of tools, powerful 125-Watt motor, speed from 10,000-33,000 RPM, infinitely variable, double ball-bearing motor shaft, precisely centered collet chucks.

Accessories: 1 collet chuck holder, 1 grinding disk holder, 3.2 mm drill bit, 9 cutting disks, 1 abrasive belt with holder, 2 abrasive belts, 4 grinding stones, 6 polishing disks, 2 mills, 1 flexible shaft (length approx. 100 cm / 39-3/8"), 1 quick-release chuck, 1 mounting hook.
Technical data: 230/240 volts. Power: 125 watts. Weight: 0.45 kg. No-load speed: 10,000-33,000 RPM.

Good advice, not at all expensive.

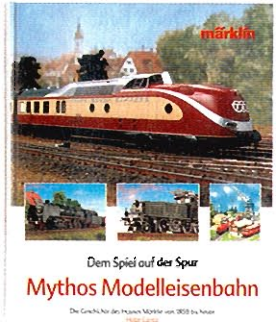
Even playing with a model railroad needs to be learned. For example, it is not at all easy to work out a main line in a limited space so that the layout offers enough variety through the years. And so that the required electrical and/or mechanical connections or options for subsequent expansion are taken into account right from the start.

Looking back you're always cleverer. The authors of our Märklin guides have also had these experiences and pass them on to you: valuable information for planning, building and operation of a model railroad layout. The videos and richly illustrated books show you step by step what you need to be aware of in the different phases. Naturally, you can do everything quite differently, for example, change track plans to suit your own ideas. But you know what you're doing here, you avoid mistakes, reach your goal more quickly and simply have more fun doing it.

Annual Chronicle "A Year with Märklin".

Available as VHS cassette or DVD. Running time 60 min. VHS cassette with German narration (item no. 15697). DVD in German (item no. 15698), in English, French, and Dutch (item no. 15699).

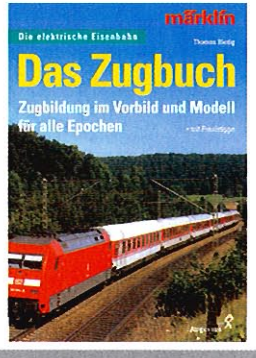
07458
The model railroad legend – on the trail of play.



I - V

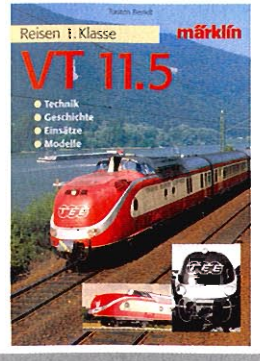
The history of the Märklin company from 1859 to today. The model train manual in a pictorial format shows all of the familiar and important Märklin model series and models in a broad overview. An illustration of the track gauge development, as well as the train and rail technology. Content of approximately 320 pages. With more than 600 colored illustrations. Format 26 x 32 cm / 10-1/4" x 12-19/32". Only available in German.

07466
The Train Book.



By Thomas Rietig.
After the two successful volumes on steam and diesel and electric locomotives comes the train book. It describes how a model railroaders can make up prototypical train consists from the extensive Märklin assortment. This book also documents by way of prototype photographs unusual consists that you don't see every day. Marvelous, photographs of the models, some them full page in size, show trains from all eras in operation on a layout. Numerous scratch building tips for cars complete this book. 144 pages, bound. With over 220 color photographs. Format 21.0 x 29.7 cm / 8-1/4" x 11-11/16". German text only.

07495
Book "VT 11.5 Powered Rail Car Train".



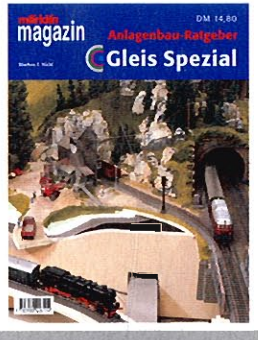
By Thorsten Bernd.
Complete history and description of the VT 11.5/601/602 powered rail car trains. Diesel powered rail cars in Germany and Europe. Design and technology in detail. The use of these trains as TEE, as InterCity and afterwards. Further developments and successors. Recollections of the trains in operation. 144 pages, approx. 220 photographs. Format 21.0 x 29.7 cm / 8-1/4" x 11-11/16". Bound. German text only.

07455
Track Plan Book for C Track.

80 different H0 track plans are presented in detail with scenery suggestions and parts lists. The layouts are planned primarily for the C Track system. All of the track plans are also presented as just track plans with parts lists for the K Track system. 160 pages with the format 29.7 x 21 cm / 11-11/16" x 8-1/4". Available only at authorized Märklin dealers. German text only.

188987
Märklin Magazin – C Track Special.

This brochure explains the advantages and use of the C Track system, contains three different suggestions for building a beginner's layout, a layout for the somewhat experienced, and a layout for the experienced model railroader. The text will lead you step by step to a finished layout. 148 pages richly illustrated with color photos, detailed sketches, and track plans. Format 21.0 x 27.5 cm / 8-1/4" x 10-13/16". German text only.



07459 German issue
07451 English issue
07452 Dutch issue
07453 French issue
Track Planning Book – C Track.

Large track layouts, over 3 m / 9.8 ft in length, are introduced and described with track plan, part lists and color illustrations or drawings. Scale 1:10. In addition to detailed representation with C track, track plan and part lists are also specified for corresponding K track layouts. 154 pages. Format 29.7 x 21.0 cm / 11-11/16" x 8-9/32". Bound.

03901 German Edition
03902 English Edition
03903 French Edition
03904 Dutch Edition
Märklin Catenary Manual H0.

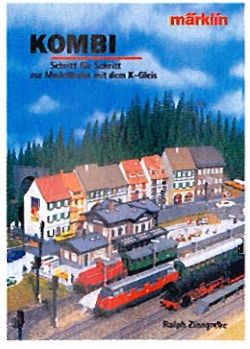
An introduction into the world of the catenary in prototype and model railroading. Detailed description with many tips to build and use the H0 catenary. Content of approximatel 100 pages. Format of approximately 29.7 x 21 cm / 11-11/16 x 8-9/32".

Good advice, not at all expensive.

07456
Book "Planen – Bauen – Fahren" ("Planning – Building – Operating").

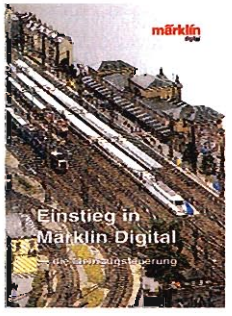
By Klaus Eckert, Elvis Müller and Michael Siemens.
Detailed description of two layout projects and how they were built in H0 scale. Layout concepts with scenery designs by Peter Bomhard. Planning the track layout by computer. Illustrated presentation of all construction phases step by step. Installation of the controls and operating possibilities with Märklin Digital. Many large format color photographs by Andreas Stirl and Markus Tiedke. 144 pages, over 250 photographs. Format 21 x 29.7 cm / 8-1/4" x 11-11/16". Bound. German text only.

07450
KOMBI – Step by step to a model railroad with K Track.



Introduction into the Märklin KOMBI starter program in H0 for K Track. The ease of using the K Track system is covered in this book as well as the basics for setting up and constructing a model railroad. Twenty track plans that for the most part have never been published are presented in this book. These are plans that can be built with the KOMBI track program. Format 21.0 x 29.7 cm / 8-1/4" x 11-11/16". German text only.

0308
Book "Getting Started with Märklin Digital – the multi-train control system".



Complete description of the Märklin Delta and Märklin Digital systems. Step-by-step presentation of the necessary components. Focal points are the uncomplicated setup and the easy-to-use manual control of a layout with this multi-train control system. 230 pages. Format 17.5 x 24.5 cm / 6-7/8" x 9-5/8". German language only.

03401 German edition
03402 English edition
03403 French edition
03404 Dutch edition
Märklin Signal Book.

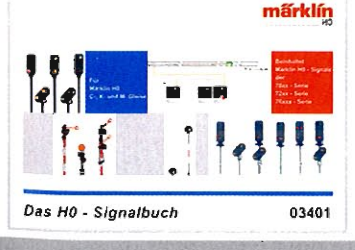
Complete explanation of signal technology in the prototype and as models. Sample applications for semaphore/target and color light signals. Presentation and applications of the new color light signals. Contents approximately 100 pages. Format approximately 26.4 x 22 cm / 10-3/8" x 8-11/16".

0716
Electrical Manual for H0.

Practical tips for hooking up turnouts and signals as well as all of the working models in the Märklin assortment such as the rotary crane, turntable, and transfer table. Numerous sample circuits and circuits for hooking up electrical items for conventional and digital control of model railroad layouts. Contents 78 pages. Format 22 x 26.4 cm / 8-5/8" x 10-3/8".

0730
Service Manual H0.

Function, care and maintenance of locomotives. Useful tools and how to use them. Troubleshooting locomotives and layouts. Tips on the Digital system. Extensive spare parts tables. Contents 72 pages. Format 22 x 26.4 cm / 8-5/8" x 10-3/8".



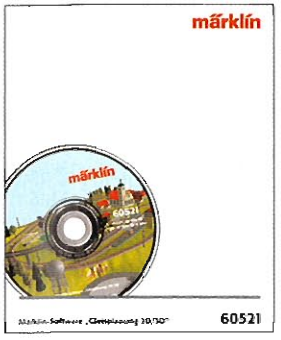
60520
Märklin Software Archive.

The collector data base for Märklin H0.
Data base includes extensive additional information.
DVD includes the Märklin catalog.

Collector data base with an overview of all Märklin H0 products from 1935 to the present. Data base is divided into the rubrics assortment, personal collection, buying and selling, and desired model. Contents have over 5,000 items and over 9,000 images. Includes the Märklin catalog and an extensive reference work on the history of Märklin H0, technical references and aids for collectors as well as prototype information.

System Requirements:
Computer with Pentium-compatible processor. Windows 98/2000/XP or compatible operating system and at least Internet Explorer 4.01. DVD-ROM drive. Hard drive with approximately 30 MB free memory (for installation).
VGA Graphics card and appropriate monitor. Resolution of at least 800 x 600 with at least 256 colors. HighColor (32 or 64 thousand colors) recommended. Mircosoft-compatible mouse.

60521
Märklin Software
"Track Planning 2D/3D".



2D/3D track planning.
Märklin H0/1/Z and Minitrix.
Includes 25 selected 3D models.
Includes track plan library.

Track planning software on a CD-ROM for Märklin model railroad layouts. Many useful planning tools for fast and easy production of that dream layout up to 15 x 15 meters / approx. 49 x 49 feet with up to 99 levels. Fast selection of the track sections and the accessory from tables, automatic connection of the track ends and laying out of parallel tracks. Calculation of grades and clearance heights. Variable representation of the track. Library with symbols for many building shapes. Additional possibility of representation of wiring plans and layout benchwork. Practical printing formats for viewing and additional processing of the track plan. Automatic generation of the parts list. 3D view for the representation of the layout and the benchwork.

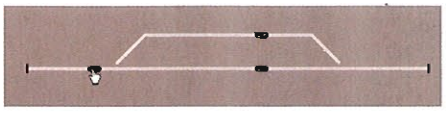
System Requirements:
Windows 98/ME/2000/XP or higher. Pentium II with at least 500 MHz. CD-ROM drive. VGA graphics card. 128 MB working memory (RAM).

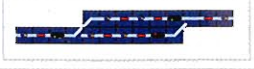
60512
Model Railroad Software
"Controlling Trains and Accessories".

Easy-to-use model railroad software for controlling Märklin Digital layouts and Selectrix Digital layouts. Software for manual and automatic train control, track diagram control boards, manual and automatic control of solenoid accessories, combination operation of manual and automatic controls is possible, blocks and staging yard assistant, video image of an engineer's cab, crane control, 3D sound, route control, language selection, clock. Languages supported: German, English, Dutch, and French.

System requirements:
Pentium II with a minimum 350 MHz, minimum 128 MB RAM storage, minimum 100 MB free hard drive, 1 parallel LPT port, 1 serial COM port, CD-ROM drive, DirektX 8.x. Optional: Soundcard, video hardware, joystick.

