

*International Edition*

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

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# Trainini

German Magazine for Z Gauge



A V 188 for Everybody

Freight Car Metamorphosis  
As a Beginner on his first Layout

## Introduction

Dear Readers,

Do you still remember the beginnings of your own model railway hobby?

By that I mean the aficionados who have been pursuing the hobby in 1:220 scale for decades.

How we sometimes cursed in the seventies that the selection of Z scale products was so modest. I myself (as a fourteen-year-old) discovered “kitbashing”, because there were not enough buildings for Z scale. Without further ado, 1:160 kits were trimmed down a bit. What didn't fit was made to fit.

And, today? A veritable “wonderland of goodies” has emerged, and the Internet also really helps with searching and finding things. But one thing has remained the same: Motivated newcomers to our scale are often faced with thousands of questions before setting up their first track oval.

Here in **Trainini®** and through a new series of articles we want to make it at least a bit easier to get started, especially since readers have already approached us with many questions throughout this Covid-19 period.

But we also have another tip, just pay a visit to your local model railway club; they can certainly help you if you need it, regardless of the gauge and... In my club alone there are now three new Z scale enthusiasts.

Fittingly, our reader and book author Heribert Tönnies explains, in an advance excerpt from his forthcoming third book (e-book), a relatively simple method for constructing track ramps.

Long before Märklin announcing their class V188 model, NoBa-Modelle had listened to various customer requests and explored how a V 188 model could be produced in an affordable way through 3D printing. In this issue, we show you the result of our build and adaptations of this model.

Märklin's Insider Club annual car 2019 (“Kuba-Imperial”) is unfortunately only a compromise when looking at its lettering and markings. With a few easy touches and small series parts, a de facto type Gl 11 therefore becomes the Gl 22 model it was supposed to be. Of course, we also add some suitable weathering. Other news from the model railway industry rounds off this issue.

Our regular appeal to readers still remains valid: Wherever in the world these lines are read, please stay safe!

In recent weeks and for reasons unrelated to the pandemic, parts of our editorial team have been reminded of how precious and unique it is to be in good health. The consequences cost time and often also nerves. That is why this issue has been released unusually late, and we cannot rule out further delays with upcoming issues over the next few months. We ask for your understanding and patience.

Sin-Z-erely,

Dirk Kuhlmann



Dirk Kuhlmann  
Editor

## Editorial

Introduction .....	2
--------------------	---

## Model

The alternative "Bull" .....	4
Upgrading made easy .....	17

## Prototype

Currently no items

## Design

Planning and finding Materials.....	27
-------------------------------------	----

## Technology

Track Geometry and Basics.....	35
--------------------------------	----

## Literature (not translated - only in German)

Excursion into the past .....	45
The successful car with the star .....	47

## News

Zetties and Trainini in Dialogue.....	49
---------------------------------------	----

Imprint .....	67
---------------	----

We thank Heribert Tönnies for his contribution and Eisenbahnstiftung for a historic photo.

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### Cover photo:

V 188 002 a/b leaves a tunnel at the Spessart ramp with a heavy goods train, where it was found for years in goods train and pushing service. A special eye-catcher in the train is the colourful Kuba-Imperial car running in second position.

## The V 188 from NoBa-Modelle The alternative “Bull”

*The staff (of the Bundesbahn) called the powerful double diesel locomotives of the V 188 series, which the Bundesbahn had taken over from the legacy of the Wehrmacht and modernised, “bulls”. Long before a Märklin announcement, NoBa-Modelle had already listened to various customer requests and investigated how this class could be converted into a model in an affordable way using 3D printing. Today we would like to present the result in detail.*

In February 2020, we presented the resin 3D-printed housings for replicating a V 188 (art. no. 5007R) offered by NoBa-Modelle as part of our Toy Fair coverage. The set consists of these two parts for the double diesel locomotive, and, also, includes a connecting drawbar for the two halves, together with two screws for permanent connection.



Our model is based on V 188 002, shown here as 288 002-9 on 22 July 1969 in front of Dg 5387 in Bergtheim (Schweinfurt - Würzburg line). Photo: Heinz Hangarter, Eisenbahnstiftung

In the meantime, the two „Hütchen” (“little hats”; shells/bodies) are also available in ready-painted and labelled form (5007L). Like many other model railway enthusiasts, however, we were attracted by the idea of finishing them ourselves, especially as we found a few challenges that we were happy to take on.

In our case, all the buyer needs, in addition, are two shorty chassis from Rokuhan (SA001-1 / Noch 7297903), suitable paints, and decals for the chosen road number. These can be made at relevant decal pattern manufacturers, so that the finished locomotive can finally stand in front of you for about EUR 100 cost.

This makes it a low-priced, but also compromised alternative or, in some cases, a supplement to the Märklin Club Model 2021. It will not meet the highest demands, but those who are more price-sensitive and who are willing to accept the deviations from the prototype to be discussed are well advised to go for the small-series model — the tinkering fun comes free of charge.



**Test sitting on the chassis:** To build up a V 188 from the two resin bodies from NoBa-Modelle, only two shorty chassis from Rokuhan are additionally required. The superstructures are simply attached.

First of all, we would like to point out that the locomotive was built as true to scale, as possible. This can also be seen in our data table in this article. Especially the bodies of the locomotive halves, but also the distance between the two vehicle parts, have been reproduced very precisely.

Nevertheless, we did not notice any problems when running on radii of 220 mm or more and also on opposite curves of the turnout, which makes the model very practical. The driving characteristics of the Shorty chassis are, however, not really slow runners, which of course cannot be blamed on NoBa-Modelle.

