

*International Edition*

Free,  
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for railroad enthusiasts  
in the scale 1:220  
and Prototype

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# Trainini

German Magazine for Z Gauge



Clear message to Märklin?

Heavy boys from Göppingen  
What Intermodellbau was like

## Introduction

Dear Readers,

May has come... and is going again. Anyhow this applies to the publication date of the current issue. But as you know, this magazine is the result of voluntary work of many involved, diligent helpers.

Month after month they research, write, take photos, edit, build, do handicraft work and translate in order to provide you with regular, sophisticated and entertaining articles. When private commitments take their toll, you show concern, but not impatience, as we have been able to gather from the questions to the editorial team. We thank you for that!

We are happy to be part of a big but still manageable Z-gauge family, in which community and enjoyment of the hobby count and one stands up for the other.

In the current month I often had to wait patiently to complete a procedure that is usual for me. A whole backpack filled with empty (but lockable) containers was waiting to be filled with various types of earth and sand. The supplies for a whole year of landscaping were to be available.

We try to reproduce nature as well as possible on our layouts, but what is better than the material from nature itself? Of course, all finds must be sieved and subsequently disinfected. But the result is always persuasive.

Since the big exhibitions are over and most of the model railroaders have the courage to leave the hobby room because of the coming warm season, it would be a reasonable activity. Here even the spouse could be engaged. A little tip: The root balls of last year's potted plants to be disposed of are also a wonderful resource!

During summer pause you can take a look at this edition, because with NoHAB we are looking at a very special locomotive from FR Freudenreich Feinwerktechnik. In addition to the extraordinary running smoothness, the model also excites in detail.

Meanwhile Märklin opens a new chapter of the model railway production, the technology of the metal-filled plastic has been explained to us and we now present you the implementation here in the **Trainini®**.

Of course we also report about the Intermodellbau in Dortmund, which took place this time from 4th to 7th of April 2019. In addition to the presentation of the Z-gauge layouts exhibited there, we would also like to take a closer look at the work of young people. It is never wrong to invest in the future!

The content of the late May version will be completed by two book recommendations, the first of which is a perfect match for the location of the model exhibition already mentioned. There has also been a great deal of news gathering with a view to the larger time window.

Sin-Z-erely,

Dirk Kuhlmann



Dirk Kuhlmann  
Editor

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We thank the 1zu220-Shop for provided test models and Harald Möller for his photographic support.

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### Cover photo:

Freight traffic is the daily bread of the MY 1131 in the services of the Erfurt railway service. We caught the diesel locomotive, which was designed in the late DSB painting and roaring strongly, leaving the harbour area after it had put together a short freight train from several groups of wagons.



## New FR models under test Round noses from Sanitz

*Märklin has had a replica of the NoHAB diesel locomotive in its range for many years, but real enthusiasts of these machines never really liked it. Harald Thom-Freudenreich has therefore ventured to design his own locomotive with a view to his clientele in Scandinavia. It is already in its first edition for a German railway company and will now have to compete with the Göppinger model.*

The origin of the locomotives with the official type designation NoHAB AA16 goes back to the American E and F series of EMD (General Motors). Developed from the thirties onwards, the manufacturer also made an early effort to export its models.

For this purpose the locomotive body was designed somewhat lower and instead of the two-axle bogies three-axle bogies were used, in order to lower the axle load according to the regulations in the export markets. At the same time, the Clyde A16A, built in 1952, was equipped with two end driver's cabs. The first A was an indication of the streamlined shape of the ends, the number stands for the 16 cylinders of the two-stroke diesel engine.

This (still further developed) export model was the basis for the NoHAB AA16, which became successful in Europe as licensed production from 1954. The first units went to the Danish State Railways (DSB).



The first built NoHAB AA16, the MY 1101 of DSB, could be seen on 11 May 2013 in Tepestrup, Randers, in front of VP 226410. Photo: Morten Jensen (CC-BY-2.0)

This type of construction was briefly and simply called “NoHAB”, although this is actually only the manufacturer's name: in 1949 the company Nydqvist och Holm AB, or NoHAB for short, acquired the licence for construction in Europe in Trollhättan, Sweden.

Anglo-Franco-Belge (AFB) was responsible for the CFL (Luxembourg) and NMBS/SNCB (Belgium) specimens, also known as “potato beetles” because of their decorative stripes, as sub-licensees of NoHAB.

Like the similar US models, the NoHAB locomotives were equipped with the EMD 16-567 engine, driven by a generator either by four or six traction motors per bogie, i.e. in the axle sequence (A1A)' (A1A)' or Co' Co'. These are therefore diesel-electric machines, generally equipped with a steam boiler for train heating.



Many NoHAB locomotives found a new home after their retirement. The MY 1147 arrived at STRABAG Rail, for which it ran in GM demonstrator paint when it was picked up in the eastern parking area of Dortmund Hbf on 14 April 2012.

Depending upon the number of traction motors and the equipment with train heating, the weight of a locomotive was between 70 and 109 tons. To maintain the UIC clearance profile, further external adjustments were necessary: The roof had to be curved more in the direction of the lower side edge of the roof.

This also changed the position of the side windows. The outer ends of the driver's cab front windows were pulled downwards and, together with the more pronounced curvature of the roof edge, were the most striking feature that made the machines immediately recognisable.



The snout of the “round noses” was more inclined than the American and Australian models. This allowed them to better absorb the impact forces of the side buffers. In all other respects, the NoHAB revision corresponded to Australian Class B 60, which EMD had internally called AA16C.

The template for the FR conversions are the machines supplied to DSB as the MY series and their externally identical representatives, which were or are used for other railway administrations. The concrete model for the first edition is the MY 1131, which was delivered to DSB on 25 October 1957 with the serial number 2372.



The former MY 1135 of the DSB is long under way with the UIC number 90 86 00-21 135-7, which it was assigned on 5 July 2001 in Vojens, (Denmark). Her bleached out colour paint is the one that FR also realized in the special edition presented. Photo: Peter L. Svendsen (CC-BY-SA-2.0)

It served there for forty years until her retirement on 2 June 1997. In 2010, she joined EBS (Erfurter Bahnservice) via various companies, where she was soon returned to her black and red design from the later DSB period. It remained in service at EBS until 2018, before joining Altmark Rail.

## The external impression

The announcement by FR Freudenreich Feinwerktechnik at the end of 2018 of a new design of the “round noses” had surprised the model railroaders of gauge Z: After all, the large series manufacturer Märklin had already launched several models based on the same model beginning in 2005: SNCB (Era III), CFL (III) and two versions of the DSB (V / III).

In view of the engine conversions, which in the meantime had also reached the six-axle chassis used, reissues or previously unoffered variants of the NoHAB were very likely and sooner or later probably foreseeable.



The DSB original version with the article number 88633 from the year 2011 (epoch III) is the last Märklin edition of a NoHAB diesel locomotive to date.

An important goal of FR Freudenreich Feinwerktechnik and the 1zu220 shop booking a special edition should therefore be to deliver their own models before the Nürnberger Spielwarenmesse 2019 (International Toy Fair) and to use the attention they received with their announcements.

Unfortunately nothing came of it, because only four months later the first vehicles were ready.

And so it came as it had to: At the toy fair Märklin actually announced an SNCB and an MAV version of this locomotive.

In addition to the drive converted to the bell-shaped armature motor, the new models are to be equipped with revised bogie covers, which will eliminate the biggest point of criticism.

Other weaknesses will remain, but at least in weight the upcoming editions will increase significantly and therefore develop more tractive power.



Freudenreich's new model of the MY 1131 from the EBS stock has to prove itself in the test. For the first time, the same locomotive is available for order in analogue and digital versions.



Consequently, the new FR design today has to be measured against the Göppingen model, because there are only reasons to buy if it avoids the known weak points, and can also gain such an advantage that Märklin cannot be expected to open the door at eye level with product updates.

The small locomotive from Sanitz, which is available as an exclusive model for the 1zu220 shop (art. no. 49.125.01) in analogue and digital versions (DCC and sound module: additionally art. no. 00.125.00), is given a critical look at its long side when it is removed from the package. And it can truly stand up to this: This is what we think a NoHAB must look like. Shapes and proportions generally appear to be appropriate.



“First impressions count,” is an old saying. And with the former MY 1131 of the DSB (Art. No. 49.225.01), which is recorded in the NVR as 92 80 1227 003-1 D-EBS, this is definitely true. This new product comes from FR Freudenreich Feinwerktechnik.

This impression is also confirmed all around, as the small series manufacturer has done a great job here. If you are a real fan of this type of locomotive, you won't be able to avoid this model.

But probably nobody can deliver a perfect model and therefore we still look at the details and measure. We really like the engravings, which show even the finest features, especially in the roof area. Only those who take a close look can recognise individual layers of print. This reveals that the master model for the vacuum casting (plastic housing) in a silicone form came from the 3D printer.

Very finely engraved are also the bogie panels, which correctly and absolutely convincingly reproduce the design typical for types with the axis sequence (A1A)' (A1A)'. For use in Germany, however, the model lacks the Indusi magnets, which is a small mistake in relation to the MY 1131 of the EBS.

This is certainly due to the fact that FR Freudenreich Feinwerktechnik's target group is focused on Scandinavia, because the manufacturer has invested a great deal of time and effort in injection moulds that do not allow every tiny detail to be individually adapted to the individual variants. This is an economic compromise, which we also consider to be justifiable for small series manufacturers.



If we look at the model dimensions, we can immediately see the centre of gravity of the construction: As expected, Harald Freudenreich focused on absolutely harmonious dimensions and proportions. His model meets almost all model dimensions in tenths of a millimetre.



The bogie panels are also very finely engraved and correctly represent the version with a central running axle. However, the Indusi magnets between the first and second axle on the right side, which are required for a locomotive running in Germany, are missing.

Only in the bogie axle position do we measure a small, imperceptible difference, which is still within the range of measurement errors. However, the overall wheelbase seems to confirm our measurement, as it resulted in an interference of 1 mm. Märklin's predecessor model, which was built around an existing casting block, definitely surpasses the small series production.

As examples for the claim that was worked with here, we would like to mention the rail scrapers made of etched parts. They reproduce exactly the shapes of the EBS machine, the version "Railcare" (see below) produced for their own account in the FR in-house range was given a different design.

The fine coupling hook is also well thought out, which does not disturb the overall impression and safely interferes with the Märklin system couplings. After all, you don't have to be shunted with a NoHAB.

The strengths of the miniature also include separately attached handrails on the driver's cab access steps, which, however, do not quite correspond to the original model, as an image comparison of various machines reveals.

The shape, size and design of the side windows in the engine room and, above all, the driver's stands do not repeat Märklin's mistakes. They contribute enormously to the good overall impression.

Nevertheless, there are also small weaknesses in this area. The four portholes on each side of the machine room are fitted with transparent inserts, which look very accurate.

#### Dimensions and data of the diesel-electric locomotive MY 1131

	Prototype	1:220	Model
Length over buffers	18.900 mm	85,9 mm	86,2 mm
Widest point	3.090 mm	14,0 mm	14,3 mm
Height over rail head	4.295 mm	19,5 mm	19,5 mm
Total length	14.300 mm	65,0 mm	64,0 mm
Wheelbase	4.000 mm	18,2 mm	17,8 mm
Wheel diameter (new)	1.040 mm	4,7 mm	5,0 mm
Tare weight	89 t	---	48 g*
V <sub>max</sub> (Maximum Speed)	133 km/h		
Power	1.250 kW / 1.700 PS		
Design	(A1A)' (A1A)'		
Years of construction	1954 - 1965**		
Manufacturer (Locomotive)	NoHAB		
(Diesel motor)	General Motors EMD		
Quantity built	159 units***		

\* Digital model 50 g

\*\* Delivery period for all three series for the DSB (59 units)

\*\*\* Total of all production models NoHAB-AA16-Locomotives

The windows of the driver's cab can't quite match this. They have been produced with the help of shiny black polycarbonate films, which have been precisely cut and inserted. So far there would be no cause for complaint. However, if we put the analogue locomotive on the track and let it run, disturbing light emissions are soon noticeable, which appear along the window edges.