Operating system:
Win 98, Win ME, Win NT4, Win 2000, Win XP. Connection to a Märklin layout with the 6051 Interface and 6021 Control Unit. Connection to a Trix layout with the Interface and Central Control 2000. (These units are not included with the software).





Spare Parts for Locomotives.

Item No.	Item No.	Item No.	Item No.	Traction Tires	Pickup Shoe	Pantograph		Light Bulb		Brushes
	30000			7154	7185	–		61 0040	–	60 1460
	30033			7153	7185	–		61 0040	–	60 0300
	30322			7154	7185	–		61 0080		60 1460
30747				7154	7164	–		61 0040	–	60 1460
3078				7154	7185	–		61 0040	–	60 1460
3087				7154	7185	–		–	–	60 0300
	30881			7154	7185	–		61 0040	–	60 1460
	30951			7153	7185	–		61 0040	–	60 0300
	3374			7154	7164	–		61 0040	–	60 1460
	33745			7154	7164	–		61 0040	–	60 1460
	33961			7153	7164	–		61 0040	–	60 0300
	34132			7153	20 6370	–		–	–	–
	34401			7153	7164	21 5000		61 0040	–	60 1460
	34402			7153	7164	22 0433		61 0040	–	60 1460
	34750	37750		7153	30 6328	30 6367		–	–	–
36330				7154	30 6328	60 0549		–		–
36335				7154	30 6328	31 4307		–		–
36336				7155	30 6328	31 8572		–		–
36800				–	7164	–		–	–	
36806				–	7164	–		–	–	–
36807				–	7165	–		–	–	–
36810				–	7166	–				
36845				7153	20 6370	–		–	–	–
36850				7153	20 6370	61 0677		–	–	–
36851				7153	20 6370	61 0677	61 0678	–	–	–
36852				7153	20 6370	61 0677	61 0678	–	–	–
36853				7153	20 6370	61 0677	61 0678	–	–	–
36854				7153	20 6370	61 0677		–	–	–
36861				7154	37 8960	–		61 0040	–	–
		37022		7153	20 6370	–		–	61 0080	60 1480
		37030		7152	22 5647	–		–	61 0080	–
		37034		7152	22 5647	–		–	–	–
		37036		7152	22 5647	–		–	–	–
		37050		22 5024	20 6370	–		–	–	–
		37055		7154	21 2448	–				–
		37056		7154	21 2448	–		–	–	–
		37073		7153	7164	–		–	61 0080	60 1460
		37120		7153	20 6376	66 2450		–	–	60 1460
		37133		7153	7185	–		–	–	60 1460
		37134		7153	7185	–		–	61 0080	60 1460

Reverse Unit	Coupler front	Coupler rear	Conversion
–	39 9740	39 9740	1
–	20 2140	70 1540	3
–	29 5440	29 5440	1
20 8240	70 1560	70 1560	▲ 1
20 8240	39 9740	39 9740	▲ 1
20 8240	20 0010	20 0010	▲ 3
–	39 9740	39 9740	1
–	20 5320	21 8420	3
–	26 3730	26 3730	1
–	70 1630	70 1630	1
–	–	–	4
–	70 1630	70 1630	–
–	70 1630	70 1630	1
–	70 1630	70 1630	1
–	70 1630	70 1630	●
–	70 1630	70 1630	–
–	71 1630	71 1630	–
–	72 1630	72 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
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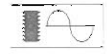
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–

Delta with 66031 or 66032	▲
Digital with 60901 fx	1
Digital with 60902 from 6090 to fx	2
Digital with 60903 for the small flat commutator motor	3
Digital with 60904 for the large flat commutator motor	4
Digital with 60905 for the can motor	5
Digital retrofitting is only possible at the factory	●
Retrofitting not possible / not useful	–

*** Details were not available at the time of the press date.
Technical modifications reserved.

Spare Parts for Locomotives.







Item No.	Item No.	Item No.	Item No.	Traction Tires	Pickup Shoe	Pantograph	Light Bulb		Brushes
		37135		7153	31 3551	–	–	61 0080	–
		37140		***	***	***	***	***	***
		37157		7153	28 0270	–	–	61 0080	60 1460
		37236		7153	20 6370	60 4262	–	–	60 1460
		37240		7153	7164	60 6703	–	61 0080	60 1460
		37241		7153	7164	66 2459	–	61 0080	60 1460
		37242		7153	7164	60 6703	–	61 0080	60 1460
		37251		7153	7164	–	–	–	60 1460
		37255		7153	7164	61 5390		61 0080	60 1460
		37263		7153	7164	61 5390	–	61 0080	60 1460
		37270		7154	20 6370	–	–	–	60 1460
		37316		7153	7164	60 3391	60 0627 rot	61 0080	60 1460
		37331		7153	7164	32 3805	–	–	–
		37332		7153	7164	32 3805	–	–	–
		37364		7154	7185	–	–	61 0080	60 1460
		37365		7154	7185	–	–	61 0080	60 1460
		37389		7153	7164	61 5390 61 5400	–	61 0080	60 1460
		37398		7153	20 6370	60 1434	–	61 0080	60 1460
		37401		7153	7164	25 8270	–	61 0080	60 1460
		37412		7153	7164	60 3713 60 7555	–	61 0080	60 1460
		37413		7153	7164	60 7555	–	61 0080	60 1460
		37440		7153	7185	30 1896	–	–	–
		37470		***	***	***	***	***	***
		37476		7154	34 2551 04	30 2663		–	–
		37477		7154	34 2551 05	60 4097	–	–	–
		37490		***	***	***	***	***	***
		37510		7153	7185	60 3076	–	61 0080	60 1460
		37522		7154	20 6370	60 3243	–	–	–
		37537		7153	7164	60 9649	–	–	60 1460
		37538		7153	7164	60 9649	–	–	60 1460
		37540		7153	20 6370	–	–	–	–
		37550		7153	20 6370	–	61 0040	61 0080	–
		37554		7153	20 6370	–	–	61 0080	–
		37558		7153	20 6370	–	–	61 0080	–
		37559		5153	20 6370	–	–	61 0080	–
		37562		7153	7164	25 9530	61 0080	61 0080	60 1460
		37610		7154	20 6370	–	–	–	60 1460
		37611		7154	20 6370	–	–	–	60 1460
		37652		7153	7164	–	61 0060	61 0080	60 1460
		37653		7154	7185	–	–	61 0080	60 1460

Reverse Unit	Coupler front	Coupler rear	Conversion
–	70 1630	70 1630	–
***	***	***	***
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
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–	70 1630	70 1630	–
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–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	26 3730	26 3730	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
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–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
***	***	***	***
–	70 1630	70 1630	–
–	70 1630	70 1630	–
***	***	***	***
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	●
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	–	–	–
–	29 8470	29 8470	–

Delta with 66031 or 66032	▲
Digital with 60901 fx	1
Digital with 60902 from 6090 to fx	2
Digital with 60903 for the small flat commutator motor	3
Digital with 60904 for the large flat commutator motor	4
Digital with 60905 for the can motor	5
Digital retrofitting is only possible at the factory	●
Retrofitting not possible / not useful	–

*** Details were not available at the time of the press date.
Technical modifications reserved.

Spare Parts for Locomotives.

Item No.	Item No.	Item No.	Item No.	Traction Tires	Pickup Shoe	Pantograph	Light Bulb		Brushes
		37654		7154	7185	–	–	61 0080	60 1460
		37658		7154	20 9217	–	–	–	–
		37659		7154	20 9217	–	–	–	–
		37669		7154	7164	–	–	61 0080	60 1460
		37673		7154	7164	–	61 0080	61 0080	60 1460
		37724		7154	7164	–	–	61 0080	60 1460
		37725		7154	7164	–	–	–	60 1460
		37726		7154	7164	–	–	61 0080	60 1460
		37746		7154	7164	–	–	61 0080	60 1460
		37841		7153	20 6370	–	–	61 0080	60 1460
		37884		7153	20 6370	–	–	61 0080	60 1460
		37886		7153	20 6370	–	–	61 0080	60 1460
		37889		7153	20 6370	–	–	61 0080	60 1460
		37900		***	***	***	***	***	***
		37914		7152	7164	–	–	61 0080	60 1460
		37921		7153	20 6370	–	–	61 0080	60 1460
		37952		7152	20 6370	–	–	61 0080	60 1460
		37953		7152	20 6370	–	–	61 0080	60 1460
		37954		7152	20 6370	–	–	61 0080	60 1460
		37973		7153	20 6370	–	–	–	–
		37974		7153	20 6370	–	–	61 0080	–
		37991		7153	20 6370	–	–	–	–
			39103	7152	7164	–	–	–	–
			39104	7152	7164	–	–	61 0080	–
			39161	7152	43 4200	–	–	–	–
			39223	7153	7164	60 9117	–	–	–
			39340	7153	20 6370	60 8853	–	–	–
			39358	7153	20 6370	60 1323	–	–	–
			39560	7153	7164	60 6712	–	–	–
			39581	7153	7164	22 0433	–	61 0080	–
			39582	7153	7164	22 0433	–	61 0080	–
			39602	7154	7164	64 4240	–	–	–
			39820	7153	20 6370	–	–	61 0080	–
			39821	7154	20 6370	–	–	61 0080	–
			39830	7153	20 6370	60 1323	–	–	–
			39831	7153	20 6370	60 1323	–	–	–
			39832	7153	20 6370	60 1323	–	–	–
			39833	7153	20 6370	60 1323	–	–	–
			39834	7153	20 6370	60 1323	–	–	–

Reverse Unit	Coupler front	Coupler rear	Conversion
–	29 8470	29 8470	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	46 3640	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
***	***	***	***
–	–	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	–	70 1630	–
–	–	70 1630	–
–	–	70 1630	–
–	–	70 1630	–
–	–	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–
–	70 1630	70 1630	–

Delta with 66031 or 66032	▲
Digital with 60901 fx	1
Digital with 60902 from 6090 to fx	2
Digital with 60903 for the small flat commutator motor	3
Digital with 60904 for the large flat commutator motor	4
Digital with 60905 for the can motor	5
Digital retrofitting is only possible at the factory	●
Retrofitting not possible / not useful	–

*** Details were not available at the time of the press date.
Technical modifications reserved.

Couplers and DC Wheel Sets for Passenger Cars.