Data and dimensions of the double diesel locomotive V 188 (ex D 311 of the Wehrmacht):			
	<u>Prototype</u>	<u>1:220</u>	<u>Model</u>
Length over Buffers	22.510 mm	102,3 mm	103,1 mm
Length of each locomotive half	11.080 mm	50,4 mm	50,2 mm
Width	2.910 mm	13,2 mm	15,0 mm
Height above SO* (rail head)	4.445 mm	20,2 mm	20,3 mm
Wheelbase (locomotive half))	6.000 mm	27,3 mm	26,5 mm
Wheelbase (each bogie)	2.000 mm	9,1 mm	9,4 mm**
Driving wheel diameter	1.250 mm	5,7 mm	3,8 mm
Service weight	147 t	---	25 g
Power	1.382 kW / 1.616 kW***		
Year of construction	1941		
Procured number of units	4 (2 transferred to the DB)		
Retirement	1969 / 1972		
* Before modification of the roof section by DB, does not correspond to the model			
** Wheelbase in the bogie			
*** After conversion and motor replacement by the DB			

All deviations from the prototype dimensions that cannot be attributed to measuring errors are due to the undercarriages used. NoBa-Modelle's aim was to create an inexpensive model and to dispense with a new undercarriage construction that could not be re-used elsewhere.

The Shorty chassis have altogether quite useful overall dimensions and can be hidden well in the body of the V 188. This made them the first choice for this project, because with this prototype a locomotive has

been found that does not have to be compressed or reamed to fit over this chassis.

The only thing that had to be accepted were a slightly too large width and the deviations in the running gear. Apart from the fact that the original has four rigid driving axles and the model has two bogies instead,



Before the 3D printed parts are painted, they first receive a five-minute bath in 100% isopropyl alcohol.

not been painted. The material of these parts does not take paint well, which is why you have to try it yourself.

A coat of paint is advisable to remove the plastic gloss, but the DB's prototype bogies were also painted RAL 9005 jet black. In an earlier project, the spray primers from Modelmates proved to be a stroke of luck, but, unfortunately, they are no longer available.

Parts to be protected, such as contacts and current-draining wheel surfaces, can be covered with masking tape (preferably Tamiya, Vallejo or Faller) and masking liquids (such as Humbrol, sold by Faller). Afterwards, it is only one stroke out of the spray can and the part to be worked on has the right colour, without completely losing its structure.



RAL 3004 purple red in a silk matt finish from Oesling-Modellbau gives the locomotive housings the already decisive closeness to the great prototype.

It is more complicated with the superstructures, because the resin parts should be degreased in an isopropanol bath beforehand. This simple alcohol is also used by the manufacturer to rinse out uncured resin residues. It does not harm the model, but guarantees a good painting result, and prevents adhesion problems caused by fingerprints or other grease deposits.

this also applies to deviations in the driving wheel diameters and axle positions. Those who want to take advantage of the price of this model will gladly accept this.

In the following we would like to describe how the unfinished resin bodies ejected by the 3D printer turned into presentable models, which also had a special feature built into them and which served us as practice and test pieces.

### Reconditioning and painting the parts

The work on the bogies is done quickly. The bogies of the chassis are in a grey colour ex-works, and have

It takes two painting passes with the airbrush before the model takes on a recognisable shape. First, we choose a PUR primer from Vallejo in neutral grey before spraying on the RAL 3004 purple red top coat in a silk matt finish from Oesling-Modellbau.

The roof area is to be painted in RAL 9006 white aluminium, the paint is once again from Oesling-Modellbau. This is also done by spray painting, which is why the area must be masked off cleanly beforehand. The same can be done for the side area, where the same coloured trims are located. Practice is needed here, so that there is no paint infiltration and thus undesirable reworking.



After applying the roof colour, decorative stripes and black paint for buffer plank, lanterns and handrails, the painting is complete. Now it's time for some modifications and labelling.

We are very satisfied with the result so far. The remaining paint work is now limited to the deep black buffer beam including the lower locomotive lanterns and the driver's cab ascents. Here we use a brush and Aqua Color from Revell in a silk matt finish.

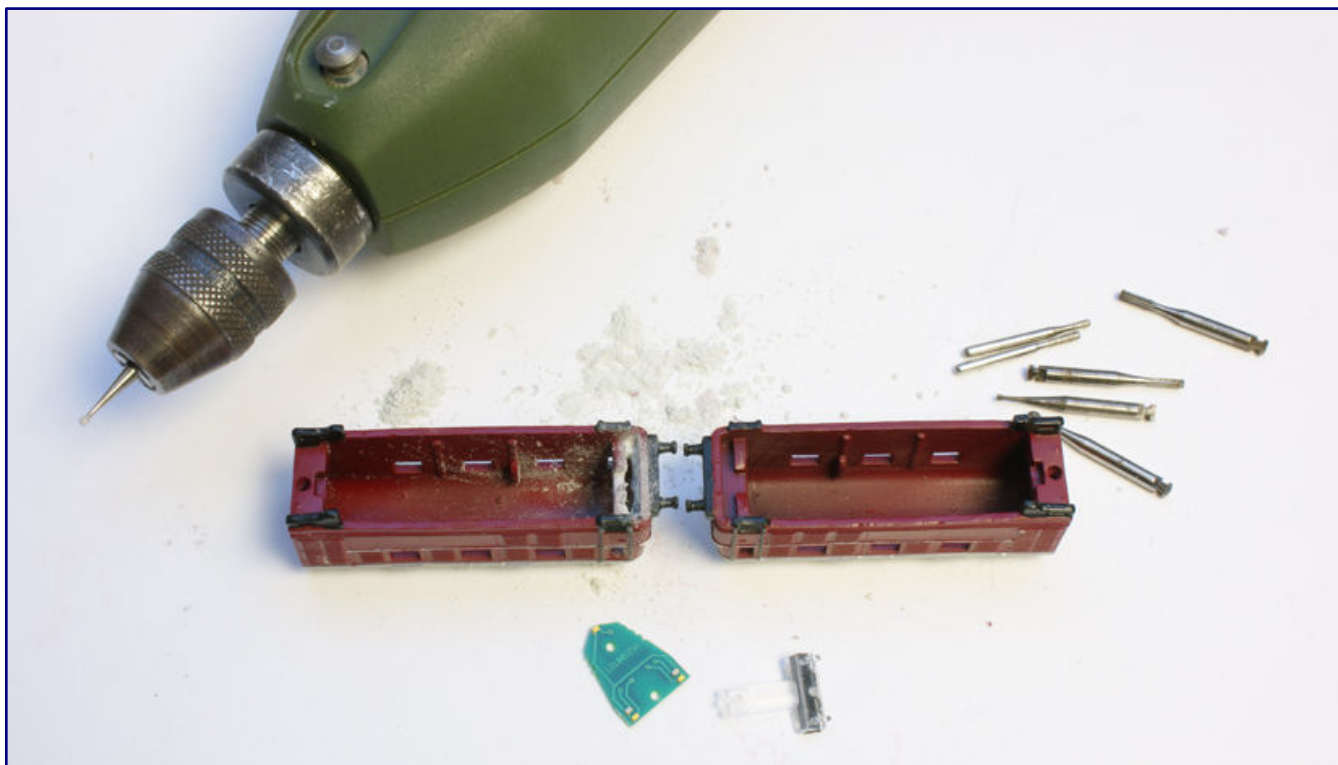
It should be mentioned at this point that we have chosen the V 188 002 a/b as a model, while Märklin wants to convert their sister locomotive. Differences are immediately recognisable: V 188 002 wore a red frame edge, which saved us a masking and painting pass, and the roof colours were not identical either. Even the inscriptions were arranged differently – it would not be possible to be more different with the dissimilar siblings.