The paintwork of the model is sharp and clean, even with the (model-like) rather sparse lettering flawlessly executed (picture above left). Compared to the original, the front windows of the driver's cab look a bit too high on us (photo above left). One of the features that characterize the good overall impression is the accurate roof design with sharp engravings and fine rivet reproductions (photo below).

This means that the driver's cab seems to remain dark as a whole, as we know it from the model on the road, but the bright ring of light around the windows does not fit into this image at all. We will get to the bottom of the cause in the technical evaluation.

But also the shape of the front windows does not completely convince us: Compared to Märklin they are clearly in front, because the inventor of the Z-gauge didn't even attain the typical shape correctly. But while they are clearly too narrow in Märklin's case, in Freudenreich's they seem a bit too high for the viewer.

Unfortunately, this shows that it is not always the miniaturization to the nearest tenth of a millimetre that decides, but that some details need to be over- or under-proportioned in order to appear subjectively correct to the viewer. Well-known examples of this are rows of rivets, which would actually not be visible on a scale of 1:220. In the case of the front windows, a slightly reduced accentuation would have given us a better impression.



We would like to close our visual evaluation with a glance at the paintwork and printing: FR chose the black-red DSB paintwork with which the model for EBS was on its way. A completely correct part of this is a deep black roof area, which almost eliminates traces of ageing.

This model lacquering has been applied correctly, precisely and cleanly in its colour distribution. EBS's rather sparse company labelling, which are based on those of the Danish State Railways, were applied by pad printing. This was done with white ink in the correct size and with respect to the fonts chosen by the operator.



The turning out of the fine bogies is limited by the ladders of the driver's cab, but the manufacturer does not specify any radius limitation. Another glance is taken at the fine snow ploughs, which differ in shape from the Railcare version.

As an interim conclusion, we can state that although Harald Freudenreich did not create a perfect model, he clearly leaves the deficiencies of the large-scale production model behind him. In this test discipline, the small series model is clearly the first choice, despite a few weaknesses.

## A variant from FR

FR Freudenreich Feinwerktechnik emphasizes the advantage of small-series models right alongside the Railcare model (46.125.01), which appeared in parallel and can also be optionally selected in digital version (DCC and sound module, 00.125.00 in addition). The TMY 1150 of this Swedish private railway company is also a former DSB machine.

Nevertheless, there are some differences, which have also been taken into account in the model: It has a different housing which correctly shows a door between the two lower headlights. We even got the explicit hint that there will be a third housing variant in the future, where the right driver's cab door is missing.



The TMY 1150 (46.125.01; photo above) from Railcare is not a pure colour variant, as can be clearly seen. It carries a front door below the top light (photo below left) and a different snow plough. The buffer ascents with railings also attract the attention of the observer (photo below right). Photos: Harald Möller

We had already pointed out the typical snow plough shape of the EBS locomotive. Consequently, the Railcare version has a different shape, which is also strictly based on the original. Further distinguishing feature are the shunting platforms mounted above the buffers, which were not fitted to the prototype locomotive until its late service period.

## Technical evaluation

Before we look at the other aspects of this discipline, we would like to get to the bottom of the reason for the previously criticized light emissions on the driver's cab windows of the analogue version. In the digital version, there was no disturbing light at the front and hardly noticeable at the side windows.

This either speaks for a qualitative diffusion in the series or must have a constructive reason. So only "hats off" and a lookup will help. On both models, the light in each of the three top lanterns comes from three warm white SMD LEDs mounted on a small, vertically mounted circuit board that is firmly connected to the horizontally mounted main circuit board on the engine block. Only the digital model has two red LEDs at the bottom for the rear lights.



Short light guides are located in the housing openings of the front lights, which do not reach seamlessly up to the light sources. Instead, there is a gap between them, in which the light emitted by the led can spread almost freely through reflection.



The light emitted from the edges of the window is very disturbing with the analogue model (left photo). We have found the cause to be a lack of light shielding on the lighting boards and inside the housing (photo right).

So it is not only captured by the clear light guides, which are supposed to transport its glow to the outside. All the gaps in the model therefore participate in the emission. The rails of both models are illuminated to a very small extent, but it is the edges of the windscreens that make the light so unpleasant and contrary to the original.

The digital version is not (visibly) affected by this because it has a horizontally glued shielding part between the upper and lower light emitting diodes. From this we concluded that mainly the lower row is responsible for the phenomenon.



The digital version is not (visibly) affected by this because it has a horizontally glued shielding part between the upper and lower light emitting diodes. From this we concluded that mainly the lower row is responsible for the phenomenon.

The weak point of the analogue locomotive could have been avoided if it had been equipped in the same way, or, alternatively, the windows had been covered from the inside with additional opaque material. According to our ideas, this could have been done with a black adhesive tape, for example, which the buyer could possibly do himself.

In their basic forms the printed circuit boards are identical, although of course differently equipped: We have already mentioned the main board with the light boards plugged in at the ends.



...the five LEDs on each side of the digital version are shielded by an insert between the upper centre mounted light and the lower lights. This small part has a significant effect, because unwanted light emissions can barely be detected with this model.

In addition, to the additional tail lights of the digital version, the essential and immediately recognisable differences are the front loudspeaker from the mobile phone area, which radiates upwards into the housing, and the actual decoder, which sits on its own circuit board at the rear under the main plate.

This solution was developed by Velmo on the basis of the D&H SD18A decoder with NEXT18 interface from Doehler & Haass especially tailored for the FR novelty. Therefore, the purchase of a DCC noise module includes the manufacturer's installation in the locomotive purchased at the same time. The decoder operates on the DCC protocol, which is widely used internationally in two-wire digital operation.

Later retrofitting would be technically possible in principle due to the modular design: According to Harald Freudenreich, two screws and six solder joints on the system boards require changes.

The acquisition of a digital model is definitely worthwhile from our point of view. Once you've gotten to know its advantages, you'll quickly become a digital enthusiast: In addition to comfortable driving, the digital extension offers 21 noise and light functions, of which only 19 are listed in the enclosed brief instructions.





The side view allows an idea of how the three PCB elements are connected to each other. The analogue locomotive looks very tidy due to its low proportion of electronics inside.

During test operation on Märklin's Mobile Station 2 with 10 Volt track voltage, we were only able to test the first 16 functions, which convinced us all round. To call up all functions, a suitable central control unit with a larger operating scope is required. The function key assignment for the NoHAB looks as follows ex-works:

### Light functions

- F 0 (Light) direction-dependent headlights and taillights
- F 1 Dimming / Fading of the peak signal
- F 2 Switch off top signal / taillight to driver's cab 1
- F 3 Switch off top signal / taillight to driver's cab 2
- F 4 Shunting gear and shunting lighting (top signal on both sides)

### Sound functions

- F 5 Horn
- F 6 Ballasting
- F 7 Compressor
- F 8 Starting / Operating sound / Stopping
- F 9 Fan sound
- F 10 Coupling / uncoupling
- F 11 German Railway Station  
Announcement (not mentioned in  
the product sheet)
- F 12 Danish station announcement  
(not mentioned in the product sheet)
- F 13 Dynamic brakes
- F 14 Compressed air release
- F 15 Braking sounds



Only in the digital version does the locomotive also have (switchable) red taillights.



The direction-dependent lighting is activated via function F 0. The digital locomotive then shows the faded-up peak light at the front (left picture). When the F 1 function is activated, it is dimmed by the decoder (right picture) - an effect that is hardly visible on the photo, but is much better in reality.

## Special functions

F 16	Operating sounds on- / off (Tunnel operations)
F 17	Volume gradually lowered
F 18	Volume gradually louder
F 19	Switch off squeaking brakes
F 20	Idle running

In the delivery state, the decoder for DCC is preconfigured with the short address 3 and 28 / 128 speed steps. The preconfigured volume of all operating noises appears appropriate and not disturbing. The sound spectrum is also really impressive, especially in view of the tiny size of the model and speaker.

The NoHAB design has also been well thought out in other respects: As we traditionally know it from Märklin models, the plastic housing snaps onto the solid chassis block and can be pulled off by spreading. In our test, the structure of the digital test candidate was much tighter than that of the analogue one.

This is important to know because both models do not come with a manufacturer's care and maintenance manual. The removal of the "little hat" is therefore not explained anywhere. It is driven by a bell-shaped armature motor of the Maxon RE8 type via a worm and plastic gears on all six axles.

The bogies are guided via inserted pins in the grey painted chassis block which extend through the centring point of the large gears - this is also a Märklin standard for many years. However, the current is not transmitted to the motor via sliding contacts, but via strands. This means that bogies and frames are firmly connected to each other during operation.

The curves are limited by the separately attached etched parts for the ladders to the driver's cabs. In the test cycle our candidates were driven through a radius of 220 mm, the manufacturer does not specify the minimum curve on which the locomotive can be operated.





In addition to the lighting and special functions, the digital version also has operating sounds and two platform announcements available. Here, we just start the operating sounds via function F 8, where the locomotive first starts the starter, and, after that the diesel engine and generator can be heard.

However, a test track on the industrial circle of 145 mm did not cause any problems surprisingly, but the locomotive does not look good at such radii, because the coupling hook and snow plough swivel far out to the sides with such small radii. It also became apparent that we had reached the limits of the curve running capability here at the latest. Therefore, we decided not to go for further tests at such radii to protect the fine ladders.

A large brass flywheel mass mounted on the drive shaft ensures good running smoothness, which not only ensures safe driving over currentless sections and points at creep speed: in addition to the milled brass main frame, it also contributes to the high weight, which is responsible for good traction. The models do not have traction tires, but this favors the safe power consumption of all six axles by means of wheel grinders.

While Märklin is now saying goodbye to the drive of the centre axle on three-axle bogies, FR has consciously decided to include them in this design. It is therefore all the more surprising that there are no pendulum axles on the model that would guarantee constant track contact for all wheels. The centre wheels also do not have an upwardly offset position, as was once the case with the models from Göppingen.

From our point of view only the open gearbox of the NoHAB deserves real criticism. All gears are completely open at the bottom, and covers are completely missing. During layout operations, the gearbox could therefore also collect dust and dirt and distribute such on the gears. Lubricants favour its adhesion and shorten the maintenance intervals.

We consider this to be relevant insofar as the small-series model proves to be a real driving miracle and is certainly too good for the display case. This brings us now to the values of the technical evaluation to be measured.

Even at a track voltage of 0.3 volts, the small locomotive hardly moves visibly. With the digital model, this happens in speed stage 2. The measured starting speed, converted to the model, is only 0.4 km/h and thus the lowest value that we have ever measured. In analogue mode there is no light from the warm white LEDs that is perceptible.



The D&H decoder shows an amazingly good sound spectrum with the loudspeaker on the left upper side of the circuit board (picture above), which originates from mobile phone technology. Claudius Veit mounted it on the right side below the main PCB. We are not convinced by the open gearbox of the NoHAB (picture below), because here the door and gate are opened to dirt.

This changes when we increase the track voltage to 1.6 volts. The tiny muscleman, which with ten attached bogie (4 axle) tank wagons does not reach the limits of his tractive power even when cornering, now sneaks safely over every switch at walking speed (5.2 km/h).

The locomotive can be comfortably and finely controlled in all speed ranges. It also travels much slower than the elderly NoHAB interpretations from Göppingen, which is good for prototype-like operations.

But at the equivalent of 275 km/h, it can also compete with any ICE at full track voltage of 10 V. However, the operator will not adjust it so high, because transmission noises will then also be quite noticeable.



This also applies to the digital version at the highest speeds, where the operating sounds are additionally superimposed. Slow driving in particular, however, is an optical and digital pleasure, as well as an acoustic one. Seldom has the operation of a Z gauge locomotive provided so much pleasure.

The measured current consumption of the model is unobtrusive, as the motor and light source are not power guzzlers. With transformer position 100 it is 41 mA, with position 150 it rises to 65 mA. This also suggests a smooth-running gearbox, as the other values have already suggested.

## Use of the model

According to the range of services offered by the Erfurt Railway Service, the main focus of its activities is on hiring out machines, operating special trips, long-distance services and operating sections of track that are difficult to negotiate shortly before a train reaches its destination. The transport of dangerous goods is explicitly highlighted.

