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and Prototype

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German Magazine for Z Gauge



The Ancestor of Diesel Traction

Jewel Dragonstone
Mercedes-Benz Fire Trucks

Introduction

Dear Readers,

Never before has it been so challenging for me to find a few suitable words to introduce our current edition. We all have one thing in common, the desire for a normal life.

However, this has been denied to us by the SARS-CoV-2 virus. I can only continue to urge all people to pass the next few months with thoughtfulness and true self-control. As mentioned earlier in the summer, selfishness, denial and ignorance are not suited to contain, fight and eventually defeat this epidemic.

You may not believe it, but my 83-year-old mother had a little contribution to this introduction. It is always most interesting to see how that generation has managed many a crisis - with far less technology and knowledge.

The conversation was about the subject that is examined in more detail in this **Trainini®**: the V 80. In her memories there was the story that in the late fall of 1951 a bright red and brand new locomotive was standing "over there" in repair works in Opladen. My then 17-year-old father and my grandfather, both German Federal Railways employees, made a trip to the factory like many other colleagues to admire and touch the newcomer!

The V 80 006 must have been a symbol of better times, after the many years of hardship. Unfortunately, I never got to see the V 80 006, but at least 37 years later I stood with my father in almost the same place and we looked at the first ICE-1 head unit delivered from the factory.

Let's stay on the subject of father and son. Especially in the run-up to Christmas, many memories from childhood come back to light for us model railway lovers. How often did my father and I visit various depots and very special railways in Bavaria?

Decades later, I saw a very special 1:220 scale model railway layout for the first time at an exhibition and was fascinated. Without further ado, I got myself a chair and took my time looking at the scenery. Harald Hieber really hit the mark with his "Drachenstein" layout, its realisation and character took me back in time to the days of our travels at that time.

After all, the highest goal for any layout designer is to spark emotions in the spectators when they view his or her work.

This is now the last edition of the year 2020. On behalf of the entire editorial team and all contributors to **Trainini®**, we wish you a quiet but nevertheless Merry Christmas and a peaceful New Year in these difficult times.

Wherever in the world these lines are read, please protect your health and that of your fellow human beings!

Sin-Z-erely,

Dirk Kuhlmann



Dirk Kuhlmann
Editor

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Cover photo:

In its early years of operation, V 80 008 is still the pride of the German Federal Railways. It is often used in front of express and passenger trains on non-electrified main lines, but it is also at home on secondary lines in the greater Frankfurt area.

Mercedes fire trucks

The Starry Sky

Even a model railway magazine cannot do without some automotive history. Fire engines are an important element for the layout design. We would like to focus on two of them today, and to do so we will also digress to two close relatives. But all four of them have one thing in common: they bear a star.

The beautiful Kallental fire station (art. no. 401191) by Archistories, which is available as a commissioned work exclusively from the 1to220 shop, invites you to dream. A Magirus fire engine can be added to any order, but this only represents part of the firefighting world.

For more than six decades, there were almost only two types of fire-fighting vehicles: Magirus-Deutz, where chassis and superstructure came from one source, and a duo of Mercedes-Benz and Metz. A Metz superstructure (almost) always sat on a Mercedes-Benz chassis.



The topic of fire brigades has always had its model railway attractions. And since Archistories has two contemporary and particularly beautiful fire stations, a model in 1:220 scale is even more worthwhile.

This close relationship was regulated by contract and dates back to 1923. Even after the merger of the once independent companies Daimler and Benz, it continued and became even closer.

The contract stipulated that Metz was not allowed to build its own chassis and was not allowed to supply its bodies to other car manufacturers. Fire-fighting vehicles could only be built by Metz on a Daimler-Benz chassis. Daimler-Benz, for its part, was only allowed to use Metz for the superstructures and was no longer allowed to build fire pumps. As a result, only Metz pumps were contract goods.

It is due to this close cooperation, which excluded other market participants, that fire-fighting vehicles from Mercedes-Benz had a Metz superstructure as a matter of course for around sixty years and could not be imagined any other way.

It may be a historical peculiarity, it may be perceived as sensible or as manipulating the market, for everyone the assessment will be different, but it is a combination that was characteristic of its time and hardly played a role in Z gauge.

Road vehicles are part of the model railway and the fire brigade actually plays a particularly conspicuous role there: sometimes their vehicles invite you to equip them with flashing effects, elsewhere they extinguish smoking roof trusses. Their red colour alone attracts attention.



Magirus-Deutz offered both chassis and body from its own production and was thus the second major supplier alongside the duo Mercedes-Benz/Metz. Photo: Jörg Erkel

For us it was like an invitation to rummage through the somewhat thinned-out programme of the last few years and see if we could not also stage the Mercedes-Metz duo, after we had already provided a backdrop for the Magirus LF from the 1to220 shop on our midsummer diorama a few years ago.

And this much we can reveal: We have found what we were looking for and would like to tell a little bit of German automotive history below.

Mercedes-Benz L 1500

First, let's look at the Mercedes-Benz L 1500 light truck, where the number stands for the permissible payload in kilograms. It was a supercharged version of the L 1100 from 1936 and was built primarily for the Wehrmacht, a war baby, so to speak. Almost 9,000 examples were built between 1941 and 1944.



A distinctive feature of the Mercedes-Benz L 1500 and other models of its time was the large star in the radiator, supplemented in the case of a diesel engine by the word "Diesel" in the lower arc. Accordingly, we have taken this as a model for our miniature of this LF 8, in the photo an example of the Lich volunteer fire brigade built in 1942. Photo: Cherubino (CC-BY-SA-3.0)

Two variants were available: rear-wheel drive as the L 1500 S and all-wheel drive as the L 1500 A. The all-wheel drive version predominated with around 4,900 units built and had greater ground clearance and a payload increased by 180 kg (1,680 instead of 1,500 kg). At that time, trucks were built on a ladder frame.

Many of the 4,090 L 1500 S vehicles built that survived the war were still in use as fire engines after 1945. The superstructure for this light fire-fighting group vehicle (LLG) had been supplied by Metz. From 1943 onwards, this class of fire engine was known as LF 8. This was the largest series of identical fire engines ever produced in Germany.

Approximately 3,650 fire engines are said to have been built until production ceased in the summer of 1944. Of these, 2,660 received their bodywork directly from Daimler-Benz, and, thus, most certainly one from Metz, while the remaining units were completed in other factories in the area of influence at the time.

One disadvantage of this light vehicle was its low loading capacity. It did not allow the portable pump (TS) with accessories to be loaded on the vehicle itself. A so-called portable pump trailer (TSA) had to be carried for it, but the LF, which had a good engine for the time, did not have any tractive power problems.



The models of the LF 8 based on the Mercedes-Benz L 1500 (left) and a matching portable fire engine trailer (right), designed and printed by Michael Hering, arrived primed.

Michael Hering from Wilhelmshaven chose this combination to reproduce on a scale of 1:220. He constructed it on the computer using CAD, and printed the LF together with a portable fire engine trailer on his own 3D printer.

We each received a primed model and finished it. The dominant colour is, of course, RAL 3000 Fire Red, which replaced the dark green of the Order Police of the Third Reich in the Federal Republic of Germany. The paintwork was sprayed with Oesling modelling paints.

Mudguards, rims and bumpers were painted deep black (RAL 9005), for which Revell Aqua-Color was used. Silk matt (36302) is the right gloss level for these parts and we also used it for the door handles.

We went back and forth about the radiator grille. During our research we found red, black and completely chrome-plated versions. We decided on the black version, because, at that time, it was a utility vehicle and not a museum vehicle.

The tyres were painted matt (36108) with a brush, while a very dark grey is ideal for the window panes, but it has to shine later. What was still missing were the chromed strips in the grill and headlights: Here "Metal Color 'Chrome'" by Vallejo (77707) remained our favourite, because this dries quickly with good adhesion.

For the construction lights, Heinz Wagner from Modellbaukompass had already prepared a dark blue-metallic Vallejo mixture a long time ago, which looks just perfect for this purpose of a switched-off flashing warning light.



The finished painted LF 8 has received its 3D-printed radiator star made by Z-Doktor Modellbau, and it is now waiting for the call number plates from HOS Modellbahntechnik to be attached.

With this state of work it seemed about time to provide the boards stuck on fire brigade vehicles to announce the emergency call 112, also for the model. The decals, which we apply here with adhesive primer and softener, come from HOS Modellbahntechnik and are easy to read.

The radiator grille still called for a large Mercedes star, as was once typical for this vehicle. We were able to fall back on the 3D prints from Z-Doktor Modellbau, which had already been printed for our MB O 307, which we presented earlier this year.



After all other painting and lettering work has been completed, the headlight lenses, blue light domes and window panes are sealed with a high-gloss brush.

Then, it was time to seal the surfaces and the decals. For this, the spray pen was unpacked again and the silk-glossy acrylic clear varnish (83213) from Bergswerk was tried out, expressly, with a very satisfactory result!

After drying, the paintbrush was used again, because the blue lights, headlights and windows needed a glass shine. We achieved this by dabbing on a high-gloss clear lacquer that should have a viscosity that matches the brush. In our stock we had colourless-glossy Aqua Color from Revell (36101).

And already the first vehicle unit was ready and could be handed over to the (layout) operation. By the way, the operating time of the prototype was very long. Because of their great reliability, some of these fire engines were used by volunteer fire brigades for up to 40 years before they went the way of old iron, or were refurbished for museums.

Mercedes-Benz L 3500

The Mercedes-Benz L 3500 was the first new truck to be developed in Stuttgart after the Second World War. After Daimler-Benz AG was ordered the stopping of production of its L 3000 for the Wehrmacht in favour of the Opel Blitz during the Second World War, it did not resume production of the latter after the end of the war.

Instead, from 1945 onwards, it continued to produce the Opel Blitz under licence as the L 701, since Opel's production facilities were much more severely affected than the Daimler plant in Mannheim. At the same time, it began development work for a successor model.



This four-wheel drive Mercedes-Benz LAF 3500 with Metz body from Braunlage / Harz (Lower Saxony) probably dates from the first year of construction in 1950. This is indicated by the blue warning lights, which are only directed forwards, and above all by the split windscreen, which was no longer common for this type of vehicle. Photo: Bahnfreund (CC-BY-SA-4.0)

The L 3250 was introduced as early as 1949, and series production of the L 3500 began between 1950 and 1954. From 1955 onwards, the long-truck was designated the L 311, before production finally came to an end in 1961.

During the entire production period of the series vehicles, chassis for fire engines were also produced under the designation L 3500 F with wheelbases of 3,600 and 4,200 mm, for special bodies from 1954 also with 4,830 mm.

Although the chassis was up to date due to lightweight construction and the L 3500 was well powered in relation to its weight, it unfortunately did not offer the driver comfortable seating. The powerful OM 312 engine (OM denotes oil engine), which was lighter than earlier units, was to become the basis for Daimler's diesel drives for over 50 years.



This Mercedes-Benz L 3500, from the construction period between 1950 and 1955, shows the familiar appearance of the then completely new driver's cab. In contrast to the chassis and the performance of the engine, however, it was probably never able to satisfy all of its drivers. Photo: Lothar Spurzem (CC-BY-SA-2.0-DE)

The cab of the L 3500 / L 311 was cramped, offered no storage facilities and, above all, taller people required an adjustable seat. By the time they reached the second half of the 1950s at the latest, they were considered obsolete, even in-house.

This type of vehicle as a TLF 15 tank fire-fighting vehicle with Metz superstructure is available from the 1zu220 shop as a three-part 3D print kit (SH-5418403). It consists of a chassis base, a centre section with mudguards and interior benches, as well as a superstructure for two units.

This kit is usefully completed with the etched parts for a Westheimer fire-fighting vehicle (MM-9505), which also contain a micro screw and nut for assembly, and the corresponding decal set (DP-002).

If you buy both in addition, you can build the restored vehicle, which is now active as an advertising medium, so that you do not end up owning two identical fire engines. We did the same and bought a ladder set (322.016) from Artitec in order to be able to reproduce the ladders and wooden ladders that used to be secured on the roofs of the vehicles.



A restored Mercedes-Benz LF 3500 with a Metz body is now in use as a “fire engine” for the Westheimer brewery. This advertising wagon was the model for the kit at the 1zu220 shop, which we will also cover in the article. Photo: Jörg Erkel

Before we start working, we always bathe all 3D printed parts in 100 per cent isopropyl alcohol for at least five minutes to flush out any residual resin and degrease the surfaces.

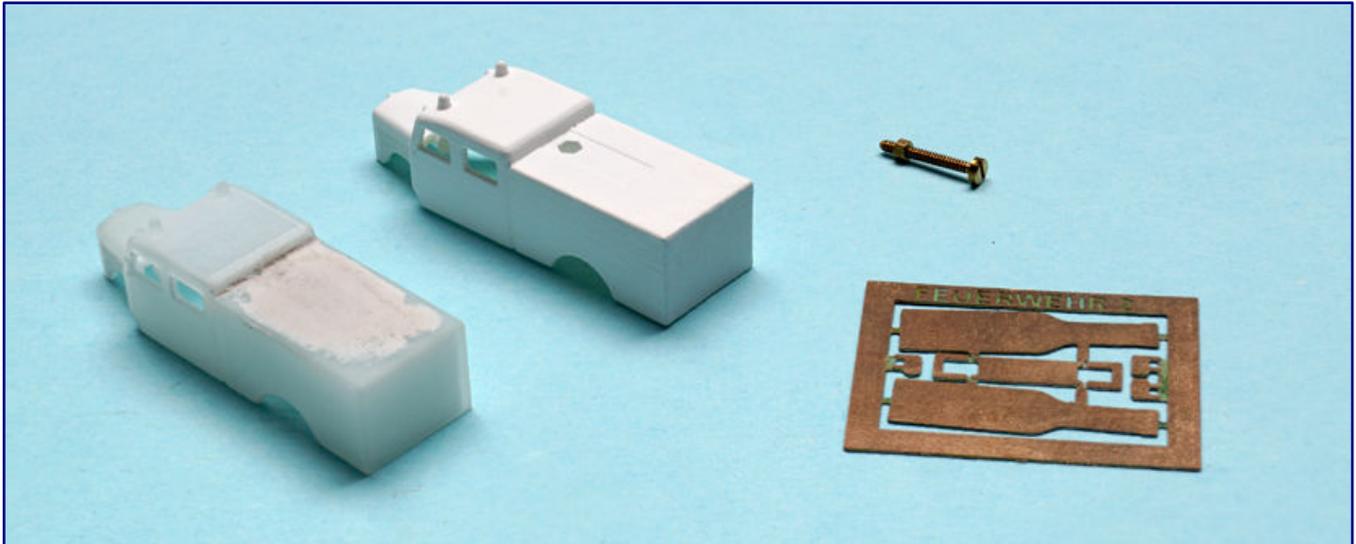
In this case, the plastic surface no longer appeared transparent. This meant that the window parts supplied could not be fitted to the models, provided that the view inside remained possible.

After drying, the painting work on the Westheimer vehicle began with a spray application of the PU primer “White Primer” (SNR-401) from Badger, which already produces the matching target colour.

It was also used for the roof sign, but this first had to be separated from the etched sheet, bent and additionally reinforced at the corners and joints by careful soldering. To make sure that the solder ran well into the cracks, some soldering grease helped as a flux.

Its remains were then washed off with an old toothbrush and washing-up liquid. To make the primer adhere better to the bare metal and also to degrease it safely, foam sanding gel from Ndetail (distributed by Bergswerk) was used - also with the help of the toothbrush.

The chassis centre parts could also already take their basic paint for both vehicles, whereby the centre part of the Westheimer vehicle also called for white here, while the fire brigade wore black here at that time. Black was also the colour of both lower parts with the wheels.



The body for the Westheimer vehicle (right) is already primed in white, the red TLF 15 is still being filled (left). The roof attachment with the lying beer bottle (far right) is folded from an etched sheet and soldered in the corners.

On the other hand, the superstructure of the L 1500, which was later painted fire-red in the same way as the L 1500 described above, still had to be filled and sanded. The area where the advertising sign would otherwise be used and where it should also cover a micro nut had to be flattened for the TLF 15 design.



This was done with Revell Plasto and fine sandpaper on a small sanding block. Afterwards a flat railing had to be reproduced, which was cut and bent from hard nickel silver wire with a thickness of 0.3 mm (606) from H0fine, available directly or from Kuswa.

The parts were inserted and fixed with Bindulin instant glue gel in self-made holes at the ends of the roof surfaces.

Equipped like this, the kit already looked quite different. While the white Westheimer model was already fitted with the sliding panels, it became clear that the fire engine would be missing the hinged doors on the superstructure. So what to do? Draw or scribe or copy them in plastic?



Photo above:
The cross stabilizers of the two bottle panels are only loosely attached to each other and should be better soldered. This also increases the stability of the folds.

Photo below:
With the help of the foam sanding gel and an old toothbrush, the etched part can be cleaned well, degreased and also roughened a little so that the primer adheres better.

The decision was made in favour of plastic replicas. For this purpose, the dimensions of the decals were taken and compared again on the vehicle. In this way they could be cut out of thin polystyrene plates of 0.13 mm thickness (Evergreen; distributed by Faller) and glued on.

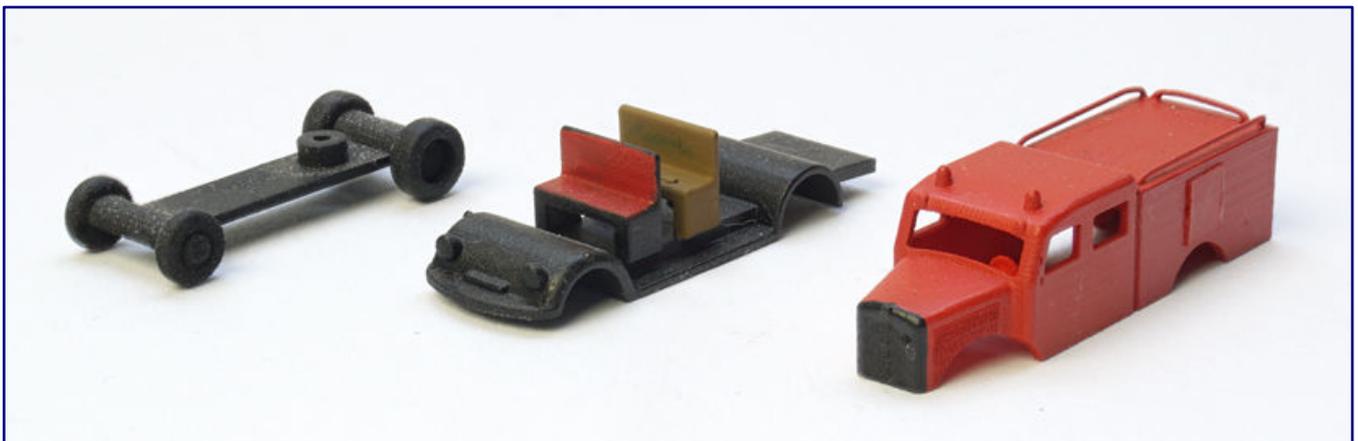


Photo above:
The roof rails of the still active emergency vehicle were self-made from fine nickel silver wire and were countersunk and glued into precisely drilled holes. The flaps and doors of the superstructure were reproduced with thin polystyrene strips.

Photo below:
After spray painting the prepared superstructure and the two chassis parts, including the first touch-ups with a brush, the red TLF 15 has made similar progress as its Westheimer counterpart. Now, the decals await application.

In the meantime, the prepared decals had their work cut out for them. Their carrier foil is very thin, and the decals were very flat after application. The disadvantage, however, was that only one film was provided for the entire superstructure and driver's cab area.

It was barely possible to trim it in the window area in such a way that these spaces remained free and it lay everywhere else as intended by its draughtsman. Again and again, the ends fell over and it was barely possible to separate them again.



The decals are applied to both vehicles and sealed with silk matt clear lacquer. Now, it was time to reproduce the glass surfaces on the vehicles. But before this work progressed significantly, we still saw a need for detail improvements.

In the end it worked out, but one of the gold-coloured trim stripes in the roof area had to be sacrificed and reproduced by brushwork. The matching Revell paint in the colour gold (94) was used on the mudguards and rims anyway. The interior benches of both models were to be red (Revell 36) and leather brown (Revell 84).

While the thirst quencher for shooting festivals was taking on more and more shape, the painting work in fire-red with the spray gun was now also on the counterpart active for recovery, fire-fighting, relief and rescue operations. After drying, the radiator was given a black coat with a brush.

After that, it was also time to add decals to this specimen. The fire brigade boards with the emergency call 112 came from Modellbahn-Decals Andreas Nothhaft. A matching decal for the radiator front was included in the set from the 1zu220 shop.

What was missing were matching exterior mirrors, as the Westheimer vehicle was also to have some, which were part of the etched parts sheet. Prepared and primed, they could be glued into drilled receptacles on the vehicle, whereby the mirror surface was made shiny with Vallejo chrome paint.

Two U-shaped holders were made from 0.22 mm bronze wire from Kuswa (xf211), which could also be glued into holes. Matching cut-outs from Evergreen's 0.13 mm thin polystyrene served as mirror surfaces and were glued onto them.



This close-up shows one of the matching decals for the radiator, which are included with the accessory parts from the 1to220 shop, as well as the call number plate from Nothaft. The two exterior mirrors are completely self-made, but do not correspond to the original factory design.