## Own adaptations

As soon as both halves of the locomotive have been painted, we can actually start labelling them. For us, it should remain at this point with a small test drive, which compensates us for the work done so far. The next step is the milling work in the front area of both body parts.

This is to be done carefully by hand with a micro drill grinder and disused dentist's cutters, and, is only necessary, because we want to provide the model with top and bottom lighting using LEDs.

However, we can save ourselves a larger self-build, because we have identified the lighting units of Märklin's V 200 (E161319) as a suitable circuit board. The side distances of the lower top lights and the



The floor area of the driver's cab must be milled out in order to insert a light board. However, the wide vertical walls (visible on the right housing) must remain to hold the chassis. The light guide board comes from Märklin's V 200 and has been stripped of its light guide.

height to the upper top light fit perfectly. Also, the red LEDs for the tail light are placed so close that they can illuminate the larger lanterns of the V 188 at the rear running end.

We only have to mill out the space between the outer casing and the partition wall and create a little more free space in the area of the upper tip light so that we can slide in the PCB without damaging it. The LEDs are particularly at risk of being torn off, because we have to pull off the attached light guide, which does not fit our model.



In order to achieve optimum adhesion of the decals and flush application of the films to the structures of the substrate, adhesive primer and softener are used as auxiliary agents.

We will explain later how to protect the sensitive parts. At this point we are only concerned with the preliminary work to be able to finish the exterior of the housing and not to risk any more damage to the

paint or inscriptions. The danger of the cutter slipping and going through the resin should not be underestimated and can lead to the total loss of a part. That's why we work carefully, and with as low a rotation speed, as possible.

If everything fits, we clean the inside of the housing by blowing it out and using a hair brush so that we can continue with the lettering. NoBa-Modelle obtains the white company inscriptions from Z-Doktor Modellbau as wet decals. Björn Plutka supported us here, and, also, created the previously missing labelling of the V 188 002 a/b and delivered them to us. For this, he deserves a special thank you.

They are applied in the usual way, whereby all inscriptions should always be given sufficient time to dry so that they are not accidentally moved or slip when the model is turned and worked on from the other side. The procedure is as follows:

1. Cut the respective decals as accurately as possible (leave little margin without damaging it),
2. Briefly place on the model to make sure that the cut fits (especially at corners or window openings),
3. Wet the target surface with an adhesive primer.
4. Immerse the decal in water for 5 to 10 seconds, depending on the size,
5. Allow the transfer pattern to "drag" on a non-absorbent surface, then wet with a little softener,
6. Place the decal on the model and push it onto the target surface with the help of a fine hair brush,
7. Carefully align there and smooth out with the brush, if necessary, drizzle on some more softener, if further shifting is required, and,
8. Finally, allow to dry well.



After the Micro Kristal Klear from Microscale has dried, all window surfaces are coated black on the inside with Revell lacquer to prevent unwanted light leaks or a view of the Shorty chassis block.

The inscriptions of the V 188 are quite extensive and some are not easy to apply, for example the circled vehicle half numbers near the buffer beam. When the steady hand gets lost in between, it is time for a break.

In this case, the model should be allowed an additional drying phase, and, if in doubt, work should only be continued the following day. Some of the decal patterns have also driven us to the brink of madness, at times.



You can see from the standing housing that the Revell Aqua Color dissolves the adhesive paint again, because the milky haze returns. This is not a problem and will disappear, but care must be taken when working.

Once everything is in place and dry, a semi-gloss clear acrylic coat (Bergswerk 83213) seals and protects the applied inscriptions from mechanical influences. At this point, the airbrush is used again.

The window panes are made with Micro Kristal Klear from Microscale, which is not available anywhere at the moment – all contacted dealers are waiting for a new delivery. That is why we do not give a current source of supply.

When this glue has also dried transparently, a step follows that has to be done carefully because it dissolves it again: To avoid unwanted light leaks, we paint the window replicas from the inside with deep black Revell Aqua Color, which was used before, using a hair brush. Black is also generously used to cover the entire front area where we had used the milling cutter.