Item No.	Coupler	DC wheel set
4035	32 5400	70 0600
4038	32 5400	70 0600
4039	32 5400	70 0600
4107	32 5400	70 0600
4108	32 5400	70 0600
4131	70 1630	70 0580
4132	70 1630	70 0580
4133	70 1630	70 0580
4233	27 2910	70 0580
4234	27 2910	70 0580
4256	70 1630	70 0580
4257	70 1630	–
4281	70 1630	70 0580
4282	70 1630	70 0580
4313	70 1630	70 0580
4314	70 1630	70 0580
4315	70 1630	70 0580
4316	70 1630	–
4317	70 1630	70 0580
(4317)	70 1630	40 6240
4318	70 1630	70 0580
(4318)	70 1630	40 6240
4319	70 1630	70 0580
(4319)	70 1630	40 6240
4327	70 1630	70 0580
4335	70 1630	70 0580
4365	70 1630	70 0580
4368	70 1630	70 0580
4369	70 1630	70 0580
4384	70 1630	70 0580
41273	70 1630	70 0580
41352	70 1630	70 0580
41362	70 1630	70 0580
41372	70 1630	70 0580
41773	70 1630	70 0580
41774	70 1630	70 0580
41895	70 1630	70 0580
41896	70 1630	70 0580
42162	70 1630	70 0580
42178	70 1630	
42271	70 1630	70 0580
42272	70 1630	70 0580
42341	27 2910	70 0580
42551	70 1630	70 0580
42561	70 1630	70 0580
42571	70 1630	–
(42571)	70 1630	–
42644	70 1630	70 0580
42645	70 1630	70 0580
42646	70 1630	70 0580
42721	70 1630	70 0580
42722	70 1630	70 0580
42723	70 1630	70 0580
42750	70 1630	70 0580
42751	70 1630	70 0580
42758	70 1630	70 0580
42861	70 1630	70 0580
42862	70 1630	70 0580
42932	70 1630	70 0580
42943	70 1630	70 0580

Item No.	Coupler	DC wheel set
42971	70 1630	70 0580
42972	70 1630	70 0580
42973	70 1630	–
42993	70 1630	70 0580
42994	70 1630	70 0580
42995	70 1630	70 0580
42997	70 1630	70 0580
43010	70 1630	32 3760 04
43020	70 1630	32 3760 04
43030	70 1630	32 3760 04
43040	70 1630	70 0580
43050	70 1630	70 0580
43060	70 1630	70 0580
43070	70 1630	70 0580
43080	70 1630	70 0580
43100	70 1630	70 0580
43108	70 1630	70 0580
43109	70 1630	–
43110	70 1630	70 0580
43119	70 1630	–
43135	70 1630	70 0580
43145	70 1630	70 0580
43148	70 1630	70 0580
43155	70 1630	70 0580
43201	70 1630	70 0580
43211	70 1630	70 0580
43221	70 1630	70 0580
43231	70 1630	70 0580
43237	70 1630	70 0580
43238	70 1630	70 0580
43241	70 1630	70 0580
43251	70 1630	70 0580
43258	70 1630	70 0580
43259	70 1630	70 0580
43261	70 1630	70 0580
43266	70 1630	–
43300	70 1630	–
43303	70 1630	–
43305	70 1630	–
43351	70 1630	70 0580
43532	70 1630	70 0580
43534	70 1630	70 0580
43536	70 1630	–
43581	70 1630	70 0580
43582	70 1630	70 0580
43583	70 1630	–
43584	70 1630	70 0580
43585	70 1630	70 0580
43586	70 1630	–
43601	70 1630	70 0580
43602	70 1630	70 0580
43603	70 1630	70 0580
43604	70 1630	–
43614	70 1630	70 0580
43781	70 1630	70 0580
43782	70 1630	70 0580
49962	70 1630	–
49964	70 1630	–
49982	70 1630	–

Couplers and DC Wheel Sets for Freight Cars.

Item No.	Coupler	DC wheel set
4410	70 1570	70 0580
4411	70 1570	–
4413	70 1570	70 0580
4415	70 1570	70 0580
4417	70 1570	70 0580
4421	70 1570	70 0580
4423	70 1570	70 0580
4424	70 1570	70 0580
4430	70 1570	70 0580
4431	70 1570	70 0580
4432	70 1570	70 0580
4440	70 1570	70 0580
4441	70 1570	70 0580
4442	70 1570	70 0580
4459	70 1570	70 0580
4471	70 1570	70 0580
4473	70 1570	70 0580
4474	70 1570	70 0580
4610	70 1540	70 0500
4617	70 1540	70 0530
4624	70 1630	70 0580
4626	70 1630	70 0280
4635	70 1630	70 0600
4661	70 1630	70 0580
4671	70 1540	70 0530
4663	32 3990	70 0270
4694	70 1630	70 0580
4699	70 1630	70 0580
4712	70 1630	70 0580
4740	36 3660	43 2950
4741	36 3700	43 2950
4754	70 1630	70 0580
4756	70 1630	70 0580
4771	70 1630	70 0580
4867	70 1630	70 0580
44174	70 1570	70 0580
44177	70 1570	70 0580
44181	70 1570	70 0580
44184	70 1570	70 0580
44186	70 1570	70 0580
44187	70 1570	70 0580
44188	70 1570	70 0580
44189	70 1570	70 0580
44190	70 1570	70 0580
44191	70 1570	70 0580
44241	70 1570	70 0580
44333	70 1630	70 0580
44401	70 1570	70 0580
44460	70 1570	70 0580
44525	70 1570	70 0580
44591	70 1570	70 0580
44732	70 1570	70 0580
44900	70 1630	70 0580
45020	70 1630	32 3760 04
45021	70 1630	32 3760 04
45072	70 1630	70 0580
45093	70 1630	70 0580
45094	70 1630	32 3012 11
45096	70 1630	70 0580
45580	70 1630	32 0552
(45580)	32 5482	32 0389 RP 25
45646	70 1630	32 0552
(45646)	32 5482	32 0389 RP 25
45647	70 1630	32 0552
(45647)	32 5482	32 0389 RP 25
45648	70 1630	32 0552
(45648)	32 5482	32 0389 RP 25
45650	70 1630	32 0552
(45650)	32 5482	32 0389 RP 25
45651	70 1630	32 0552
(45651)	32 5482	32 0389 RP 25
45652	70 1630	32 0552
(45652)	32 5482	32 0389 RP 25
45680	70 1630	32 0552
(45680)	32 5482	32 0389 RP 25
45690	70 1630	32 0552
(45690)	32 5482	32 0389 RP 25
45702	70 1630	32 0552
(45702)	32 5482	32 0389 RP 25
45703	70 1630	32 0552
(45703)	32 5482	32 0389 RP 25
45705	70 1630	32 0552
(45705)	32 5482	32 0389 RP 25
45800	70 1630	32 0552
(45800)	32 5482	32 0389 RP 25
45801	70 1630	32 0552
(45801)	32 5482	32 0389 RP 25
46020	70 1630	32 3012 11
46030	70 1630	70 0580
46039	70 1630	70 0630
46040	70 1630	70 0580
46075	70 1630	70 0580
46076	70 1630	70 0580
46077	70 1630	70 0580
46078	70 1630	32 3012 11
46121	70 1630	70 0580
46122	70 1630	70 0580
46131	70 1630	70 0580
46133	70 1630	70 0580
46151	70 1630	70 0630
46157	70 1630	32 3012 11
46160	70 1630	32 3760 04
46161	70 1630	32 3760 04
46200	70 1630	70 0580
46202	70 1630	70 0580
46249	70 1630	70 0580
46250	70 1630	70 0580
46251	70 1630	70 0580
46253	70 1630	70 0580
46274	70 1570	70 0580
46275	70 1630	70 0580
46280	70 1630	20 6852
46300	70 1630	70 0580
46310	70 1630	70 0580
46313	70 1630	70 0580
46314	70 1630	70 0580
46321	70 1630	70 0580
46322	70 1630	70 0580
46323	70 1630	70 0580
46324	70 1630	70 0580
46340	70 1630	70 0580
46360	70 1630	70 0580
46361	70 1630	70 0580
46363	70 1630	70 0580

Item No.	Coupler	DC wheel set	Item No.	Coupler	DC wheel set	Item No.	Coupler	DC wheel set	Item No.	Coupler	DC wheel set
46364	70 1630	70 0630	47210	70 1630	70 0580	48012	70 1630	70 0580	48755	70 1630	70 0580
46426	70 1630	32 3760 04	47211	70 1630	70 0580	48025	70 1630	70 0580	48759	70 1630	70 0580
46428	70 1630	32 3760 04	47262	70 1630	70 0580	48031	70 1630	70 0580	48770	70 1630	70 0270
46429	70 1630	32 3760 04	47314	70 1630	70 0580	48052	–	70 0580	48802	70 1630	70 0580
46524	70 1630	32 3760 04	47440	70 1630	32 0577	48100	70 1630	70 0580	48805	70 1630	70 0580
46551	70 1630	70 0580	47441	70 1630	32 0577	48102	70 1630	70 0580	(48805)	70 1630	32 3760 04
46555	70 1630	70 0580	47442	70 1630	32 0577	48252	70 1630	70 0580	48807	70 1630	70 0580
46556	70 1630	70 0580	47446	70 1630	32 0577	48261	70 1630	70 0580	(48807)	70 1630	32 3760 04
46601	70 1630	32 3012 11	47448	70 1630	32 0577	(48261)	70 1630	40 6240	48808	70 1630	70 0630
46615	70 1630	70 0580	47449	70 1630	32 0577	48270	70 1630	70 0580	48821	70 1630	70 0580
46621	70 1630	70 0580	47450	70 1630	32 0577	48271	70 1630	70 0580	(48821)	70 1630	70 0270
46624	70 1630	70 0580	47523	70 1630	70 0580	48283	70 1630	70 0630	48881	70 1630	70 0580
46743	70 1630	70 0630	47561	70 1630	70 0580	48291	70 1630	–	48946	70 1630	70 0580
46752	70 1630	70 0580	47700	70 1630	70 0580	48295	70 1630	31 0199	49150	70 1570	70 0580
46829	70 1630	32 3012 11	47702	70 1630	70 0580	48449	70 1630	70 0580	49952	70 1630	–
46843	70 1630	70 0580	47704	70 1630	70 0580	48450	70 1630	70 0580	49953	70 1630	–
46903	70 1630	70 0580	47705	70 1630	70 0580	48484	70 1630	70 0580	49963	70 1630	–
46906	70 1630	70 0580	47713	70 1630	70 0580	48485	70 1630	70 0580			
46948	70 1630	70 0580	47730	70 1630	70 0580	48504	70 1630	70 0580			
46974	70 1630	70 0580	47876	70 1630	70 0580	48532	70 1630	70 0580			
46975	70 1630	70 0580	47877	70 1630	70 0630	48544	70 1630	32 3760 04			
46977	70 1630	70 0580	(47877)	70 1630	70 0580	48545	70 1630	32 3760 04			
46980	70 1630	70 0580	47878	70 1630	70 0580	48546	70 1630	32 3760 04			
47124	70 1630	70 0580	47879	70 1630	70 0580	48664	70 1630	70 0580			
47149	70 1630	70 0580	47908	70 1630	70 0580	48668	70 1630	70 0580			
47190	70 1630	70 0580	(47908)	70 1630	60 1329	48671	70 1630	70 0580			
47192	70 1630	70 0580	47909	70 1630	70 0580	48672	70 1630	70 0580			
47195	70 1630	70 0580	(47909)	70 1630	70 0270	48673	70 1630	70 0580			
47197	70 1630	70 0580	47910	70 1630	70 0580	48675	70 1630	70 0580			
47198	70 1630	70 0580	48004	70 1630	70 0580	48676	70 1630	70 0580			
47200	70 1630	70 0580	48005	70 1630	70 0580	48690	70 1630	70 0580			

One-time Series: Steam Engine.

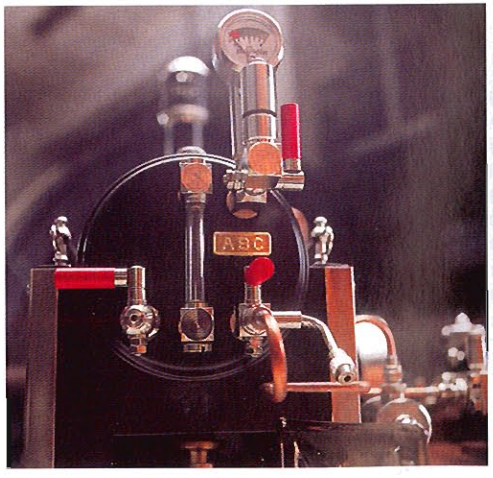
16051
Steam Engine.

One-time series.

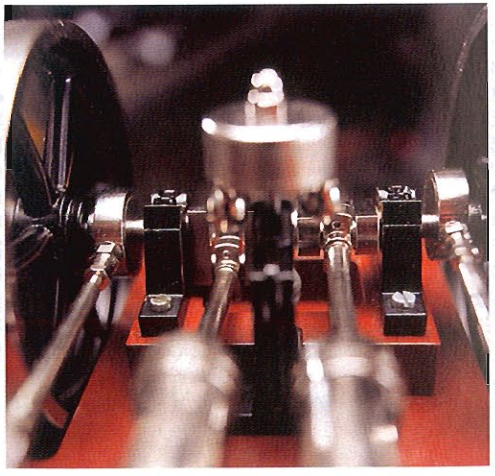
Model: Reissue of a Märklin steam machine from the 1930's.
Horizontal **machinery**, high pressure and low pressure cylinder mounted in joint cylinder jacket. 2 massive flywheels with doubled string-run choke cam. Drop shaft, centrifugal regulator. Sheet iron foundation.
Sheet brass **boiler.**
Fire box with gallery rods on both sides.