Painted black and the mirror surfaces chrome-plated, they made a good impression on the body, which still received a few colour refinements, such as, the offsetting of the headlights and marker lights. It was only later that the modeller noticed that the mirrors fitted to today's Westheimer vehicle did not correspond at all to the historical original in the state of delivery.

FKS-Modellbau would have suitable round mirrors on a single spar for N scale, so that a suitable size could possibly have been obtained from there. But we were still satisfied with the result, because the prototype model has even been certified as a historic vehicle and should, therefore, have been on the road for several decades.

After a protective clear coat, which we also described for the L 1500, the work slowly came to an end. We used Micro Kristal Klear to cover the window panes. All other glass surfaces (blue light domes and headlight lenses) were covered with glossy Revell clear lacquer (36101).

Now both models seemed ready for final assembly and completion of the project. But I rejoiced too soon. The ladders on the fire-red fire engine were still missing, but unfortunately this was not all, as soon became apparent.

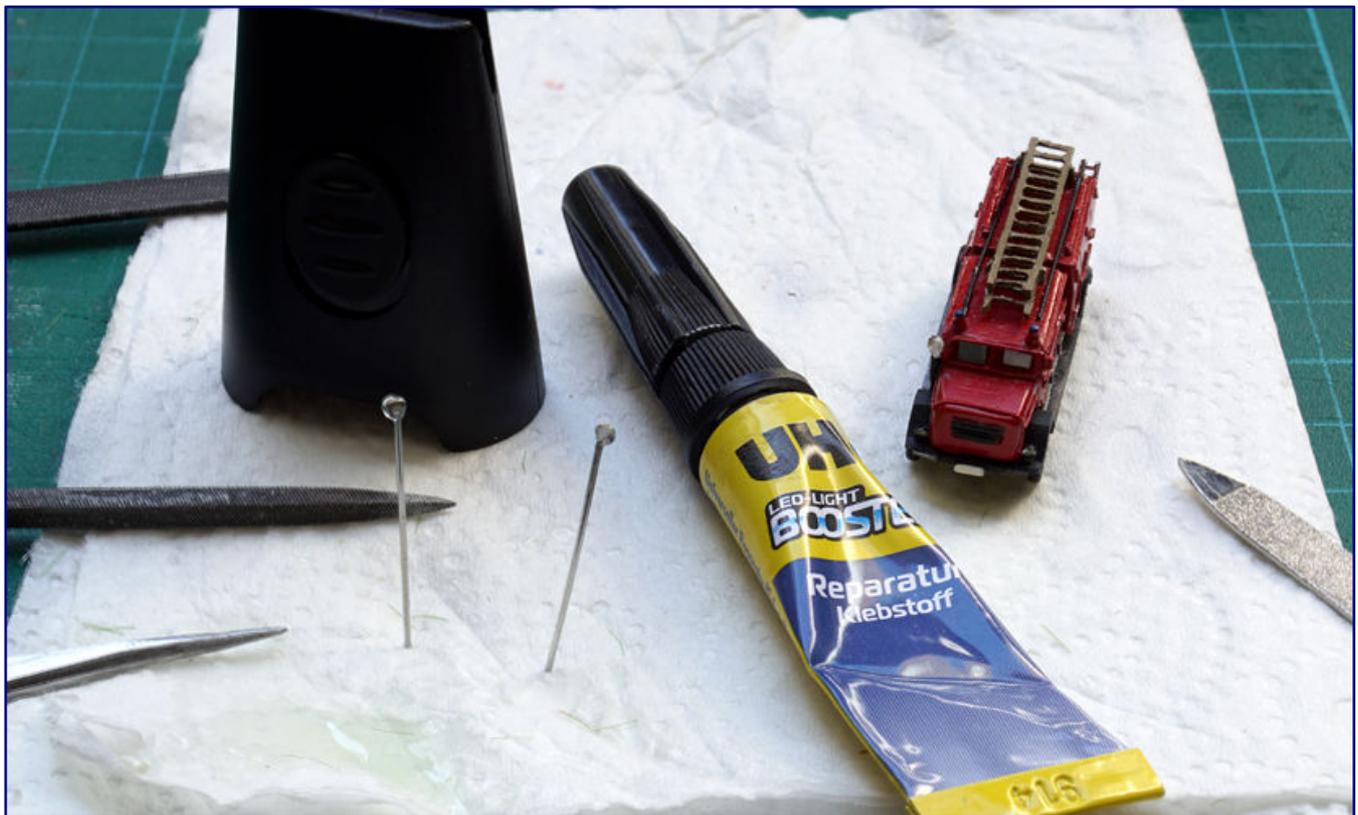
For decades, typical for every fire engine were telescopic searchlights mounted on the passenger side. They were not included in the kits, but even the historic vehicle is not on the road today without such an attachment. So a solution was needed.

Due to the very thin telescopic rod, it seemed almost impossible to permanently glue on a hemisphere at the top for the spotlight. It took some time until the saving idea came: We had already made or collected some good experiences with the light-reactive repair adhesive "Uhu LED-Light Booster" off and in model building.

The manufacturer also points out that it is suitable for filling gaps and can also be modelled within limits. After hardening, as a result of activation with UV light, it can be sanded and also painted. These were decisive properties that were also in demand here!

We were already convinced of its impressive strength and holding power, because it had long since passed its baptism of fire in editorial tests. After it had surprised and even amazed us in this respect, it has long been a permanent part of our range of materials and aids for current projects as a repair adhesive.

We made our first attempt on a Magirus fire-fighting vehicle from the 1to220 shop, on which this searchlight had broken off. We rebuilt the missing piece from a round polystyrene profile of the same diameter (from Evergreen).



We modelled the hemispherical headlights for the ambient lighting using the UV adhesive "Uhu LED-Light Booster." The basis was formed by two ground pinheads (left of the tube). For a preliminary test we used one of the Magirus fire engines from the 1to220 shop, where this headlight had broken off at an exhibition (right in the photo).

At the tip, we modelled a hemisphere out of the aforementioned glue and hardened it with the enclosed LED UV light source. Then we glued the part vertically onto the fracture with the same glue. After a colour treatment (black and chrome for the reflector), almost nothing was left of the defect.

This was the blueprint for the complete self-made construction on the two LF 3500's. We chose two pins as the basic body, the heads of which were ground off on the grindstone until only one horizontal bar was left in each case. The vehicles were measured and the shaft shortened to fit.

Before we went on, we pulled it through sandpaper a bit in our hands to roughen the surface and give the primer a better grip later on. Afterwards, these two specimens got the headlight attachments modelled in the same way as the test object. The remains of the heads secured the hemispherical attachments against loss.



Shortened, glued on and finished in colour, the tricoloured copy on the fire engine, in particular, reveals a particularly great effect.

After curing, grinding the front surfaces (reflector glasses), and gluing them in place, the final colour design followed. The results proved to be quite "face-shaping", and seemed indispensable to us right away.

The last task to be done was to place suitable ladders on the roof shelf of the TLF 15. We took our Artitec purchase and checked the contents for suitably designed ladders of sufficient length. We also had to verify whether they could be shortened to a suitable length if necessary, which involved looking closely at rungs and their spacing.

We decided to use the ladder for erection, the halves of which were separated again and stripped of paint. Then the ladder was cut to size with the help of nail scissors. When the test fitting was satisfactory, it was time for new paint in a wood tone, because no aluminium ladders were in use in the fifties.

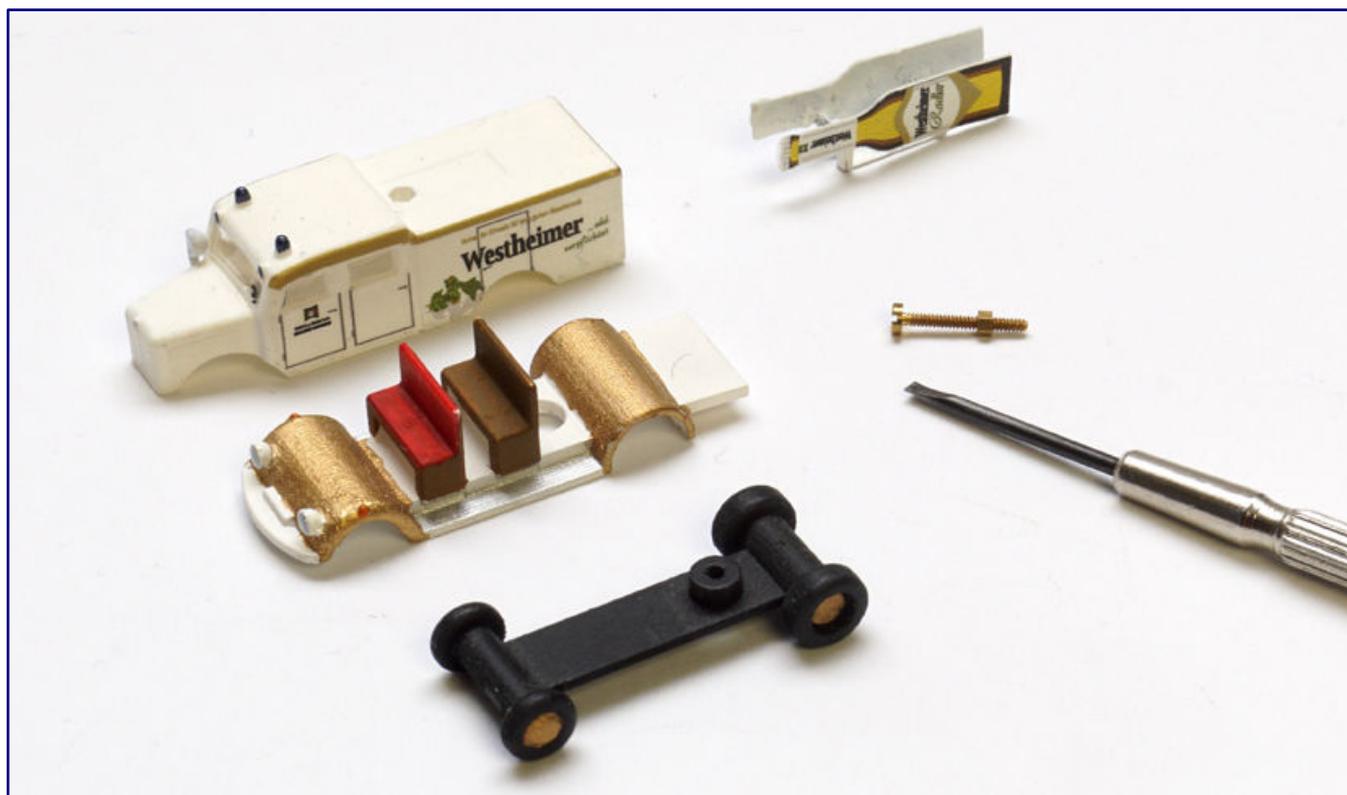
After a short bath in acetone, a very thin coat of paint was applied with the help of the spraying stylus so that the ladders would not lose their filigree. The colour of choice was a matt earth tone (XF-52) from Tamiya.

Now the three basic vehicle parts could finally be permanently joined together. While on the Westheimer vehicle the tiny nut is inserted in the roof area and the associated micro screw is passed through from below, and screwed into it, the red vehicle required an adhesive treatment.

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Matching Artitec ladders were selected, shortened and repainted in a matt, wood-like earth tone (photo above). After drying, they could be glued to the roof and the three vehicle parts permanently joined together (photo below).



On the Westheimer vehicle, too, all three vehicle parts and the roof plate are ready (photo above). They are connected with a micro-screw that is guided through the chassis from below and engages in the nut resting in the body (photo below).

To do this, the contact surfaces inside were first determined and “supplied” with adhesive in good doses. Then, all three components could be joined together. With the help of model building clamps from Revell (39070), they were fixed in place until the glue was able to withstand the stresses.

The very last step was to put the large advertising sign in the shape of a horizontal beer bottle on the Westheimer thirst quenching vehicle. To retain access to the nut, we did not glue it on permanently. Applied on one side, Fixogum by Marabu keeps this option open, because the bond remains detachable this way.



We stuck the advertising sign on with Fixogum to keep access to the nut in the roof, just in case. The chrome paint was used for final touch-ups on the headlights and mirror surfaces.

The contemporary O 321 H

We would like to make a small digression about the Mercedes-Benz O 321 H bus model. It seems to be out of place in this article, as it does not fit in with the fire brigade theme. However, its relationship to the L 3500 / L 311 model series is greater than it appears from the outside.

The fifties were the great time of the long-haul trucks, but the big manufacturers usually also had front-wheel-drive vehicles in their range, which were hardly advertised. The customers' confidence in a vehicle where the driver sat in the very front and did not have a protective bonnet in front of him was still not well developed.

Thus, the front-wheel drive cars of the first post-war series were not yet independent and well thought-out developments, but rather makeshift solutions on the same chassis. Only in bus construction was there front steering, with the engine in the rear, and the self-supporting design became standard (see also our article on the rail-road-bus in the summer of 2020).

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This Mercedes-Benz O 321 H city bus, built in 1955, photographed at Jungfernstieg in Hamburg, with its folding doors roughly corresponds to Zcustomizer's model. The colour scheme also corresponds to the one we chose for our model. Photo: Spoorjan (CC-BY-SA-3.0,2.5,2.0,1.0)

Photo page 21 below:

This is what the bus driver's workplace looked like in this very modern bus of the 1950s. Photo: Norbert Schnitzler (CC-BY-SA-3.0-migrated)

The relationship of the O 321 H, which we first received as a model from MO-Miniatur a few years ago, to the long haul trucks from Mannheim is evident from their heaviest and last series and the engines used.

The last further development of the Langhauber was the L 321 model, which was created by adding loads after Mercedes-Benz had recognised that there was too large a gap between its commercial vehicles in the medium weight class (from the Mannheim plant) and the heavy construction types from Gaggenau. This type of vehicle was intended to bridge the gap and prevent customers from having to migrate to the competition.



The blank from Zcustomizer only had to be painted. But, because of the fine window struts and trim lines, this created a lot of work. At the very end, the headlight lenses and all window surfaces were sealed with high-gloss clear lacquer, in this case, a new product from Bergswerk.

Since it required more power than the types L 311 (3.5 t payload) and L 312 (4.5 t), the designers went for the OM 321 engine. This further development of the OM 312 had been installed in the O 321 H bus since 1954, which the type designation already seemed to suggest (the H stood for rear engine).

That's why we took the current model from Zcustomizer and prepared it for this article as well. The blank was given an elaborate two-tone paint job with a roof cover and chrome-coloured trim strips and window bars.

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Travelling from the neighbouring community to the shooting match in style with the Mercedes-Benz O 321 H (photo above): If you are into alcohol, it is better to leave your own car behind. While the Schützenplatz fills up and the band heats up the party crowd, the Westheimer fire engine takes up its position (photo below).

The technology and materials do not differ from the fire brigade models already described. It should only be mentioned that the 3D printed blank cannot offer window transparency. Therefore, the glass surfaces are to be painted dark and the typical window gloss is to be produced by means of clear varnish.



While some are celebrating, others have to work: The volunteer fire brigade goes out on a mission. Only the old LF 8 (far left) remains in the yard of the station today. Since there is no rooftop ladder, it is probably a technical issue. Let's hope that it was not an accident under the influence of alcohol.

This model, whose two-colour design follows the typical taste of the fifties and was deliberately kept neutral, was created from a real model. For the first time we had tested the new, high-gloss acrylic clear varnish (83214) from Bergswerk in a brush finish on the miniature, with success.

Equipped in this way, this bus from the economic miracle era, which was epoch-making for Mercedes-Benz, was also allowed to complete its maiden voyage in the Diemel valley. For us, its pioneering design points the way to future car articles with which we would like to bring "life" off the tracks into the focus of our readers from time to time.

Manufacturer of the basic model:

<http://online-miniclub.de>
<https://www.zcustomizer.de>
<https://www.1zu220-shop.de>

Sources for required accessories:

<http://www.badgerairbrush.com>
<https://www.bergswerk.de>
<https://www.bindulin.de/>
<https://www.faller.de>
<http://www.hos-modellbahntechnik.de>
<http://www.h0fine.de>
<https://kuswa.de>
<https://www.marabu-creative.com>
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Märklin's V 80 series

Trailblazer of Z Gauge?

When the Mini-Club entered the big stage, the active time of the V 80 was already coming to an end. However, almost fifty years had to pass before this distinctive and unique locomotive found its way into mass production. There have already been at least three small-series realizations on the long way, but Märklin's novelty tops everything we have seen so far.

If we are already so excited and so clear in the introduction, then it must be a special model that we have for testing. And indeed, our test conclusion is now at the beginning instead of at the end of this article: Märklin's new V 80 series (art. no. 88803), the Insider Annual Model 2017 that has finally been delivered, is impressively well done.

The tester cannot remember having held a model from this company in his hands ever before that was so accurately dimensioned, had perfect running characteristics and did not neglect the classic Märklin virtues in any way.



Mini-Club members had to wait for their V 80 (art. no. 88803) more than three years after it was announced. Now the new model is to show what it is made of.

In all important characteristics, the V 80 is at least on a par with the E 41, which was offered one year later and was probably also constructed somewhat later, but the V80 even surpasses it in driving characteristics. And since it has no (not precisely to scale) pantographs, it is also ahead of the company's own flagship locomotive in the visual rating.

But now let's take things in order. After all, we don't want to simply overwhelm our readers with our excitement, but rather explain it in a clear and comprehensible way. Let us begin by saying that for a long time the chassis designs of the 78 series and the V 100 were considered the benchmark for Märklin models. Those can also be found in the inventory of many Zetties.

Long waiting

When Sondermodelle Z presented its own V 80 a few years ago, it seemed clear that this model would probably be a special one. After all, from Vienna we are used to only the finest and most operational realisations.

But something made us doubtful at the time: Isn't this series actually a typical model for mass production, even particularly predestined for a mass production model? Although only ten examples were built, this locomotive is well known because of its technically ground-breaking basic design and museum preservation (see the prototype article in this edition).

Its low number of prototypes provides a touch of exclusivity, which such offers often demand. And besides, a Märklin H0 model had already existed for a long time, so the construction data was also available. Meanwhile, it still took a few years, and so the successful SMZ realisation also found its buyers a long time ago.



The first impression is accurate. The V 80 comes up with some parts that have been separately attached. And further observations suggest a well thought-out construction that makes a correct reproduction of further variants possible in the first place.

As those who want to acquire a Märklin model in any case, we definitely count them among the Insider Club members. They were able to look forward at the end of 2016 when this series was announced from Göppingen as the exclusive annual model for 2017.

Since then, they had to show a lot of patience, as the delivery took an unusually long time. Finally, Märklin went public and announced a serious tooling defect as the cause. Occasional status updates, for example about quality assurance test runs by Märklin TV, were intended to keep the stressed purchasers happy.

Finally, about a month ago, the time had come and everyone was happy to hold their model in their hands. But the novelty also caused surprised looks and even a few calls to the editorial office: Apparently something could be wrong with the new locomotive, because it was running much too slowly.

The general response was that this was not something we were used to from Märklin. And so we would like to examine this point in detail and explain to our readers at the end what tests and investigations at Märklin, or in this case even by Märklin, have revealed.

Traditionally, however, we always begin our test with the external impressions of a new model: After unpacking, there are initially few surprises. The bogie-equipped locomotive shows a consistent and clean exterior, correct proportions and also its weight seems familiar.

But a look at the details shows the first, special features of the new V 80: In front of the driver's cab, corresponding to the delivery condition of the prototypes, tiny compressed air whistles in brass colour are attached. A clear view through the driver's cab windows is possible.



The fine brass whistles in front of the driver's cab windows are among the characteristic features in addition to the attached handle bars. The lightning warning arrow between the front windows is correctly printed in RAL 1007 daffodil yellow and thus deviates from the other markings.

The chrome-plated access bars on the side doors and the handles on the fronts are also found in the correct colour and shape as separately attached parts.

The bogie covers are also separately attached to the frame as two different parts (with and without Indusi magnet) and thus leave room for design in later variants.

Märklin seems to have similar plans for the driver's cab: Here the roof has been attached as a separate part, which is held to the body by detents. The windows at the front, at the rear and at the sides consist of two clear parts with foil embossing to reproduce the chrome frame.

With this construction Märklin has also kept some options open for the future: Both versions with subsequently attached rain drainage sheets above the side windows, the distinctive but not really beautiful exhaust silencers and laterally attached typhoons (instead of the already mentioned whistles) can be implemented in this way.

Such an effort, which has at least already been taken into account in the design of the model, would have been impossible in Z gauge twenty years ago. Together with the conclusive engravings on the body, which besides the engine compartment hatches and the fan rotor also takes into account the steps for the shunter at the four ends or the access ladder, the result is an impressive model.

Our V 80 008 of the Griesheim depot, which comes from the MaK construction lot, is in no way inferior in appearance to its larger sister in H0 gauge with the same markings (item no. 36082). And both reflect the operating condition around 1957, when the markings had already been changed to the German Federal Railways logo, the car numbers were written according to the DB's DIN 1451 medium font and the trains had a third headlight.



V 80 008 is in no way inferior to its larger sister in 1:87 scale (36082): The differences are almost limited to the more indicated driver's cab interior in the larger scale, the different system couplings and wheel flange heights.