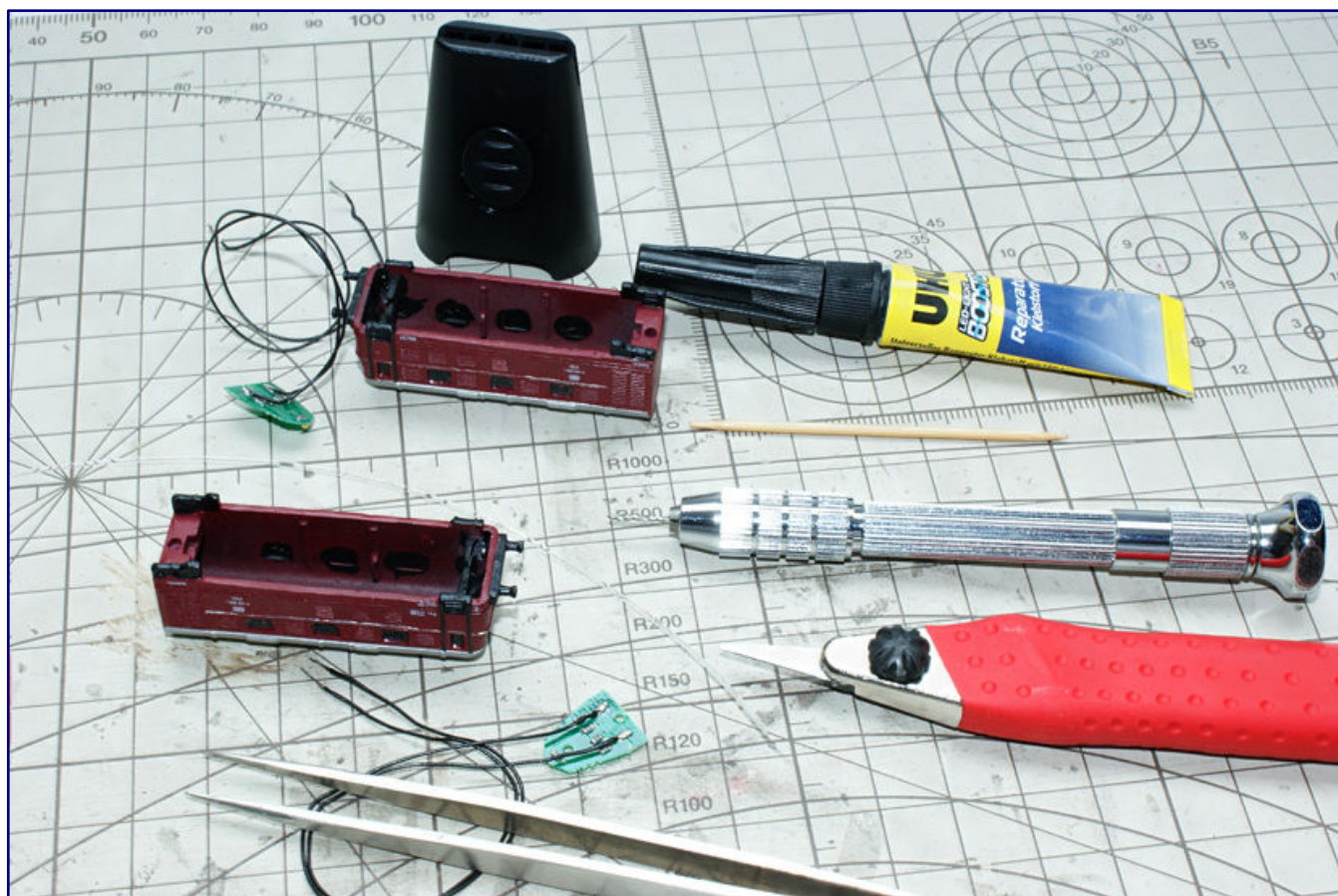
The locomotive body is finished at this point and is now waiting for its further use.

## Electrical work and a critical look

In a perhaps unexpected waiting period, it is possible to work on the circuit boards. We have already taken off the light guides, but now we have to wire them, because the spring contact of the Märklin locomotive is not suitable here. The two poles are pre-tinned and then sufficiently long stranded wire is soldered on.

Since this has to be as flexible as possible and also very thin to be able to be placed inside between the running gear and the housing, we chose the extra-thin cable with a cross-section of 0.3 mm<sup>2</sup> in black colour from Viessmann (6890). The ring with 5 m will still be enough for several projects.

To prevent the LEDs from tearing off the PCB during insertion work – this happened to us with two of them, which we had to solder back on manually in the correct polarity – we came up with an effective protection: The light-sensitive adhesive Uhu Booster hardens crystal-clear and, in our experience, holds literally bombproof.



**Fine, flexible stranded wire is to be soldered to the contacts of the light boards in order to be able to establish an electrical connection inside the locomotive housing. The Uhu booster prevents the SMD light diodes from being torn off and at the same time does not hinder the light emission.**

We therefore cover all the light-emitting diodes with single drops of this adhesive and cure it with the UV-LED. The tear-off edges have now become sliding edges that will not swallow any light. And our repaired areas also receive an additional and effective fixation.

Then we lead the strands, with their loose ends pointing upwards, through the routed shaft and in the roof area into the larger opening of the housing, where the landing gear will take its place. We now pull

this in, loosen the top cover, which has two feed-through holes with the hand drill, and solder the strands fed through it to the current pick-ups on the chassis.

A short test now shows us whether we have chosen the correct polarity, which can be easily determined via the NEM definition by a brief thought. The test on the transformer also proves that all three lanterns are sufficiently and properly illuminated.



The cable routing needs to be well thought out (photo above): The strands are routed just under the roof into the area of the Shorty, where two bushings have to be drilled and soldered to the contact lugs on the driven bogie. Once this step is also completed and the housings are in place, both aids are permanently connected by means of a coupling drawbar and two screws (photo below).



Ready painted, lettered and with glued-in light guides, the model makes a good impression. The compromise in the undercarriage is not even noticeable from many perspectives.

There are no other unwanted light leaks, only at the bottom we have to provide a closure at the end of the project (with a suitably cut sheet of black construction paper fixed with a glue stick).



We can also successfully test the warm white-red light change. The project is now successfully completed, except for a few small things that still bother us.

What our model is still missing are light guides. These can be found on the internet in transparent versions in various diameters, but perhaps they can also be found – like ours – in the craft box. We push a suitable piece into the lantern openings until it meets the LED at the back.

Then we cut it to length, apply Uhu Booster into the lantern opening, push in the light guide, and cure the glue. The light guide may be cut quite short, and then the glue can also form a small lens on the outside. This may require another droplet, which is made to cure in the same way.