The main focus is on rail classics from various series, which are used in historical colours. The application possibilities of the FR model also depend on this.



Model photos show EBS locomotive 1131 in front of tank wagon trains, among other places. Märklin's articulated tank cars as the most modern representatives would certainly be even better suited, but machines from Erfurt's railway service can also be parked in front of museum passenger trains.

First of all, historical passenger train sets of any kind are conceivable, as they are used for special trips. An arbitrary example would be TEE car sets such as the trains marketed as "Rheingold." Many other combinations do not appear to be far-fetched either.

Freight trains, too, are occasionally historically compiled and operated for photographic purposes. However, we find any shorter sets of modern wagons to be more commonplace here. However, we found an interesting model of the converted locomotive in front of modern tank cars.

This train can be reproduced, for example, with Märklin's articulated tank wagons (82530 train set and single wagons; individually also offered aged). In addition to the dark grey VTG specimens, the other versions can also be used.

For fans of Scandinavian models, FR Freudenreich Feinwerktechnik itself offers a larger selection of suitable models, which can be assembled, as desired. There are certainly plenty of models to be found in the worldwide network. Märklin can optionally add the car package "Green Cargo" (82532) to the list.

## Our overall impression

In Märklin's NoHAB model, the bar was not really high, which probably challenged Harald Freudenreich. It seems courageous to consciously compete against a large-series model and to enter into a double development.

With their distribution network, the Göppingen company has completely different and much more possibilities to sell their models. FR Freudenreich Feinwerktechnik, on the other hand, has built a regular clientele in Scandinavia in particular, whose demands Märklin's model probably did not satisfy: What the V 200 series is for German model railroaders, has a counterpart there in the NoHAB AA16.



For her circle of fans the NoHAB AA16 is not just any locomotive: It enjoys a high reputation and is popular as for example the V 200 of the DB in Germany. That's why FR Freudenreich Feinwerktechnik has deliberately thought of its customers in Scandinavia with a harmonious model in which the lifeblood of the construction cannot be overlooked.

With this we have described the motives for the new model aptly. The task was solved with bravura, even if not completely error-free. There is still, even if little, room for further improvement.

Clearly the bar has now been raised considerably and it is already foreseeable that Märklin will not be able to beat them in the optical evaluation. Whether they will catch up technically remains to be seen.



This lets customers decide whether they want to give priority to the price or the precision with which the model features were implemented. If you want a NoHAB that is coherent and shines with strong driving performance, you can't get past the FR. Many a Zettie will now seriously consider switching to digital operation at the earliest possibility, we believe.



We nominate the basic model (49.125.01) and the optional digital upgrade (00.125.00) for the best new releases of 2019 in the categories locomotives and technology.

And that is why we nominate the MY 1131 of EBS (Art. No. 49.125.01), representing this model series, as a candidate for the best new releases of the year 2019 in the category locomotives. Specifically included is the optional digital version (00.125.00) with operating sounds.

This is a premiere in that never before has a model been represented in two categories at the same time.

- **Manufacturer of the model:**  
• <https://www.fr-model.de>
- **Exclusive cover of the tested EBS version:**  
• <https://www.1zu220-shop.de>
- **Digital components used:**  
• <https://doehler-haass.de/cms/>  
• <https://velmo.de>

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Märklin on new paths

## Increasing instead of losing weight

***A manufacturer from Japan has shown the way, unnoticed by many, and now Märklin is following suit: With metal filled plastic, the Göppingen market leader opens a new chapter in model railroad production and pursues completely different goals than the earlier pioneer. We had the technology explained to us and tried to shed light on its possibilities and limitations. A comparison of the various production processes provides further information.***

Plastics and metals have only a few properties in common. They usually behave extremely differently and are used, therefore, for different purposes: Plastics are very light compared to metals and have a higher degree of flexibility.

Plastics started to be widely used after WWII. New and ever more types of plastics were developed to meet very different and increasingly special requirements. With the rise of plastics, the chemical industry also strengthened and grew to its present importance. In retrospect, it should come as no surprise to us that plastics also led to a fundamental transformation of the model railway sector.



In 2019, Märklin launches a new edition of an SNCB “potato beetle” in SNCB livery. This will be the first time that Märklin will use its new metal filled plastic process with an already existing model. As a result, the loco will have a much higher weight on the tracks.

At that time, locomotives and wagons were mostly made of thin sheet metal, and Märklin was an early adopter of heavy die-cast zinc alloy shells. Model buildings, initially made of cardboard and wood, soon





Minitrix product manager Claus Ballsieper illustrates the idea of the new technology for Märklin: “The housing with tungsten alloy (right) is considerably heavier than that made of ordinary plastic (left).”

became mass produced articles, once accessory manufacturers such as Faller turned to plastic injection moulding.

In recent years, manufacturers have increasingly been confronted with the desire for more individual models. At the same time, the willingness to compromise on the quality of rolling stock has diminished, whilst the overall customer base has, unfortunately, also shrunk.

Fewer customers demanding higher quality products requires producers to rethink in many areas, with answers being found in rediscovering materials such as hardboard and the use of new techniques such as laser cutting or 3D printing.

In the meantime, Märklin has pursued for many years a further approach and is now, in 2019, finally in a position to integrate it into its series production.

The aim is not to adapt to lower quantities of a model, but to produce any number of models as economically as possible and with the highest possible weight.

Traditionally, the market leader has relied on zinc alloy die casting, because the resulting heavy metal body shells are meant to convey to customers a sense value for money for the quality products from Göppingen.

At the same time, however, plastic body shells, frequently made from ABS (acrylonitrile butadiene styrene), can be injection moulded at lower costs because of the lower required pressures and demands on tooling, compared to metal die-casting.

So why not combine the advantages of both processes? This thought is precisely at the heart of a long development and learning process at Märklin, which ultimately led to success with the introduction of metal filled plastic.

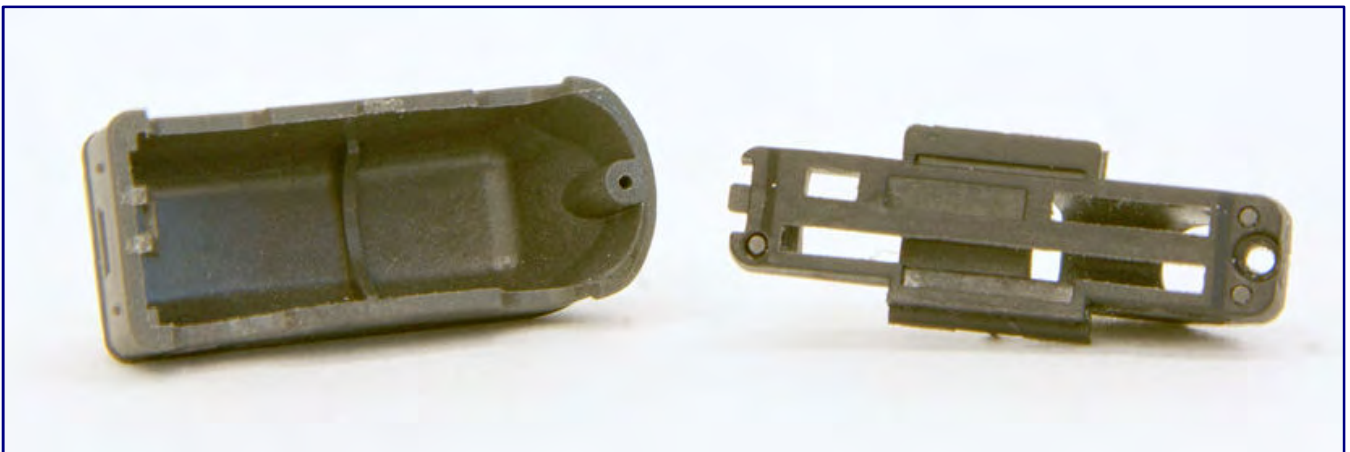


The addition of metal particles changes the colour of the material: The ABS plastic body shell is blue, whilst the metal filled plastic shell of the class 103 locomotive takes on the grey colour of the tungsten metal.

## Metal filled plastic

However, Märklin is by no means a pioneer in this field, although it is the only European manufacturer that currently uses this production method. The first to introduce it in the model railway sector was the Japanese manufacturer Kato at the Nürnberger Spielwarenmesse 2006 (2006 Nuremberg Toy Fair).

At the time, Kato presented an American container freight car, where the addition of ferrous metal to the plastic served two purposes: improved running abilities through higher weight and the quite elegant solution to stacking and fixing containers through magnetic force, as each container was equipped with a metal plate and a magnet.



**The Z gauge version of the class KlV 20 rail van is the first and currently only newly designed model that will be produced with metal filled plastic. As shown here, both the chassis base and the body shell are made of the new material.**

Märklin, however, is pursuing a different path, which does not involve the use of a ferrous metal. To date, three motorised models have been presented: two versions of the NoHAB diesel locomotives in Hungarian and Belgian livery and the small DB class KlV 20 rail van.



As for H0 scale, the possible uses for metal filled plastic are significantly less than for the smaller scales, but the Era I "Glaskasten" (glass box) lightweight tank locomotive presented at the Nürnberger Spielwarenmesse certainly will benefit from the new material.

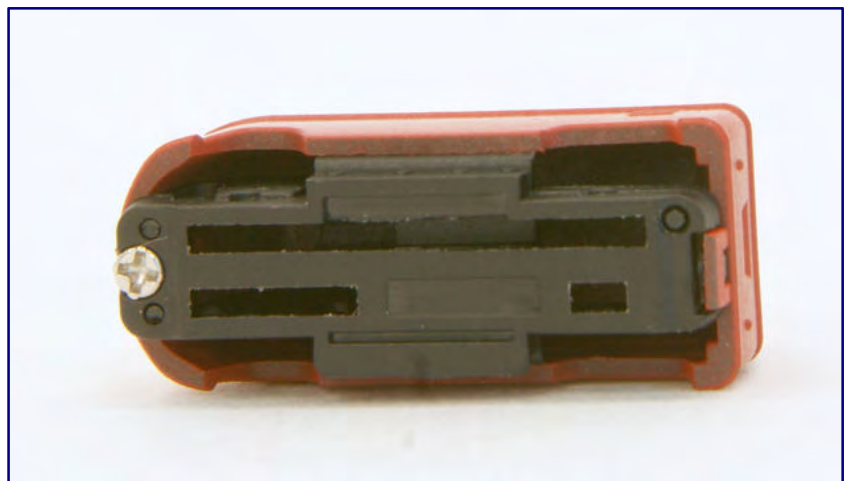
Märklin's ongoing switch to new types of motors and a corresponding loss in weight in the die cast chassis frames created a need for adding weight in other places. This is most evident with the class KlV 20 rail van whose tiny dimensions limit its attainable weight in a critical way. After all, there is a direct relationship between weight and tractive force, as well as, continuous current collection from the track.

Traction tires offer no solution, because they do not solve the basic problem of ensuring a reliable contact with the tracks. On the contrary, they would limit the number and total area of contact points with the track and would thus have an additional negative effect on the power supply to the motor.

Using magnetic force to increase the contact pressure on the track, such as with Busch's 1:87 scale narrow gauge light railway on 6.5 mm tracks, would not be a solution either, because of the Z gauge non-magnetic nickel silver rail profiles.

Lead weights are also taboo, as their toxicity does allow for their usage in toy products.

The perfect solution would therefore be to combine the light and robust ABS plastic shells with the heaviest possible metal, without creating health risks for customers



A clip and screw mechanism connects the class KlV 20 rail van chassis with its body shell. Producing a motorised version of this tiny model is quite a venture and a great challenge for Märklin.

This is exactly the combination which Märklin and its external partners have been developing for years, until they managed to successfully test and integrate metal filled plastics in their regular production injection moulding process.



This year, Märklin plans to produce several models with metal filled plastic shells: one model in H0 (Class PtL 2/2 steam loco ("Glaskasten")), and two each in N gauge ("Crocodile" and a DB class 103) and Z gauge (two versions of the NoHAB and the KlV 20 rail van). With the exception of the KlV 20, all models will be new editions of existing models and will thus allow for a direct comparison with earlier versions.