The locomotive's paintwork is clean, free of dust inclusions and applied in a pleasant dull appearance. The colours for the superstructure and roof in RAL 3004 purple red and the chassis and bogie in RAL 9005 deep black are correct.

The printing also continues this impression seamlessly: The raised aluminium decoration mouldings of the prototype, a wider one approximately in the middle of the locomotive and a narrower one as separation to the frame edge, have been reproduced by means of pad printing. In addition, there are the extensive service markings as well as the MaK factory sign in the correct colours.

Dimensions and data for the DB V 80 series:

	<u>Original</u>	<u>1:220</u>	<u>Model</u>
Length over bumpers	12,800 mm	58.2 mm	58.2 mm
Maximum width	3,060 mm	13.9 mm	13.9 mm
Height above rail top	4,100 mm	18.6 mm	19.5 mm
Overall wheelbase	9,200 mm	41.8 mm	41.6 mm
Bogie centre distance	6,300 mm	28.6 mm	28.3 mm
Bogie axle distance	2,900 mm	13.2 mm	13.0 mm
Wheel diameter	550 mm	2.5 mm	3.4 mm
Service weight	58 - 60 t	---	22 g
Axle formula	B'B' dh	---	B'B'
Permitted V _{max} *	100 / 50 km/h		
Power	1,100 hp (810 kW)		
Manufacturer	Krauss-Maffei, MaK		
Years of manufacture	1951/52		
Number of units	10		

* Track / shunting transmission

For the service signs of the time, this means the colour RAL 1002 sand yellow, while the flashing warning arrows between the front windows are RAL 1007 daffodil yellow.

Märklin has even thought of such small details, which are hardly noticeable on a scale of 1:220 and which are hardly noticeable without knowledge of the original!

In addition, the dimensional accuracy is almost perfect: Almost all of the converted prototype dimensions are accurate to a tenth of a millimetre.

Where we found the slightest deviations, these were probably measuring errors rather than actual deviations.

We noticed that the four bumpers seem to be part of the injection moulded housing. For Märklin this would be a rather unusual way of implementation. According to the exploded view, they are attached separately, which seems more likely in view of a simpler realisation.



The macro shot reveals the clean paintwork and finely printed markings from the year of service 1957. The compressed air whistle, which is clearly visible on the right, also comes into view. Only in such a magnified view it is noticeable that the driver's cab is placed as a separate part on the locomotive chassis.



In addition to correct proportions, the model also offers a partial view through the engine room windows (picture above). We are also impressed by the engravings of the engine room hatches, the covered fan rotor and the small ventilation flaps on the driver's cab roof and the short front end.

They seem to be not only attached, but probably glued in place and therefore give this impression. By the way, both bumper discs, which follow the trends of the last few years in terms of original size, are flat - in the original, the right one was domed.

The re-designed wheels are also a surprise. We had expected the wheels of the 220 / 221 series with plastic discs, which always made a good optical impression. However, Märklin has now opted for fully turned types, which show strikingly narrow wheel rims, which also helps the overall visual impression.

Before we come to the technical evaluation, we conclude this section with an idea: How about gluing a torso into the driver's cab, which can be looked through unobstructed, in order to recreate the locomotive driver and to strengthen the realistic impression even further in this way?



From this perspective, we were also able to showcase the central wind deflectors on the large driver's cab side windows to such an extent that they become visible to our readers.

New technical features

The V 80 also impressed us very much in the features to be examined here. Let's therefore start with the only point of criticism that has to play a role in the end: As advertised, the model shows warm white LED head lighting which changes with the direction of travel.

In one of the first product specifications we found a pictogram that also announced a red tail light. Since this remained a singular instance and could not be seen later anymore, it was probably a mistake.

But it points out a small deficiency, because the prototype of the V 80 was capable to run push-pull trains. And especially in the Frankfurt area which is also home to the model of the V 80 008 this class was also used from the beginning on in the then ultra-modern push-pull traffic. So we thought of many train car versions that are missing in the assortment and would be a perfect enrichment for this locomotive.

The coupling assembly on the V 80 is completely new for Märklin: Obviously copied from Rokuhan is the plug-in part in the shaft together with the spring-loaded guiding. The reason for this solution, which differs from all previous designs, is the shorter construction compared to the solution used since 1972.

Only this made it possible to keep the prototype dimensions in the bogie area so perfectly. In any other case, the bogies would have moved further inwards, which would have resulted in visible deviations in their centre-to-centre distance and also in the overall axle base, had it not then been distorted within the bogies at the same time.



The view of the underside already points to a new bogie design due to the exposed gear wheels. The bogies would not have offered sufficient space for the previously known coupling shaft or would have required a visible compromise in the chassis area.

There has been some criticism of (overly) thick and unprofessional-looking solder joints. The cable routing in the area of the bogies also appears to be in need of improvement, at least in partial production runs. This criticism is indeed justified and seems to refer to a great time pressure in the production.

As a result of these inaccuracies, our model also showed a sluggishness on the short front end, which sometimes led to derailments in right-hand curves when this bogie was leading. In the opposite direction, this also caused the first connected wagon to derail after right-hand curves.

If you also experience this or a similar problem with your model, we recommend contacting the dealer in order to have a reworking carried out within the scope of the warranty.

The inside of the locomotive becomes visible with a few tricks, which we have not yet seen from Märklin. Here, spreading apart the housing is not enough, because there is no point where the chassis can be grabbed and pulled out.

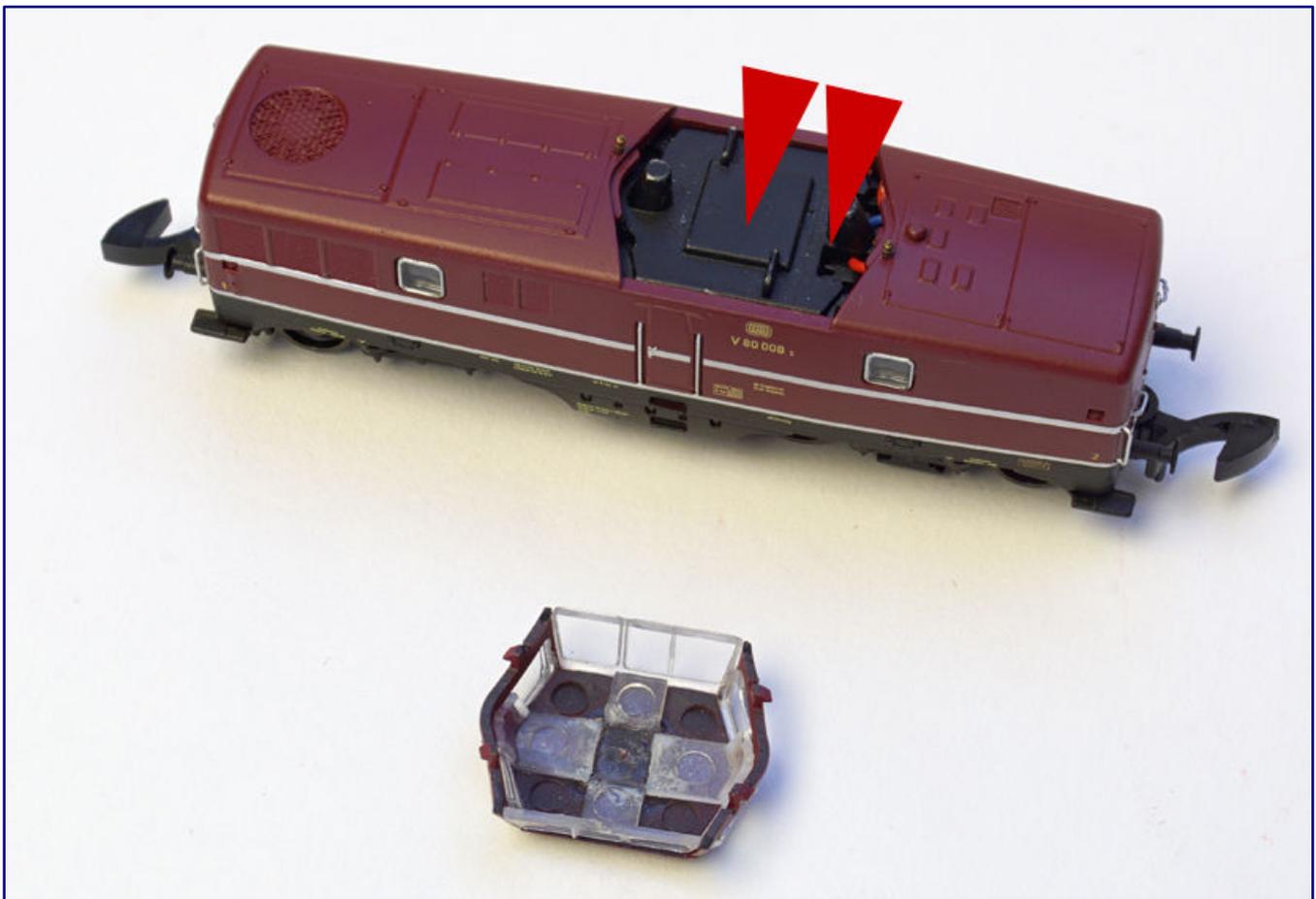
Instead, a different approach brings success: The driver's cab is attached with four detents. At the edge to the cabin, the upper attachment can be pushed upwards with a fingernail. Then there is enough space inside to access the chassis. If we now grab the housing, the chassis can be pushed out downwards.

The block consists of two parts, which are held together by four screws and form the fixture for the bell-shaped anchor motor inside. The driving worms on both sides, which are only plugged in, are injection moulded parts for the first time, but they work on the usual gear drives in the bogies.

Nevertheless, it is also worth taking a look at these, as the construction and stepping are also different from the usual and together are the cause of the model's remarkably slow running. With this observation, we now come to the electrically measured values.

The V 80 already starts at a track voltage of 0.3 volts. The LED front lighting is not yet apparent. The locomotive moves hardly noticeable, we measure a record-breaking speed of converted only 0.6 km/h.

At this speed, it even occasionally drives over turnouts, but not reliably. For that we increased the track voltage at the transformer 67011, which is not very sensitive in the lower control range, to 1.8 volts. Now the locomotive creeps along at a converted walking speed (6 km/h) and safely passes all turnouts on the well-cleaned and well-laid test tracks.



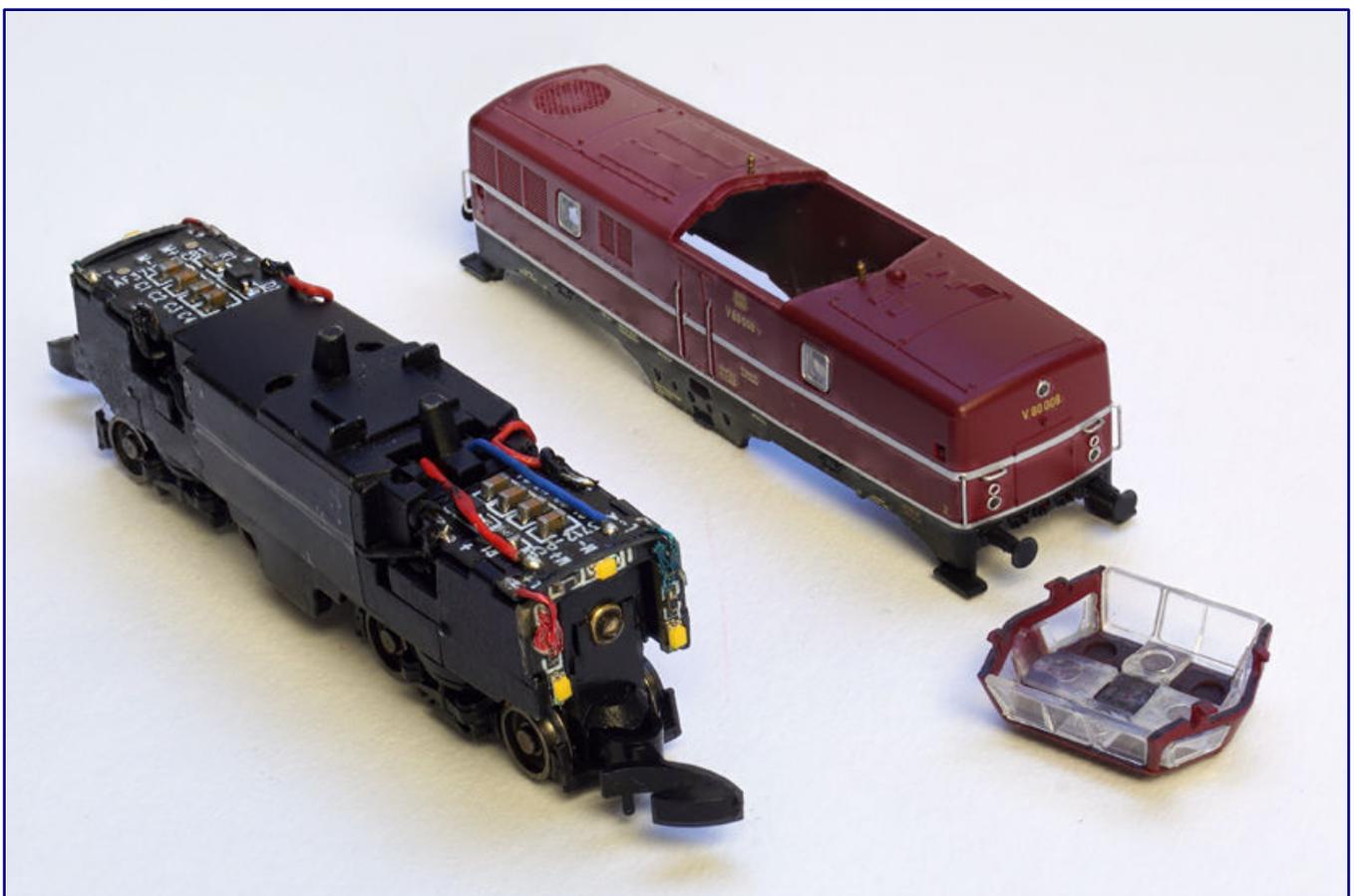
The procedure for removing the chassis is also different from what we have been used to: First, the driver's cab must be pulled straight and carefully upwards without damaging the four detents (visible in the picture). While holding the body with one hand, the chassis can then be pushed out downwards with one finger in the area of the arrow markings. At this point, it would be worth considering whether a locomotive driver's torso should be glued to one of the two indicated backrests.

The maximum speed that this model can achieve is exciting. At the beginning we already referred to noticeable problems and enquiries. Fortunately, we received enquiries not only from readers, but also from Märklin itself, because the decisive factor is how this is received by customers.

A gear reduction was intentionally chosen here, which brings the model so close to the original and leaves the real racing machines of the past clearly behind. It should be a standard for the future to further emphasise the closeness to the original of the small gauge. We are reminded of the Kittel steam railcar, which already attracted a lot of positive attention in this respect.

And so we have also determined the maximum possible speed. The white transformer with the item number 67011 was known to deliver a voltage significantly above the nominal value of 10 V= without load.

If the V 80 with its economical bell-shaped armature motor is the only consumer that uses its power, it fed the track with 14.2 volts in the test. The locomotive then travelled at the equivalent of 130 km/h, which is slightly higher than the original. Fortunately, it did not get warm thereby.



The interior of the new V 80 is cramped, so that there was hardly any space left for the circuit boards. We see that the chassis of this locomotive is also divided into two parts, but not yet along electrical poles as with the E 41 announced a year later: Here instead a cover was put on the bell-shaped armature motor along with the gearbox in order to store these parts firmly.

At position 150, the track voltage is between 9.5 and 10.5 volts, i.e. the nominal range that Märklin specifies as the maximum. We measured a converted original speed of around 87 km/h here. The miniature then remains just below the maximum speed of its original.

More important than the missing 13 km/h when using a voltage source that can only supply the nominal voltage of 10 V, however, seems to us the hint at the large, because full control range of the speed controller that can be used with this model.

This is so far (almost) unique and a comfort feature we can quickly get used to. Driving this locomotive, especially the gentle starting after a stop in a station or in front of a signal, is just as much fun with it as the gentle braking. And by the way, the original locomotive hardly ever reached the speed it was capable of on branch lines.

Meanwhile, the measured current consumption is fully within the expected range, which speaks for a smooth-running gearbox and the bell-shaped armature motor: At transformer position 100, it was only 15 mA, when turned up to 150 (we have indicated the corresponding voltage above), the value increased only slightly to 20 mA.

We can also dispel concerns that the locomotive might cave in to trains because of its low speed. With the four bottle-green reconstruction wagons of the package 87530, which Märklin had offered as a matching train, it is still just as fast on the tracks as it is on its own.

Even with a total of eight express train wagons in tow, her tractive power limit on a plain was far from being reached. For true-to-scale passenger and goods trains, we therefore see no problem with the lightweight, which weighs in at only 22 grams. With this, we are approaching the final consideration.

...and not to forget

Always a key point of interest for our readers are realistically designed train formations for new locomotives. For the V 80 we have tried to give some suggestions in our prototype report, which can also be reproduced in 1:220 scale with the known assortment.

So there are many possibilities to build short freight trains from the most different wagons and to add freight train luggage cars from Märklin or FR Freudenreich Feinwerktechnik to them. The typical picture of a transfer freight train on the branch line was determined by the needs of the connecting hubs that had to be served on the way.



A short freight train consisting of different types of cars, typical for a branch line, does well behind the V 80.

continues on page 38



In addition to the 87530 car pack recommended by Märklin (see cover picture and lead photo), we have two other train formation suggestions that go well with the V 80: The combination of three-axle reconstruction cars and a central-entry car (pictured above) is modelled on the early push-pull trains. A possible driving trailer defect leads to the replacement by an ordinary 2nd class coach. At that time, express trains were often formed from the brand-new Silverling cars (picture above), with which the V 80 sometimes also ran on main lines and which go well with its white-aluminium-coloured trim.

At that time, general cargo transport with boxcars still played a major role. But a local coal merchant was also served by rail with open cars or even a tank car. Low-sided wagons or stake wagons, which can be arranged unloaded or with any kind of loading equipment, show themselves in a varied way.

As our photos show, however, somewhat longer trains consisting of side-dump cars with rotary slides are also possible. Such unit trains make an impressive picture even with eight to ten wagons. With a rotary slide cover, such a composition would even fit a version for the Hersfelder Kreisbahn.

However, most of the photos show the V 80 with passenger trains. In their early service period, which the current Märklin model reflects, the machines were often on the road with three-axle conversion carriages or "Donnerbüchsen" (train cars that were very loud, so people called them "thunder cans").



V 80 008 cuts a fine figure from every perspective. The only pity is that this locomotive, which is suitable for push-pull trains, apparently could not be fitted with red tail lights.

For the open platform cars there was at least a push-pull command car from Westmodel, which also fits very well into the Frankfurt service period. The driving trailer for the central-entry cars, which usually completed the reconstruction cars, is unfortunately still missing in Z-gauge and can at best be built by the customer.

The same applies to the VS 145 driving trailers, which were by no means only on the tracks with diesel railcars. They therefore already made sense individually in the Märklin line-up and would nevertheless offer further perspectives for the future.

What is offered, however, seems exotic and unusual, but is nevertheless documented in pictures, are Prussian compartment coaches in tow of a V 80. Märklin has offered suitable, bottle-green examples without DB logo only recently. They would also find a suitable field of operation here.

And also typical were four-axle reconstruction wagons, which was recognised by Märklin itself with the wagon set offered simultaneously and as a supplement. Mostly there were two to four examples, which still offers some scope for creativity.

For future variants of the new model, the older editions for Era IV with chrome oxide green paintwork, which accompanied the original until the end of its service life, can then also be used.

In its last years, it was often seen with Silverlings, which also look good on the red locomotive. If you want to stay close to the original, you should only avoid the driving trailer with the Karlsruhe head, because its commissioning and the retirement of the V 80 only just overlapped in time. The "bunny box" driving trailer, which is missing from the assortment, would also be the better option here.

In exceptional cases, green passenger coaches also fit the locomotive, as it occasionally appeared on the Schiefe Ebene (a steep track between Bamberg and Hof (Saale) in Germany) in front of short trains of types actually intended for express trains. Shortly before, the class 001 was still on the track with these carriages, on such short trains also singly.



The V 80 closes a gap in the history of Diesel locomotives in 1:220 scale and points the way for future constructions. That is why we nominate it for the new releases of the year 2020 in the category locomotives.

We have now covered all aspects of an exciting and certainly ground-breaking novelty. The V 80 achieves top ratings in all disciplines. The only thing that remains to be noted is the lack of a taillight, and there should still be room for improvement in assembly quality.

In view of the extremely accurate and also quite innovative realisation, which brings our small gauge further ahead, we nominate the model of the V 80 (88803) for the new releases of the year 2020 in the category locomotives.

Manufacturer of the model:
<http://www.maerklin.de>

Pioneer of the cardan shaft drive

Unimportant and Yet Significant

The title seems like a paradox that we have to clear up in the course of this article. The only ten examples of the V 80 series wrote railway history in Germany and are still remembered today with their striking exterior from the kidney table era. We summarise their development and operating history, which ended for the Bundesbahn as early as 1978.

The Deutsche Reichsbahn had already experimented a lot with diesel engines. After good experiences with small locomotives, they thought about making this form of propulsion usable for larger vehicles as well.