Once, this step has been carried out six times, the locomotive is ready. Now at the latest, the running gear and body are pressed firmly together and a critical review begins for us. The length of the strands must be sufficient to be able to remove the body without any problems and to work on the running gear, if necessary.



This photo illustrates, like no other, the still existing problem that the strands change the housing seat, and then make the double diesel locomotive bodies uneven.

At the same time, they should be as short as possible in order to take up little space inside. We have not yet succeeded in doing this perfectly, because after a few minutes the „Hütchen“ (‘‘little hats’’; shells / bodies) at both ends push up again a little in places. The locomotive then gives the impression of being ‘‘bent’’ in the middle of the two units.

We are also not yet satisfied with the handling characteristics of a chassis that has a noticeable tendency to derail. NoBa-Modelle has given us advice on reworking that can solve this problem, as this problem has also been observed by them, in some cases, with these very inexpensive parts.

However, this is also caused by the long coupling drawbars with Märklin-compatible couplers. The short alternative does not fit on this locomotive, while the long Rokuhan parts sag too much. A tighter guide that allows less downward play, therefore, also remains to be retrofitted.

There remains an in-house development by Z-Doktor Modellbau that can give these undercarriages better low-speed characteristics. It is not yet clear whether this electronic board will be offered in series production, because lawmakers have set high hurdles for the offering of electronic components.



The layout "Werdersheim" seems to be made for this model, on which V 188 002 is now happily making its rounds with a long goods train.

The only request we received was for a test fit to see if these parts could be used in NoBa-Modell's V 188. There is no doubt that they would fit well there and could be a mutual selling point. But this step is also still pending and can only take place when we have solved our "cable problem" inside.

**Manufacturer of the basic model:**  
<https://www.noba-modelle.de>

**Chassis used:**  
<https://www.rokuhan.com/english/>  
<https://www.rokuhan.de>

**Lettering and materials:**  
<https://www.bergswerk.de>  
<https://www.faller.de>  
<https://www.oesling-modellbau.com>

<https://www.tamiya.de>  
<https://viessmann-modell.com>  
<https://www.z-doktor.de>

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A GI 11 becomes a GI 22

## Upgrading made easy

*Märklin's Kuba-Imperial wagon is only a compromise, if we take its labelling as a yardstick. The Miele wagon of the same shape, on the other hand, has matching inscriptions, but only had a similar prototype. We want to change that with a few handholds and small series parts. Afterwards, the models will be given a patina suitable for operation.*

Märklin's Insider Annual Car 2019 (Item No. 80329) was certainly on the wish list of many Zetties. So it should not have been a disappointment when a covered goods wagon in light grey with large Miele lettering was presented, instead of a new item in form.

The delivered model was labelled as a GI 11, a wagon of the association type with riveted design and labelled as a vehicle owned by the Deutsche Bundesbahn (German Federal Railways). This fits exactly to the shape of the chosen wagon, but, nevertheless, raises some doubts with regard to the prototype.



Unfortunately, we have to do without diagonal stiffeners on the right and left of the sliding door because of the design. Nevertheless, the two parts from Z-Doktor Modellbau for the sprinkler system on the undercarriage floor clearly show the decisive difference to the GI 11, which Märklin's mould construction has reproduced.

As is well known, DB's own goods wagons were painted reddish brown, so this example was somehow out of the ordinary. It would have been more logical to have a private wagon that was used on the state railway and had the company colours of its owner.

If we explain the background of this special design, it will immediately lead us to a quick and easy-to-implement project that we would like to present here. Nevertheless, some inconsistencies remain to be mentioned and explained, because they also influence the course of our adaptations.



At the time of our sample test, Z-Doktor Modellbau had designed two versions that differed in their spatial depth and, consequently, their stability. What they both have in common is that they have a long adhesive edge on the side facing the carriage floor for a perfect hold.

In the 1950s, the Deutsche Bundesbahn began to rent out GI cars belonging to splinter classes to customers on a long-term basis, or even to sell those cars to its customers. Therefore, the customers could also paint them in company colours and paint them with their advertising logos. They were recommended for the transport of large-volume, but relatively light goods, such as tin cans, but also high-quality appliances such as washing machines.

The companies Miele and Kuba-Imperial, among others, made use of them, which Märklin has done with the Insider Annual Cars 2019 and 2020. Miele rented at least two wagons over the years, while Kuba-Imperial bought them, if we can believe the labelling of the Märklin model (80330).

The Kuba-Imperial example bears the road number 566 425 [P]. But, what is more interesting, is that it is labelled as GI 22. This is one of the aforementioned splinter types, which the Bundesbahn apparently did not know what to do with in its regular service. In this case, however, the shape of the model does not quite match the original.

However, it is a good thing that the main dimensions, the running gear and the brakes of the "Verbandswagen," which was later classified as GI 11, were taken over for this type of the exchange type built from 1923 onwards. Thus, the basic dimensions are correct, and the external deviations are limited to a few points, some of which we want to correct.

What we don't like about the Miele wagon offered one year earlier, which is indeed labelled as GI 11, is that it was not a splinter type after the end of the war. So, we are left with great doubts, that an example of this type could also have been hired out.

If we take our cue from models that Märklin has produced in larger scales and are also inspired by implementations by other manufacturers, we come to the decision here to re-label and rebuild the 2019 annual coach. It, too, is to mutate into a GI 22, and, since we have also acquired a second example, they will both also receive new road numbers.

## Quickly and easily implemented

The easily recognisable differences between the GI 11 and GI 22 models remain manageable: First, there is a diagonal brace to reinforce the bays next to the sliding doors, which the GI 11 did not have.

However, we will have to overlook this difference. In principle, it would be possible to attach such a strut, but, in view of the low profile thickness, this would be a greater challenge. Almost impossible, however, are the advertising markings on both models, which would have to be transferred without interruption, including the basic colour.



The two supporting struts are easy to fit in: they are placed centrally between the axle brackets and directly behind the ladder (see also enlargement on the top right). Glue them together with Uhu Booster.