All of these models will benefit from the combination of extra weight (possible until now only with zinc alloy casting) and the fine detailing possible with plastic injection moulding. The impact will be mostly felt at the Z and N gauge level, but also with the smaller and lighter H0 models.

A significant increase in weight is possible because 70 % of metal (in terms of weight) is added to the plastic granulate. In theory, many types of metals could be used for this, but the choice was made for tungsten because of its high density and mass. The melting point of tungsten is at 3,422° C, meaning that its solid particles remain preserved in the significantly cooler, liquefied plastic material. They are injected together with the molten plastic into the moulds and firmly bond with the plastic during solidification. Technically, the result is a so-called composite material, as was already the case with the Kato process.



**This class 144 body shell was part of Märklin's trial runs to master the process of working with metal filled plastic. A close look at the unpainted shell reveals that some fine details have been more clearly rendered than is the case with an earlier production model made of conventional plastic (Art.-Nr. 8811).**

It is somewhat less flexible than a pure plastic and also differs from it with respect to tensile and compressive strengths. Nevertheless, it is still very distinct from a pure metal, which is particularly evident from the absence of electrical conductivity. And the fact that it does remain a plastic is a prerequisite for producing the same locomotive shells which were previously moulded from pure ABS plastic.

A key thing Märklin had to learn to master was controlling the shrinkage of the new material so that all parts would continue to fit and, at the same time, remain true to scale. The limits of the process became apparent during the development and testing phase, and Märklin had to realize that it cannot continue using all of its existing injection mould tools under the new process.

For example, the moulds needed to be adapted with respect to heating and cooling during injection process: Instead of hot runners, cold runners were now required. Injection parameters such as material temperature and injection pressures also had to be adjusted, and even the colour treatment of the ejected shells sometimes required some modifications.

Märklin also performed climate change tests in order to prove that the new material met all of the physical requirements necessary for model railways and in order to avoid any unwanted surprises. And the tests also showed that the new material makes for an often better representation of the finest details, compared to conventional materials.

During the many years of developing the new process and getting it ready for the market, Märklin sometimes had to learn the hard way. But the considerable investment seems to be justified as it secures Märklin a unique selling point and puts it clearly ahead of its competitors across all model railway scales.

### Effects of the new manufacturing technology

Cost savings, as claimed by many observers, were not a consideration to introduce the new material, especially as the metal filled plastic granulate costs ten times more per kilogram than conventional ABS plastic. However, raw material costs account for only a small part anyway of the total cost of the entire production process.

However, one cost driver that does need to be taken into account is the higher rate of mechanical abrasion in the moulds, caused by the grinding force of the fine metal particles. This decreases the overall service life of the moulds, but is acceptable and can be mostly neglected due to the fact that the output in numbers for model railways is rather small compared to other larger scale industrial processes.



**Especially this tiny Z gauge model will benefit from the weight gain caused by metal filled plastic. Although the K1v 20 is more on a scale of 1:200, it is hardly larger than the tip of a pencil.**

Our photos also show a class E 44 body shell made of metal filled plastic. It can be directly compared with the pure plastic shell of the same model, which was once produced under article number 8811





The smaller a model, the more effective the metal alloy plastic becomes. Mini-Club product manager Jürgen Faulhaber knows this very well and is therefore firmly committed to this technology.

(picture on page 27). We show this model because we did not have any comparable NoHAB parts at the time of writing.

This is one of many attempts to master the new process and to gain sufficient experience to venture onto the market.

In addition to other material properties already described, there was also the question of how the new material would perform in terms of flexibility.

The body shells should hold securely on to the chassis and at the same time are spread for detachment without breaking.

Let us now take a final look at the weight gains that can be achieved with metal filled plastic.

Not surprisingly, we find that the new material shows its full potential in the Z gauge segment of the market.

We can explain this by taking the already mentioned shell of the class E 44: whilst its previous ABS body only weighed 3 grams, its metal filled plastic equivalent comes out at a rather hefty 14 grams, almost five times as much as before. Using a zinc alloy die-casting process would have yielded a weight of about 16 to 17 grams, which is only slightly more than with metal filled plastic.

The "Potato Beetle" (NoHAB) shell has increased from 4 grams (plastic injection moulding) to 19 grams for the metal filled plastic. This mass is also very close to what could be achieved mathematically with zinc alloy die casting (approx. 22 grams). This is, of course, a purely mathematical exercise, because the injection mould cannot be filled with zinc and may also require different material thicknesses.

Especially, the class KlV 20 small rail van is true to its official name. With a shell weight of 0.4 grams, a normal plastic body would have contributed nothing to the traction, with the likely result that the model would have hardly moved or would have stopped for lack of contact with the track.

With the alternative technology, however, the body shell arrives at a weight of 2 grams, heavy enough together with the chassis and motor to make for a usable model. Using the more expensive zinc alloy die-casting moulds would not have made a significant difference in this case.

We are now looking forward to the first deliveries of and experiences with the new models. In the case of the NoHAB diesel locomotives, we are sure that we will also hear from some of our readers about their first impressions and how the new models measure up to previous editions. At least the new bogie frames will make for a more authentic and interesting look for this locomotive.

Manufacturer pages for the topic:  
<https://www.maerklin.de>

Note for English readers: The literature section that follows is not translated into English because the original texts of the books involved are in the German language. The original German is left here for information purposes only.

## Industrialisierung und Verkehrsentwicklung **Blick in Dortmunds Eisenbahngeschichte**

*Viele Leser sind vermutlich Anfang April mit der Bahn zur Intermodellbau angereist. Da lohnt sich angesichts des thematischen Schwerpunkts dieser Ausgabe ein Blick auf die regionale Geschichte dieses wichtigen Verkehrsträgers. Die Deutsche Gesellschaft für Eisenbahngeschichte tritt auch als Verlag auf und hat der größten Stadt Westfalens einen neuen Band in der Reihe ihrer Monografien gewidmet.*

Rolf Swoboda, Norbert Tempel und Wolfgang Fiegenbaum  
Die Eisenbahn in Dortmund

DGEG Medien GmbH  
Hövelhof 2018

Gebundenes Buch  
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272 Seiten mit ca. 450 überwiegend S/W-Abbildungen

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Bereits fünfzehn Jahre ist die erste Auflage eines Buches unter diesem Titel schon wieder her! Vergangen ist eine eisenbahngeschichtlich lange Zeit, in der viel geschehen ist und die es nun fortzuschreiben und zu aktualisieren galt.

Der Basisteil des vorliegenden Werks hat seinen Umfang allein dadurch bereits verdoppelt. Damit sollte der vorliegende Titel auch für alle diejenigen interessant sein, die bereits das ältere Werk ihr eigen nennen und unverändert Wissensbedarf an der regionalen Bahngeschichte zeigen.

Doch warum widmen die Autoren der Eisenbahngeschichte Dortmunds überhaupt ein eigenes Buch? Die Antwort ist einfach: Die größte Stadt Westfalens und des Ruhrgebiets war und ist ein Eisenbahnknotenpunkt herausragender Bedeutung. Dortmund gehörte zu Bundesbahnzeiten zu den größten Zugbildungsbahnhöfen der Bundesrepublik Deutschland.

Der Start für den Aufschwung der Eisenbahn in der einst blühenden Hansestadt, die nach dem dreißigjährigen Krieg einer Bedeutungslosigkeit verfiel, in der Folge klein und längst auch unbekannt war, gab die Köln-Mindener Eisenbahn. Sie erreichte Dortmund als erste und baute hier auch große Anlagen, die dem Unterhalten ihrer Fahrzeuge dienten.

Aber in der zweiten Hälfte des 19. Jahrhunderts trafen hier dann auch die übrigen großen Eisenbahngesellschaften Preußens aufeinander und legten den Grundstein für einen raschen





industriellen Aufschwung: Das Land brauchte wie die Dampflok Kohle, und nur die Eisenbahn war in der Lage, sie in Massen über größere Strecken zu transportieren.

Das vorliegende Werk betrachtet diese Entwicklung ganzheitlich. Behandelte Themen sind die geschichtlichen Abrisse von der Privatbahnzeit über die preußische Staats- und Deutsche Reichsbahn, die Bundesbahn bis hin zur Deutschen Bahn AG.

Revue passieren lassen die Schreiber den zunehmenden Schienenverkehr, der bald wichtige Straßenwege am großen Bahnübergang nahe dem Hauptbahnhof lahmlegte und der als Konsequenz folgenden Verlagerung und Höherlegung von Station und Trassen. Zäsuren bedeuteten die Ruhrbesetzung durch Frankreich und Belgien sowie der Zweite Weltkrieg mit einer völligen Zerstörung der Innenstadt und des imposanten Hauptbahnhofsgebäudes.

Einbezogen in die Betrachtungen sind aber auch alle übrigen Personen- und Rangierbahnhöfe, die Betriebswerke und betrieblichen Brennpunkte, Strecken- und Technikgeschichte. Hier erwähnen wir kurz den früheren Rangierbahnhof Dortmunderfeld, den viele als Heimatbahnhof der Bierwagen Dortmunder Brauereien kennen.

Nicht vergessen wurden die ungewöhnlichen Brückenkonstruktionen, ohne die das Höherlegen der Gleise ohne niveaugleiche Kreuzungen nicht möglich gewesen wären. Dortmunder Brückenbaufirmen wie Klönne und Jucho waren weltweit bekannt und durften bei den Betrachtungen daher auch nicht fehlen.

Eine ebenso bedeutende Rolle spielt die aus der Hafen- und Kleinbahn hervorgegangene Dortmunder Eisenbahn GmbH (DE), die bis heute existiert und deshalb auch umfassend portraitiert wurde. Nur eine kurze Nebenrolle spielen hingegen die früheren Werksbahnen der Stahlbetriebe.

Mit dem Erreichen Dortmunds durch den Fahrdracht 1957 und dem Aufbau eines S-Bahn-Netzes bis in die achtziger Jahre gelangen wir langsam schon in Richtung Gegenwart. Etwas fremd im Buch, wenn auch nicht minder interessant, ist die von Siemens entwickelte, führerlos fahrende H-Bahn, die den Universitätscampus, den S-Bahn-Halt und einen von den Studenten bevorzugten Wohnort miteinander verbindet.

Das alles wird auch durch gut ausgewählte, aussagekräftige Fotos und Abbildungen unterlegt. Verständlicherweise ist allerdings die Pionierzeit der Eisenbahn nur recht dürftig bebildert, für die Zeit nach der vorletzten Jahrhundertwende konnte auf deutlich mehr Aufnahmen zurückgegriffen werden.

Einen kleinen Kritikpunkt gibt es allerdings auch: Als den Lesefluss störend haben wir die fast durchgängig falsch, das heißt nicht im bahnamtlichen Sinne, benutzten Baureihenbezeichnungen von elektrischen sowie dieselbetriebenen DB-Fahrzeugen empfunden. Für die Zeit nach dem 1. Januar 1968 lesen wir hier nämlich beispielsweise von „V 260“, „V 290“, „E 111“ oder „E 141“.

Der Ersatz der Buchstaben V und E zum 1. Januar 1968 durch die Ziffern 2 und 1 an erster Stelle der neuen Baureihenbezeichnung dürfte allerdings auch den Autoren bestens bekannt sein. Daran haben wir angesichts der deutlich erkennbaren Fachkenntnis keinen Zweifel.

Deren fundierte und gewissenhafte Arbeit ist es dann auch, die diesen Band so empfehlenswert macht. Und das gilt für alle, die an regionaler Eisenbahngeschichte interessiert sind, mit Dortmund und dem Ruhrgebiet irgendwie verwachsen sind, oder einfach authentische Eindrücke und Wissen zu Themen für ihre Anlage nach Motiven der Montanindustrie suchen.

Auch wer einfach erleben möchte, wie wandlungsfähig eine Region, eine Stadt und ihre Infrastruktur sind, wird von diesem Buch nicht enttäuscht.