Appliances: Steam dome with safety weight valve. Steam whistle, steam shut-off cock, three-way cock, water level indicator with discharge cock, manometer.

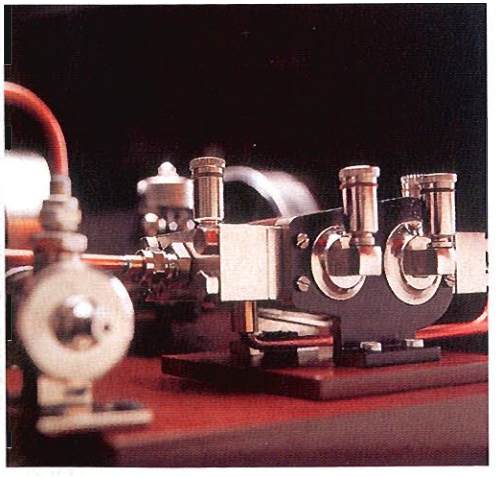
Size: Height with smokestack app. 34 cm / 13-3/8".
Foundation app. 37 cm x 37 cm / 14-9/16" x 14-9/16".



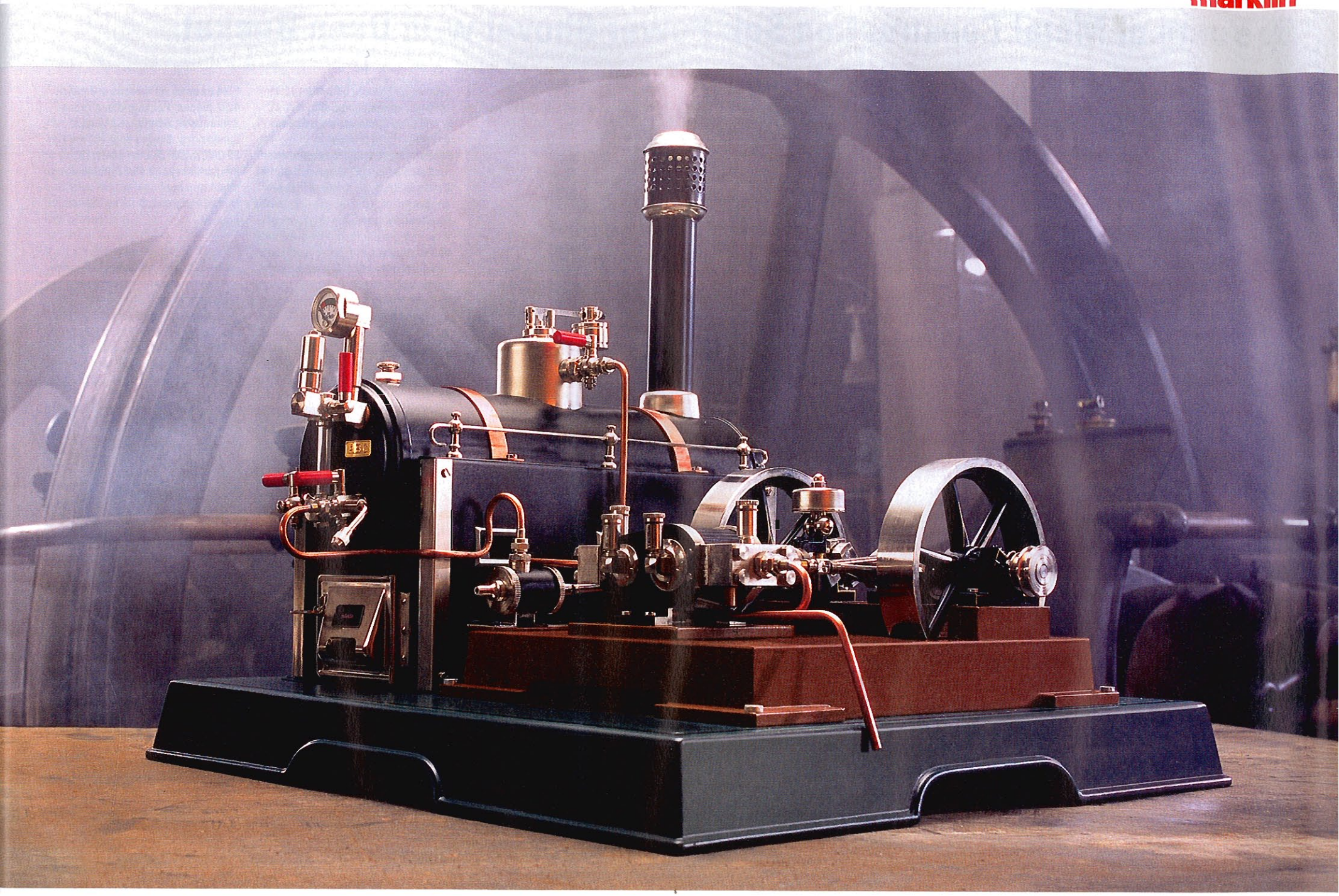
Appliances:
Steam whistle, steam shut-off cock, water level indicator with drain cock and manometer.



Machinery
Two massive flywheels, drop shaft and centrifugal regulator.



Machinery
Horizontal machinery, high pressure and low pressure cylinder mounted in joint cylinder jacket.



90 Years of Metal Construction Set: Power Shovel with Deep Bucket.

Build on your own or follow the detailed instructions.
Learning to understand technology through play – for many years that was what characterized the reliable Märklin metal construction sets. Production of the assortment stopped in 2001. For many generations the metal construction set offered the first contact with technology.

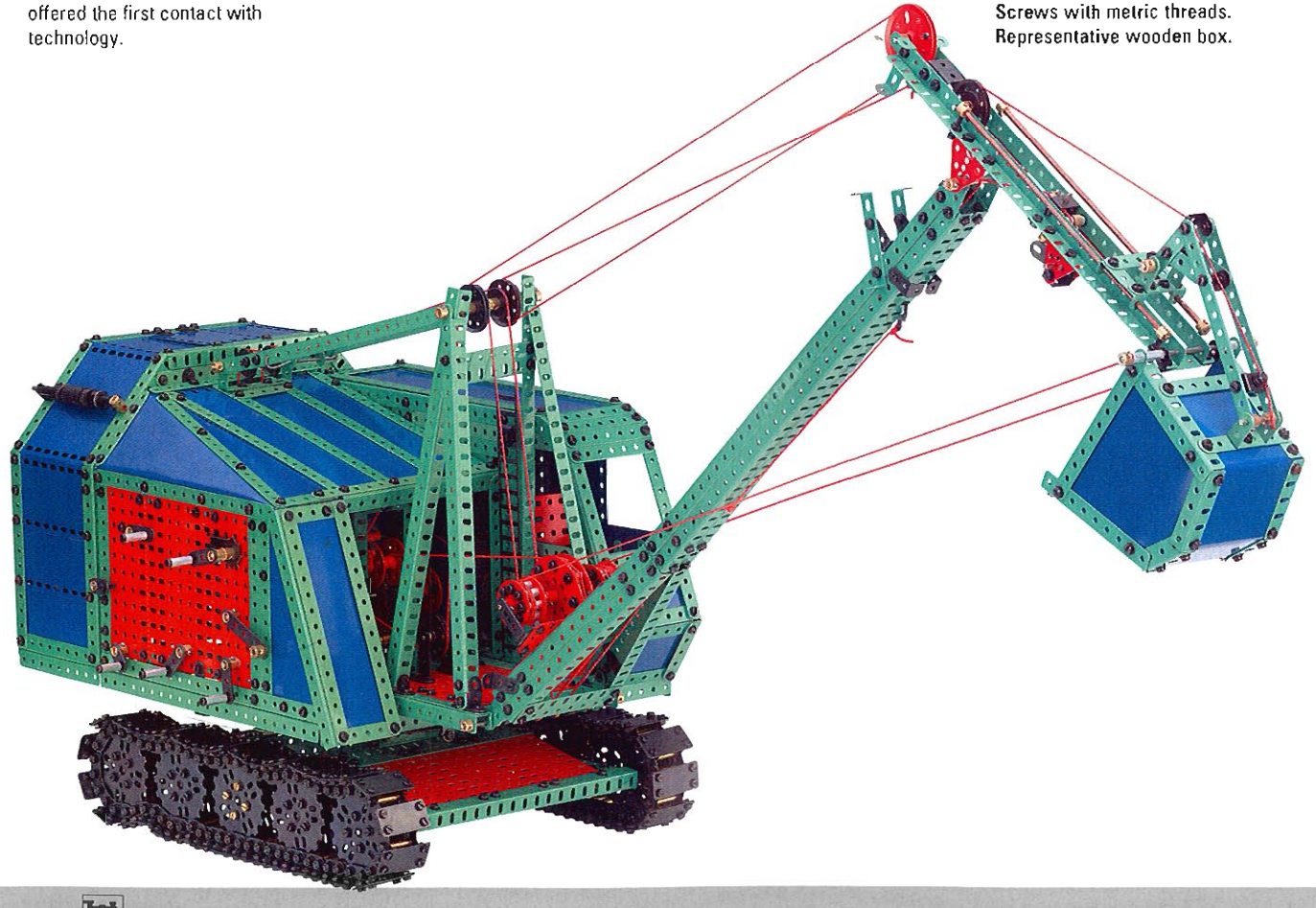
The model of a large power shovel is being issued on the occasion of the 90th birthday of the construction set at Märklin, continuing the tradition of the large models.

10900
Power Shovel with Deep Bucket.

One-time series.
"90 Years of Metal Construction Sets".
Challenging large model.
Many play functions.
Screws with metric threads.
Representative wooden box.

Prototype: Menck, built from 1950-1956. Universal power shovel, as it is still used in many construction applications to this day.
Model: Challenging construction set model of a typical power shovel from the 50's with detailed instructions.
All essential functions like raising/lowering the boom, the deep bucket, and turning the superstructure, can be represented. Chassis with working chain.

Please note: All threads are metric. 4707 pieces. Packaged in a representative wooden box. Model dimensions: Length app. 100 cm / 39-3/8", width 38 cm / 14-31/32", height 85 cm / 33-15/32" (middle boom position).
Model weight: app. 17 kg. / 37.48 pounds



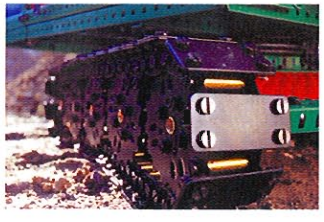
Menck & Hambrock was founded in 1868 in Northern Germany by Adolf Menck and Diedrich Alexander Hambrock, and over a longer period it was one of the most significant European manufacturers of power shovels. As early as 1869 the company introduced their first developments. The company's heyday started in 1891 with the construction of steam-powered cranes.
The first bucket power shovel was developed in 1904. Menck shipped the first crawler power shovels in 1922. In 1978, the history of the Menck power shovels came to an end. Many thousands of power shovels had been produced, some of which are still performing their extraordinary services.

Menck M 75
The M 75 was introduced in 1949. As the first power shovel in some parts it introduced the later visual form of all Menck power shovels. The M 75 was offered on the market until the mid 1950's. Its performance range was then handled by the newly-developed types M 60 and M 90.

The Anniversary for Looking Back.