We can and would, therefore, like to accept this manageable deviation. However, the situation is different for another characteristic feature of the Dresden further developments: Their prototypes were equipped with bogies that originated from or were derived from the stanchion wagons of the replacement types.

Therefore, behind the running boards of the loading doors there were supporting struts that gave the running gears additional stability. Even at a short distance, their profiles are easily recognisable, despite the black frame colour and are therefore quite “face-defining”.

From an early stage, the shapes of the supporting struts, including the gussets, seemed suitable for 3D printing. And so we got in touch with Z-Doktor Modellbau, because Björn Plutka understood and still understands how to make extremely filigree and clean structures with his printer.



On the Miele wagons, the no longer correct type designation and the operating numbers on the body and frame still have to be removed in order to be able to replace them later. We were able to do this with the unfortunately no longer available pad print remover from Pehm-Modellbahn, and a dental supply micro brush.

He was persuaded by our product idea and designed the parts we needed for this conversion (art. no. ZD-220-20002-1). In order to approach the optimal product, two versions were first implemented, which are identical in their length and height dimensions. The depth (thickness in the horizontal) of the supports to be glued under the wagon floor was varied, which is not visible when looking at the refilled wagon.

Attaching these two 3D printed resin parts is really easy. They are first placed dry with tweezers to determine the correct position directly behind the running boards and between the axle holders of the treated side.

The course should then be thinly painted with a suitable adhesive. Here we recommend Uhu-Alleskleber Super "stark & sicher" (formerly "strong & safe") or also Uhu Booster, which cures under the UV light of an LED, which we chose here.

Our choice is based on the fact that we only have to apply a light pressure for a short time. As soon as the enclosed LED unit has been in use for 20 seconds, the adhesive is cured and develops its holding power. We can then proceed directly to the colour design.

In this next step, we adapt the appearance of the attached supporting strut to the car floor. We therefore use deep black, matt Revell paint (Aqua Color 36108), and a fine hair brush and colour the part that has just been glued on until the wagon floor looks like it has been "cast in one piece" again.

After drying, we can go about changing the operating number and inscribed type on the two Miele wagons. Only the Kuba-Imperial wagon already has the correct designations, which we will, of course, leave in place.



The complete removal of the frame inscriptions that are no longer required (and have already been replaced here) is hardly possible. The arrowhead marks tiny remnants, including the complete "D" from the previous owner's inscription. These residues, barely visible to the naked eye, can only be carefully covered with matt black paint.

Before new labelling can be applied, however, the old ones must be removed, as gently as possible. The use of electric erasers is conceivable as well as chemical aids. We still have one in stock, but as far as we know it is no longer available: Tampon print remover from Prehm Modellbahn.

It is applied with a micro brush from dental supply, and after a short time, it dissolves the inscriptions to such an extent that they can be carefully wiped off or removed. In this case, the type designation and the operating number can be found on the left side of the car body as well as on the frame.

For the new labelling of the GI 22 we have chosen the service numbers 191 286 and 192 608. Both fit into the number range of this design, and, are, in many respects, conclusive for our project. However, we could neither prove nor disprove that they were indeed once used on wagons with Miele advertising. The company archives of the household appliance manufacturer from Gütersloh could not help either.

New decals for wet application were also made by Z-Doktor Modellbau, whose printing skills we are now well impressed with. Low font height, razor-sharp typeface and an almost invisible backing film that did not tear during application are evidence of the highest quality. Incidentally, not all suppliers on the market can print white.



Using a pointed hair brush in the smallest size available, we cover the imperfections shown in the previous Photo under triple magnification of a magnifying glass using Revell paint (Aqua Color).

The application to the model follows a procedure that has been described many times: cut as small as possible from the sheet, dissolve in a water bath for 10 seconds, then let it soak for a short time, and bathe the backing paper in a suitable softener ("Decal Softener"), while the substrate on the wagon is wet with an adhesive primer ("Decal Setter").

Then, the decal can be transferred to the object with the help of a fine hair brush (cat's tongue shape), moved into position, and smoothed out before it is allowed to dry in peace. Excess liquid can be soaked up at the edge with a cotton bud.



The before and after comparison shows the difference between the converted and re-labelled GI 22 (left) and the original model designed as GI 11 (right).

The softener is important so that the backing film fits tightly on the board structure of the wagon wall, but also on the frame support with fine rivet reproductions, and does not leave any bumps on the relief. Another drying break is then required.

## Fine and ageing work

In a next step, we carry out a magnifying glass inspection. As expected, we do not find any faults on the body, because this area is easily accessible. On the frame, on the other hand, the unerring removal of the old labelling is not so easy, and so we find tiny remnants here that we did not cover.

Again, the deep black Revell lacquer is used, which now has to be applied accurately to the faulty areas with the finest hair brush. This can only be done with an extremely steady hand and under magnifying glass control. The result immediately compensates us for these moments of tension.



The Cuba-Imperial wagon has also already received supporting struts that match the type already inscribed at the factory, and has already been painted over in black. Now it is waiting for its patina, which will still give it operational traces.

Once this paint has also dried, we reach the final and also most exciting phase of the fine detailing. No freight wagon, not even one with such an advertising motif, was and is always in a freshly washed condition. Dust and dirt, to which it is exposed every day, leave traces that the models also need in order to look authentic and realistic.

It is important that we do not apply any colours indiscriminately, but think carefully about what kind of contamination will be found in various places, and how it got there.

We have identified:

- Rain run-off marks on the roof,
- Various types of dirt that get stuck especially in the board joints of the superstructure, and
- Flash rust as well as brake dust on axle holders, parts of the brake system and the frame.

The first two patinas can be applied and crafted with a brush. Again, the matt black from Revell serves us well. This time, however, we dilute it with a little water and a few drops of isopropyl alcohol.

So it flows well into the cracks and at the same time we reduce the opacity considerably towards a classic washing product. On the side walls, it flows into the joints and leaves clearly visible traces there, while only a light veil remains on the raised parts.