But, these attempts often failed due to the power transmission, because a diesel engine cannot start under load and there was a lack of suitable gearboxes, that could absorb the power after the start and distribute it to the wheels.



When the V 80 first saw the light of day, the steam locomotive still dominated everyday life, here in Nuremberg in April 1956, as V 80 009 passes through the scene. The only provisionally mounted, upper top light is interesting. Photo: Sammlung Peter Pfister

At the beginning of the 1930s, however, various railcars for high-speed and branch line traffic were already being built, which were still a long way from a large diesel locomotive, but which did provide important insights into possible solutions and misguided approaches. A large diesel locomotive was considered to be a machine with at least 1,000 kW of power.

The first successful design appeared in 1935 in the form of the V 140 001 (until 1936: V 16 101). It had an output of 1,030 kW (1,400 hp) and had a hydraulic power transmission on a jackshaft that worked on the three drive axles via coupling rods.

It owed its emergence to the fact that a diesel-electric locomotive would have been too heavy. After the attempts with direct (Diesel-Klose-Sulzer thermal locomotive), as well as pneumatic drive (V 120 001) were not successful, many options were ruled out.

A hydrostatic transmission was also out of the question because the transmittable power was too low. The only promising option was a hydrodynamic drive with a Föttinger-type fluid transmission, which had already proven itself in railcars.



A typical feature of the Bamberg machines in their early years were the wheel discs, which were painted red at their own initiative. When V 80 006 comes before the photographer's lens in its home town in April 1956, the class reform was still pending. Consequently, the attached middle entry car still shows the 3rd class. Photo: Sammlung Peter Pfister

After eliminating "teething troubles", the new locomotive proved itself in the greater Munich area almost straight away and provided valuable knowledge for diesel-hydraulic power transmission. But the war slowed it down due to a lack of fuel, and it had to be shut down.

On the instructions of the Allies, it was put back into service after 1945 and remained in service until 1953, when it was already obsolete again in view of the newly delivered class V 80. The first diesel locomotive design of the young Bundesbahn virtually took over its tasks as a supplier of fundamental knowledge.

Breakthrough for the diesel locomotive

With the class V 80, the Bundesbahn and the locomotive industry set a milestone: while diesel-electric power transmission began to gain acceptance in North America and, also, in European countries, they swam against the tide and helped diesel hydraulics achieve a breakthrough in West Germany for decades to come.

For the first time, a four-axle bogie locomotive was powered by an internal combustion engine that worked on the wheels via a fluid transmission and cardan shafts. Although the cardan shafts proved to be a constructional weak point of this series, the courage, nevertheless, paid off.

The joy of innovation triumphed over all reservations and DB was able to use the advantage of lower installation mass and volume in comparison to the heavy DC generators. The V 80 was also superior in terms of starting and in transmission torque.



V 80 006, photographed on 26 May 1960 in Nuremberg Hbf (photo above), was the first locomotive to be fitted with a silencer during a stay at AW from 12 February to 12 April 1957. The silencer's box shape with cooling slits clearly distinguished it from that of the other machines (cf. V 80 001; photo below). And although the noise level in the driver's cab could be measurably reduced as a result, the basic problem of this series remained: According to today's occupational health and safety regulations, it should still only have been operated with hearing protection. Photos: Helmut Röth, Eisenbahnstiftung (photo above) / Sammlung Peter Pfister (photo below)

And so this locomotive finally cleared the way for series such as the V 200, which were procured in larger numbers and were much better known. Here, the Bundesbahn could not and did not want to take any risks at the time and had to be able to fall back on technologies and components that had already proven their operational suitability.

It is therefore not surprising that the (originally) three engine and two transmission types tested in the V 80 were also used in the other vehicles of the first type programme. Originally, they had a power output of 800 to 1,000 hp, which also resulted in the classification of the series according to the scheme in force at the time.

The model number indicated one tenth of the originally intended power, i.e. 800 hp. However, the designation V 200 (with two engines) already shows that an increase in power could be achieved within a short time. In fact, this then brought it to 2,200 hp, which was also shown with increases in the V 80.



Even though the V 80 never changed colour on the Bundesbahn, it still changed its appearance over time: When V 80 009 is photographed in Nuremberg Hbf on 9 September 1960, it is wearing the exhaust silencer, but, still has its trim and inscriptions in the original colour, these, however, have long since been changed to the Ege biscuit and typeface according to "DIN 1451 Mittelschrift DB". Photo: Sammlung Peter Pfister

Like its direct successor V 10010 (series 211), it later had an output of 1,100 hp thanks to MTU engines. The keyword MTU leads us to another clue at this point: After Daimler-Benz and Maybach had merged their engine production in the Motoren- und Turbinenunion, the engine designations in the documents changed.

Nevertheless, the engines were still the familiar four-stroke diesel engines in a V12 arrangement with turbocharging, which is sometimes misunderstood or misrepresented in the literature. Later, the large engine production of MAN was added to MTU, which does not simplify the overview either.

The V 80 was procured in a quantity of only ten units, which meant that it could not play a significant role in operations. However, it formed the basis for all subsequent diesel locomotive series until the procurement of machines from the V-160 family was completed.

In 1951/52, Krauss-Maffei (V 80 001 - 005) and MaK (V 80 006 - 010) each supplied half of the ten locomotives. The first was V 80 006, which was delivered from Kiel on 14 November 1951. At the beginning of January 1952, the test programme could begin in Opladen with a total of three locomotives.

Its colour scheme was RAL 3004 Purple Red for the superstructure and cab roof for the entire period of operation. The undercarriage and the running gear were and remained painted RAL 9005 deep black. Two trim strips (100 mm wide in the middle of the locomotive, 50 mm wide at the bottom) running around the entire vehicle were painted in RAL 9006 white aluminium, from which the chrome-plated handle bars and window frames stood out somewhat.



We would like to contrast the photo from page 43 with this photo from Coburg: The decorative strips of the 280 003-5 have long since given way to two surrounding decorative strips in RAL 1014 ivory. The colours of the inscriptions also underwent two changes in the course of time. Photo: Sammlung Peter Pfister

The decorative strips were later removed due to rusting, with the exception of the V 80 006, and replaced by painted decorative strips in RAL 1014 ivory. The colour of the inscriptions also changed somewhat in the course of service: In the beginning, the service inscriptions were without exception applied in RAL 1002 Sand Yellow, only the lightning warning arrows were in RAL 1007 Narcissus Yellow.

Later they changed to RAL 7030 Stone Grey, because this harmonised better with the red of the locomotive body. From 1970 onwards, the newly introduced RAL 7032 pebble grey was used, which was very popular with the DB.

After being handed over to the operating service, the locomotives were initially assigned half to the Frankfurt (Main)-Griesheim and Bamberg depots. In the first months of operation, individual machines were repeatedly exchanged between the two services until March 1954, when these movements were reduced.

Finally, the status was as follows: Frankfurt (Main) was home to V 80 001, 002, 004, 005, 008 and 010, while V 80 003, 006, 007 and 009 were stationed in Bamberg, thus a slight surplus in favour of Griesheim.

This division lasted until 25 July 1963, when all locomotives were brought together in Bamberg over a few months. From this point on, the history of the V 80 (from 1968: class 280) and the Bamberg depot were inseparable.



When 280 006-8 and 280 009-2 are photographed together in Kirchenlaibach on 23 May 1976, the star of this class is already sinking. 280 006-8 was the only one of the ten locomotives to keep its trim until the end. Photo: Sammlung Peter Pfister

Operational testing

DB's new mainline diesel locomotive was to be as universally applicable as possible. Its specifications provided for light passenger and express train service on main and branch lines, as well as for hauling goods trains or heavy shunting service. For this reason, the UV gearboxes could be used for both mainline and shunting service.

Their external appearance was also designed with this in mind: a single driver's cab protruding above the front end could be used for both directions of travel and was therefore placed almost in the middle of the vehicle, a novelty at the beginning of the 1950s. This arrangement promised equally good visibility to the front and to the rear and was not only adopted for the V 60 and the V 100.

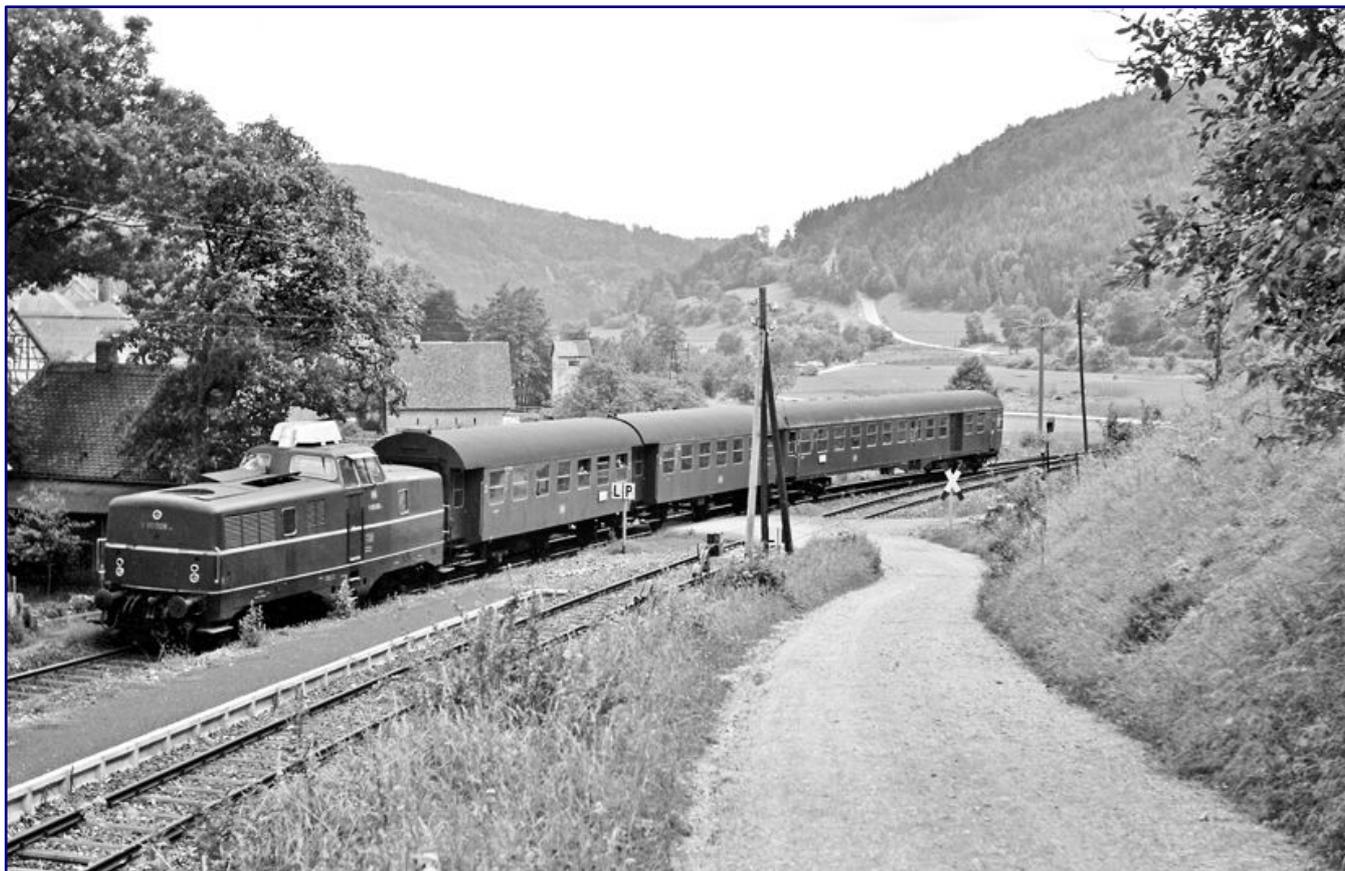
Additionally, the two ends of the engine, which could only be accessed from the inside, remained unique in German locomotive construction: their bonnets occupied the entire width of the vehicle on both sides. Similar importance as in 1935 with the E 18 was apparently attached to the design language of the new locomotive: Rounded edges and surfaces were exactly in keeping with the taste of the kidney-shaped era.

In service, they then provided the desired insights, which did not lead to further construction, but helped their successor, the V 100, to succeed. They proved to be unsuitable for shunting service, because the wide and high front ends made the machines confusing.

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V 80 004 from the Frankfurt-Griesheim depot pushes its passenger train of blunderbusses between the Galluswarte branch and Frankfurt-West in 1954 without a doubt under indirect push-pull control, as can be seen from the direction of view of the driver remaining on the locomotive (photo above). The same locomotive still had to make do with Prussian compartment coaches when it left Frankfurt's main station in October 1952 (photo below). The three-light tip signal was not yet mandatory at that time. Photos: Reinhold Palm, Eisenbahnstiftung



V 80 008 arrives in Frankfurt-Höchst in August, 1956 with the "Heckeneilzug" E 792 from Cologne (photo above). The trains initially consisted of sidecars and driving trailers for pre-war diesel railcars (mainly VB / VS 145). In June, 1966, the same locomotive has long been based in Bamberg and passes Muggendorf on the Forchheim - Behringersmühle line with a push-pull train, as we have tried to recreate in the model article. Photos: Kurt Eckert (Photo above) / Reinhard Todt (Photo below), both Eisenbahnstiftung

After eliminating teething troubles on the universal joints of the cardan shafts, auxiliary units, as well as, control and monitoring devices, they proved their worth. From then on, mixed branch line service became their preferred area of operation for the entire period of service.

In Frankfurt (Main), for example, they were used in suburban service to Bad Homburg v. d. Höhe and Kronberg in front of reversible trains. These were made up of "Donnerbüchsen" or three-axle conversion coaches with a B1 driving trailer (centre entry coach).

On the short branch line from Frankfurt-Höchst to Bad Soden, the Bundesbahn initially retained the indirect push-pull control known from the V 36 since 1948. The V 80 pushed five blunderbusses here, the leading one of which was designed as a control car.

From summer 1956, an express train service between Frankfurt (Main) and Köln (Cologne) was added (E 792 / E 793). Here, the V 80 initially had VB / VS 145 trailer and driving trailer of diesel railcars on the hook, later pre-war cable cars with driving line, and also with middle entry cars. These typical sets would also be excellent suggestions for suitable assortment extension sets from Märklin.

The locomotives based in Bamberg were used for a long time in Nuremberg suburban traffic (used by the Bw Nuremberg Hbf), but also on various branch lines in the Bamberg area. Here, too, it could be seen in front of push-pull trains to Pegnitz, Amberg and Ansbach, as well as, from Fürth to Markt Erlbach.



In the winter wonderland, 280 010-0 is on the move on 6 February 1972, with a four-part set of four-axle conversion wagons, as Märklin also envisaged as a typical train formation for its model. Photo: Sammlung Peter Pfister

When all ten locomotives were assembled in Bamberg in the second half of 1963, they took over further passenger and goods train services on many branch lines in northern Bavaria. Their turning stations were now called Schlüsselfeld, Maroldsweisach, Forchheim, Höchststadt (Aisch), Behringersmühle and Heiligenstadt.

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280 004-3 is on the move in Kulmbach on 25 June 1972 with three- and four-axle conversion wagons and a blunderbuss luggage van (photo above). Four years later, it was the first machine to be retired from DB service. In the last years of service the locomotives appeared occasionally on the inclined plane, like here 280 001-9 with D-train wagons in August 1972 in Marktschorgast (photo below). Photos: Sammlung Peter Pfister

However, they also continued to reach Würzburg or occasionally Hof. Cargo service was also provided on the Frensdort - Ebrach and Hassfurt - Hofheim lines. From 1968, the class 280 was mainly used from the Coburg depot.



280 006-8 (with trim) waits for departure in front of Ng 64531 at the Maroldsweisach ballast works, the terminus of the line from Breitengüßbach, on 23 July 1976. Photo: Wolfgang Bügel, Eisenbahnstiftung

Up to six units a day now ran in mixed services to Rossach, Rodach, Neustadt and Fürth am Berg. The home depot only had a two-day circulation schedule in push-pull service.

As early as 17 July 1976 (280 004-3 z-gestellt), when the class had just returned to its old regular routes, DB began to part with its ten machines, and as early as 9 April 1978 the last locomotive, 280 002-7, was also out of service, although it would not have been fully depreciated until after thirty years.

The reasons for this appear to be many and varied: splinter designs are often only granted a short service life, but many parts of this series were, after all, interchangeable with other diesel locomotives and railcars. This point therefore seems less likely as a trigger.

However, the death of branch lines in the 1970s certainly contributed to the rapid demise, especially since the Bundesbahn was able to fall back on a sufficient number of modern 211s and 212s for the remaining lines.

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The last home of the class 280 were the branch lines of Northern Bavaria: 280 001-9 is working in Ebrach on 7 April 1977 in local freight service (photo above), 280 009-2 is standing at the local platform in Hallstadt on 6 July of the same year with a passenger train to Bamberg and already has contact wire over it again. Photo: Peter Schiffer, Eisenbahnstiftung

However, the foreseeable end of the Bamberg depot, which remained inseparably linked with this locomotive type until the end, could also have played a role. New facilities for diesel locomotives were already being built in Hof, and a complete relocation of the rolling stock was long imminent.

For the small amount of remaining service time, it would hardly have made sense from a business management point of view to build up the necessary special knowledge for the splinter genre there. Presumably, the DB managers thought that good sales opportunities would be a better option.



On 18 June 1977, 280 008-4 has to make do with two conversion wagons when it is on the Hof - Steinach - Ebersdorf route. The final end for this class came together with that of the Bw Bamberg only one year later. Photo: Sammlung Peter Pfister

Another argument was provided by the design weaknesses themselves: The long cardan shafts from the main to the distribution gearboxes tended to buckle during heavy traffic in front of cargo trains. Especially, in the last years of operation, cardan shaft breakages became more frequent when V-80 double traction units were supposed to replace a V 188 in case of failure. As early as 1970, the DB refrained from such operations.

Fate after withdrawal from service

The future of the locomotives, which had been class 280 since 1 January 1968, only becomes clear in the historical context: DB had decided early on against a series procurement.

For shunting service, both the train heating system and the reversing draw gear were dispensable, and the locomotive could not prove itself there. This led to the development of the class V 60 as early as 1953. It appeared too expensive for the remaining range of tasks.



As an operational museum locomotive of the DB Museum Nuremberg, V 80 002 was a guest in the Koblenz-Lützel branch in October 2002. Its lettering "Deutsche Bundesbahn" on the sides did not match the painted decorative stripes, the colour contrast of the wheel cut outs was just as historically incorrect. Four years later, this locomotive was a victim of the difficult approach tracks.

The Bundesbahn decided against a self-supporting body and in favour of a stable frame as the basis for a new construction. Less emphasis was also already placed on the exterior and so the path led to more angular V 100s, whose parts were significantly cheaper to manufacture.

For heavy shunting service, the V 90 / 290 finally followed as an independent design instead of a V 100 with ballast weights. The Achilles' heel of the V 80 was eliminated in both types: the transfer gearboxes were omitted; the cardan shafts to the bogies could be shorter and ran almost in the horizontal optimal line.

This was not only more reliable and reduced the cardan error, but also saved costs compared to the previous, more complex design. The cooling of the engine was also not yet perfectly solved in the first bogie diesel locomotive. The locomotives were almost always seen with the engine room flaps raised on the long stem to increase the air throughput.

The noise emissions of the class V 80 remained unsolved. From the end of 1957 onwards, the DB tried to get the externally perceptible rattling noise of the drive system under control with silencers mounted on the cab roof. These disfigured the machines, but were unsuccessful and were therefore removed again after only a few years.

The engine noise was transmitted into the interior through the one-piece body - a problem that not only, but especially the V 80 had. The lessons learned from this were that the successor, the V 100, had a separate driver's cab with rubber seals to the two bonnets, as well as retracted front ends for a better view of the track.

So it can be said that the V 80 was far from being able to fulfil all expectations, but with monthly mileages of more than 14,000 km it proved to be thoroughly reliable. And even if it remained almost insignificant in operational terms, it provided decisive insights for all future diesel locomotives of the Bundesbahn.

And that was precisely one of its intended tasks. At this point, our paradoxical-sounding title for this article makes sense. It now seems clear that because of its pioneering significance, at least one example was to be preserved for posterity.

This function was to be assigned to 280 002-7. After a long period of storage, it was restored to working order at AW Nuremberg in view of the approaching 150th anniversary of the German railways and used as a museum locomotive from 1984 onwards.

Since they were far from being old-fashioned, eight more were sent to Italy in 1977/78, where they were used by track construction companies (V 80 001, 003, 004, 005, 006, 008 and 009) and Ferrovie Bari Nord (V 80 007).



280 010-0 was the only one of the remaining nine V 80s that did not immediately go to Italy. Instead, it found a new home as V 31 in a second crew at the Hersfelder Kreisbahn until 1981, when damage sealed its fate there. Photo: Sammlung Peter Pfister

280 010-0 initially remained in Germany and found a new home as V 31 from 1977 to 1981 in freight service on the Hersfelder Kreisbahn. After damages were repaired, it then also went to Italy.