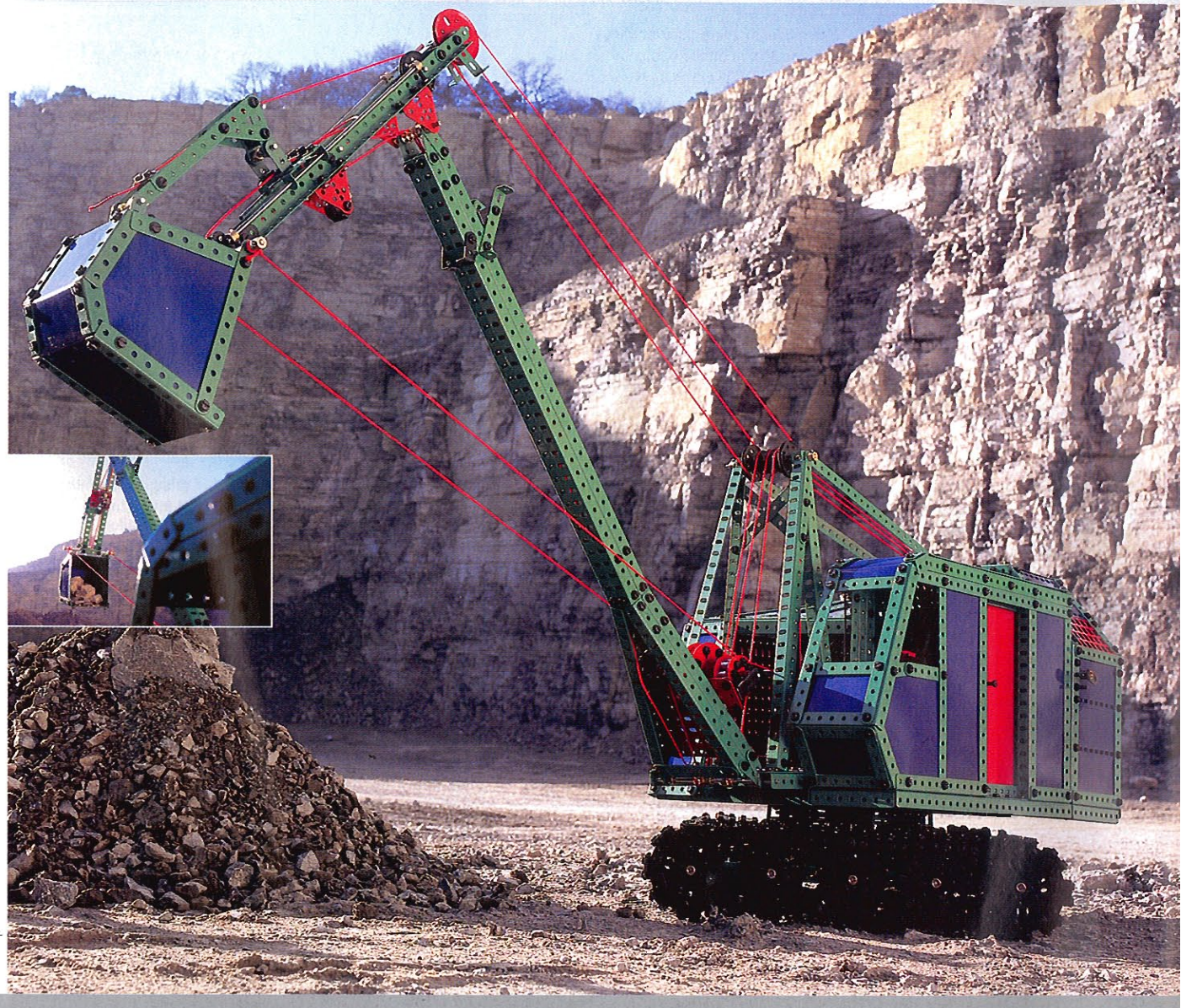
The Märklin metal construction set celebrates its 90th birthday with a special type of model: The power shovel with its numerous manually-activated movements and functions demonstrates all the strengths of this technical toy.

It all started with the English inventor Frank Hornby. While his earlier construction sets were based on a single model, Hornby standardized the components to perforated metal strips, as well as angles, surfaces, and mechanical parts, which are screwed together. He applied for a patent on this principle of the



construction set. Märklin became the exclusive distributor of the Meccano Construction Set in Germany and continental Europe; the construction set soon became a success throughout Europe. Starting in 1912, Märklin annually shipped 60,000 windup motors and introduced its own Märklin metal construction set in 1914. In 1917, Märklin obtained the patent and trademark rights for Europe and later integrated the construction set in its own assortment.

Entire generations have grown up with the metal construction set, and in the process have learned the principles of statics and mechanics through play. The intelligent reduction to basic mechanical elements "forces" planned, systematic construction, and as a consequence offers a rich learning experience. New pieces were added on a consistent basis, also miniaturized parts or electric accessories like motors and solar panels extended the possibilities. The product line was reduced several times over the decades.
Highpoints of the Märklin metal construction set include large construction sets like the model of the Eiffel Tower and the DO X, each with several thousand pieces. However the "naked" technology, which extensively dispensed with molded parts and plastic, was not in the trend of streamlined design. In addition, play stations, computers, and other leisure activities offered competition. The metal construction set lost its competitive basis. Since 1999, the Märklin Construction Set has only be produced in the form of exclusive special series – like this anniversary power shovel.



One-time *Exclusiv* Series.

Since 1990, there have been one-time *Exclusiv* editions in the Märklin product line that can only be purchased from Märklin *Exclusiv* dealers. *Exclusiv* special productions are innovative, special products differing from regular models in color scheme, imprinting, and technical features for the for experienced model railroaders and collectors.

Märklin *Exclusiv* products are manufactured in one-time series and are only available in limited quantities. These products are indicated in the presentation book with .

You can find the Märklin dealers in your area on the Internet at **www.maerklin.com**

All 2004 *Exclusiv* series are indicated in this presentation book with . You will find them on the following presentation book pages:

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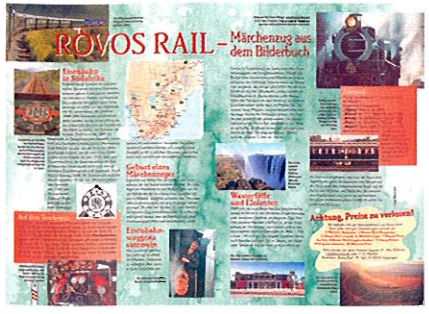
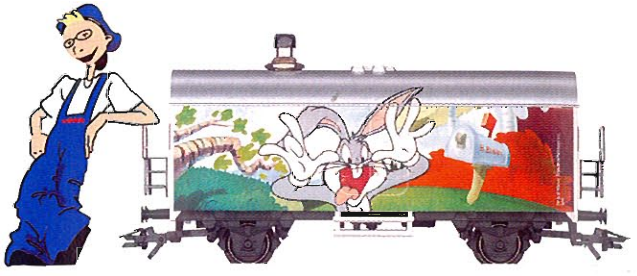
One-time *Exclusiv* series for 2004.

1. FC Märklin: The Club for Young Märklin Fans





Young model railroading and Märklin fans have their own club, where they can get information and find new friends. The 1. FC Märklin is the only model railroading club for children and offers the young fans fun, interaction, and information about real life and model railroading.

- The club magazine (appears 6 times a year) with Märklin product news, worthwhile information about prototypes, contests with prizes, travelogs, presentation of railroading museums, pen pals, tips for layout construction, puzzles about real life and model railroads, stickers, and posters.
- The club card provides discount entry fees in many museums and for Märklin events and consumer shows.
- The coupon for an H0 presentation book is included with the membership.
- The 1. FC annual car can be ordered exclusively.
- The online world of experience: www.fcmaerklin.com with a member area that is password protected: worthwhile information & fun, reports & games, interaction, communication among members.

You can register in 1. FC Märklin at any time. Information and registration forms for the club are available at www.fcmaerklin.com under the header, Information for Parents. Membership dues: € 10.00/year. Registration forms can also be requested from the address below: 1. FC Märklin – PF 960 – D-73009 Göppingen, Germany – 1.fc@maerklin.de

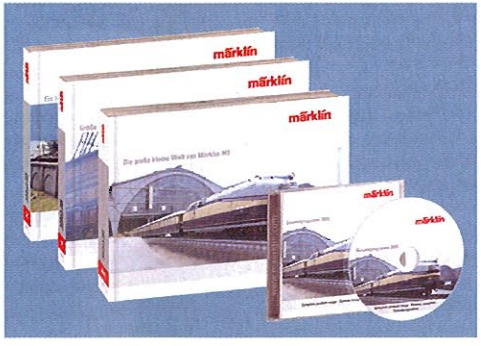
Annual Car for 2004 for the 1. FC Märklin.

This car accompanies the adventures of Bugs Bunny and his friends. You can record comic sound effects with the built-in electronic sound effects circuit and surprise your friends with the voice from the railroad car.
Only available for members in 2004.

III-V

Become a Märklin Insider.

Identify yourself as an Insider with the membership card, which is redesigned every year.



Insiders always know more.
Where others remain on the outside of things, Insiders have access, they receive special offers and information.
Except for the special anniversary cars, all services on this page are included in the annual dues for the Insider Club. Moreover, Märklin brings out exclusive models that are reserved for club members only.

The Insider Club package costs EURO 72.90, CHF 119.00, $ 85.00, including the annual car, a video, the annual Märklin Magazine subscription, complete catalog, the Club News, etc.
You get quite a lot for your money.

It is quite easy to become an insider: Just fill out the registration form that comes with this presentation book or which is available from your dealer, and send it to us.

Märklin Insider
P.O. Box 9 60
D-73009 Göppingen
Germany

And here's what you will receive with your membership:

The **Märklin Magazine** is an entertaining and competently produced model railroading magazine, which appears every two months. Existing subscriptions can be carried over.

The **Club News** with exclusive Insider information, tips, and new items for all gauges. This magazine appears every two months.

You will receive a coupon good for either a current **presentation** book or an CD-ROM presentation book that you can redeem from your Märklin dealer.

The **Annual Chronicle "A Year with Märklin"** is also a coveted extra included with your membership, which shows the high points of the past year. It is available as VHS (German only) or as a DVD.

As an Insider, you will receive all **brochures and publications** are sent to you free of charge.

Moreover, as an Insider you will profit from **extended services**. You will really be pleased with what we will offer you, together with our partners, in the areas of travel, car rental, and insurance.
Your wallet will also benefit in this regard. More details about the special conditions and Insider offers will be sent to you along with your membership documents.

Special Models for Insiders Only
The Märklin Dealer Initiative also works closely together with the Insider Club in Germany. It commissions special products from Märklin several times a year that remain reserved for Insiders.

Insider Annual Car
Only for Insiders: The annual car included in the annual dues, available either in H0 or Z. Insider annual cars are carefully selected and lovingly crafted models that will enrich any layout or display case.

Annual Car for 2004 in Z Gauge.

Annual Car for 2004 in H0 Gauge.

Annual Chronicle for 2004 "A Year with Märklin".

Our Way of Saying Thanks for 10 Years of Insider Membership.

37082
Express Steam Locomotive.

The 37082 express train steam locomotive will be exclusively produced for those Insiders who have been members for 10 years.

Prototype: Krauss-Maffei design for the German Federal Railroad (DB) class 10.
Model: This locomotive comes with a digital decoder, controlled high-efficiency propulsion and sound effects module. 3 axles powered. 2 traction tires. Metal tender. Close coupling between locomotive and tender. Ready for installation of 72270 smoke generator. Headlights and smoke generator will work in conventional operation and can be digitally controlled.

Running gear lights, whistle, and steam locomotive sound effects synchronized with the driving wheels, which can be digitally controlled with the 6021 Control Unit.
Length over buffers 30.5 cm / 12"

The new flagship locomotive of the German Federal Railroad was to shine not only with its technology, but also with its appearance. Consequently, the color design of the prestigious class 10 became quite an important issue. The participating locomotive builders submitted their drafts and color studies for a decision in the meeting of the factory committee on the August 4, 1955. In addition to color selection, particular attention was directed to design of the decorative striping and the smoke deflectors. The study, designated TLO 54801, from Krauss Maffei showed a very dynamic and innovative looking locomotive in a red color scheme. The extremely large tear-drop shaped smoke deflectors with diagonal front line accent the forward thrust of the machine. However, in the following meeting on December 14, 1955, the committee was not able to decide on this design.

46010
Track Cleaning Car
"10 Year Insider".

Special H0 Gauge Anniversary Car.

This track cleaning car is offered exclusively to Insiders, who have been members for 10 years.