Using matt black Revell paint (Aqua Color 36108), water and a little isopropyl alcohol (96 %), we prepare a washing preparation with which, we can give the board joints and rivets on the sprinkler more plasticity, and at the same time recreate a stressed operating condition. Brushes and cotton swabs help to apply, smudge, and, if necessary, remove too much paint in one go.

The steps we are about to complete take a little time, which we are happy to take. As soon as the colour mixture has dried a little, we wipe the outer skin with a cotton bud. Every now and then, we even moisten it. We take off colour where the impression is too intense, if necessary, also with the help of simple alcohol.

Shortly afterwards, we can again use the brush. Only when the joints show the desired depth and the box struts and the door area with the latches show credible dirt adhesion, which also brings out the finest details such as rivets, are we done here.

After drying, we work on the roof. We apply the same paint thinly over the entire surface, let it set briefly and then paint from the line of the highest point of the barrel roof outwards to both sides of the wagon. This way we get, also after a few corrections, the typical traces that water leaves behind when it follows gravity.

The last weathering step aims at the undercarriage. For this we choose rust-brown and not too garish colours from the Vallejo range (distributed by Faller), which should be matt drying in any case.



The procedure is simple. For the even deepening of the board joints, our glaze is applied with a brush over the entire surface. As soon as it has dried a little, we wipe the surface with the cotton swab (photo above), and take some of the glaze off the walls. This step can be repeated until the joints are sufficiently dark and the walls show a slight haze of dirt. In the course of the work, we selectively touch up selected areas (photo below) in order to emphasise all textures and shapes in the desired way.

This time they are applied with the spray gun in a fine mist that emphasises the lower sections more than the adjacent frame parts at the transition to the coach body. This completes the colour work, and a matt clear coat preserves our results, but, above all, also protects the new inscriptions.

Tiefmatter Acryl-Klarlack (deep matt acrylic clear varnish) from Bergswerk (83211) convinces us at this point, because it really removes all the shine from the model and makes it look dull like the prototype. At the same time, it does not leave a grey haze when applied with spray.



Three at one go: While V 160 005 has both Miele wagons in tow in a through goods train, 55 2993 is shunting Cuba-Imperial's GI 22 on the lower track level, which was hired as a private wagon by DB.

In any case, we are very satisfied with the result and are happy about three new “individualists” in the wagon fleet. They will certainly attract attention in goods trains because of their colours, which differ from the usual photo, but, at the same time, they no longer outshine all the other representatives in the train with unnatural purity!

**Manufacturers of the base model and the conversion parts:**

<http://www.maerklin.de>  
<https://www.z-doktor.de>

**Sources for required accessories:**

<https://www.bergswerk.de>  
<https://www.faller.de>  
<https://www.noch.de>

<https://www.prehmshop.de>  
<https://www.revell.de>

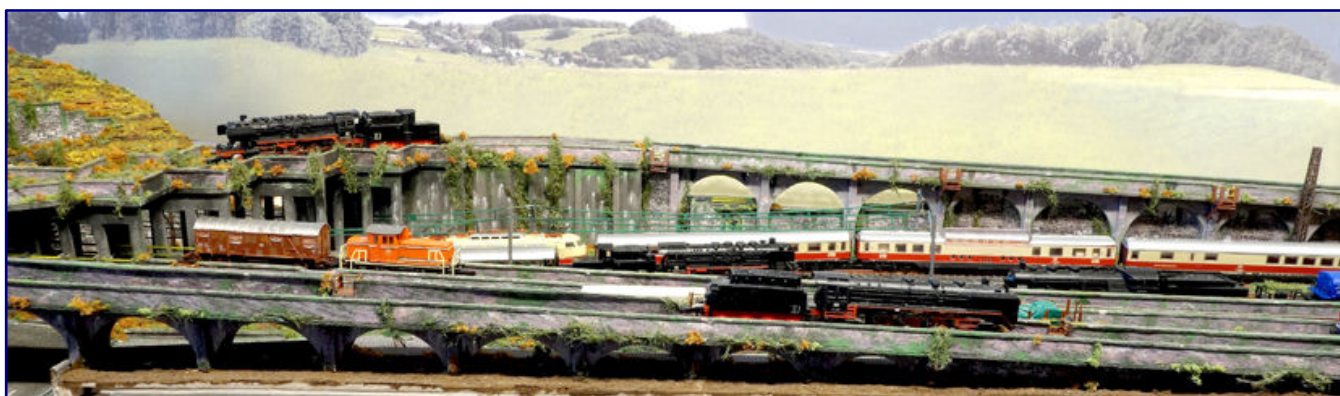
Self-built track ramps (Part 1)

## Planning and finding Materials

*Our reader and book author Heribert Tönnies has dedicated himself to model building that is as simple as possible, inexpensive and easy to master. He therefore also offers special options for newcomers who do not yet have access to a stash of kits and materials accumulated over years. In a two part series he will teach you to build arcade-lined ramps with simple means.*

By Heribert Tönnies. Today, and in the next issue of **Trainini®** I would like to explain a method for the relatively simple construction of track ramps as an advance extract from my forthcoming third book (eBook).

For my large “Herilingen depot”, which is located on a slight slope, different heights between the double-track main line, the depot and the industry section of the layout had to be navigated.



Building ramps according to individual measurements in the simplest, most time effective, and inexpensive possible way, together with a lot of modelling fun, is the central aim of our author.

Due to the layout's topography and its theme which I already described in more detail in volume I of my practical guidelines, routing tracks through the sloping areas in the naturally given terrain was not possible.

The industries are located in the immediate vicinity of a city. In such a setting of inner-city and peri-urban locations, railway ramps were built to create pass-overs, often to cross over other tracks.

If such ramps were located not only on railway owned property, but directly on property boundaries or, in the case of crossings, on third-party property, they were built with arcades in the form of a stub or round arch.