The Krauss-Maffei-built V 80 001 returned to Germany in October 2005 after a private collector from Hesse had bought it and transferred it back to its old home. A stroke of fate caused a heavy loss at the same time:



When 280 010-0 is repaired and repainted in Penzberg in September 1982, it is waiting for its journey to Italy. This class had never worn ocean blue ivory with the DB and we can see that this colour scheme did not suit it very well. Photo: Sammlung Peter Pfister

V 80 002 was one of the irretrievable victims of the locomotive shed fire in Nürnberg-Gostenhof on 17 October of the same year.

Trainini® had reported on this in one of its very first issues.

As a replacement, the DB Museum in Nürnberg (Nuremberg) was only able to get V 80 005 back from Italy in June 2008 via a barter deal.

In contrast to its predecessor at the museum, however, it had not been refurbished to operational condition in April 2013.

The Deutsche Privatbahn (DP) from Hameln acquired 280 007-

6 at the end of 2009 and had it restored by Rail-Design Bäcker in Siegen. Since then, it has been stored in Altenbeken's locomotive shed in perfect condition.



The first DB locomotive to be taken out of service, the former 280 004-3, is still active in Udine (Friuli-Venezia Giulia region; north-eastern Italy) in 1999. Its external condition, however, has long since left much to be desired. Photo:: Sammlung Peter Pfister



280 001-9, shown here on 29 May 1973 at its home depot in Bamberg, was also sold to Italy but was the first to return to Germany in 2005 and is now in private hands. Photo: Prof. Dr. Willi Hager, Eisenbahnstiftung

While these three locomotives look forward to a bright future, the same cannot be said for the other six: Four have been dismantled in the meantime, only the former and long since parked V 80 008 and 010 were at least still present in 2020.

Prototype photos at time of refurbishment:
<https://www.railedesign-baecker.de>

Weihnachtsgrüße



The editorial team and all **Trainini®** staff wish our readers, correspondents, helpers, producers, colleagues and everyone else who appreciates this magazine a merry, healthy and reflective Christmas and all the best for a hopefully carefree 2021.

Drachenstein of Harald Hieber The Neverending Story

The title of this story already indicates what it is about: For Harald Hieber, what seemed to matter was the journey and not the destination when he embarked on building his Drachenstein layout. A classic model railway career led him early to Z gauge, which has cast its spell on him ever since. Today, he is one of the great ones of the community, and his masterpiece is a worthy conclusion to our 2020 annual focus theme on our readers' layouts.

Like many boys his age, Harald Hieber was a passionate H0 scale model railway enthusiast when Märklin introduced its Mini-Club line in 1972. He was immediately taken with the smallest series produced model railway in the world. Long trains and a really big station – a childhood dream come true!



This article illustrates how the Drachenstein layout evolved and changed its appearance over the course of about ten years. In December 2008, it was dominated by mass-produced buildings from Faller, Kibri and Vollmer. Today, the (almost) only remnant of that time is the railway station based on Faller's "Güglingen" kit.

Thanks to the support of his parents, he was soon the proud owner of a starter kit and a first layout that would grow to stately size. But puberty and adolescence finally shifted priorities and all the railway material disappeared into a box in the attic for almost 20 years.

But true model railway enthusiasts always find their way back to their roots. For Harald, too, this was bound to happen. When he awoke his Z gauge collection from hibernation, he was pleased to discover that a lot more information and products were available compared to when he first started out in this scale. Quickly, the idea was born to start building again, a small, perhaps suitcase type layout. This was followed up by the plan combine the layout with a digital control system. In the end, the result was "Drachenstein".



The layout is named after the ruins of Drachenstein (Dragon Stone) castle which are the central motif to the right of the station, and around which the single-track branch line curves in a large arc. The ruin's steep walls are a popular destination for rock climbers

Inspiration through technical progress

Admittedly, this is a very condensed version of what actually happened. But, by and large, this is also exactly how the extraordinarily successful layout we are presenting today came into being. Many years passed from the first idea to the finished layout, and with them, this piece of work changed its appearance several times.

In this article, we want to try to record the most important stages of the layout's evolution, and to show the influences that gave rise to the changes. Finely detailed and new accessories, many created with laser cutting technology or 3D printing, have and will continue to enrich Harald Hieber's hobby, and that is exactly what we find on his masterpiece.

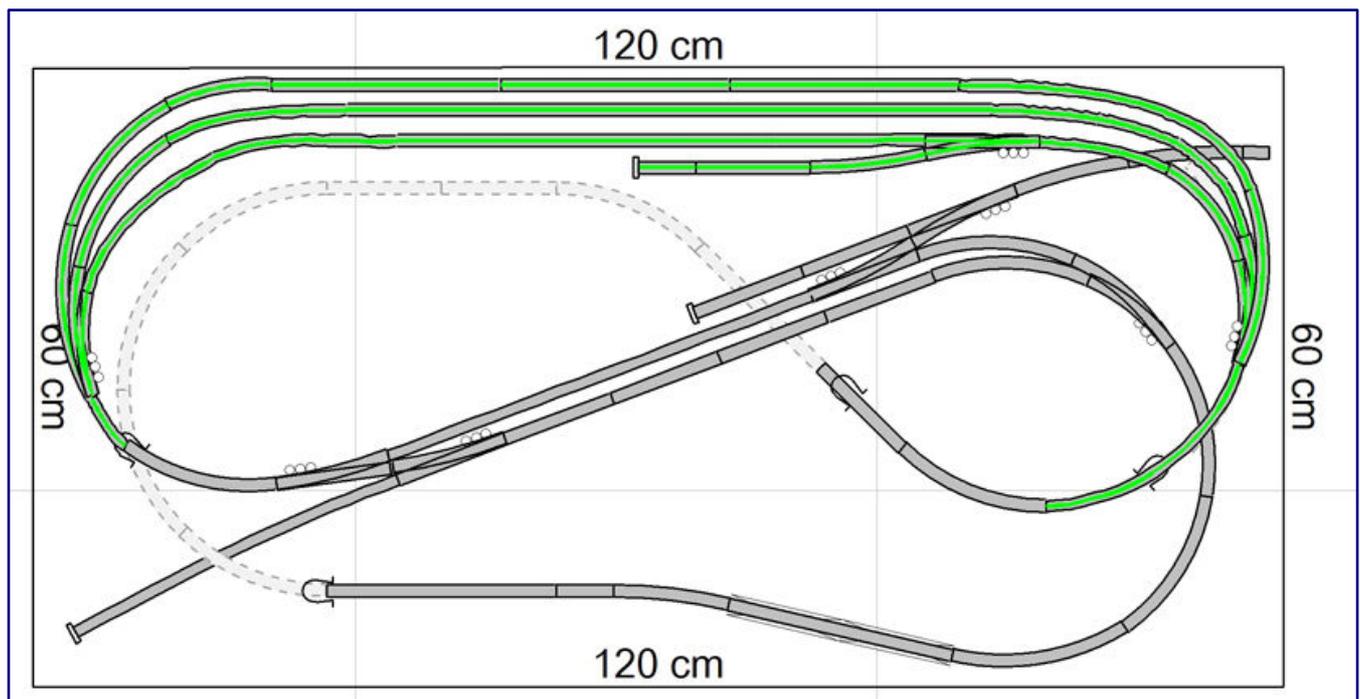
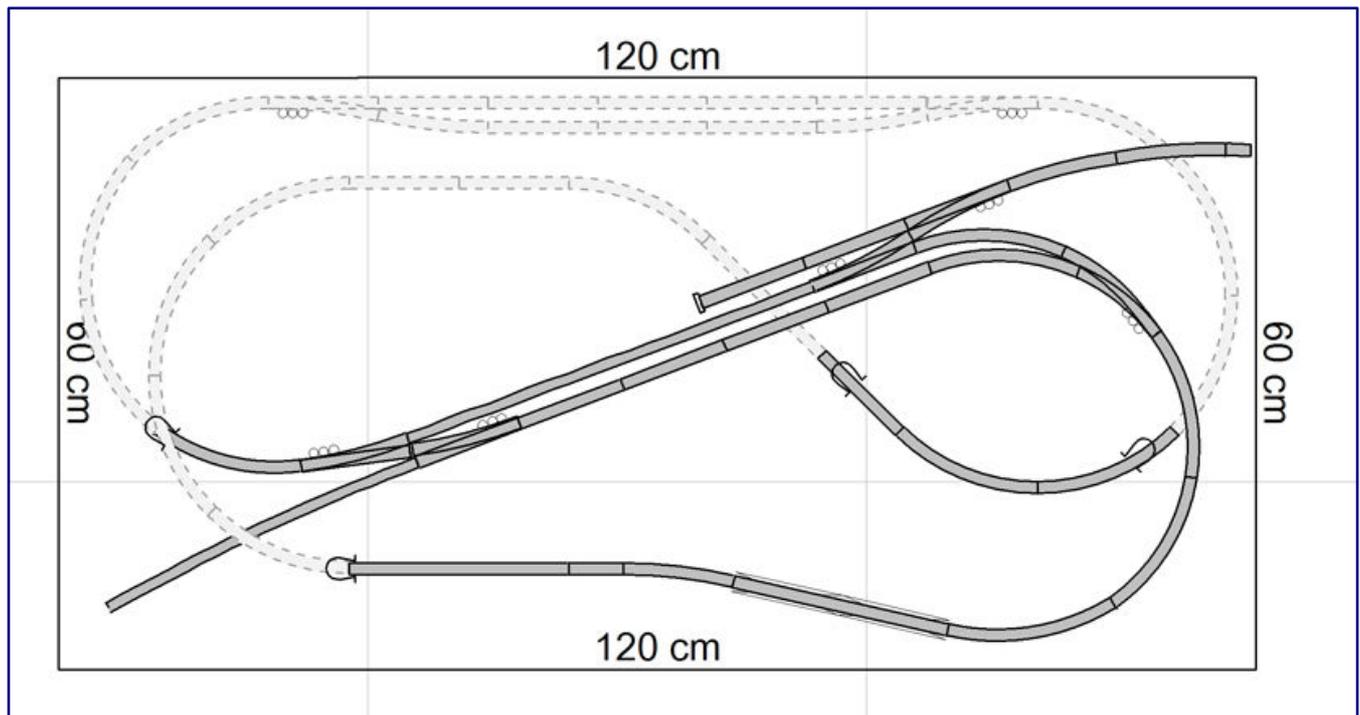
At the beginning of his new start in railway modelling in 2004, there was a plan for a single-track branch line with a village station. It was to be set in the transitional period from railway eras III to IV, in order to be able to gear operations towards steam and diesel traction.

The track plan was to support both automatic operation and manual shunting. Thus, reversing loops were also dispensed with, which at the same time allowed the electronics for digital operation to be kept as simple as possible. The resulting "Drachenstein" track plan evolved until 2010 as an intertwined figure eight that wraps around the Drachenstein ruins.

Up to this point, many of the layout's structures were sourced from large manufacturers: The railway station is based on the "Güglingen" kit by Faller, the buildings in the village came also from Faller, as well as, from Kibri and Vollmer, while the ruin, cave and sinkhole that give the layout its name come from Modellbau Luft. All the details of the landscape design arose spontaneously during the construction of

the layout. Operations were controlled by the Selectrix system, which also enabled automatic train operation.

At exhibitions and trade fairs, the proud owner received much recognition and words of praise for his new gem. The only annoying thing for him was the hidden track sections, which were hardly accessible because the layout had been designed with the lowest possible construction height. If a train derailed in these sections, things became difficult. On the other hand, the trains mastered the inclines without any problems, because they were short, as is typical for branch lines.



The track plan before (above) and after the redesign of the staging yard (below; tracks marked in green). The siding to the right of the station had already been extended before to the edge of the layout. Track plans: Harald Hieber

In the station area, some shunting operations were also possible over the main line. Jörger uncouplers in the form of electromagnets were installed under both sidings in order to facilitate operations and thereby add to the pleasure. The right siding was later extended to the edge of the layout to allow for connecting modules to the main layout.

We will come back to this aspect later, because due to the difficulty making the topography of the main layout fit with the size of normed modules, this siding found another use: It would later serve as a connection to the “Drachenloch” (Dragon’s Hole) extension segment.

What Harald Hieber lacked much earlier, however, was a larger staging yard: In the initial configuration described so far, just two train formations could take turns underground. And, that was quickly noticed by exhibition visitors. So, in 2011, a major reconstruction of the layout began.

This led to three staging tracks and an additional siding for shuttle operations with a rail bus. The only headache Harald had at the beginning was achieving the desired length of the staging tracks with the geometry of standard Z scale tracks.



The reconstruction of the layout also made room for a shuttle service with a rail bus, which waits here on the siding for passengers, before it will later use the siding at the dragon hole and disappear there into the tunnel. On the island platform on the right, mouse, elephant and duck are waiting for the mouse train.

The layout size of 120 x 60 cm remained fixed and could not be changed. A solution to his problem arose when he approached the producer Weichen-Walter at 2011 Märklin Days. A custom-made set of two triple curved turnouts matching the Märklin track, finally made his plan come true!

They are driven by servo motors that can also polarise the frogs. Before the conversion, Roco drives were still in use on the predecessors. Further, operating possibilities resulted from the division of the track from originally eight, to now 16 blocks, with occupancy detectors.

The good experiences with the two custom-made turnouts from Weichen-Walter prompted him to also exchange the curved turnout in the right station entrance for one made by the same company. As with so many Zetties, the Märklin model had caused Harald problems time and again.



The operation on the layout is digital and includes large and small series material, such as here the excellently done class 627 from SMZ. This rail bus successor, together with the “roten Brummer” (red hummer), also provides authentic acoustic experience at exhibitions.

The village is changing

Over time, however, the scenic part of the layout also underwent a lot of changes which would be visible to exhibition visitors. The reconstruction of the village can probably be best described by the term “New-Drachenstein”.

The rebuild of the village was triggered by the fact that the original buildings made for an overly eclectic mix of architectural styles from different regions. Unhappy with this, Harald decided to aim for a unified and individual regional style of his layout.

Photo right:
The fiery brew at the inn doesn't seem to go down well with all the guests (right), but at least a road sign warns of the involuntary quadrupeds.



“Over the years, the layout has changed its face again and again and has become more detailed”, Harald Hieber looks back proudly. For example, most of the polystyrene buildings made way for individually designed kits from MBZ. In addition, the village could be lowered by about two centimetres by replacing a 2.5 cm thick PS foam board with a 4 mm plywood panel, which makes for a more pleasing appearance of the area behind the station with respect to the overall scenery.



Unrecognizable compared to its previous state, the village has changed its face considerably with the conversion and replacement of the buildings. Many loving details bring the village to life, such as the road assistance mechanic attending a broken down car (photo above, partially covered in the middle and photo below, left half), or the maypole, so typical of Bavaria (photo below).

The regular meeting of the model railway enthusiast club Bavaria at “Zum feurigen Drachen” (The Fiery Dragon Inn) also had to move to a new building during the makeover, which is now also much more frequented by guests. Some revellers seem to have long since fallen victim to the Dragon Slayer, the



Drachenstein is set in the transitional period from steam to diesel operation. A small locomotive station on the extension building was not to be missed, where Märklin's most beautiful steam locomotives are now skillfully staged.

fiery speciality of the brewery, which is served here: A traffic sign along the road warns of people who are crawling on all fours...

Discovery in the Drachenloch (Dragon's Hole)

The last major reconstruction phase took place in 2014/15. Drachenstein was now to be expanded, i.e. receive an extension and a turning loop. However, autonomous operations should remain possible, as before. This extension required bringing a track to the edge of the module, which had been missing in the first approach (extension of the shunting track at the station).

A two-track locomotive supply station with locomotive shed, where steam locomotives can be nicely staged, and an additional stub track ending in a tunnel were included in this extension. This way, at least a short train can be hidden from the eyes of the observer.

The dragon's hole, a sinkhole near the castle ruins which gave this segment its name, became the design highlight of the extension. It features the newly discovered entrance to a stalactite cave that has been created in the sub-terrain of the segment and can be seen by spectators through a peephole in the side panel.

Speleologists and scientists are already at work exploring the cave and hoping to discover evidence that might explain the name of the castle and this site. Did a dragon once live in this cave or did people in the Middle Ages, perhaps, at least, believe this?

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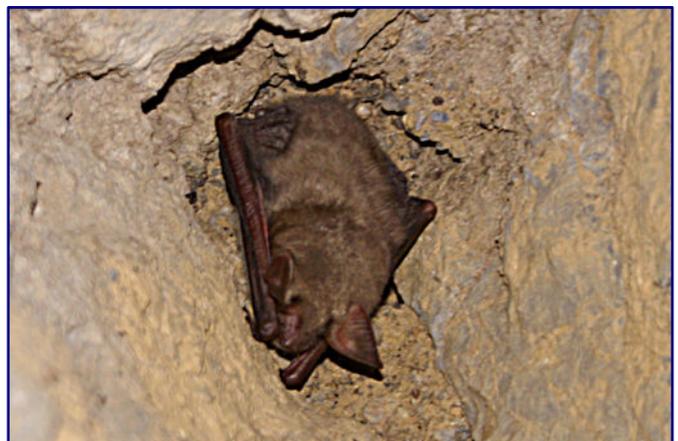


The Drachenloch (dragon's hole) (top photo) was only recently discovered and is now keeping scientists busy. It holds the entrance to a stalactite cave (bottom photo), which speleologists have already begun to explore. This nourishes hopes of learning more about the origin of the name of this place and the castle.

Digresion: Dechenhöhle, the only cave with a railway connection

The term dripstone cave is colloquial, i.e. not scientific. Many show caves, i.e. caves open to the public, bear this designation in their name or in advertising terms, because this generally requires no further explanation.

One such destination is the Dechenhöhle in Iserlohn-Letmathe (Sauerland region), which is one of the better known and larger caves in North Rhine-Westphalia. Attached to it is the German Cave Museum, which provides a lot of information about caves of this kind, their research and discovery, but also about life in a cave.



The Letmathe-Dechenhöhle train halt (district of Iserlohn; photo, above) is the only one in Germany to offer a direct access by track to a cave. The story of this goes back to the cave's discovery, which was by chance by two railway workers who were searching for a lost hammer during track-laying work. Cave spider (photo, bottom left) and cave bat (photo, bottom right) are animals that inhabit the entrance area today.



The German Cave Museum holds the almost complete skeleton of a young cave bear

The Dechenhöhle is the only one in Germany that even has its own railway station. The reason for this is that it was discovered by chance in June 1868 by two railway workers who had lost their hammer in a crevice.

Because of this close and unique connection, it therefore seemed particularly suitable to mention this cave in this article.

The characteristic trait of dripstone caves are the stones that give them their name and which are formed by dripping water.

The water contains large amounts of dissolved minerals, especially lime, which forms deposits during this process and creates the typical rock forms. This material is called sinter.

Dripstones that grow downwards from the cave ceiling are called stalactites. Dripstones that grow upwards are called stalagmites.

When the two meet and fuse over the course of many thousands of years, a pillar called "column" is formed.

A special type of formation is the form of appearance of the (sinter) curtains, which consist of a whole row of interconnected stalactites. Particularly thick stalagmites are also called columns.



With his layout extension, Harald Hieber seems to have really got going, and we cannot help but notice that his layout has become much more lively, be it through couples having some outdoor fun, or a large flock of sheep being driven across a field path. In addition to the increased number of figures, the way in which they have been arranged is also striking.



Harald Hieber has convincingly brought a flock of sheep into this scene, which is being herded together and led by the dogs. To the right of it, endurance runners work on their conditioning.

They all seem to relate to each other and communicate, which gives the scenery its special finishing touch. And in order to cater to the needs of the many hikers roaming the layout, well-maintained paths had to be included in the landscape. One of the paths leads towards the Dragon's Hole, and crosses the branch line that goes around the Drachenstein castle ruins.

Because of the small amount of traffic on that line, the crossing did not require the installation of a barrier, although some guard rails provide for some basic safety. These guard rails were made from etched railings from Modulor, according to the prototype.

These railings consist of three rails and come at a scale of 1:200 which makes them actually too high for Z gauge. They were therefore shortened with a scalpel before being painted red and white and installed. Together with Andreaskreuzen (St. Andrew's crosses) from Trafofuchs, this ensures a safe crossing of the track for hikers. The matching figures also come from the same manufacturer.

However, the layout also has some curious scenes in store: At the forest tavern away from the village, demonstrators protest against serving beer, whilst a father and his son are playing with a remote-controlled boat at a nearby pond. As is so often the case, however, it's the son who is watching and the father playing.

It is also worth seeing how Harald humorously pokes fun at the reliability of many German craftsmen: In the village, the specialists from the Krumm + Schief (Crooked + Skewed) timber construction company are at work, while the journeymen of master painter Peter Klecks (Peter Stain), who are supposed to be fixing up the exterior façade, make the chaos perfect.

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Photo above:
Even a small level crossing for a hiking trail does require some basic safety features. However, a flashing light or even a barrier would have been oversized for this type of pedestrian crossing of a branch line.

Photo below:
While people demonstrate against serving alcohol at the pub on the left, father and son devote themselves to their remote-controlled boat at the pond. As one would expect, the offspring is condemned to watch whilst the father takes the controls.



Photo above:
Chaos reigns on the premises of "Holzbau Krumm & Schief" (Crooked & Skewed Timber Construction), wrecked by master painter Peter Klecks (Peter Stain) and his journeymen. Instead of being on the ladder, the first bucket full of white paint is now on the apprentice's head and has doused him.