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<https://shop.dgeg-medien.de>

## Ein Überblick über die Welt der Modellbahn Viel Wissenswertes und Kurioses

**Was muss ein Modellbahner wissen und was nicht? Darüber ließe sich trefflich streiten, doch der Geramond-Verlag gibt eine aus seiner Sicht eindeutige und klare Antwort dazu. Wir haben uns das jüngste Taschenbuch aus einer unterhaltsamen und informativen Reihe angeschaut, um festzustellen, wen dieser Band ansprechen wird und wer ihn braucht.**

Martin Menke / Peter Wieland  
101 Dinge, die ein Modellbahner wissen muss

Geramond Verlag GmbH  
München 2019

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Die Autoren Martin Menke und Peter Wieland zeichnen seit vielen Jahren für die Modellbahnredaktion des Eisenbahnmagazins verantwortlich. In dieser Funktion sind die beiden mit ihren Arbeiten langjährigen Lesern auch schon aus den Zeiten vor Übernahme der Alba Publikation durch Geramond bekannt.

In der bekannten 101-Dinge-Reihe des Verlags, die weit über den Bereich des Modellbaus hinausgeht, schien es nun an der Zeit, auch zum Thema Modelleisenbahn nützliches Wissen sowie interessante oder amüsante Fakten einzufangen.

Immerhin begeistern bereits seit dem 19. Jahrhundert verkleinerte Modelle alte und jungen Menschen. Sogar Johann Wolfgang Goethe soll drei Jahre vor seinem Tod, also 1829, eine Miniatur der englischen „Rocket“ für seine Enkelin geschenkt bekommen haben.

Ob derartige Dinge tatsächlich zum Pflichtwissen eines Modellbauers gehören, bleibt der Sichtweise und Meinung jedes einzelnen Menschen überlassen. Fakt ist aber, dass es einen sinnvollen Rahmen gibt, der beim Orientieren im weiten Feld von unterschiedlichen Maßstäben, Spurweiten, Betriebsarten, Epochen usw. helfen wird.

Und eben den haben die beiden Autoren zu sortieren, zu strukturieren und in diesem Band wiederzugeben versucht. So soll auch dieses Werk helfen, persönlichen Zugang zum Titelthema zu finden und den Leser dafür zu begeistern, was ruhig als Versuch einer Nachwuchsakquise verstanden werden darf.

Ob das gelingen kann, vermögen wir hier nicht zu bewerten. Dafür spricht aber, dass der Preis gering ist und sich das Taschenbuch auch als Mitbringsel oder kleines Präsent eignet, zumal es selbst in größeren Bahnhofsbuchhandlungen zu finden ist. Beleuchten wir aber den Nutzen für gestandene Modellbahner, die auf der Suche nach einer etwas unterhaltsameren und eben mal weniger tiefgreifenden Lektüre sind.



Ausdrücklich ausnehmen von unserer Wertung möchten wir das Kapitel 26 (Seite 60) zur Spurweite Z, denn wie bereits im Vorwort zu lesen handelt es sich hier in Wort und Bild um eine konkrete Zulieferung des Rezensenten, der natürlich versucht hat, die vielen Facetten des Maßstabs 1:220 kompakt zusammenzufassen.

Dem genannten Vorwort entnehmen wir aber auch viele weitere Namen, die als bekannte Experten beispielsweise für die Bereiche historischer Modelle, der Deutschen Reichsbahn in der DDR, der Modell- oder Digitaltechnik samt deren Geschichte gelten. Das verspricht in Summe auf jeden Fall ein gelungenes und vielseitiges Buch.

So erstreckt es sich über ein sehr weites Feld, das mit Anlagenformen, deren Unterbau und Verstaumöglichkeiten beginnt und sich vielen, teilweise auch sehr speziellen Facetten zuwendet. Dazu gehören beispielsweise Industriethemen, Kopfbahnhöfe, Zahnrad-, Schweb- und Straßenbahn oder auch Bahndienstfahrzeuge.

Selbst der Modelleisenbahn auf Briefmarken und Film haben die Autoren je einen Abschnitt gewidmet, ebenso haben sie die Gleisreinigung, den 3D-Druck, Modellbahnbörsen und Auktionen nicht vergessen. Wissenswert ist sicher auch das Benennen prominenter Modellbahner des In- und Auslands. So kamen allerlei, teils auch kuriose, Fakten zusammen.

Eingang gefunden haben aber selbstverständlich auch klassische Themen wie Bahnübergänge, das Gestalten von Wasserflächen, Begrünen der Landschaft oder Lokschuppen. Damit wird das Taschenbuch zu einem abwechslungsreichen Ratgeber mit vielen Grundsatzinformationen zum Themeneinstieg. Tabellarische Übersichten runden dies ab.

Nicht ideal, aber mit der gewählten Gliederung leider nicht anders zu lösen, ist der Umstand, dass viele Informationen zu einem Themenfeld auf viele Kapitel verteilt vorzufinden sind. Gefundene Schwächen zeigen sich vor allem im Mittelteil des Titels, was vor allem die Textpassagen betrifft.

Hier zeigt sich das aus unserer Sicht deutlich unterschiedliche Können der beiden Autoren. Wortwiederholungen, eine bevorzugte Ausdrucksweise in der „Leide-Form“ und mit regelmäßiger Hilfe des Pronomens „man“ belegen kommunikative Defizite und wirken persönlich distanziert.

Dies findet seinen Gipfel in holperigen und umständlichen Formulierungen, die an den Schriftverkehr eines Untertans mit kaiserlichen Behörden erinnern und daher seit über einhundert Jahren als überholt gelten dürfen. Hier hätte es ganz klar redigierender Eingriffe bedurft!

Doch auch die farblich und ebenso im übrigen Druckbild gute Wiedergabe der ausgewählten Aufnahmen findet an einigen Stellen ihre Grenze in handwerklichen Fehlern des Fotografen. Dies betrifft dann Ausleuchtung und Schattenwurf oder auch nur allzu sichtbare Unschärfen über weite Strecken eines Bildmotivs. Besonders ärgerlich aus Sicht des Käufers ist das etwa beim Foto von Stuttgart Hbf aus der Anlage von Wolfgang Frey, welches im Buchdeckel abgedruckt wurde.

Hier wurden ganz klar Chancen vertan, die aber auf keinen Fall zu einem Abraten vom Kauf dieses Werkes führen. Beachtenswert ist und bleibt die erstaunlich breite Themenstreuung über ganze 101 Themenpunkte, die nicht leicht zu bedienen waren. Und so ist das kleine, aber feine Taschenbuch wohl auch jeden Cent des verlangten Preises wert.

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Intermodellbau Dortmund

## Visiting the construction site

*The biggest spring fair for the general public is always Intermodellbau in Dortmund. The most recent edition from April 4 to April 7, 2019, also fits in seamlessly here and was also very well attended in terms of the Z gauge. We report on what could be seen there across all scales and divisions and, of course, also take a targeted look at the important junior product ranges.*



Some key data for Dortmunder Intermodellbau from 4 to 7 April 2019 quickly illustrate the importance of this trade fair not only for model railways as a traditional driving force: 87% of the trade fair visitors have already visited the exhibition in recent years, almost all the federal states are represented in the Westphalia metropolis and about 10% of the guests come from abroad.

With 77,000 visitors, this important trade fair, which has also played an important role for Z gauge for many years, has shown itself to be stable in its latest edition. The approximately 500 exhibitors came from a total of 18 countries, all exhibition areas were occupied with Halls 1 to 8, but the numbering had changed within these halls.

One change that visitors immediately noticed on arrival was the continuing construction site due to the redesign of the exhibition grounds, including entrances and the large lettering "Messe Dortmund" on the roof of the entrance area.

He referred to a reorganization carried out shortly before Intermodellbau: With immediate effect, the rich events, congresses and trade fairs will be organized and responded to by separate subsidiary companies. Intermodellbau will therefore be organised by Messe Dortmund GmbH, with immediate effect.



The offers for children and young people are becoming more and more important. These included the "Track 5" area in Hall 4, where this little model railway enthusiast can pursue his play instinct to his heart's content.

The former and well-known Hall 1 for concerts, television recordings, sports and evening events has been removed from the number concept. It is now again what it actually was for the Dortmund-based company earlier: the Westfalenhalle.

This resulted in the already mentioned new number structure, which now starts at 1 instead of 2 and ends unchanged at 8. The reason for this is that the letters A and B were previously added. However, this had no effect on railway model construction, as it was to be found unchanged in Halls 4 and 7.



Sea and coast are themes that also attract children. The modular layout of the coastal N-Bahn in Hall 7 was therefore very popular with our young reporters. Only the appearance of the "Tobler One," of which they had raved so much, was not captured in the photo. Photo: **Trainini®** / Hendrik Späing

However, a visit to Hall 8 was also worthwhile, as topics related to railways were also found there: Steam model making, fairs and the circus dioramas by Rolf Böhm (Recklinghausen), who had also thought of the scale 1:220.

At this point we would like to record the satisfied conclusion of the organizer, because the visitors rated the fair in a survey with the average school grade "good," an impression to which we have nothing to add.

However, in view of the great challenges facing young talent, the view of children is always particularly important to us. Does the fair also meet their expectations? How do exhibits and offers look from their perspective? Do they feel invited and addressed?



Where there is movement and excitement, children are not far away. They will be attracted by demonstrations of remote-controlled truck and construction machine models, which will also have to cross level crossings as crossings with steam railways at this large-scale facility in Hall. Photo: **Trainini®** / Hendrik Späing



In the run-up to the event, we made our concern clear to the organiser, as we had done at other trade fairs before. He showed himself willing to accept the two children of the editor-in-chief as official representatives of the press, and to have them researched and photographed on site and provide with press credentials.

The results to be evaluated would be a four-page, very detailed and conscientious report of the daughter and a large yield of pictorial material produced by the son.

There was no way around these two, many a young observer was asked by them about his impressions and compared them with his own notes as well as the appropriate pictorial material produced.

That's why we don't want to withhold it from our readers, because after all it can help everyone to think over their own presentations and to adapt them so that much larger target groups feel addressed by them.

If we think, for example, of the viewing height of children, it corresponds roughly to that of wheelchair users. They don't want to be forgotten any more than the majority of adults walking on their own feet.



Always well attended and popular with young and old was Michael Rehorik's bizarre ride, which grew like a roller coaster like no other.



Michael Rehorik stands here next to his layout after motives of the British cartoonist Rowland Emett.

A magnetic attraction (not only) to children is a showpiece that has life and movement to offer. Besides trains, road and water vehicles, figures or even bizarre implementations, also are implemented here.

A prime example of this was the 1:160 scale module layout of the coastal N Bahn.

To the children's delight, a bascule bridge moved along the main railway line here.

Also the moor typical for Northern Germany on the module of Harald Käfferlein had it in itself, because here the tower of a submarine appeared in short distances.

The written name "Tobler One" showed it to be of Swiss origin, the



lieutenant captain entering the conning tower, and soon declared that he had gotten lost and had not appeared in Switzerland. With this humorous interlude, the community had already provided enthusiasm at several other exhibitions.

Michael Rehorik also had children on his side: In Hall 7, he showed a layout on which the trains were running on rails of size H0, but whose vehicles were more on a scale of 1-gauge or 11m. It was the only one that was built consistently in height and exceeded a total dimension of 2 meters.



The British railways keep reporting new transport volume records: in the cartoon, this is expressed in highly stacked boxes and huge coal mountains already trickling away in open freight wagons.

The youngest were amazed by the imaginative, almost magical design of the trains, the almost roller coaster-like track layout and an airship above the event, which was moved loudly in circular orbits with propeller motors.

Memories of Pinocchio came back to us: it too was once created for adults and met the hearts of children. A deeper meaning was also hidden behind this bizarre railway: it went back to the British comic-strip artist Rowland Emett.

Based on his models, also reproduced here in the model, a brightly coloured and richly distorted park railway was once created. Together with some overdrawn figures from society and the railway environment, it looks like a cartoon.

And that's exactly what it is, because Emett was also a cartoonist who liked to and often made a mockery of the English railways. Layout constructor Michael Rehorik was so enthusiastic about the work of the draughtsman that he wanted to create three-dimensionally the richly decorated and mostly already



Rowland Emmett's legacy also includes some recurring characters, which can also be found in Michael Rehorik. These include the locomotive driver on locomotive number 6 with the name "Hattie," the bald gentleman, the fine lady in the background or the stationmaster waving his flag at the left edge of the picture. This masterpiece stands out not only for its typical facial features but also for its size.

surreal works. It is and remains a completely new, almost artistic approach to model railways, which did not fail to have an effect.