Prototype: Two type KK 15 gondolas, permanently coupled, used as a railroad maintenance car. Era III design.
Model: Both cars come with a built-in track cleaning device. Each one consists of a metal block that moves vertically with parallel polishing felt cleaning pads. The cleaning pads can be replaced and washed. Retractable opening roofs. Close couplers guide mechanism. Both cars permanently coupled.
Length over buffers 15.3 cm/6-1/32".
DC Wheel Sets 70 05080

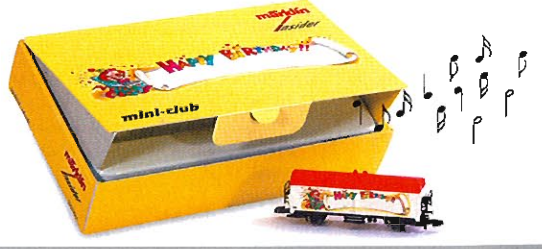
The gentle cleaning process is also suitable for nickel or brass rail.

86002
Birthday Car.

Special Z Gauge Anniversary Car.

This special Insider car can only bo ordered by Insider members who have maintained their unbroken loyalty to our club for at least 10 years.

Car for 10 years of insider membership. The birthday car is not only appropriate to celebrate one's own birthday, it's also a very special gift for friends and acquaintances. "Happy Birthday" music chip is built into the original packaging. The melody plays when the package is opened.



Seminars for Model Railroaders.

training

Registration and information at:
Gebr. Märklin & Cie. GmbH
Training
Holzheimer Straße 8
D-73037 Göppingen, Germany

Telephone +49 (0) 71 61/6 08-170
Fax +49 (0) 71 61/6 08-143

You can reach us by E-mail at:
seminarwesen@maerklin.de

Insiders automatically receive our seminar brochures.

Seminars for model railroaders and anyone wanting to become a model railroader, are a high priority at Märklin.

The Märklin seminar team has an extensive program offering that is particularly aimed at all model railroaders who want to gain more knowledge about their hobby. The know-how of the Märklin seminar leaders and active involvement with the Märklin and Trix locomotives and layouts provided at the seminars are the basis for high-level learning success in model railroading theory and practice.
Naturally, we ensure that plenty of fun and shoptalk are part of the program!

Seminar program examples:
- Introduction to Märklin Systems
- Layout planning, construction, and preparation for Märklin H0
- Layout building and landscape design for H0, Z, gauge, and Minitrix
- Märklin H0 – service end maintenance

Our seminars are held in Göppingen, as well as at other locations throughout Germany.

Web Training
Model railroaders wanting to further develop their hobby skills at their own pace can visit web training at Märklin.
It's this easy: Go to our homepage and click on the "Web Training" button. Then, register with your e-mail address, and you will obtain access to our training.

The following courses are currently being offered:
- Märklin Systems – from the Mobile Station to the Central Station
- Everything about the new generation of Märklin color light signals

Current information on our seminar and web training courses can be found on our homepage at:
www.maerklin.com

www.maerklin.com/web training

Modellbahn Treff.

2005

MODELLBAHN
TREFF
GÖPPINGEN

2005 is an odd year, at least according to the calendar. This means that once again you can reserve a weekend in June – for the Modellbahn Treff / Model Railroad Meet in Göppingen.
It is impossible to describe what goes on here during these two deys. It's something that you should experience for yourself. All Göppingen is seized by model railroading fever.
In different municipal halls, in the railway station, in the Märklin Museum, in the old power station, in the track construction plant of Leonhard Weiss GmbH & Co. KG – layouts, exhibitions, demonstrations, models, consulting, technology, and contests are everywhere.

There will even be real life locomotives and cars for 2005. Moreover, there will again be special models and many meeting points for young visitors.

For questions contact:
martina.eckstein@maerklin.de

The dates to reserve:
June 11 and 12, 2005

Travel with Märklin.

2005

This year as well you have the possibility of traveling with Märklin, which is always an interesting and rich experience.
"Short trips" of 2 days are planned, fireman training and travel with an ICE simulator.
Also city tours, a legendary trip through Switzerland, and an American trip.

Naturally, every person who takes part in these trips will receive an exclusive special car.

If you are interested, then please contact us by e-mail at:
martina.eckstein@maerklin.de or by telephone at +49 7161/608-257.

Märklin Magazine: The Model Railroad Consumer Publication.

The new Märklin Magazine – always provides current information on:

- New models, new technology
- The best tips for building a layout
- All the important information to collect
- All event dates

Märklin Magazine:
The fascination of railroading

Subscribe to the new Märklin Magazine

Märklin Magazine is the leading magazine for model railroaders and appears in German, English, French, and Dutch.

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By e-mail: maerklin-magazin@maerklin.de
By mail: Modellbahn-Welt Verlag GmbH
P.O. BOX 940
D-73009 Göppingen,
Germany

Copy or cut out the coupon

Yes, I would like to receive the Märklin Magazine at the price of (please check):

- ☐ 27,60 € (Germany, annual subscription with automatic debit transfer)
- ☐ 28,60 € (Germany, invoice or payment in advance)
- ☐ 32.10 € (Outside Germany, invoice/payment in advance)

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Postal code / City

Bank ID no. Account no.

Date of birth Telephone no.

Financial institution

E-mail:

Date, signature

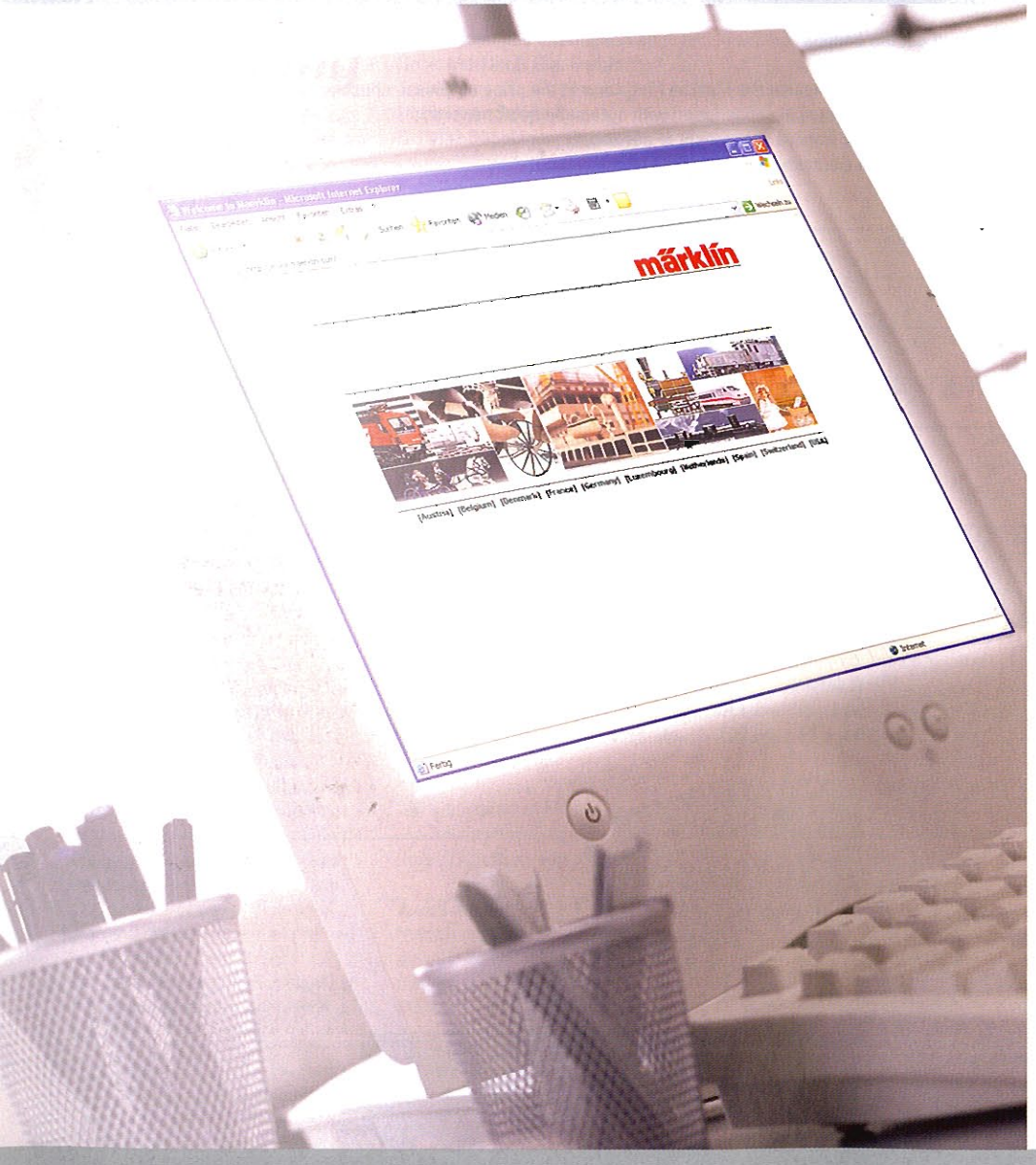
80814
Annual Märklin Magazine Car in Z for 2004

A detailed product description can be found in the Z presentation book on page 129.

48504
Annual Märklin Magazine Car in H0 for 2004

A detailed product description can be found in the H0 presentation book on page 287.

www.maerklin.com



www.maerklin.com is our international homepage with links to all Märklin companies in the world. You can get there from the German homepage with a click of your mouse – or you can go there directly at www.maerklin.de.
Our Internet site has established itself as an independent source of information and service.

We are developing new products for the Internet, just as we do in the model railroading market, and the former always make it worthwhile to visit the Märklin home page.

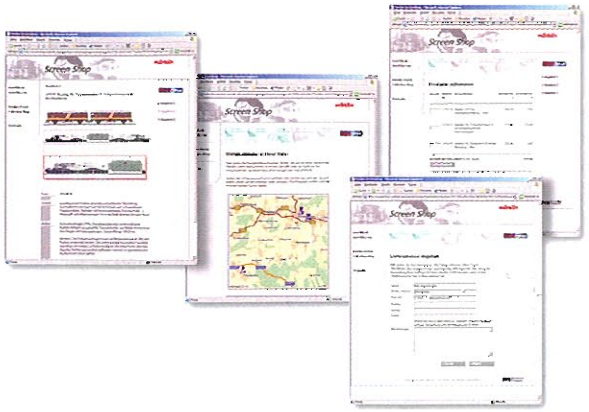
Under heading Märklin Training, we offer dealers and model railroaders various specialized seminars, correspondence courses, and workshops. Some of these services are fee-based seminars with trained instructors.

Services Offered
The Internet also enables you to access current Märklin information. Thus, you will find more than 2000 items in our product database, and hundreds of exploded parts diagrams and lists, each with a daily updated display of availabilty in the Märklin warehouse.

Web Training
Märklin is breaking new ground with interactive web training, a free Internet seminar, in which everything worth knowing about current topics can be learned, such as the new color light signals and the Märklin Systems components. After successfully answering the test questions, you will also get a personal certificate here.

Newsletter
Our Web News is also new, it provides current information per E-mail on the many new items on our web sites.
We would be pleased to send you this Märklin Web News at no charge.

Screenshop.



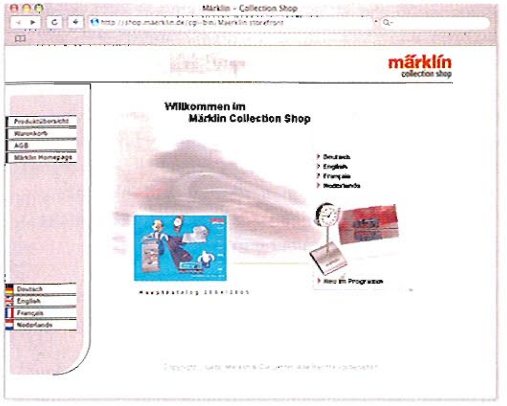
Our Internet ScreenShop has been accepted with enthusiasm by many model railroading fans.
This year, a completely reworked and improved ScreenShop awaits you. In the ScreenShop on the Märklin home page we present special items, which change on a monthly basis. These items can only be ordered through the ScreenShop. For example, train sets and car sets, model variations, and accessories in different scales. The supply of items is limited and each is only available during the respective month.