Photo below:
The FC Bayern Munich team bus stops in front of the "Feurige Drache" ("Fiery Dragon"). A lucky club supporter with ten friends boards the bus and starts the journey to the club stadium in the state capital.

The FC Bayern Munich team bus also stops nearby. Whether or not one shares Harald's passion for football is completely irrelevant, because a real event was reproduced here.

In "normal" times, a loyal club supporter who has been drawn by lot can always look forward to being taken to the stadium in the team bus together with ten friends. I do wonder, however, if the stadium, had it been included in the layout, would have been dubbed "Kaiserklo" (emperor's loo), because of its appearance from above like a toilet seat. Certainly not.

Cherry on the cake: Depth Effect

A good model railway layout will probably never be finished, and so here, too, there was always room for improvement. A chance encounter finally produced the decisive depth effect.

Atelier Dietrich (Andreas Dietrich) designed and supplied a customised and made to measure photo background, the effect of which is simply astounding. The expanses now seem almost endless and can easily absorb the spectators.



The depth effect of the Drachenstein layout is fantastic thanks to its custom made and perfectly designed background from Atelier Andreas Dietrich.

In order for the layout to have the effect it does today, an optimal form of presentation was needed. A picture frame front panel with integrated LED lighting shields everything from interfering and stray light and at the same time ensures a uniform illumination of all scenes. And, by the way, it also protects the buildings from damage.

Finally, let's turn to the rolling stock that is operated around Drachenstein. It was a deliberate decision to avoid electric traction. Harald Hieber's absolute favourites are the veteran diesel locomotives of the 218

and V100 series, which form the backbone of the traffic here. But he also can't get another train out of his head. "It's the red rail bus that I used to ride almost every day when I was a school boy", he says.

A specimen of such a rail bus, equipped with a sound decoder, usually shuttles between the station and the stub track in the staging yard. When it sets off, it unmistakably draws attention to itself with a loud rattling noise. We almost want to believe that we can also smell the typical diesel soot in the air – Drachenstein simply captivates every observer.



And now our three television protagonists have waited long enough: The mouse train has arrived and picks up the three favourite actors at the platform of Drachenstein, much to the delight of children.

For young visitors Harald wanted a "Mouse Train" (after a famous German TV cartoon character), but this locomotive was actually a class 110. So, what to do? Torsten Scheithauer, who has already presented some of his great works here, helped out and gave a diesel locomotive the design he wanted. Now this train also delights young and old here.

But that's not all, because the well-known TV mouse with elephant and duck also paid a visit to Drachenstein station. It is now standing on the platform waiting for her special train, much to the delight of the little children.

Materials and supplies used:

<http://www.atelier-dietrich.at>
<http://www.hos-modellbahntechnik.de>
<https://www.mbz-modellbahnzubehoer.de>

<https://www.modulor.de>
<http://www.rolfs-laedchen.de>
<http://www.trafofuchs.de>
<https://www.zcustomizer.de>

Information on the Doline and Dripstone Cave:

<http://de.wikipedia.org/wiki/Doline>
<http://www.dechenhoehle.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.

Langhauber von Mercedes-Benz

Gute Sterne auf allen Straßen

Einst war es selbstverständlich: Jeder Lastkraftwagen besaß eine lange Haube, unter der sein Motor arbeitete. Was vor dem Zweiten Weltkrieg galt, fand nach 1945 seinen Höhepunkt der Entwicklung. Neue Zulassungsvorschriften änderten später die Anforderungen an einen wirtschaftlichen Lkw. Das im Folgenden vorgestellte Buch zeichnet dieses Stück Fahrzeuggeschichte beim Erfinder des Automobils nach.

Achim Gaier
Mercedes-Benz LKW
Die legendären Langhauber 1945-1962

Motorbuch Verlag
Stuttgart 2020

Gebundenes Buch
Format 26,5 x 23,0 cm
240 Seiten mit 325 teilweise farbigen Abbildungen

ISBN 978-3-613-04323-7
Titel-Nr. 04323
Preis 24,90 EUR (Deutschland)

Erhältlich direkt ab Verlag
oder im Fach- und Buchhandel

Als Deutschland 1945 in Trümmern lag, war wohl jeder noch fahrtüchtige Lastwagen wahrlich Gold wert. Was damals mühevoll wieder in Schwung kam, dürfte zum großen Teil aus ehemaligen Wehrmachtsbeständen gestammt haben.

Viele Fahrzeuge erfuhren auf diese Weise eine zivile Nutzung, doch der Bedarf im Wiederaufbau und dem beginnenden Wirtschaftswunder war groß. Für die Marke mit dem Stern war es beschämend, dass sie im Krieg ihr eigenes Fahrzeug der Drei-Tonnen-Nutzklasse nicht weiterbauen durfte und stattdessen angewiesen wurde, den Opel Blitz in ihren Hallen zu produzieren.

Nach dem Kriegsende erwies sich das aber auch als eine Rettung, denn schneller als der Rüsselsheimer Hersteller schaffte es Daimler-Benz, seine eigene Produktion wiederanzufahren. Und so ließ sich eine Lizenz erwerben, unter der der Opel Blitz als Mercedes-Benz L 701 zunächst weitergebaut werden durfte.

Doch die fleißigen Schwaben taten alles, um von ihrem Konkurrenten wieder unabhängig zu werden und ihm das Wasser abzugraben. Parallel entwickelten sie deshalb einen neuen Laster für die Nutzklassen von 3,5 und 4,5 Tonnen, um damit bereits 1950 in den Serienbau einzusteigen. Schwere Lkw sollten kurz darauf folgen.



Das deutsche Wirtschaftswunder hatte da bereits eingesetzt und der folgende Aufschwung im Lkw-Bau half auch Mercedes-Benz bei der Rückkehr auf den Weltmarkt: Die neuen Fahrzeuge mit der langen Haube ebnete schließlich den Weg zum größten Lastwagenhersteller der Welt.

Mit dieser Kurzfassung automobiler Geschichte bei Mercedes-Benz möchten wir die Brücke zum hier vorgestellten Titel schlagen: Ausführlich ist in diesem Buch beschrieben, wie steinig und auf welchen Wegen diese Geschichte verlief. Zugleich wird aufgezeigt, wie sich der Diesel-Antrieb bei Mercedes-Benz schon früh etablieren konnte und sich schließlich im Nutzfahrzeugsektor durchsetzen sollte.

Wer sich Automobil-Geschichte allgemein und für die Marke mit dem dreispitzigen Stern im Besonderen interessiert, der kommt hier voll auf seine Kosten. Autor Achim Gaier beschreibt die Typen, ihre Technik, die unterschiedlichen Modelle und Entwicklungen wie auch deren Hintergründe ausführlich.

Der Verlagshinweis, dass die Vielfalt so groß war, wie die Hauben damals lang waren, trifft aus unserer Sicht zu. Ohne die fachkundigen Hinweise des Verfassers dieses Werkes wären wir wohl kaum in die Lage versetzt worden, die äußerlich sehr ähnlichen Baureihen und auch die einzelnen Baujahre innerhalb einer Typenreihe zu unterscheiden.

Nach Einblick auch in bisher im Archiv schlummernde Protokolle entstand hier ein einzigartiges, zugleich hervorragend bebildertes Standardwerk, das uns auch gut recherchiert scheint. Es schließt eine wichtige Lücke in der Mercedes-Benz-Geschichte.

Gemein ist den in diesem Buch im Fokus stehenden Fahrzeugen, dass sie in der letzten, aber großen Blütezeit der Langhauber gebaut wurden, bevor die Kurzhauber und danach die Frontlenker ihr Erbe antreten sollten.

Nachdem der Anfang im Mannheimer Werk gemacht wurde, lief die Produktion in Gaggenau, dessen bekanntestes Fahrzeug wohl der Unimog ist, erst später wieder an. Von dort kamen die schweren Lkw-Modelle, die hier wie die Übergangstypen zu den Kurzhaubern ebenfalls Eingang fanden.

Nach der historischen Einleitung von den Anfängen der Nutzfahrzeuge bis zum Ende des Zweiten Weltkriegs arbeitet Achim Gaier alle Mannheimer und Gaggenauer Modellreihen chronologisch und ausführlich ab. Dabei werden auch Seitenläufer der Entwicklung wie der Omnibus-Bau in Mannheim oder nach Anforderungen der Feuerwehren nicht vergessen.

Ebenso zählt er auch die Schwächen der Konstruktionen oder die Folgen schwäbischer Sparsamkeit auf. Im Gesamtkontext ergibt sich ein gutes Bild, wie Mercedes-Benz mit Bedacht und Zielstrebigkeit in die Weltspitze fand.

Eine Besonderheit dabei waren Auslandsvertretungen, Montagewerke oder später auch Lastwagenfabriken, über die Daimler-Benz weit über Europa hinaus expandierte. „Langhauber auf allen Kontinenten“ heißt bezeichnenderweise das letzte Kapitel dieses Buches.

Mit Tabellen zu technischen Daten aller Fahrzeuge und Statistiken zu ihrer Produktion rundet der Autor die Inhalte am Buchschluss ab. Bis dahin hat er aber auch durch eine ausführliche und gute Bildauswahl, die seitens des Verlags auch beinahe perfekt reproduziert wurde, anderweitig zum Lesevergnügen beigetragen.

.....
: Publishing pages with reference possibility:
: <http://www.motorbuch.de>
:

Modellbahnratgeber für Anfänger Schritt für Schritt zum Erfolg

Vor fünf Jahren haben wir das literarische Erstlingswerk von Heribert Tönnies vorgestellt. Seit zwei Jahren ist er mit einem neuen Buch am Markt und arbeitet längst an einem Folgeband. Getreu dem Motto „besser spät als nie“ möchten wir die Chance nutzen, vor allem Neueinsteigern schöne Bastelstunden in diesen wirren Zeiten zu schenken. Das schönste Hobby der Welt hilft auch durch Dunkelheit, doch sollen die Erfolge ja sichtbar werde, wenn uns die Welt wieder hell erscheint.

Dipl.-Ing. Heribert Tönnies
Eisenbahnmodellbau – eigentlich ganz easy!
Band 1: Das Bahnbetriebswerk

Eigenverlag
Köln 2018

Elektronisches Buch
PDF-Datei 73,8 MB
Ausdruckformat 21,0 x 29,7 cm (DIN A4)
506 Seiten mit über 1.200 meist farbigen Abbildungen

keine ISBN oder Best.-Nr.
Preis 9,99 EUR (Deutschland)

Erhältlich nur direkt beim Autor
oder vermittelt über den 1zu220-Shop



Dipl.-Ing. Heribert Tönnies ist seit Jahren Leser unseres Magazins und hat auch schon Bauanleitungen und Artikel beigesteuert. Er ist insofern kein Unbekannter, zumal wir auch sein erstes elektronischen Buch zum Bau einer Burgruine vor fünf Jahren an dieser Stelle besprochen hatten.

Längst im Ruhestand, findet er nun mehr Zeit, sich neuen Aufgaben und Herausforderungen zu widmen. Aktiv beim Stammtisch Untereschbach e.V. ist ihm die Modellbahn und besonders die Spurweite Z eine Herzensangelegenheit.

Dabei wendet er sich bewusst nicht den anspruchsvollsten und schwierigsten Projekten zu, sondern sucht einen Weg, der besonders Einsteigern zu vorzeigbaren Ergebnissen verhelfen soll. Kreativität, Bastelgeschick und ein gutes Auge, um auch aus einem alten Modell noch etwas Schönes zu zaubern, sind die Punkte, auf die es ihm ankommt.

All das spricht nicht nur für eine Bauweise, die auch aus gebrauchten Gebäudemodellen oder eigenen Dachbodenfunden noch etwas Ansehnliches hervorbringt, sondern auch für das Nutzen künstlerischer Fertigkeiten. So kommen selbst Eigenbauten hier nicht zu kurz.

Auch bei ihm hängt vieles davon ab, Vorbildaufnahmen oder eigene Beobachtungen genau zu studieren, sich einzuprägen und sie zu analysieren, um das Gesehene mit Geschick ins Modell umzusetzen. Leserinnen und Leser dieses Werks werden erkennen, dass dies wirklich kein Hexenwerk ist.

Klar zu bekennen haben wir, dass sich die wesentlichen Inhalte dieses Buches auch auf erheblich weniger Seiten hätten wiedergeben lassen, aber genau das war offenbar nicht gewollt: Der Autor legt hohen Wert auf sehr ausführliche Beschreibungen und Erläuterungen, die zudem mit einer Bildfülle versehen sind, die wohl jeden Titel aussticht, der mit einem kommerziellen Ziel verfasst wurde.

Genau das ist hier nicht der Fall, obwohl wir offen lassen müssen, ob der moderate Preis nur die Selbstkosten deckt oder auch ein wenig zum Hobby beiträgt. Immerhin arbeitet sich Heribert Tönnies an

einem Schaustück ab, das er eben für diesen Titel überhaupt gebaut hat, während er das Entstehen ausführlich dokumentiert hat.

Die Bezeichnung als Band 1 deutet bereits an, dass es eine Fortsetzung geben wird und Einsteiger, die ihn erwerben, werden gewiss genau verfolgen, wann sie auch den Nachfolger bestellen können. Mag es gestandenen Modellbahnern mit großer Vorbildkenntnis bisweilen etwas langatmig erscheinen, die Zielgruppe dieses Buches fühlt sich mit Sicherheit umso mehr angesprochen.

Immerhin haben auch wir häufig vernommen, dass besonders die Printpresse ihre Artikel und Anleitungen zu kurz und knapp verfasste und viele Leser, die eigentlich Rat und Hilfe suchen, völlig abhängt. Vielleicht hat sich das auch Heribert Tönnies gedacht, als er seine Karriere als Autor begann. Denn detaillierte Schritt-für-Schritt-Anleitungen waren sein erklärtes Ziel.

Ermutigt von seinem Erstlingswerk, das wir 2015 vorgestellt haben, schritt er ein zweites Mal zur Tat und hat einiges an Rückmeldungen mitgenommen: So wurde das Hoch- in ein Querformat geändert, um neben Buchlesegeräten auch am Monitor und den nun weit verbreiteten Tablet-Rechnern Lesevergnügen zu bieten.

Überfliegen wir noch kurz die wichtigsten Inhalte, um Interessenten einen Überblick zu geben, was sie hier erwerben können: Nach dem Beginn mit einem Einführen in den Anlagenbau nach Vorlage des Vorbilds folgen Grundüberlegungen und Hilfen zur Maßstabsbestimmung anhand von Originalaufnahmen. Anschließend geht es an die praktische Umsetzung. Die freie Vorlage lieferte das ehemalige Bw Köln-Gremberg mit zwei Gleisebenen.

Das Erläutern der Betriebsabläufe und technischen Einrichtungen wie auch Lokbehandlungsanlagen unter Zuhilfenahme historischer Originalfotos nimmt am Beginn großen Raum ein und wirkt stellenweise wie ein Vorbildbuch. Doch der Leser wird später merken, wofür diese Detailverliebtheit gut war, denn die Kenntnisse helfen auch, typische Anfängerfehler zu vermeiden, die die Freude am Ergebnis sonst bald trügen könnten.

Die vielleicht wichtigste Nachricht steht nun hier am Schluss: Auch wenn der Verfasser seine Leser am Entstehen eines Spur-Z-Dioramas teilhaben lässt, so handelt es sich in keiner Weise um ein Buch ausschließlich für den Maßstab 1:220!

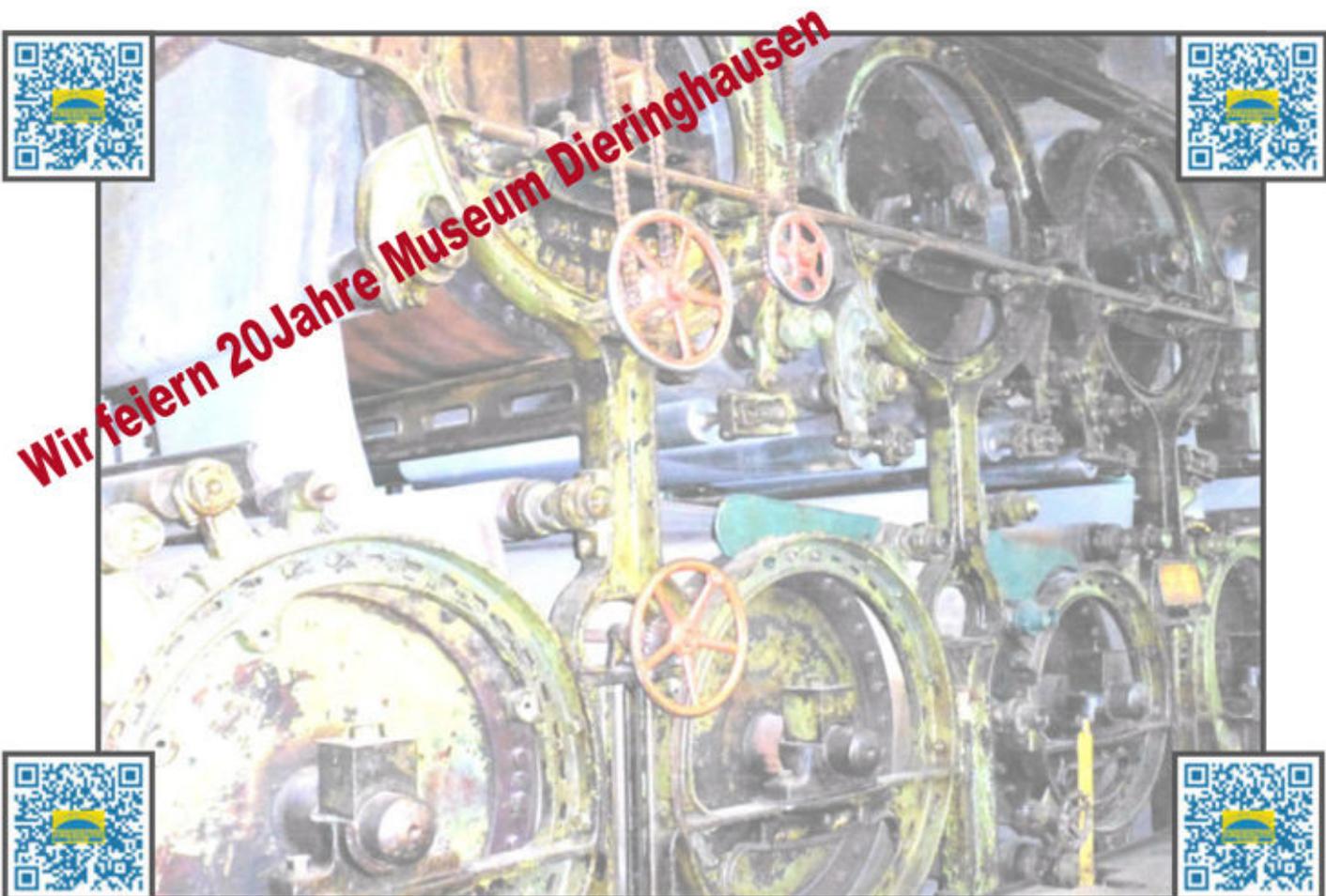
Auch Freunde der Nenngrößen N, TT und H0 haben an ihm schon längst ihre Freude gefunden, denn leicht anwendbare Umrechnungstabellen und Maßangaben führen auch sie zum Erfolg. Material-, Werkzeug- und Herstellerverzeichnisse sowie ein Register mit Begriffserläuterungen sind eh baugrößenunabhängig.

Reference possibility:
• <https://bestagernet.de>
• <https://www.1zu220-shop.de>

Stammtisch - Untereschbach

Jubiläumspräsentation

Spur Z Modelleisenbahnen und Zubehör



*In der Dombacher Maschinenhalle PM IV
Im LVR Museum in 51465 Berg. Gladbach.*

*Am 12.06.2021 von 11:00 Uhr - 18:00 Uhr
Am 13.06.2021 von 11:00 Uhr - 18:00 Uhr*

www.Stammtisch-untereschbach.de

Commentary from Dirk Kuhlmann

A Time to Forget

The ongoing pandemic is gnawing at our nerves. At the same time, many people are reflecting on their model railway hobby, while hardly anything is noticeable outside. But while we all probably have to reposition ourselves, maybe even reinvent ourselves, some prefer to nurture their egos, leave it at "business as usual" or even try to exploit the crisis commercially for their own benefit. Dirk Kuhlmann comments on the excesses of our environment.

By Dirk Kuhlmann. This year, for understandable reasons, Model Railway Day is simply non-existent in the public's awareness! In the summer, various associations, clubs and other participants had prepared a programme, which by autumn at the latest had become inapplicable.

Now, in the last few days, I have done a lot of research to see if there was anything left to report: indeed, at the grassroots level! In a positive sense, many club model railroaders (staying at home) have maintained and in some cases even expanded their contacts with their normally in-person guests virtually.

This is a very noble gesture, and I think that especially the individual model railroader can do a lot for our hobby this way. Even I have received some calls from newcomers, e.g., with the request for some tips.

My club is based in a school, and there was even an enquiry here as to whether, after the Covid 19 period, pupil-teacher seminars on model railways could be held again after many years. So: Something is moving after all, only on a small scale, but all the more important and most gratifying.