We are returning once again to the promotion of young talent, because the focus this time was once again on the numerous opportunities for participation. Probably every model building division has now discovered this as the key to success. And while some are using tried and tested methods, others are making an effort to offer a regularly changing programme.

As regular visitors to the fair, our test persons therefore omitted the well-known model truck driving licence and the Junior College Europe of the BDEF in order to look for further offers. They were enthusiastic about the ship's driving licence, which was probably the result of demonstrations of interesting models in the show basin. Submarines, discharge ships and rescue cruisers were the clear favourites here.

The flight demonstrations among the remote-controlled models were also well attended. And there it does not necessarily have to be aerobatics with particularly fast models. Comparatively leisurely floating helicopters of large scales radiate a great fascination for young and old. This also makes it attractive to build a small balsa-wood glider at the association's stand and take dreams home with you.

This year the handicraft stand of the Youth Welfare Office of the City of Dortmund was missing. In the previous year's editions, plastic model kits were always allowed to be assembled there, accompanied by experienced young people. This was not only fun for the children, but also built up valuable experience, which is also helpful in railway model making.

The still very young robot show fights are enjoying an ever increasing popularity. It was therefore clear that our young reporters would also discover this point in the programme. The machines, which compete against each other in different weight classes, try to make each other unable to move.





Although the robot show fights have developed into a new magnet for visitors, the flight demonstrations also enjoy the favour of the spectators. The helicopter shows are particularly popular. Photo: Silvia Kriens / Westfalenhallen

They have armour to protect themselves, sophisticated forms to be agile, to push the opponent out of the arena or to knock him over, as well as effective weapons and tools to take the opponent out of combat. They meet under loud machine drumming or banging, protected from Plexiglas panes to the outside. For a while they work against each other, the victory takes place by knockout or by points.

What sounds brutal and martial here, however, is most comparable in the sports world with the Olympic discipline of wrestling: No robot suffered a total loss here. Perhaps this is the reason for the clearly perceptible influx of visitors?

Traditionally, the most important venue at the fair for young and old is the model railway. That's why it occupies two of the halls (4 and 7) and takes up the largest exhibition space. For the younger visitors there were several opportunities to participate and do handicrafts. Roco and Märklin invited visitors to play directly at their stands, as did the toy car brand Siku, which can be found in Hall 7 because of the Wiking range for model railways.

Not far away is always the stand of the Bundesverband Deutscher Eisenbahn-Freunde e.V. (Federal Association of German Railway Fans) (BDEF), where the young model railroaders were able to design small dioramas under expert guidance and supervision in the Junior College Europe. However, the children found a larger play and craft area under the name "Gleis 5" in Hall 4.



Here, many hours passed in which parents had to wait patiently while their youngest children played extensively with garden railway material. For the older ones there were kits to build, where the offer always differs from fair to fair.

From the point of view of our young journalists, however, the participation for token fee charged there is somewhat unfortunate for children who visit the exhibition without parental accompaniment or at least move around there without accompaniment. The question is always how much pocket money the children are allowed to have with them, and how they divide it up at the site.



**The association Furka-Bergstrecke (section NRW) annually demonstrates the construction and dismantling of the bascule bridge on the Furka-Museumsbahnstrecke. When they see children enthusiastically following the process, they also like to invite the children to control the train and operate the level crossing. Photo: Trainini® / Hendrik Späing**

Karl-Friedrich Ebe, who organises the model railway area for the Modellbahnverband in Deutschland e.V., was also enthusiastic about the overall good response: "The newly designed action area in Hall 4 was also very well received by the public. We are very much looking forward to the coming year in which we will celebrate our 25th anniversary."

Button actions also act children like a magnet, because they can influence what is happening on a system themselves. The stand personnel from the Furka-Bergstrecke association (NRW section) often go one step further: when they see that children are enthusiastic about their demonstrations and watch them repeatedly, they are gladly invited to help with operations. This is, of course, a great experience, as our two young journalists also found.

As far as the influx of visitors is concerned, we have the impression of strongly changed habits resulting from shortening an exhibition day (Wednesday): Thursday and Saturday have now been identified as the days with the most visitors.

At the start of the trade fair, all trade visitors who appeared spread over the first two days will now come. They often have specific questions and need advice, but they don't always get through the stands because of the crowds. This was also confirmed by exhibitors who, from their point of view, could otherwise have made even more sales.

In the meantime, Saturday has become the classic family day, which is certainly also reflected to a considerable extent by the weather. The fact that Sunday tends to be used much less in principle, however, is probably also due to the fact that the event time is one hour shorter.



The flow of visitors has changed noticeably on the individual days: Thursday and Saturday are the busiest. While families only have the weekend to spend, shoppers and those seeking advice use the first day of the fair.

Also annoying from a visitor's point of view is the continuing fact that many ideal and increasingly also commercial exhibitors start to pack up from 4 p.m., and, sometimes, even completely dismantle their stands, from our point of view, this shows disrespect to paying visitors, which the organiser should not tolerate.

So the exhibition leaves a "plundered" impression at first sight, and the guests are met in the corridors by exhibitors with exhibits and only partial stands. Where the stands are still erected, nothing moves anymore or at most a single train; showcases are generally empty and open.

We would like to remind you that the one hour reduction on Sundays was once a courtesy on the part of the organisers, because the dismantling and departure operations began at 17:00 hours. Instead of providing the entrance payers with an appropriate experience without such disturbances through a compromise, their problem has become even worse. As a result, Intermodellbau, like unfortunately many other trade fairs, is no longer worth the full admission price on Sunday (or the last day of the event).

Let us now devote ourselves more to what is shown in Z gauge and close scales: There was much more to see in Hall 5 with the ship and cardboard model building than many had initially expected. This is primarily due to paper and cardboard model making, which is often also available in small scales.



We are thinking of some other dioramas that we have already shown in earlier reports, for example Bernhard P. Schulte from Hagen, who announced a new showpiece for next year.

Contrary to expectations, there was also an interesting find in the field of RC model building: Björn Esser from SMC Hamburg took care of the Revell kit of the sea rescue cruiser "Hermann Marwede", the largest ship of the DGzRS, on a scale of 1:200 and built it as a remote-controlled model.



Björn Esser's SRK Hermann Marwede of the DGzRS, built as a remote-controlled ship from a Revell kit, was a masterpiece in 1:200 scale, which is close to Z-scale. Hermann Marwede was also an exhibitor at the trade fair.



Thomas Oswald inspired with a small suitcase system for his large MBZ building programme.

He opened the window openings and glazed them, exchanged the railing, the railing on the helicopter deck including bridge with self-designed etched parts to make the model look more realistic, classic fine model making, as we know it.

Shafts, rudders and propellers were also exchanged in order to become operable. Now, motors and gears from small linear servos take over these functions.

We would like to briefly describe the numerous manufacturers and dealers of Z gauge represented in Halls 4 and 7, as long as this is relevant, in retrospect.

Besides the big publishing houses and accessory suppliers with their own trade fair offerings, Aspenmodel / Bahls model railways and MBZ



appeared in Dortmund. Michael Bahls proved that Märklin's Series 10 can include not only fully movable detail controls, but also space for functional engine lighting.



The Märklin special car for the fair (Art.-No. 80729 was modelled on an FaL of the Dortmunder Eisenbahn (picture above). An exhibit steeped in history was the "Marx-Engels-Platz" N-gauge layout (picture below) by Bill Roberts.

Thomas Oswald (MBZ) had many construction kits from his program in large boxes sorted by gauge, which is why the stand was always surrounded by a dense crowd. A suitcase system in Z scale was an excellent illustration of what can be created from these kits. Also, Bahnreisen Sutter promoted his offerings with a previously shown suitcase system.



Manfred Lütke (Lütke Modellbahn) had arrived without any new items, but the available kits, made of milled polystyrene and plywood, are very popular again. Märklin also refrained from presenting summer new products due to the early date of the fair and made up for this at the beginning of May, as you can read in the reports of this issue.

However, this year's Gattung Fals exhibition car with the company number 3645 of the Dortmunder Eisenbahn (Art. No. 80729) in green paint with predominantly yellow lettering attracted a large number of visitors. In contrast to one of its predecessors, however, it was delivered without a load.



Dietmar Allekotte's showcase "Marienfeld" with a harbour motif on the sea had its German premiere in Dortmund and was rightly well received by the trade press.

Anyone who is interested in the possibilities of spray painting was really impressed in Hall 4 at Harder & Steenbeck. Artist, model maker and author Mathias Faber, as well as the stand personnel, provided interested parties with expert tips. Almost all of the manufacturer's injection styli filled with ink were allowed to be tried and tested under instruction.

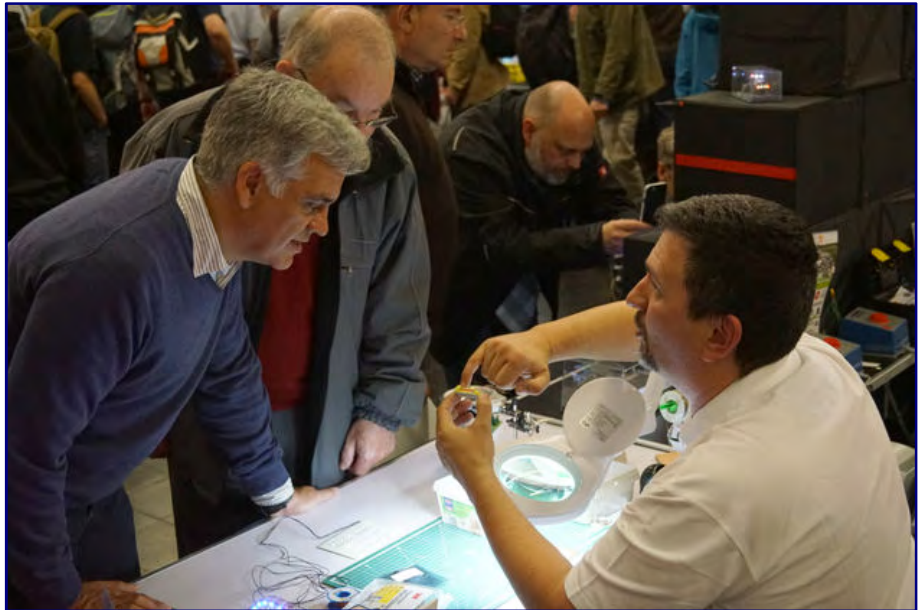
We would like to address at this point with a view over the edge of the plate also still another N-gauge plant with historical requirement, which had arrived from England. Bill Roberts had replicated the Berlin S-Bahn stop Marx-Engels-Platz on a scale of 1:160, as it looked shortly after the reunification. Today it is renamed Hackescher Markt.

The most important contact point for gauge Z was the joint stand of Dietmar Allekotte, Rainer Tielke and Torsten Schubert. Dietmar presented in a German premiere his small and much admired showcase Marienfeld, which shows a small harbour with pier on the German coast.

Torsten Schubert never got tired of giving soldering demonstrations and explaining to visitors, in detail, how they themselves can achieve excellent results.

In his exhibition wall with black showcases, he displayed many lighting effect exhibits this time as well. The latest of them was the demonstration of a light exchange at a street lamp.

On a scale of 1:220, two adjacent examples were used to show how this would have to look like following accident prevention regulations, and how this would have to look most adventurous, albeit entertaining in the model, and with great risk.



Torsten Schubert explains to the visitors in announced soldering demonstrations the correct procedures to achieve convincing results themselves.



Replacing a light source on a switched off street lamp by means of a lifting platform (left) or in a more adventurous way on a live specimen? The visitors acknowledged the juxtaposition with a smile

Rainer Tielke impressed the guests once again with his double-decker bridge Bullay. Here, thanks to a lot of digital sound support, it was sometimes quite noisy, which was mainly due to the heavy block train with two class 44 steam locomotives at the front and a class 50 following.

The children enjoyed the mouse train, for the outgoing fair team of Eisenbahn-Romantik, the Borussia Dortmund train presented in **Trainini®** 7/2017 was temporarily on track. Unfamiliar attendees were astonished by the cars moving along the lower level of the bridge.