You can also order by Internet. To do this, select a dealer in our Märklin dealer portal on the German Märklin web site, and order the desired item from the dealer using the e-mail order form provided. The dealer will handle the order and will contact you as soon as he receives the desired items. By the way, you can identify the ScreenShop items by the letters CY preceding the item number.

The constantly changing range of products offered it worthwhile to visit the Märklin home page. Many items sell out quickly, so it's best to decide quickly on what to order.

http://screenshop.maerklin.de

Collection Shop.



Regardless of whether you are a active model railroader, collector, or simply a fan of the prototype and a fan of model railroading, you will always find attractive products and gifts in the Märklin Collection Shop.

There is a catalog for the Collection Shop that you can order
by fax +49(0)7161/608-143
or
by postcard:
Gebr. Märklin & Cie. GmbH
Museum
P.O. BOX 860
0-73008 Göppingen, Germany

... simply order the products directly on the Internet.

- Practical items for model railroaders
- Nostalgia for collectors
- Travel guides
- Clothing
- Hits for kids
- Gift ideas
- Watches
- Jewelry
- Catalogs and brochures ...

www.shop.maerklin.de

Promotion Service.

Small gifts sustain friendship. In this regard "small" refers to the costs – depending on the model and the execution, these are within the range of deductible advertising costs – as well as to the scale. However, small does not refer to the effect, as a Märklin model does just as well on a manager's desk as it does in a collector's display case. Not to mention the "second benefit" as a rolling advertisement on a model railroad layout.

Impact with Long Term Effect.
A Märklin model with a custom imprint is an ideal solution for many communication tasks because of its appeal and premium quality, and it has a corresponding long-term effect. As a market leader with a recognized standard of quality and the highest level of brand recognition in the industry, Märklin supplies you with the basis for a good image. Many of your customers will spontaneously remember the time they spent with Märklin, or they will tell you that they themselves are active model railroaders. Models that suit the theme, like refrigerator cars, tank cars, or sliding wall boxcars, gondolas, as holders for paper clips, or pens and pencils, as well as large or small special holders and containers, offer you any amount of advertising surface. And the extensive know-how for true color and flawless imprinting guarantees you implementation of the message that your corporate image requires.

There are numerous occasions and themes for that special promotional gift: Introduction of your new corporate image, a thank-you gift for loyal customers, invitation to an annual report press conference, motivation for dealers and employees, a kick-off for outside sales, Christmas or anniversary presents, multi-phase promotion for a product launch, reminders for business friends, or simply: image and customer care.

Märklin special imprint models are available in all kinds of designs in Z, H0, and 1 Gauge.
We would be pleased to help you.

Märklin Promotion Service
P.O. Box 8 60
D-73008 Göppingen, Germany
Telephone +49 7161 608-0
Fax +49 7161 608-173

www.maerklin.com

The Märklin Museum in Göppingen.

The Märklin Museum in Göppingen is an unforgettable attraction for a family outing.
As a pioneer in the manufacture of the "finest tin-plate toys", Märklin can look back over 144 years of tradition and can illustrate it with an exhibit of the finest examples of historic models: doll carriages, kitchen stoves, cars, ships, airplanes, other tin-plate models, and naturally model trains in all gauges, including railroad stations and accessories.

The museum is a richly varied combination of the traditional and the modern, of looking and playing as well as action. The focus is on different, carefully designed model railroad layouts with interesting railroad station scenes, landscapes, and sweeping high-speed lines, a Maxi outdoor layout offering new ideas for the garden. An exhibit with many current Märklin models in all gauges is the framework for the museum.
The museum shop is an additional attraction. Here, you can purchase exclusive Trix and Märklin models for any gauge, which are only available in the Museum at certain times, and in limited quantities as long as supplies last. Museum models make a nice souvenir that will enhance your showcase or layout.
In addition, you will find an extended assortment of items that are still in stock at Märklin. All of this is supplemented by an extensive offering of attractive gifts, like jewelry, decorative pins, literature, and videos.

Welcome to Holzheimer Straße 8.
In Göppingen simply follow the "Märklin Museum" signs.

Open:
Monday to Sunday *
from 9:00 AM to 5:00 PM.
(Closed on holidays.)
Subject to change.

* On Sundays only Museum items are sold.

33043
H0 Museum Locomotive

Prototype: German State Railroad Company (DRG) class 80 switch engine in photo gray paint scheme.
Model: Metal body and frame. Locomotive comes with a Delta electronic circuit. 3 axles powered. 2 traction tires. Gear reduction for slow speed. Triple headlights that change over with the direction of travel. Many separately applied details.
Length over buffers 11.1 cm / 4-3/8"

48005
H0 Museum Car Set for 2005

A detailed product description can be found in the H0 presentation book on page 286.

80016
Z Museum Car Set for 2005

A detailed product description can be found in the Z presentation book on page 129.

54854
1 Gauge Museum Car for 2005

A detailed product description can be found in the 1 Gauge presentation book on page 123.

58242
1 Gauge Museum Car for 2005

A detailed product description can be found in the 1 Gauge presentation book on page 123.

Fascinating Model Railroad Shows and Exhibitions.

GB Galleria Baumgartner

The Model Railroading Show of the Southern Alps.

CH-6850 Mendrisio/TI, Switzerland
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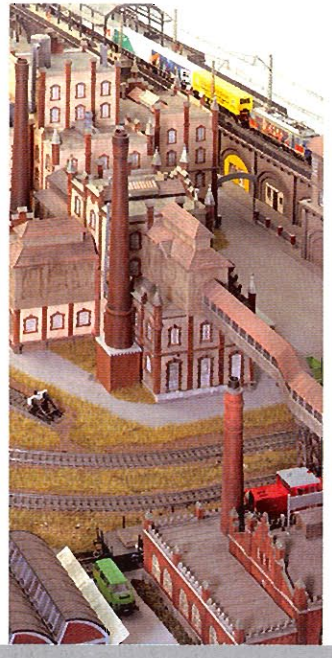
1:30 PM - 5:30 PM
Sat./Sun. 9:30 AM - 5:30 PM
and all general holidays
Mon. closed



Mo-Lok

Mo-Lok
Model Railroading Show.

Telephone +49 83 21 / 2 21 80

www.mo-lok.de

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During school vacation
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Hours of operation are extended
if the weather is bad
Closed Saturdays
Sundays
and holidays 10:00 AM - 5:00 PM

Ruhpoldinger Modellbahnschau.

Ruhpoldinger Modellbahnschau
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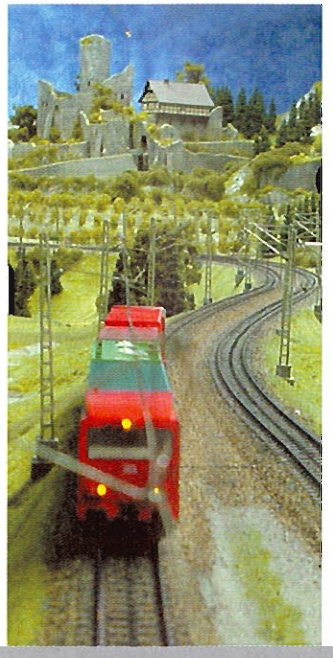
D-83324 Ruhpolding, Germany
Telephone +49 86 63 / 56 13

www.ruhpoldinger-
modellbahnschau.de

Open:
Sat./Sun./
general holidays 10:00 AM - 6:00 PM
Mon. to Sun. (from Dec. 24th to the
2nd Sunday in March), 2 weeks
before Easter until
1 week after Easter and from the
2nd weekend in Mey to the 2nd
Sunday in
November 10:00 AM - 6:00 PM



Der Deutschland Express

Der Deutschland Express.

Der Deutschland Express.
Am Bugapark 1c,
D-45899 Gelsenkirchen, Germany
Telephone + 49 2 09 / 5 08 36 60

www.der-deutschlandexpress.de

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Fri. to Sun. 10:00 AM - 6:00 PM
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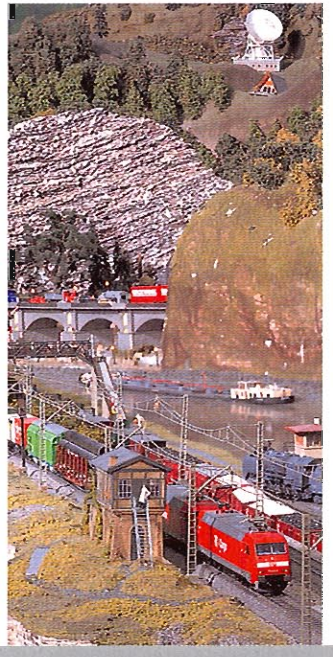
school holidays (North Rhine
Westphalie).



Miniatur Wunderland Hamburg.

Miniatur Wunderland Hamburg
Kehrwieder 2/Block D
D-20457 Hamburg, Germany
Telephone +49 40 / 3 00 68 00

www.miniatur-wunderland.de

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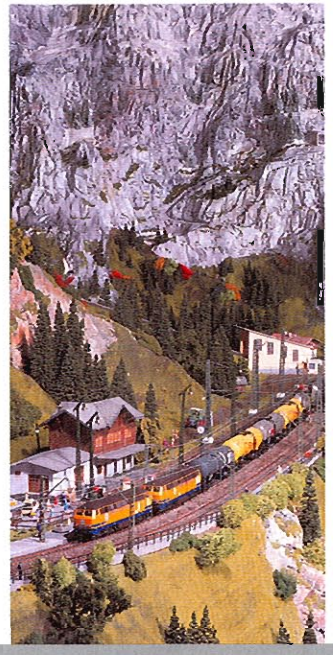


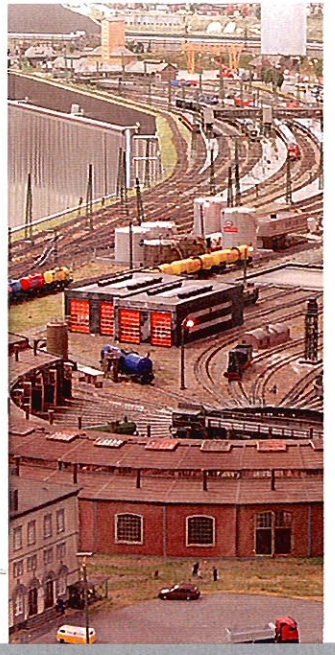
Modellshow Merklingen.

Model Railroad Show
Siemensstraße 2
D-89188 Merklingen, Germany
Telephone +49 73 37/ 92 31 94

www.modellbahnshow.de

Open:

Tue. to Fri.	10:30 AM - 5:00 PM
Mon.	closed
Holidays	open
last entry:	5:00 PM

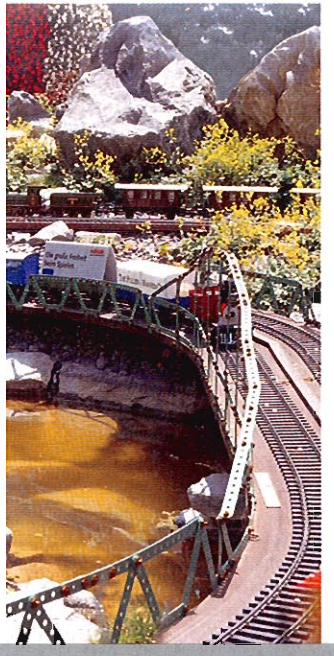


Märklin 1 im Blumenparadies.

Mainau GmbH
Telephone +49 75 31 / 303 -0

www.mainau.de

The Island of Mainau is open the entire year.



Time Tracks in Füssen.
Model railroads and cars:
The collection of Ulf and Falk Haase

ZeitscHieneN
Kemptener Str. 7
D-87629 Füssen, Germany
Telephone +49 83 62/ 92 96 78

www.zeitschienen.de

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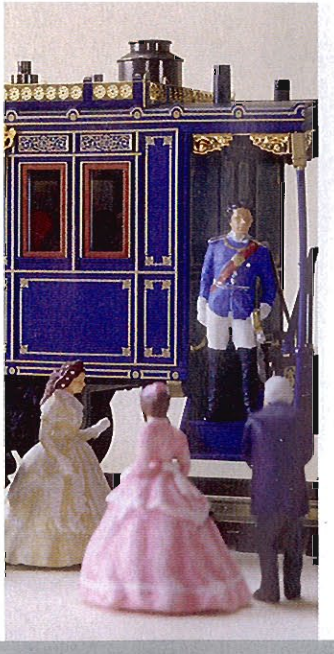
Sat.	10:00 AM - 2:00 PM
Sun.	closed



Eras.