As editor, I had of course spread out my investigation results on the table and edited them as objectively as possible, but there also lay a piece of paper whose contents contained a rather emotional message and the actual headline of this article would be: the time of forgetting!

For almost a year now, the Covid 19 virus has been among us. This pandemic is talked about daily, be it in the media, be it in private - simply everywhere. We keep experiencing various (important) restrictions in our normal lives and have to cope with them; whether we like it or not. Let's just make the best of it, with most noble consideration for our fellow human beings!

For months I have kept a very low profile and also refused the summertime carelessness of many of my downright "event-hungry" contemporaries. This left a lot of time for building some exhibits, plan drawings and other mind games. But one thought game in particular gave me quite a fright: What is happening right now to our beloved model railway hobby?

After all, the fairs and exhibitions were always the place to go for whole families to rediscover or rediscover the hobby. It was truly the industry's greatest opportunity to open up to a young audience, and, in a positive sense, to acquire.

I don't want to discuss the tiresome and well-known mistakes in the past, especially on the part of the manufacturers, but also a very pronounced arrogance of some "busybodies" here, because the events



Model Railroading Day

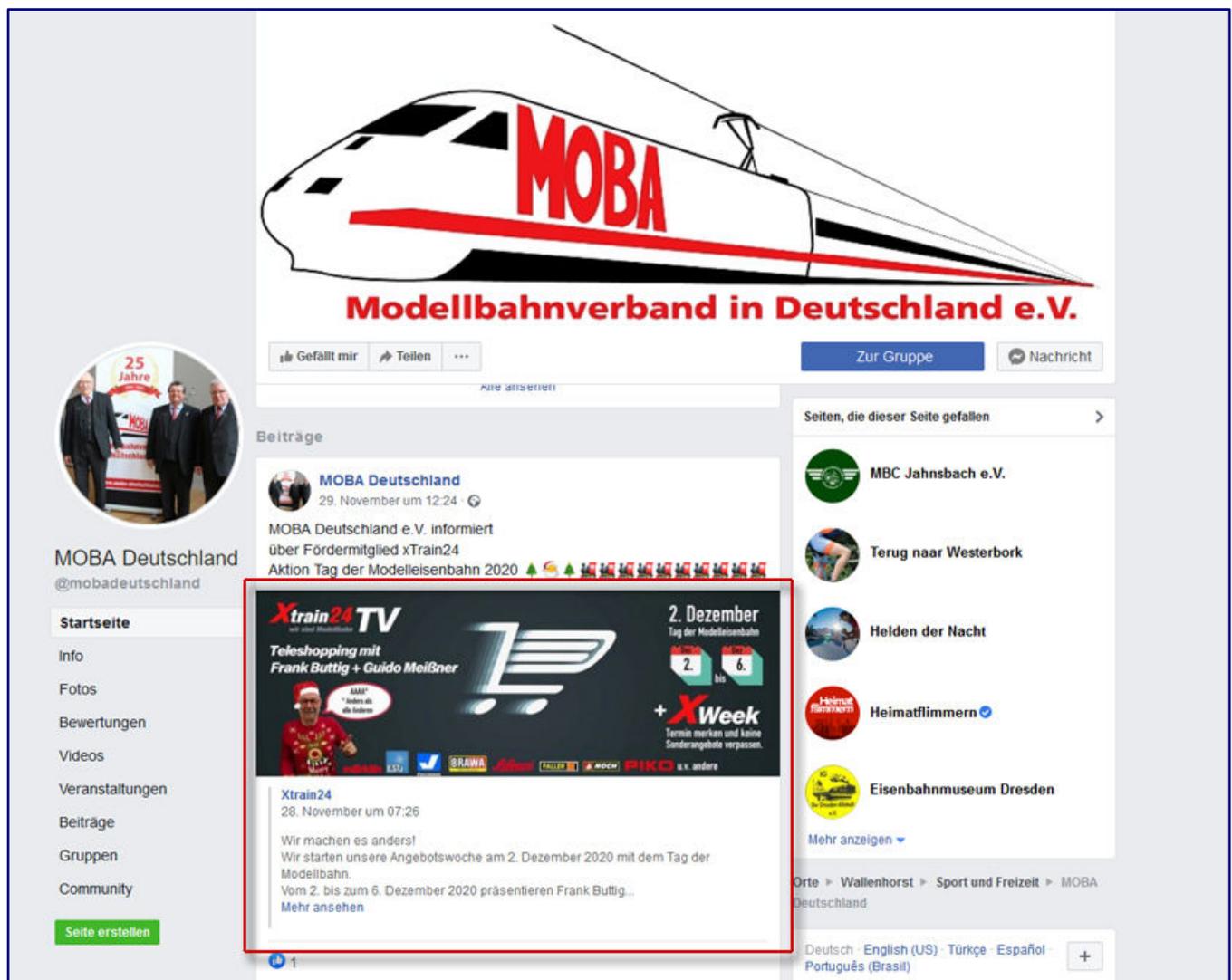
2. December

are currently cancelled or have been moved far into 2021. Thus, the break has occurred and this may even be a taboo subject.

A completely egocentric model railroader will consider the situation a happy circumstance, at last one(s) are among themselves and can enjoy life with their fellows! You know... licking rails and kissing locomotives! So go ahead.

During the first economic full stop in spring, I observed the scene at length and am dismayed by the various gaits. Of course, manufacturers and traders have to look at how to sell the goods and of course try to keep their employees.

The internet with an unbelievable number of “newsletters” or even really badly done “advertising bombs” cluttered up my electronic mailbox, but at least there was apparently still life out there. Despite good hope, but nothing more came!



Is such perfidious advertising by a single model railway dealer really what we should expect in these times on the pages of an interest group for Model Railway Day? Source: Moba Deutschland (seen by Dirk Kuhlmann)

There was also no more life in the nationwide associations. The two big associations are also very passive. Only in the forums is there still a certain informal exchange, due to the current circumstances.

Many had the feeling that they were somehow alone in the world with their hobby. Unfortunately, “buy, buy, buy” does not make up the common ground in model railways.

Well, that proves once and for all that the “big players” have determined events up to now, and the common model railway enthusiast has mostly just gone along with them, including a certain inbred brand loyalty, of course.

In addition, the railway publishing group was sold in the summer and, in my experience, this will change the composition of the press. To the chagrin of the followers of various magazines, some titles are also disappearing from the market.

Since nothing more was happening in the self-proclaimed “scene”, I used this vacuum quite brutally to place articles promoting our Z gauge. In spring, there was enough time, and, above all, peace. The air was better and there was hardly any traffic noise.

I didn't take part in Covid 19 discussions with miserable prattling and also directly terminated the friendship of pandemic deniers. Aside: watching the headlessness of Homo sapiens from a distance developed a certain humour for me. You know, just the thing with the toilet paper...



This is actually how the commentator imagines the day of action. In times of a distance ban, particularly creative approaches and forward-looking thoughts are needed in order not to lose touch in the future.

Due to the lack of presence discussants, I started a “One Man Brainstorming” to shed light on the time after the pandemic.

Conclusion as things stand: The industry will definitely want to return to its tried and tested paths, but it will be in for a nasty surprise.

Now, there has been enough time to forget and some (or many?) people will no longer follow this path. You don't believe it?

Well, this is their right! If I am wrong, there would be some relief, even on my part.

Again, where is the imagination among manufacturers, the press and perhaps dealers? Surely there are

well-endowed advertising strategists, or, is it because of a world (in)pain, that nothing works? Or was the staff just miscast for years, and we are only noticing it now?

But, one aspect is demonstrable and every model railway enthusiast should actually be aware of it: For many years, a certain number of people have been setting the public direction, a good network among themselves is a matter of course. And one's own preferences are presented to the public almost as the last resort; the hobby model railway enthusiast should simply go along with it. In spite of some high “consumption,” it is apparently very difficult to let go!

Why don't they, and let's give the younger people in their positions, a little chance to get things going again with fresh ideas?

You will have to tread new paths and here you should think about it quite quickly. Otherwise the hobby of model railways will be side-tracked for good. And then, unfortunately, no more model railway day will help.



Model railways are not a discontinued model and also appeal to younger generations again. But manufacturers, clubs and individuals should take a step back, sometimes even take a step back and try to see the world through the eyes of the next generation.

Personally, I have worked out a few new paths for myself, and this is still possible at 59 years of age, if the fire is still burning!

Once again, we all have vanity and a certain egomania. However, everyone should be aware, when it is time to withdraw from the model railway public.

A friend once said to me that he was sometimes ashamed to have chosen this hobby, which is predominantly cultivated and propagated by reactionary, old, unfriendly, and overweight people. Can and may it be?

He is a gifted designer, but only builds for himself. The embarrassment to the outside world seems too much for him.

Although the hobby is now considered likeable again, work has to be done on many fronts at the same time.

I would look forward to changes and, as a common customer, I would gladly go along with the paths to modernity, at least that way I would not have time to forget.

But wait, let's not forget that some industry giants are now predicting slight growth for 2020 in pandemic time. People have had more free time since the spring, and at home!

Could 2021 be a year of (positive) change after all? Let's all remain optimistic.

Special pages for Model Railway Day:
<https://www.tag-der-modelleisenbahn.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.

Frustration with the decay of an AZL locomotive chassis:

I wanted to thank you for your tireless commitment to the small gauge and wish you and your families a Merry Christmas.

It's all kind of muddled and special these days, but, sometimes the hobby helps, at just these times.

For reasons of space, I am the classic Christmas driver. So, also this year. My Märklin engines are over 40 years old, and after a thorough cleaning and some oil, the little loco still manages its nearly 400 km/h.

When I took my AZL-UP-GP38-2 out of the box, the parts of the chassis, due to zinc plague or whatever, fell towards me. The machine is from 2013. All research has shown that I am not an isolated case, and AZL does not really feel responsible.

I read your great magazine every month. I haven't read anything on the subject so far and haven't seen a post on it in the AZL forum either. In your imprint Rob Kluz is explicitly listed as the America correspondent.

Is it possible to find out something about this or to get the manufacturer to agree to an exchange programme? I think the AZL products are, otherwise, great, but this quality is not acceptable, and from my point of view, the manufacturer also has a responsibility here.

Michael Werstein, München

Editor's reply: To our knowledge, the manufacturer AZL has long since been legally released from all warranty obligations in all markets it serves directly or indirectly, which should also apply to its sales partners, who are the customer's legally responsible contractual partner. We are not aware of any manufacturer's warranty beyond this.

But, we do not want to try to assess the legal situation, because that would require a lawyer who is allowed to give legal advice. We take the acknowledged high level of goodwill of Märklin as a benchmark, which many of our readers also use as a yardstick, a rather moral obligation in the interest of long-term customer satisfaction and loyalty.

Since in Göppingen, even after many years, hidden product defects were, and are still being eliminated, that must have existed recognisably at the time of purchase, we also hope for comparable ideas at American Z Line on how to help affected customers and return satisfaction to them.

Therefore, we have written to one of the two owners, and Rob Kluz in his function as a wholesale distributor and asked for a response. We will provide this answer here for all our readers.

Houses by Willi Pflugbeil (layout portrait "Wiesenthal", Trainini® 11/2020):

In which magazine could I find the article on Self-built Houses?

Jan Stam, Beekbergen (Niederlande)

Editor's reply: The half-timbered building shell by Wilfried Pflugbeil, which was built on the "Wiesenthal" site, and received a reference to an earlier article, was presented in Trainini 8/2010. This issue can be found in the archives of the German National Library, or more easily in our licensed **Trainini Archives**.

Feedback on our Culemeyer articles (Trainini® 11/2020):

The current article in **Trainini** 11/2020 fits "like a glove", at the moment a transfer ramp for the wagons on the Culemeyer is being built in the area of the commercial unit in my Herilingen depot, matching the manual turntable.

Because this is a somewhat newer era, the Preiserlein found it too cumbersome to always pull the heavy wagons over the hand ramps onto the Culemeyer with winches. That's why they lowered the entrance, so that the track is at trailer height. Now the wagon can easily be pushed or pulled horizontally onto the trailer.



On our reader's operational diorama, the road roller is served directly from the track thanks to lowered access. Photo: Heribert Tönnies

Because the procedure of loading and unloading is virtually unobservable today, I have published two links to videos in my eBook "Praxisanleitungen" on page 452, that nicely show the reloading procedure:

https://www.youtube.com/watch?v=_ODxu9PRSBs

<https://www.youtube.com/watch?v=Eej45hmDd14>

Perhaps, as a supplement to your report, you can show these links so that the procedure can also be visually understood.

Heribert Tönnies, Köln

Editor's reply: The first-mentioned video link was also included as a further reference at the end of the aforementioned article in **Trainini**® 11/2020.

Insightful feedback about the Klv 20:

Book author Volkhard Stern, who has also supported us in some research or provided us with pictures and with whom we have a good relationship in the meantime, responded to our report on Märklin's model of the Klv 20.

Enthusiastic about our contribution, and awakened by the criticism of some customers about the roof rack of the model including freight, he sent us a prototype photo of the blue painted Klv 20 as a "small car no. 1" of the Wolff Walsrode works railway, which he had taken in Bomlitz in 1990. The vehicle can also be seen with a roof rack on which an open box is loaded.



The Klv 20 of the Wolff works railway in Walsrode was also carrying a roof load in 1990 when it was posing for this photo. Photo: Volkhard Stern

This proves that Märklin's approach, even if not part of the usual appearance, it is not absurd, and that the option chosen to increase the weight of the miniature Klv did not simply spring from a Göppingen whim, or even, fantasy.

New Trainini Archive:

Since the publication of the last issue, a new **Trainini Archiv** (<https://www.pilentum-television.com/en/trainini-magazine.htm>) has been launched. On his Pilentum Television pages, filmmaker Markus Lenz offers all English-language issues of the *International Edition* (since January 2018), as well as other free magazines (since January 2018).

His German site Pennula is to follow with an archive of German-language editions. Of course, we will also include both new archives in our link list.

New products from Zmodell:

From the Ukraine there are new gaps to report. Based on the latest edition of Märklin's flat car Res in standard design, Alex Mark has created a variant in the colours and labelling of the Polish state railway PKP (item no. 92427). Three blue painted cars are included in this set.

Each car has an individual road number, which was created with a UV printer together with the other inscriptions. By the way, the blue buffers correspond to the prototype, which could also be further approximated with further, smaller modifications to the body. The scope of delivery includes grey ballast loading inserts from our own production.



The PKP standard type cars Res (item no. 92427) are based on modified Märklin models. Ballast inserts as load belong to the scope of delivery, but also give an impression of the individually available products. Photo: Zmodell

They provide the cue for further new products, because Zmodell (<https://www.facebook.com/Zmodelltrains/>) has also developed its own load inserts for various Märklin models, with which alternative offers from third parties that are no longer available are to be replaced, or the reproduction quality is to be raised by hand.



In addition to various Märklin models, the open 50-foot wagon from Micro-Trains is also supplied with matching load inserts, here, metal scrap (art.-endnr. -007). Photo: Zmodell

Various basic types from the Märklin programme are taken into account, including the old Klms 440 (based on 8610) and Omm 52 (based on 8622), Eaos, Eamos, Eanos and Fals, OOtz 43 and the Res 687. Inserts for open 50-foot wagons from MTL have also been realised. Thus, the most important open, flat and self-unloading wagons are already considered.

It is hardly possible at this point to list the individual loads for all models including article numbers. Also, not all announced inserts are available yet. If you have any questions, please contact the manufacturer (zmodell[at]ukr.net), who can be contacted directly, in English.

The following cargoes are planned (end number indicates the cargo type in each case): Coal (-001), Ore (-002), Crushed stone (-003 / -004), Sand (-005), Logs (-006), Metal scrap (-007), Wood chips (-008), Metal shavings (-009), Limestone (-010), waste glass (-011), sugar beet (-012), wooden boards (-13), pipes (-014), wire coils (-015), sheet metal coils (-016), metal plates (-017) and steel beams (-018).

Since the 1to220 shop has taken on a sales function, the cargo inserts, which are already available for delivery at short notice, can also be seen there, and assessed via further product photos: https://www.1zu220-shop.de/Zmodell/Ladegut:1100105_1100246.html.



Märklin models for which loads are offered include the Fals loaded with coal (-001) here (photo left) and the Eamos filled with limestones (-010), in our examples (photo right). Photos: Zmodell

Märklin deliveries in the Christmas business:

Despite the bottlenecks communicated in the last issue, some Märklin new products have made it into the shops just in time for the Christmas business. First of all, the two diesel locomotives EMD GP38-2 of the Santa Fe (item no. 88165) and the Union Pacific (88166) purchased from AZL. Their bogies were adapted to the Märklin coupling standard.

The replica of a class 0310 express steam locomotive in steel blue (88856) of the German Federal Railroad, as it was used before it was reboilered in Dortmund, is based on the well-known model of the two-cylinder class 03, which has already undergone product maintenance and is, therefore, up to date. This includes detail control, LED lighting and a bell-shaped armature motor.

It can be used with the five apron cars from the F-train car pack (87357). Included are a red dining car WR4üe of the DSG and four 1st/2nd class express train cars of the type AB4ü with silver-coloured letters DB on the long sides.

They reflect the operating condition around 1953 and differ from an earlier car pack primarily in the abbreviation of the railway administration: The post-war trains of the Rheingold/Loreley Express, which also belonged to the blue F-train network, carried written-out lettering at the request of the neighbouring countries, as the abbreviation reminded them too much of the markings between 1937 and 1945.



The newly delivered five-piece apron car set (item no. 87357) reproduces an F-train variant that was not previously offered (photo above). The cover flaps that these cars wore before the class updates are reproduced by printing (photo below), and which cover the "1," here.

However, Märklin also took another feature of these coaches into account: Before the class reform, only 2nd class was usually found in the F trains. According to their design designation, however, the coaches are 1st and 2nd class passenger coaches. The difference between the two "upholstered classes" was only full occupancy with six persons per compartment or partial occupancy on four seats, the centre then remaining free in each case.

On the outside, this was indicated by the fact that the class numbers could be partially or not at all covered. Sliding plates then covered the 1 or 2, in the case of two-class use sometimes neither of the two digits. Märklin has reproduced these plates by pad printing, so that they would cover the upper 1 on this train.

The collectors among the Zetties will be treated in time for the festivities with the refrigerator car in real bronze (82389), which has also been delivered.

New church model from Archistories:

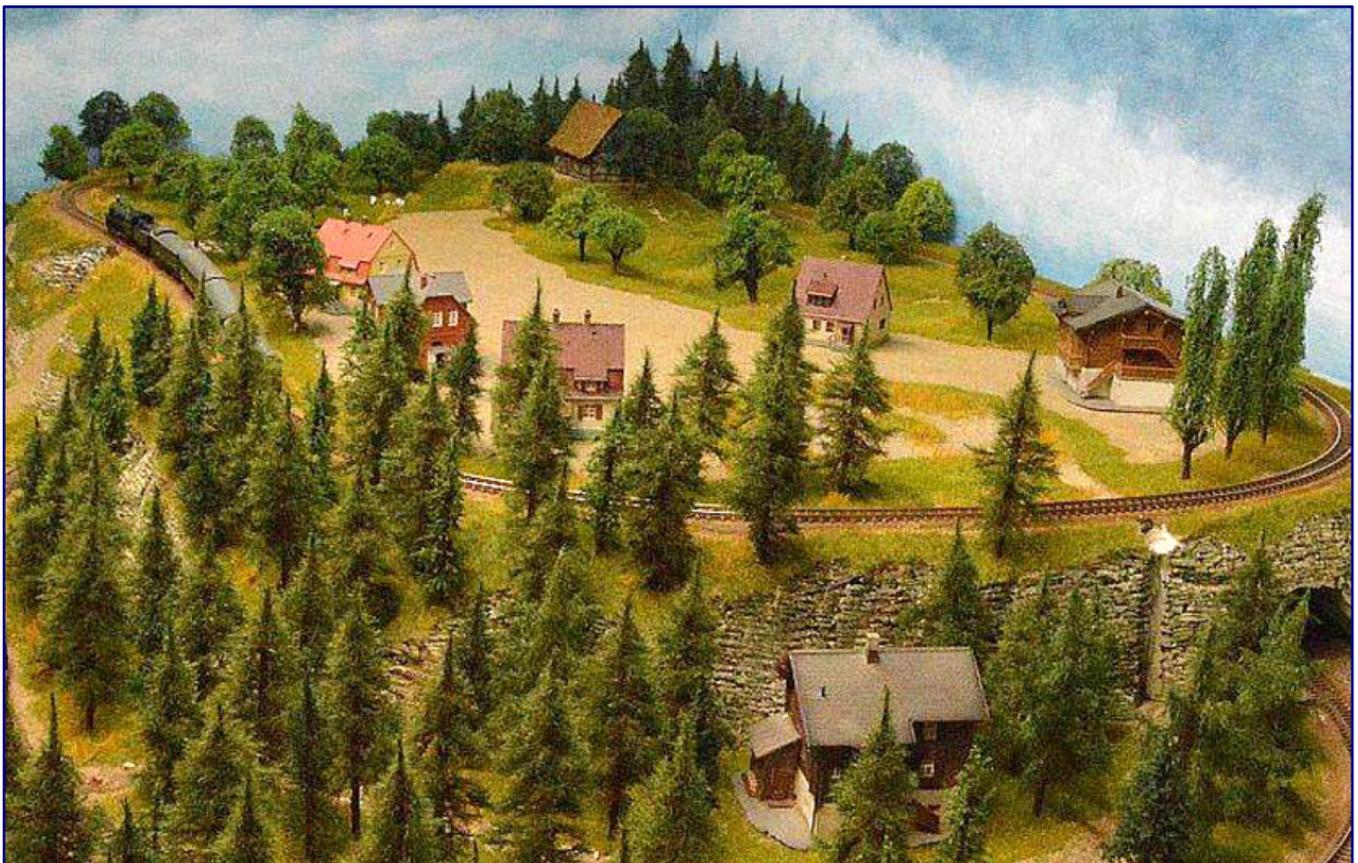
A newly commissioned kit has been delivered exclusively to Ztrack from Hanover (<https://ztrackcenter.com/403181>), which can be purchased in Germany via the 1zu220 shop. The rural wooden church based on the North American model has the kit name "Country Church" (art. no. 403181).