The heavy coal train that crossed Rainer Tieleke's double-decker bridge from Bullay captivated the eyes and ears: under the pre-stress of class 50, a 44-oil engine struggled loudly at the front (photo above) and its exhaust blows had hardly ebbed away, followed by the equally loud thrust locomotive of class 44 coal (photo below). Meanwhile, there was a small rear-end collision on the road on the lower level.

They searched in vain for chain-guided magnets under the girders and the floor of a side-mounted turning plate, which, according to their ideas, pull the small trucks across the streets. They were surprised by the Z-Car system from KK Produkcja in Poland, which has already been further developed, allows self-propelled cars even for the smallest model railway scale.





**Photo above:**  
Surprised, many visitors looked for the trick to move trucks and buses on Rainer Tielke's road. They had not expected the self-propelled cars based on the Z-Car system from KK Produkcja.

**Photo below:**  
The pink and white Hello Kitty Shinkansen had been announced as one of the main attractions by the regional press and attracted many children and families to the Z-scale stand. But also the Bernd-Knauf-Lok and many other valuables were not to be missed in the showcase.



But it was also worth taking a look at the showcase at the stand. Jörg Erkel (1zu220-Shop) had actively supported Torsten Schubert to show some extraordinary gems in the nominal size Z. In addition to Torsten's locomotive and car models with special paintwork, a large selection of Archistories buildings was also on display, one of which illustrates their construction.

But the white and bright pink painted Hello Kitty Shinkansen of the 500 series from Rokuhan, which was shown here in its full length, also received true interest from the audience. Representatives of the daily press and the local radio station had pointed it out as one of the main attractions several times and thus lured mothers and daughters into the halls.

And so we conclude the report with a satisfied conclusion: If we want to bring model railways and model making back into people's minds and bring this hobby back into the children's rooms, we need the sustained and concerted efforts of all those involved. Intermodellbau 2019 left a very good impression with us, and it was also well received in the media.

**Exhibition website:**

<https://www.intermodellbau.de>

**Exhibitor selection for model railway in scale 1:220:**

<http://www.artitec.nl>

<https://aspenmodel.com>

<http://www.bahls-modelleisenbahnen.de>

<https://www.bdef.de>

<http://das-kantoor.de>

<https://www.faller.de>

<https://www.harder-airbrush.de>

<http://www.hecklkleinserien.de>

<http://www.luetke-modellbahn.de>

<https://www.maerklin.de>

<http://www.mbz-modellbahnzubehoer.de>

<http://www.mkb-modelle.de>

<http://www.moba-deutschland.de>

<https://modellplan.de>

<https://www.noch.de>

<https://www.revell.de>

<http://www.saller-modelle.de>

<http://www.viessmann-modell.com>

**Ideal exhibitors of track gauge Z:**

<http://www.rainer-tielke-modellbau.com>

<http://www.z-lights.de>

**RC ships in scale 1:200:**

<https://besser-modellbau.de>

<https://www.smc-hamburg.de/smc-flotte/special-1-200/>

# Eisenbahnmuseum Dieringhausen



## Einzigartig in Europa

*Spur Z Ausstellung  
im historischen Güterwagen  
im Eisenbahnmuseum Dieringhausen*

*Die Sonntags-Ausstellungstermine:*

*08.06.2019, 09.06.2019, 16.06.2019, 07.07.2019,  
28.07.2019, 11.08.2019, 22.09.2019, 13.10.2019,  
27.10.2019*

*jeweils von ca. 10:00 Uhr – ca. 17:00 Uhr*

**Infos unter: [www.stammtisch-untereschbach.de](http://www.stammtisch-untereschbach.de)**



Readers' letters and messages

## Zetties and Trainini in Dialogue

**Thank you for each letter to the editor and all the feedback that reaches us. Write us (contact details are in imprint) - Trainini® lives from dialogue with you! Of course, this also applies to all suppliers in Z gauge, who would like to introduce innovations here. A representative sample is our goal. Likewise, here we note any events or meetings with significance to Z gauge reference, if we are informed in time.**

**Reader's note on the missing catenary function of the E 41 (Märklin):**

For your information, the answer of Märklin to the missing catenary function of the E 41. Their statement to generally want to do without the catenary function in the future is certainly worth publishing.

Frank Wenzel, Kaarst

Editorial response: We would like to reproduce Märklin's answer to our readers in a more precise form following a question. In the requested feedback to our editorial staff it says: "The switch to overhead line operation is only used by a small group of customers, who are also becoming smaller and smaller due to the advancing digitalisation. However, it will not be the case that this function will be omitted in all vehicles, but it will no longer be taken into account in new designs. Customers who need/request this function in their models should refer to the corresponding pictogram in the catalogue presentation/product description. This indicates whether the function is available in the model or not."

**Spring impressions on the model railway:**

In the foreword to the current issue of Trainini, you editors have suggested the construction of a spring facility. Well, my layout (which has been under construction for more than 17 years) is now receiving spring landscaping, even if, in late spring.



Why always use summer as a model? A delicate spring green characterizes this system, along with newly built track magnets for the Indusi and 30-year-old light signals and telephone boxes. Photo: Jochen Brüggemann

The aim is to recreate a landscape as it was usually experienced in the late May/early June 1960s to early 1980s in southern Niedersachsen and northern Hesse. So: based on significantly more precipitation and lower average temperatures in spring.

At the moment I am working on the basic landscaping (grasses, herbaceous plants, shrubs etc.) in the rear area of the layout. Trees and bushes follow later. For illustration, I have added three pictures, which I take from time to time, to document the construction progress on my layout.



Even the work on landscaping grass covered areas can be convincing. By the way, last year our reader also presented how it works in **Trainini®** Photo Jochen Brüggemann

It is impossible to overlook the large construction site itself (...). The 4 signals and the signal telephones (...) by the way still come from my old layout and are in the meantime well over 30 years old, make themselves, however, quite appropriate in the background. The Indusi magnets, on the other hand, I made only last year; they decorate since then (covered with "rust dust") all main and approach signals (in direction of travel right).

Jochen Brüggemann, by E-Mail

**Letter to the editor from the United States:**

Hello, my name is Eric Schellenberger and I am new to model trains and choosing Z scale. I live in California, USA.

Thank you so much for the English translation of your fine magazine! If only I could read the issues published before 2018. Hint! As a newcomer to this great hobby, I have learned so much by reading the Trainini magazines available in English. You have a wonderful and informative magazine. Just looking at the pictures is an education but the articles are also written really well.

I particularly learned from the articles on DCC electronics and Märklin motor development. Also, engine maintenance articles, and how to articles on landscaping, and building the Archistories models. Please take pride in how much your translations mean to us outside of Germany. My foundation in train modeling is being taken directly from Trainini and Märklin Insider literature. Thank you!

Eric Schellenberger, per E-Mail



Answer from the editors: Dear Mr Schellenberger, we will not be able to translate (have) all volumes of our magazine; retroactively. Also the free time of our three translators is, unfortunately, limited. However, you can easily copy texts from our magazine into translation aids in order to use electronic tools.

#### The Märklin deliveries of the last weeks:

In the last few weeks Märklin has delivered the dust silo car package (Art. No. 86665) for Era IV. It contains two cars of the type Ucs 908 from the DB stock with different service numbers.

They are painted pebble grey in accordance with RAL 7032, as prescribed by the standard paint scheme from 1977 for this type of freight wagon for body and underframe. In contrast to the similar wagons of earlier production (8666), this colouring now also includes attachments (here: suspension springs and buffers), which was expressly permitted if this was more favourable for production.



For comparison, we have placed the two Ucs 908s from the recently released car package (Art. No. 86665) in front of one of their predecessors (8666, rear left), which is shiny and prone to yellowing, and the Museum Car 2019 (rear right).

What remains incomprehensible is why the ladders and railings are not also included in the pebble-grey paintwork. This would be conclusive according to model photographs and is also shown in the product illustration. Märklin has already proven that this is technically possible with the 2018 Museum Car of the same design, which has pursued a similar painting concept.

The extension packs for the revised ICE 3 of the 406 series (art. no. 87715 / 87716) are also currently arriving at the dealers. Like the basic pack, they featured air conditioning attachments and improved car transitions. The five-piece vehicle package (89023) from the 2019 summer new products, which is described below, is also available for delivery.

## Rokuhan compatible products at **Ztrack**:

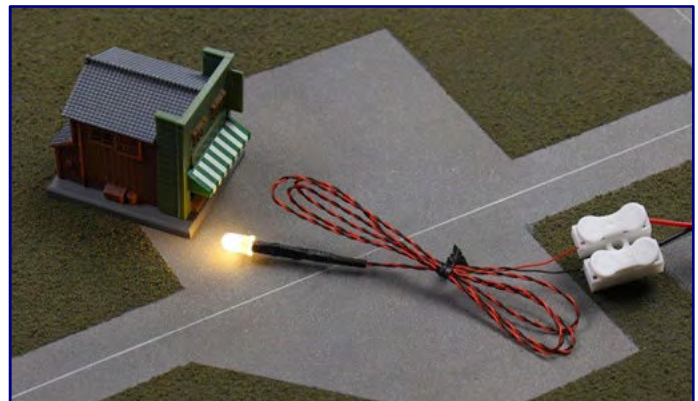
New in the distribution of our correspondence partner **Ztrack** (<http://www.ztrackcenter.com>) in the United States are the following accessories from Ztrains for a lighting system using Rokuhan controllers. The accessory power distributor (art. no. ZTR-251) serves up to twelve light emitting diodes or the LED lighting units of the same manufacturer (ZTR-260).

Six connections (plug connections) are available on each side, 5 mm light-emitting diodes were selected for the in-house lighting, which distribute the emitted light widely and thus ensure a good impression when operating in a house.

Additionally, the range has been extended by one- (ZTR-270; 3 versions) and two-arm street lamps (ZTR-271; 2 versions), as well as individual light emitting diodes in warm white (ZTR-262) and cool white (ZTR-263).

Anyone who operates many such lighting units and does not want to rely on the power supply provided by the Rokuhan speed controller can only use the independent LED power supply unit with Rokuhan compatible cable (ZTR-250) in America. It is designed for the usual North American mains voltage of 110 volts, and therefore also has the usual (US) plug.

**Company anniversaries and viaduct festival in Ostwestfalen:**  
The 1zu220-Shop (<https://www.1zu220-shop.de>), well known to our readers, is (only) a business field of the Marsberger company HRT Informationstechnik GmbH. This year, this information technology specialist celebrates its 30th company anniversary.



Power distributor (art.-no. ZTR-251; photo above) and LED lighting unit (ZTR-260; photo below) in use. Photos: **Ztrack** / Ztrains



On 25 May 2019, the special event was duly celebrated with employees, their partners, the landlord and neighbours in a small group. Relocation helpers were also invited, because the new seat in the estate administration building of the Counts of Stolberg's Brewery Westheim was occupied exactly one year ago and provided a further celebration occasion.

Thanks also to the growth in the model railway segment; the number of employees has now risen to nine full and part-time employees.



The next event for the company is the Vivat Viadukt Festival from 5 to 7 July 2019 in Altenbeken (<https://www.vivat-viadukt.de>). There, the model of the famous railway bridge will be shown on a scale of 1:220 and a Märklin special car in the HO and Z lanes, exclusively available on these days, will also be offered with an edition of 100 pieces each.



For "Vivat Viadukt" the 1zu220-Shop sells a special car in the tracks HO and Z, limited to 100 cars. The mini club model (item no. 8600.172) is shown here. Illustration: Märklin

By the way, a visit to this festival is worthwhile not only because of this and with a view to the model exhibition and partly steam-guided special trains, but also because of its further Z gauge participation, which is ensured by the Stammtisch Blomberg with its extremely appealing exhibits.

#### New models at WDW Full Throttle:

Colourful is the first of two new models from WDW Full Throttle. The closed, cylindrical bulk freight wagons have a red background with the striking Zagnut logo (Art.-No. FT-1064), which almost looks like graffiti.



Bulk goods wagon "Zagnut" (Art.-No. FT-1064). Photo: WDW Full Throttle

Also new are the Great Northern's open 33-foot bulk wagons with high dropsides (FT-3408), which appear considerably more common with a brown paint finish. They are factory fitted with wood chip loading inserts.