Whether you are a nostalgist or an historian, whether you are homesick or have wanderlust, or whether you simply have an eye for the right time and the right place – the Märklin assortment varies by historical eras, countries, and nations. All characteristic features, color schemes, details, and lettering of the models correspond to their prototypes.

In Era II a standardization office had to decreasa the multiplicity of designs from numerous builders by implementing development regulations, this problem has since been resolved with the concentration of the railroad industry.

More and more locomotives and cars are being built on the same development platforms, and they are being used in differant European countries. Examples of this are the electric locomotives in the Sprinter family (Taurus, Dispo (Lease) and multi-system locomotives), the class MaK G diesel locomotives, as well as different car designs.

You will find many models from these prototypes for other European railroads in the Märklin assortment. This will allow you to assemble European long-distance passanger trains and freight trains, just like the prototype.

The Export Program also offers additional models and one-time series that are produced for the respective countries, and which are also available from your authorized dealar.

Era I
1835 to 1925

I

Provincial and privately owned railroads, some with extensive route networks, came into being in the founding phase of railroading. Era I is characterized by a variety of car and locomotive types, colors, and lettering.

Era II
1925 to 1945

II

The large national state railroads were established in Europe. In Germany the provincial railroads were merged into the German State Railroad Company (DRG). Standard designs reduced the multiplicity of car and locomotive types.

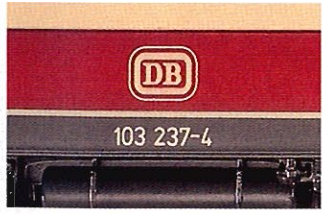
Era III
1970 to 1990

III

The German Federal Railroad (DB) in the west and the German State Railroad (DR) in the East Germany were founded. Era III is one of the most interesting phases with steam, diesel, and electric motive power.

Era IV
1970 to 1990

IV



Computer UIC lettering was introduced throughout Europe. The cars could now be used across Europe. New color concepts made railroading more colorful.

Era V
1990 to the present

V

State railroads are partially privatized in Europe. The DB and the DR are merged into German Railroad, Inc. (DG AG). Private railroad companies take over regional routes.

Railroads.

For those interested in more detail there is an overview on these pages of the eras and emblems of historic and current European railroad companies.

The pictograms described here can also be found next to the models in this catalog, so that you can assemble prototypical trains from a particular era.
The division of the eras follows the NEM standards, but in the earlier eras the cutoffs are not always very clear. In the prototype the features of different eras often overlap.

Country	Abbreviation	Original Name	Railroad
Belgium	SNCB	Société Nationale des Chemins de fer Belges	Belgian State Railways (Wallonian)
	NMBS	Nationale Maatschappij van de Belgische Spoorwegen	Belgian State Railways (Flemish)
Germany	KPEV	Königlich Preußische Eisenbahn-Verwaltung	Prussia, Hesse, North and West Germany (1878 - 1918)
	K.Bay.Sts.B.	Königlich Bayerische Staatseisenbahn	Bavaria and Palatinate, South Germany (1844 - 1920)
	K.W.St.E.	Königlich Württembergische Staatseisenbahnen	Württemberg, Southwest Germany (1845 - 1920)
	DRG	Deutsche Reichsbahn (-Gesellschaft)	German State Railroad(1924 - 1949)
	DB	Deutsche Bundesbahn	German Federal Railroad (1949 - 1993)
	DR	Deutsche Reichsbahn	German State Railroad of East Germany (1949 - 1993)
	DB AG	Deutsche Bahn AG	German Railroad Inc. (from 1994)
	AAE	Ahaus-Alstetter Eisenbahn GmbH	Branch line
Denmark	DSB	Danske Statsbaner	Danish State Railways
France	SNCF	Société Nationale des Chemins de fer Français	French State Railways
Italy	FS	Ferrovie dello Stato Italiane	Italian State Railways
Luxembourg	SNCF	Société Nationale des Chemins de fer Luxembourgeois	Luxembourg State Railways
Netherlands	NS	Nederlandse Spoorwegen	Netherlands Railways
Norway	NSB	Norges Statsbaner	Norwegian State Railways
Austria	ÖBB	Österreichische Bundesbahnen	Austrian Federal Railways
Spain	AVE	Alta Velocidad Española	Spanish High-Speed Lines
Sweden	SJ	Statens Järnvägar	Swedish State Railways
Switzerland	SBB	Schweizerische Bundesbahnen	Swiss Federal Railways (German)
	CFF	Chemins de fer Fédéraux Suisses	Swiss Federal Railways (French)
	FFS	Ferrovie Federali Svizzere	Swiss Federal Railways (Italian)
	BLS	BLS Lötschbergbahn AG	Alpen Bern-Lötschberg-Simplon
	AAE	Ahaus-Alstetter Eisenbahn GmbH	Freight car leasing
Hungary	MAV	Magyar Államvasutak Vezérigazgatósága	Hungarian State Railways Administration
USA	AT & SF	Atchison, Topeka & Santa Fe Railway	Midwest and Southwest USA (1859 - 1995)
	U.P.	Union Pacific Railroad	Midwest and Western USA (from 1862 on)
	NYC	New York Central System	Northeast USA (1869 - 1968)
	PRR	Pennsylvania Railroad	Northeast USA (1846 - 1968)

Repair Service/Warranty.

Märklin Direct Service

The Märklin dealer is your contact for repairs and retrofits from analog to digital. We will assume any retrofitting in our repair department in Goeppingen for dealers without their own service department as well as for private customer. Since the extent varies for each model, we recommend that you will initially inquire at the Märklin address below. You will then receive a cost calculation including details and cost for secnre shipping. If you personally wonld like to drop off and pick up models in onr factory in Goeppingen, please observe the business hours for dealers and private customers.

Gebr. Märklin & Cie. GmbH
Repair Service
Stuttgarter Straße 55 - 57 · D-73033 Göppingen
Telephone +49 (0) 71 61.608 - 553 · reparaturableilung@maerklin.de

Hours:
Tne + Thn 9:30 AM – 12:00 PM and 12:30 PM – 3:00 PM
as well as by appointment.

Manufacturer's warranty of 24 months after purchase date

The firm of Gebr. Märklin & Cie guarantees above the legal national warranty rights through your Märklin dealer. GmbH in addition to a manufacturers warranty of 24 months after the purchase date under the conditions listed in the warranty conditions when you purchase a Märklin product. These are described in detail in the warranty conditions enclosed with our products. You have therefore the possibility to also inquire directly at the Märklin company as manufacturer of the product in regards to any defects or faults independent of the purchase location.

Please also observe the warranty conditions enclosed with our products.

Important service data

Important email addresses

Insider-Club	insider@maerklin.de
1. FC Märklin	1.FC@maerklin.de
Spare parts	ersatzteile@maerklin.de
Repairs	reparaturen@maerklin.de
Technical questions	technikfragen@maerklin.de
Museum	museum@maerklin.de
Seminars	seminarwesen@maerklin.de
CollectionShop	collectionshop@maerklin.de
Customer service	kundenbetreuung@maerklin.de
Press	presse@maerklin.de
General information	info@maerklin.de

General References.

Märklin products correspond with the European Safety Guidelines (EC Standards) for toys.
Achieving the highest possible safety during practical operation, however, requires the intended use of individual items. References for the correct connection and correct handling are therefore listed in the operating manuals, which are enclosed with the products and which must be observed.
It is recommended that parents discuss the operating manual with their children prior to the initial start-up.
This will provide security and guarantee pleasure for years to come when playing with the model railroad.

Some important items of general importance are summarized in the following:

Connection of track systems

Only use Märklin transformers for the operation. Please only use transformers from the current product program, since these transformers correspond with the current safety standards. Please additionally feed every 2-3 m. Observe the guidelines in the operating manuals in conjnnction with this.

In addition to these general references, the operating instructions enclosed with the appropriate **Märklin** products must also be observed to maintain the operating safety.

Imprint.

If this book version should not contain any prices in the attachment, please ask your dealer for a price list.

Pictograms located in individual articles inform you simply, clearly and accurately of our Quality and System features. On the last page of this presentation book you will find a list of the pictograms.

Shipments from the factory directly to private customers are not possible. Märklin may be obtained from specialized dealers. The dealer will show yon the variety of the Märklin model railroad and will be glad to consult you.

Subject to modification and availability. Electrical and mechanical specifications are provided "as is", with no warranty of any kind.
The illustrations are partially hand-out samples.
The batch production may deviate from the illustrated models.

All previous Märklin products become invalid with the issue of this Märklin presentation book .

Manufactured in Germany.
163 62 - 02 2005 st

www.maerklin.com
www.marklin.com

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** = sold out at factory

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Explanation of Symbols.

N New item for 2005.

Metal locomotive frame.

Metal frame and mostly metal locomotive body.

Metal frame and locomotive body.

Metal car frame.

Metal car frame and body.

Universal locomotive with Delta electronic circuit. Can be operated with Märklin transformers, in the Märklin Delta system or in the Märklin Digital system (Motorola format).

Digital locomotives or digital device for the Märklin Digital System (Motorola format).

Digital Locomotives with high-efficiency propulsion. Maximum speed and acceleration/delay are adjustable. Special motor with electronically enhanced load compensation or a compact bell-shaped armature. Can be operated with Märklin transformers, in the Märklin Delta system or in the Märklin Digital system. One controllable auxiliary function (function), when the locomotive is being run in the Digital system.

fx Digital decoder with additional, digitally controlled functions (f1, f2, f3 or f4) when operated with the with the 6021 Control Unit. The functions present depend on how the locomotive is equipped. Standard function (function) active during conventional operation.

mfx Digital decoder with up to 9 digitally controlled functions, which can be operated with the 60652 or 60651 Mobile Station. Up to 5 functions, which can be operated with the 6021 Control Unit. Equipped for up to 16 functions with future controllers. The functions present depend on how the locomotive is equipped.

Locomotives with controlled, adjustable C-Sine propulsion. Can be operated with Märklin transformers, in the Märklin Delta system or in the Märklin Digital system (Motorola format).

Locomotive with 5-pole motor.

Built-in sound effects circuit.

Power supply can be switched to operated from catenary.

Single headlight at the front.

Single headlights that change over with the direction of travel.

Dual headlights at the front.

Dual headlights front and rear.

Dual headlights that change over with the direction of travel.

Triple headlights at the front.

Triple headlights front and rear.

Triple headlights that change over with the direction of the travel.

Triple white headlights in front, dual lights at the rear, each change with the direction of travel.

Four-light headlights that change over with the direction of travel.

One red marker light.

Dual red marker lights.

Dual headlights and dual red marker lights that change over with the direction of travel.

Triple headlights and two red marker lights that change over with the direction of travel.

Triple headlights and a red marker light that change over with the direction of travel.

Triple headlights and a white marker light that change over with the direction of travel.

Märklin close couplers with pivot point.

Märklin close couplers in standard pocket with pivot point.

Märklin close couplers in standard pocket with guide mechanism.

Locomotive/car has sprung buffers.

Automatic claw couplers can be replaced with reproduction prototype couplers.

Built-in interior lighting.

Interior lighting can be installed (example: with 7330).

Built-in interior details.

Märklin exclusive special model – produced in a one-time series.

Eras.

I **Era I**
Provincial and privately owned railroads from the beginnings of railroad construction to about 1925.

II **Era II**
Construction of the great national railroad networks from 1925 to 1945.

III **Era III**
Reorganization of the European railroads and modernization of the motive power from 1945 to 1970.

IV **Era IV**
Lettering for all locomotives/cars complies with uniform international guidelines for the so-called computer-compatible UIC lettering, 1970 to 1990.

V **Era V**
Color scheme changes and establishment of the high-speed train networks since 1990.

märklin

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