It shows itself emphatically simple, but with effective details such as real wood doors, gold-coloured tower cross, a street panel and fully engraved roof. The interplay of strong contrasts of wall and roof is meant to emphasise the nested construction.

Another defining feature of the kit made of solid-coloured hard cardboard are the full-colour printed church windows with ten different saint motifs from the 19th century, including a characteristic lattice image.

Good quality affordable trees:

Modellbauatelier Steinbrecher is not new to the model railway market, but has expanded its range to Z gauge, in response to demand. The main focus here is on high-quality tree models made by hand, which can be offered at affordable prices.



André Steinbrecher's Z gauge show layout displays a large selection of the trees possible in 1:220 scale. Photo: Modellbauatelier Steinbrecher.

André Steinbrecher's range includes coniferous as well as deciduous trees with a very realistic appearance. He also produces exclusive trees at the customer's request. The typical growth form of most tree species still comes into its own well on a scale of 1:220.

Fruit trees, bushes, stumps (broken trunks or felled) and dead trees are also made on request. They are usually based on wire or cast blanks from our own production. A small overview of the range is given here with the photos, further information and prices can be found on the supplier pages (<https://www.modellbau-steinbrecher.de>).

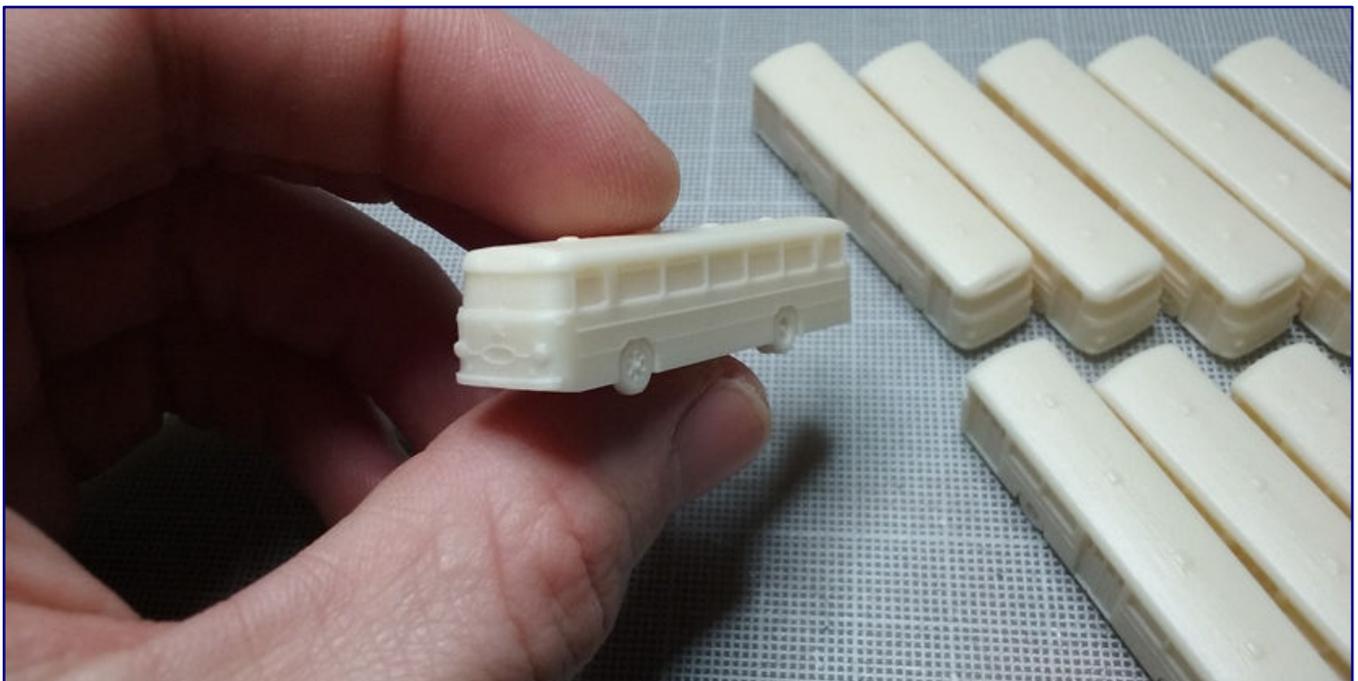
Two new wagons at Full Throttle:

Since the publication of the last issue, two new wagon models have been listed at WDW Full Throttle (<http://www.wdwfullthrottle.com>). These are a yellow-painted 33-foot bulk car with visible box braces and Ford logo (Item No. FT-2047), which come in a double pack with scrap cargo.

A new collector's pack of bulk freight cars features examples of the Reading & Northern (FT-COL52). Full Throttle models are available in Germany from Case-Hobbies (<http://case-hobbies.de>), among others.

11 metre city bus from Portugal:

JMC Scale Models has announced the Henschel HS 160, an 11-metre city bus that was on the road with three side doors from 1956. To our knowledge it is the first Henschel bus model in Z gauge market, and, therefore, a small sensation, not only against the background of the good detailing by this manufacturer. As soon as the delivery starts, we will inform you about it, here.



The Henschel HS 160 is the first city bus of this manufacturer ever to be reproduced in 1:220 scale. Photo: JMC Scale Models

New details about Märklin's V 188:

Some readers had told us their concerns about the scale of the announced Insider locomotive for the following year. The meanwhile corrected data on the net length over buffers stated 83, instead of approx. 103 mm.



This new representation as a scale model, meanwhile, allows a better impression of the announced V 188 001 a/b. Illustration: Märklin.

Märklin confirmed to us that this was an error and that there was no reason to compress this double locomotive in the smallest gauge after scaled models in H0 and 1 gauges.

Instead, we were told of another feature that is not yet apparent from the descriptions, but which could certainly be an argument for doubters to buy: Two coupling rods of different lengths are to be included for exchange, in order to be able to couple the two locomotive halves closer or further depending on the radii installed on one's own layout.

Those whose worries have now been allayed should not put off their order too long. The order deadline for this club model is 28 February 2021, and is sure to be quickly lost sight of after the holiday hype and the new product announcements (for 2021) soon to follow.

Dealers confirmed to us that this model is comparatively well received and has already generated considerable orders.

Appealing Freudenreich new products:

FR Freudenreich Feinwerktechnik has also delivered some new products. Already sold out models like the DSB refrigerator car lblps "Fynsk" (item no. 45.343.11), we do not want to present in detail here and leave it at a hint so that our readers, do not miss future issues.

Also on the road in Denmark was the NOHAB diesel locomotive MY 1132 (45.126.01), which was in a simplified livery without decorative stripes and was equipped with snow ploughs instead of front skirts. The model was available for pre-order in August 2020 and is about 75 % delivered. The remaining pre-orders will be delivered in January 2021.

The wagon set "Veolia" (46.222.52) is also at home in the far north, as Veolia set up a low-cost fast connection Malmö - Stockholm in 2011 on the basis of the 1960 design. The new FR models exactly reproduce the design of these passenger coaches.



The NOHAB diesel locomotive MY 1132 (item no. 45.126.01) is a colour and shape variant of the popular diesel locomotive, which can also be delivered digitally on request. Photo: FR Freudenreich Feinwerktechnik

The Omm open goods wagons from the Linz genus district (49.339.22), which we already presented in detail in the spring, are now available as a two-pack for Era II with addresses of the Deutsche Reichsbahn, which would have been one hundred years old this year.

Christmas party without further ado in the model:

Not only at the Miniatur Wunderland Hamburg did the Christmas party have to be cancelled this year as a result of government orders. Many other companies and people in Germany and far beyond must have felt the same way.

But a boss who thinks highly of himself and his hard-working employees will surely find another way to say thank you and express his appreciation. So we heard about gift packages, virtual Christmas parties via video conference or paraphernalia sent by mail for a smaller party at home.

The operators of Miwula were also faced with the same problem and wanted to find an appropriate substitute to honour their staff, put them in the Christmas spirit and simply say thank you. And as seems to befit these truly exemplary supervisors, they found a creative way that is now going around the world.

So the more than 300 “wonderlanders” each received a package with a basic Christmas party kit, small gifts and a request to have a small celebration at home, and dream up a roaring Christmas party on that night. The idea creators have summarised what this could look like in a film.

The main role in it is played by the figures of all the servants, who had previously been 3D-scanned and found their way onto the display as figurines. But you can see for yourself by following this link: <https://www.youtube.com/watch?v=uU80rKATwvI>.

Newly delivered by Micro-Trains:

At MTL, the green painted 40-foot standard coaches of covered type without gangways and with one-piece sliding door were delivered (art. no. 503 00 201 / -202).

The attractive models are marked for the Burlington Northern and reproduce the operating condition after a refurbishment around 1971.

The Missouri Pacific car of the same type is the guard car called HERB-1 (503 00 250), designed in 1979 by an employee in the style of Herbie Meyer, an early graffiti artist and MP signalman who retired in 1980.

Two aged models are now also on sale: the covered Railbox car (510 45 224) with graffiti spread over its entire length is part of a series of cars, while the shorter covered CP Rail car (503 44 260) carries only operational marks but is immediately noticeable because of its racks mounted on the roof.

They are intended to break icicles in tunnels and thus increase winter operational safety in railway service.

Micro-Trains products are distributed by Case-Hobbies (<http://case-hobbies.de>), among others.

New and dealer Christmas bonus from Noch:

Due to the great demand that this time of crisis is experiencing because of increased devotion to the hobby, some Noch new products that were first delivered at the end of November are currently already sold out again by the manufacturer.

These include the large landscaping basic equipment package (art. no. 60780), which offers a huge selection of different Noch products with a price advantage of about 10 % compared to individual purchases and can be used across all gauges.

No longer usable for this year, but certainly no less interesting for the following years, is the Advent wreath "Winter magic" with Rokuhan track (art. no. 88064), which has been known in its basic construction for years, but has now also been converted to the new cardboard buildings from our own company.

Furthermore, we received a hint about the new Noch main catalogue 2020/21, which contains on 416 pages the entire own programme as well as selected highlights of foreign distribution partners like Rokuhan. Traditionally, this catalogue is always published at the peak of the season.



40-foot standard freight wagon of BN (item no. 503 00 201; picture above) and wagon of the same design of CP with icebreaker superstructure (503 44 260; picture below). Photos: Micro-Trains

We see a very friendly and appropriate gesture in the campaign "Christmas bonus for your Noch specialist retailer." Noch refers to the difficult situation of the specialist dealers, which had to close its doors for the second time this year and thus seems acutely threatened in their existence.

Anyone who needs material, wants to order and would like their dealer to share in the margin in order to save them some of their income can order directly from Noch and name their dealer using a promotional code. Noch will then share 15 % of the purchase value with the dealer. This promotion is explained on the following page, which also lists the required promotion codes: <https://www.noch.de/de/aktuell/2020/29-support-your-local-NOCH-dealer-weihnachtsgeld.php>.



AZL in December 2020:

AZL's 2020 year-end brings with it a new design. The refrigerated wagons of type R-70-20 will be delivered for the first time in the colours and markings of the Great Northern.

Yellow sides and reddish-brown end walls characterise the black-lettered wagons with grey roofs. 2,400 of these refrigerator cars were built and delivered in 1969/70.



They are available in groups of four (item no. 904805-1) and two (914835-1) as well as single cars (914805-1).

Other deliveries include variants of already known models: The Gunderson MAXI-I container transport cars have been relaunched in the red colours of the SP with five 40-foot containers from Capital (906510-1CA to -4CA).

Die Erstausslieferung des formneuen Kühlwagens R-70-20 ist der Great Northern gewidmet (Art.-Nr. 914805-1; Bild oben). Auch die ALCO RS3 in ihren bunten Farben (63300-1; Bild unten) war für diese Bahngesellschaft unterwegs. Fotos: AZL / Ztrack

In terms of colour, the ALCO RS3s appear attractive in the colours of the former Great Northern (63300-1 to -3). At D&RGW, on the other hand, they showed a black and yellow stripe livery (63317-1 to -3).

The blue-yellow Santa Fe version (62509-1R to -4R) of the EMD GP38-2 came into the market, which is also available at Märklin with a different service number. They carry the housing known from the earlier edition, but a new bogie.

Manufacturer photos of the current deliveries can be found at the following address: <https://www.americanzline.com>.

Herpa announcements for the spring 2021:

Herpa traditionally looks far ahead with its new model announcements, with the advised delivery dates usually being significantly exceeded. However, we should not worry about this, because we could and can always look forward to beautiful models that also enrich model railway layouts.

Our focus for March and April 2021 is once again on those models that can be used at European-style airports and do not exceed a maximum length of 30 cm. The following Wings new products in 1:220 scale are to be mentioned here:

Sabena Fokker F 27 Friendship (Art.-Nr. 571135),
ATI – Aero Trasporti Italiani Douglas DC-9-30 (571234),
Binter Canarias ATR-72-600 „Maspalomas Costa Canarias“ (571241),
Hapag-Lloyd Express Fokker 100 (571258) und
Lufthansa Airbus A320neo “Hauptstadtflieger” (571302).

Based on military models, the following helicopter and a transport aircraft appear:

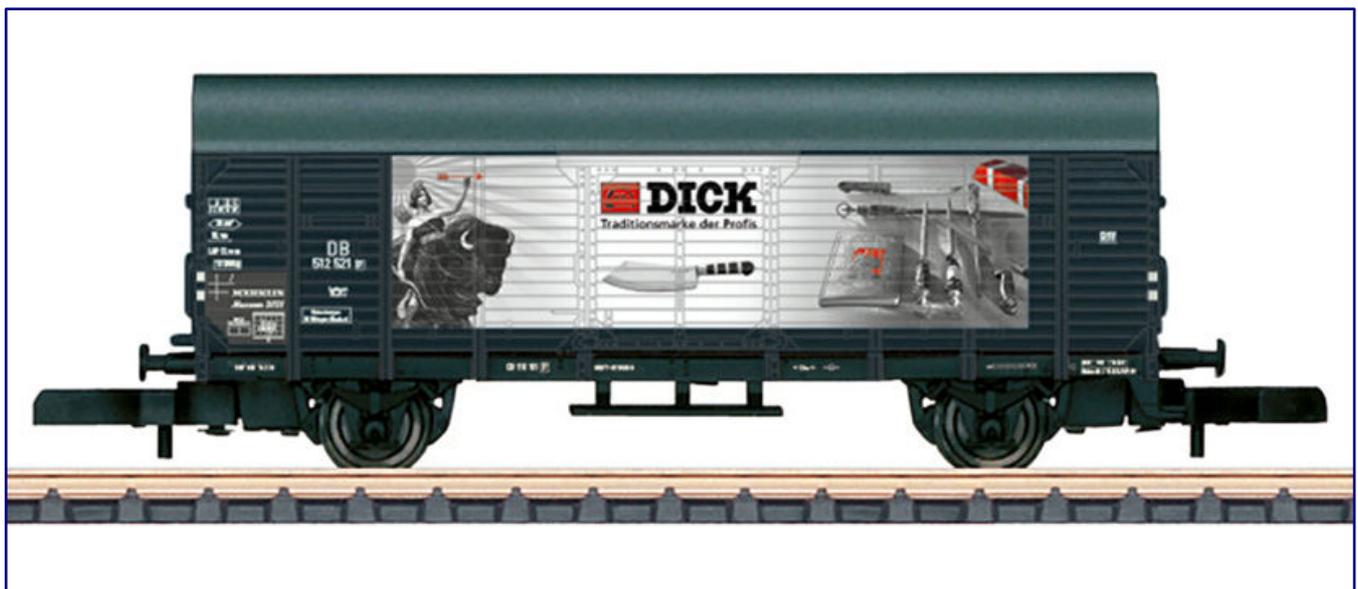
Mil Mi-8TB “Good-Bye Hip” Heeresfliegerstaffel Ost, Cottbus 1993 (571197) and
Königl. Niederländische Luftwaffe Lockheed C-130H Hercules “25 Years C-130 Hercules“ (571296).

Also appearing in the Snapfit series (simplified representation in flight) is Lufthansa's “Hauptstadtflieger” (613156) for the opening of BER Airport, which is currently almost idle, as a result of the pandemic.

Märklin-Museumswagen 2021 presented:

Märklin regularly invites visitors to an announcement ceremony in mid-December at which the museum cars for the following year are presented in the presence of the advertising partners from the region. In 2020 this was not possible for understandable reasons.

So without further ado, those responsible switched to a virtual form of presentation and present partners as well as the models in a Märklin TV special on the Märklineum pages. The partner for the coming year is the knife manufacturer Friedr. Dick from Esslingen.



Museum wagon 2021 in the Märklineum is a black painted wagon GI 11 (item no. 80032) with advertising motif of the knife manufacturer Friedr. Dick from Esslingen. It comes with an all-purpose knife as an accessory. Illustration: Märklin

The Z gauge specimen (art. no. 80032), painted black and printed with a matching advertising motif, is a covered wagon of type Gl 11, which can be purchased on site together with an all-purpose knife with a red handle and etched Märklin lettering on the blade.

However, the Märklineum will be closed at least until (at least) 10 January 2021. Those interested in this model can get an idea of the partner and the model directly from the Märklineum pages, where the film clip is also linked to:

<https://www.maerklieum.de/de/veranstaltungen/mw21/>.

New Vienna regulars' club wagon from FR:

The Wiener (Vienna) Z-Stammtisch (club) presents a new ÖBB container wagon of the Laagss type, which consists of two permanently connected units. The prototypes were created by conversion from the original Ks type. The models, on the other hand, are a completely new design from FR Freudenreich Feinwerktechnik.

The characteristic underframe has been faithfully reproduced. There is a choice of two wagon sets with different road numbers, each of which is available in a quantity of 25. They are each loaded with two different 40-foot containers, one of which is always a specimen of the Containex Container-Handelsgesellschaft m.b.H.



The two double wagons Laagss with different container loads carry the item numbers 43.346.02 (photo above) and 43.346.12 (photo below) and are available in the free remaining edition only through the Z-Stammtisch Wien. Photos: FR Freudenreich Feinwerktechnik

This company belongs to Walter Group and has around 15,000 containers in its rental fleet. The colour scheme in blue with yellow inscriptions follows the parent company. FR has also produced these containers in well-known design and quality on behalf of the Wiener Z-Stammtisch.

The second container follows different, international models in both wagon packs. A few packs are still available for free sale. Enquiries are accepted at [zspur.stammtisch\[at\]gmail.com](mailto:zspur.stammtisch[at]gmail.com).

About the prototype of the coaches: The ÖBB had procured many Ks coaches in the seventies, which were finally no longer used (stock 1997 still 767 examples). The side walls, the low and high stanchions were removed, the running capacity of the wagons was increased to 120 km and thus their suitability for container traffic was established.

Although ÖBB has long since procured many new container wagons, the short-coupled Laagss wagon units are still in use today and regularly transport containers to and from the German Baltic and North Sea ports. So they reach far beyond the borders of Austria.

Every year again - ideas and wishes at the end:

When we sit under the Christmas tree, watching model trains turn their rounds, we are fully in our element. Soon we will also be thinking about what new products we can expect next year in large and small series.

We have often placed suggestions and ideas here and some of them have long since become reality. For example, we remember here the MDyg 986 makeshift pack wagon, which both NoBa models and Ratimo-Z have taken up in different ways this year.

The series of open desired models is long and probably occupied differently by each of our readers. After the conversions in the H0 scale, we would have been very happy about an electric multiple unit of the 403/404 series, which would fit particularly well into the programme in 2021 for the anniversary "50 years of Intercity," as would, by the way, a gas turbine power car of the 602 series.



A class 614 diesel multiple unit would certainly be a dream model for many Zetties, especially in pop colours. Its prototype determined suburban traffic in the Nürnberg area for over thirty years.

But also new passenger coaches in typical designs that once characterised everyday life are actually long overdue, because in recent years new designs have been limited solely to freight traffic. For push-pull service on a scale of 1:220, two very important types are still missing, which were nicknamed the "bunny box".

This leads us to the new class 65 steam locomotive, which was also frequently mentioned by our readers after the publication of the Insider Club model for nominal size H0. Personally, we would also be inclined towards the diesel multiple units of the classes 624/924 and 634/934 or their successors 614/914, which many also have fond memories of.

We can be curious! In a month's time we will know quite a lot when Märklin and other manufacturers announce their spring new products, even without a toy fair. And dreaming will be allowed, won't it?

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