In Germany, full throttle models are available from Case Hobbies (<http://www.case-hobbies.de>), among others.

#### Märklin summer new releases 2019 presented:

This year Märklin chose a different and completely new way for the announcement of the summer new products 2019. For the first time, the brochures were not distributed at the Intermodellbau in Dortmund, because this fair apparently took place too early to be followed up.

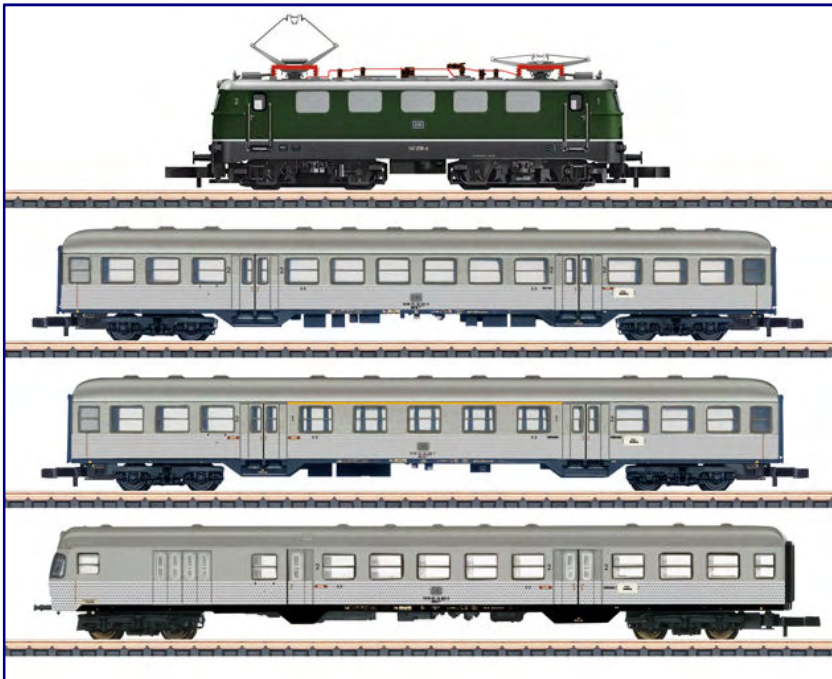
Not all customers had previously seen the spring new products announced in Nuremberg. In addition, Märklin has been actively looking for alternatives for some time in order to draw attention to its products using contemporary media.

This year, the choice fell on a moderated real-time transmission on the YouTube channel. In constant succession, a presenter displayed the innovations of the various brands and gauges, accompanied by studio discussions and film recordings.

For Z gauge, however, the result looked quite sobering, because here it was only enough to fade into the brochure pages. In our opinion, this did not create any greater incentives for purchase. So we remain confident that Märklin will evaluate its attempt carefully, and also find a better approach for our small scale.



The following new products were announced for the Mini-Club: The traditional Märklin Magazine Annual Car 2019 (Art. No. 80829) opens the series. It belongs to the type E 037, which is better known under the old designation Omm 52. It bears the blue of the magazine and is supposed to be based on a fictitious operating condition around 1990.



The five-piece vehicle package (89023) contains four trucks and a metal forklift. They are all already known in identical or similar form from other assemblies or earlier museum carriages, which is why this is probably a sale of stock goods.

The NoHAB diesel locomotive with a housing made of metal filled plastic and a bell-shaped armature motor is equipped with a third version, which is at home in epoch V. The NoHAB diesel locomotive is equipped with a metal filled plastic housing and a bell-shaped armature motor.

The TMY 1100 of the Swedish Tågab (Art.-No. 88636; picture above) wears a strange colour dress, which she had originally been given for filming. The highlight of the summer new products is the chrome oxide green 141 258-4 with commuter train (81356; picture below), which unfortunately will appear with a not reworked control car. Illustrations: Märklin

The TMY locomotive (88636) belongs to the Swedish private railway Tågab and was formerly classified as MY 1100 by the DSB.

It wears the livery of the American Great Northern, which suits it well.

But the highlight among the new products is a train package "Nahverkehr" (commuter train) (81356) for MHI: It contains a chrome-oxide green ellok (electric locomotive) of the class 141, which was colloquially known as the "firecracker." It's the first freely available version of the previous Insider locomotive.

In contrast to this, it differs from the other colouring and classification in epoch IV, also by the double jet fan with vertical blades and the 5-lamp design on the front of the locomotive.



The three accompanying silver cars of the types Bnrzb 725 (2nd class), ABnrzb 704 (1st / 2nd class) and the control car, which is not described in more detail with regard to its type, known forms and have no interior fittings.

They will wear black lower edges and again the Ege cookie in negative execution, which we consider at least at the (with the prototype converted) control car as not correct or at least very unusual.

The front and rear lighting of this BDn(rz)f 735 or 740, which is to be provided unchanged with outdated incandescent lamps, will not be revised.

Märklin chose the early design of the Karlsruhe heads without the orange warning bars on the ends - a version that did not exist before in Z gauge, and which we certainly welcome.

#### **New vehicle kits from EtchIT:**

EtchIT has published some very interesting vehicle models as finely converted kits using 3D printing. They can all be described as classics, only the modern, two-axle semitrailer tractor (Art.-No. XD016\_Z) is a current model.

A MAN already in the range is now also the basic vehicle for the Haller body of a garbage truck. This is the long-awaited MAN F8 refuse collection vehicle in a two-axle version (XD015\_Z).

The small, almost forgotten delivery van Tempo Matador 50 in its older version as "crumple face" (face of a boxer's dog) enters the program: It is available as panel van (ET031box\_Z), minibus (ET031bus\_Z) and so-called combination van (ET031kbi\_Z).

Like all kits from this manufacturer, the individual parts have been designed and divided in such a way that they can be painted easily and prototypically. The resolution of the print surfaces can only be described as excellent. Their production method can barely be seen. That speaks for the experience of many years of this manufacturer, whose products you can find on <http://www.easy01.de/etchIT-store/>.

#### **Newly Delivered MTL-Modelle:**

Finally, the delivery of the revised and reissued US diesel locomotive SD40-2 from EMD progresses, as it is the most important successful model among North America's role models. This month we will continue with two operation numbers for the Canadian National (Art.-Nr. 970 01 151 / -152).



Modern semitrailer tractor (Art.-No. XD016\_Z; photo top), refuse vehicle MAN F8 (XD015\_Z; photo centre) and Tempo Matador 50 as panel van (ET031box\_Z; photo bottom). Photos: EtchIT

Model number 4 moves up from the Farms-to-table series: This is a wooden refrigerator car with a brown primer and light blue side walls (518 00 740). It bears the company number SBIX 12911 and advertises "Stokely's Finest Foods".



The brown, covered freight cars of the Southern Pacific (505 00 391 / 392) with their yellow advertising "Hydra-cushion for fragile freight" look comparatively simple in comparison with their design. However, they have opening sliding doors and thus provide a clear view of any cargo.



The 40-foot long flat cars of Pennsylvania (525 00 171 / -172) will attract attention because they are equipped with a load that fits, but is not described in detail, which immediately catches the eye.

EMD SD40-2 of the Canadian National (art. no. 970 01 152; photo above) and flat wagon with load (525 00 172; photo below). Photos: Micro-Trains

Micro-Trains products can be purchased in Germany from Case-Hobbies, among others. (<http://www.case-hobbies.de>).

#### Sondermodelle Z puts on another "Red Arrow":

SMZ has announced a new version of the "Red Arrow": SBB's Re 2/4 201 is the original version of these multiple units and, among other things, was considerably shorter than the version previously offered. It was only on the rails between 1937 and 1948 with this unique designation, which did not correspond to today's SBB scheme. Then it was renamed to RCe 2/4 601.



The "Red Arrow" in its original version before modifications and marked as Re 2/4 201 of the SBB is the spring new item 2019 from SMZ. Photo: Sondermodelle Z.

As a model of the first series it has no buffers and couplers and is in its original state as delivered. The designation CLe 2/4-201 it carried only between 1935 and 1937 afterwards it was re-designated to the Re 2/4.



The prototype of the model was the first to be manufactured and was the only one to receive all the conversions that were carried out on these trains: Retrofitting of pulling and buffing equipment, reinforcements, and vehicle extensions. As one of only two originals, it is still in museum use today.

The model has the proven chassis with bell-rotor motor, which drives a bogie. The motherboard has a Next18s interface and can accommodate both analogue and digital circuit boards developed and manufactured by Velmo.

In digital operation, the miniature has a switchable light change (white/red) and interior lighting. In the premium version there is also complete operating sound equipment with SD18a sound decoder by Doehler-Haass and a loudspeaker. Another special feature is the use of true-to-scale SBB pantographs from Sommerfeldt.

You can see pictures and descriptions from Sondermodelle Z at the following web address: [http://www.sondermodellez.at/content\\_d/M71\\_1.asp](http://www.sondermodellez.at/content_d/M71_1.asp).



The shape of the front of the wagon looks quite accurate. It is still inscribed, as usual at that time, with 3rd class markings. Photo: Sondermodelle Z

#### **New tool from Microrama:**

Helpful tools for landscaping are the new Minigras Junior (Art.-No. 81 01 1001) and the smaller Microgras Pen (Art.-No. 81 01 1010) from Microrama. The French specialist has thus launched its first two electrostatically working grassing machines on the market.

They work with 9-volt block batteries similar to the Grasmaster from Noch. The Microgras Pen is tiny among such tools and generates a voltage of 15 kV with a current that is harmless to humans. According to the manufacturer, it is suitable for grass fibres from 1 to 12 mm in length.

Due to its small size, it can only hold a small amount of material, but delivers it very precisely. However, since the two poles can be brought much closer together than the fine feeder made in Wangen, much better results can be achieved with it. This certainly recommends it especially for demanding landscapers on a scale of 1:220.



The handy Micrograss Pen (Art.-No. 81 01 1010) works like a large electrostatic and with its small container is suitable for fine work on the layout.

The Minigras Plate (81011020) also deserves a short note at this point. It offers an electrostatically chargeable metal plate on which the company's leaves are scattered. If the opposite pole is connected with a tree from the Microrama program, the leaves jump to the tree blank that has been sprayed with spray glue.

Trees can thus have leaves added to any desired thickness, which is particularly helpful if, for example, the greenery only begins to sprout in spring; or many of the coloured leaves have already fallen off in autumn. We will test this tool and present the results in an upcoming issue.

The products are available at <https://eshop.microrama.eu/de/>.

#### Trainini®- Pages changed:

Since the publication of the last issue a lot has changed on our Internet pages. Even though we do not collect any personal data there, the **Trainini®** pages under the domains DE and EU have been converted to certificate-secured connections.

This can be recognized in a browser's command line by the "https" protocol at the beginning of the URL and usually also by a padlock displayed closed as a symbol next to it. This was possible after our EU site was transferred to the new service provider Netcup with a delay of a few days.

The previous provider Celeros was not willing or able to confirm our cancellation with effective date and to transmit the requested transfer key for the relocation of our EU domain in the last five weeks until the publication of this issue, although the receipt of this request had even been confirmed directly by the system.



#### New products from American Z Line:

The theme in May is the former name "Columbian" of the B&O, which is now being produced as light passenger carriages. A 6-6-4 sleeping car (item no. 73110-0), a viewing car (73410-1 / -2), a seating car (73710-0), a dining car (73510-1 / -2) and a pulpit car (73810-1 / -2) are in the program.



They are supplemented by a luggage van (73610-0) and a mail van (73910-0). The range already includes two matching F3 double units (62913-1 / -2).



The diesel-electric locomotive GE Genesis P42 now is available in the colours of the New Haven (63503-1 / -2). The covered AAR freight wagons, which are offered individually (904305-1), in pairs (904375-1) and quad packs (914305-1), have the Erie road name.

GE Genesis 42 of the New Haven (art.-no. 63503-1; photo above) as well as vantage (73410-1; photo center) and pulpit (73810-1; photo below) of the B&O. Photos: AZL / **Ztrack**

You will find further manufacturer photos of the current deliveries under <http://www.americanzline.com>.



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