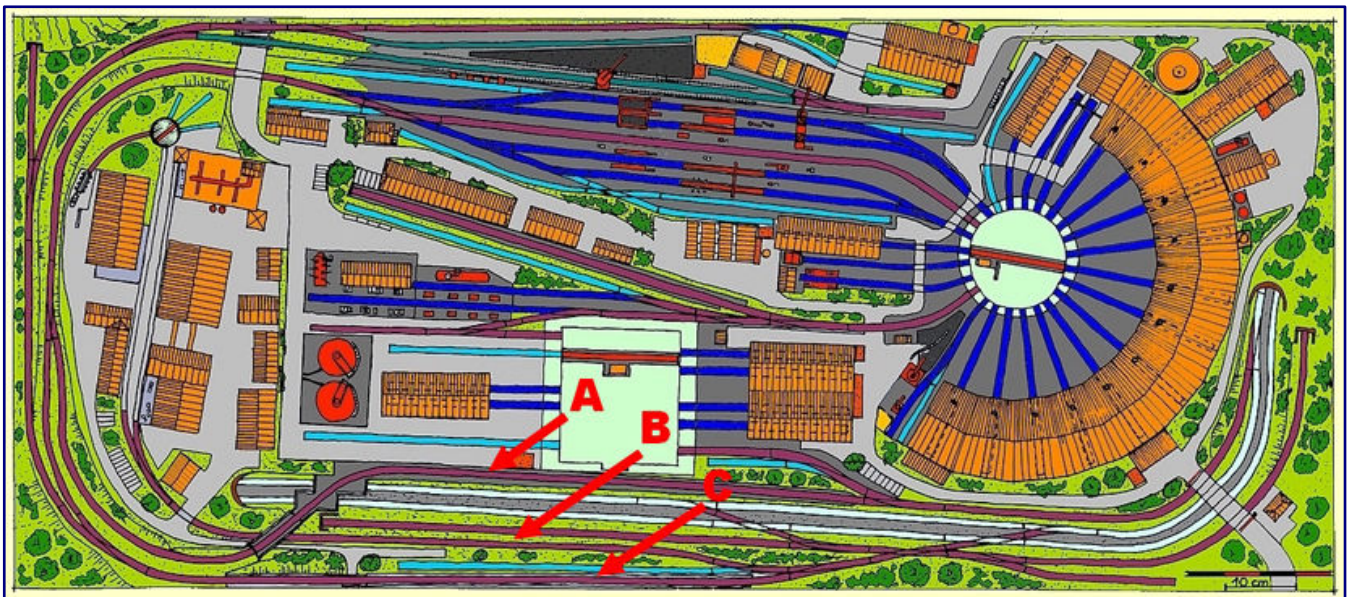
On the lower level, this made it possible to create a passage (for commercial traffic, roads, pedestrians, but also, with the appropriate height, as a superstructure to buildings or technical facilities). At the same time, this helped to avoid as far as possible cutting up cities with metre-high, wall-like railway structures, and, thus, made for transparency and visual lightness.



We often find ramps and overpasses in areas close to cities where various railway lines branch off. The example here shows a scene from Köln (Cologne).

To emphasise the location of my railway depot close to the city and to increase visual interest, I have, therefore, also decided to build track ramps. For my plan I need three versions of different lengths, which I implement with round arches as follows:

- a) For the track branching off from the double-track main line to the crossing bridge and further as a feeder track to the depot with an upstream branch to the locomotive depot (A on the track plan below),
- b) track routing under the crossing bridge, but across the access road, to the industries (B) and
- c) at the front edge of the layout for the outbound track from the depot to the main line (C).



The track plan of the depot layout shows the areas where ramps have to be constructed for crossing roads and tracks. The letters are explained in the article.

Unfortunately, there are no ready-made ramps available for Z scale which come close to the prototype I had in mind. I therefore had to build my own, also because of the desired layout-specific individuality. However, this also gave me the freedom to master almost any special situation typical for the layout.



After extensive research, the builder opted for a combination of concrete arcades in the form of round arches with reinforcing masonry pillars

For the planning of the ramps, some things had to be taken into account in advance in the design of the track plan. For example, it was necessary to determine the required clearance profiles (clearance heights) for track crossings and bridges, or, to plan the heights to be achieved with the resulting maximum gradients, from which the ramp lengths result.

I explained some of the basic principles in more detail in Volume I of my book series, which is why I will not go into more detail here and would like to refer interested parties to it. In this engineering report I will confine myself exclusively to the construction of the ramps.

After researching many ramps and elevated track solutions of the prototype, I decided on a combination of concrete arcades in round arch form (semicircle or, depending on the height, only circular segment) and brick reinforcement pillars placed in front of them.

This construction method also echoes the already completed brickwork of the coaling station of the depot, which helps to ensure visual continuity and uniformity with respect to the typical local designs on the layout.

For fall protection on the ramp, simple steel railings are usually used along the edge of the ramp. Because the three ramps on my layout are relatively long (without auxiliary structures approximately 220 cm in total), I chose a brick parapet with a concrete cover as a fall protection which can also be found in the prototype, and which simplified their construction, and helped to reduce cost.



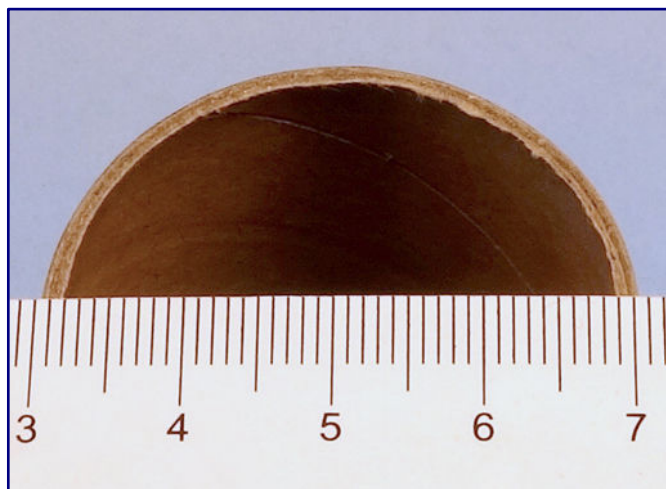
Three different types of arcades were chosen for the project: completely open design with recessed parapet walls (top left) closed arches with vertical (top right) and sloping brickwork (bottom right) in the same design.



In the area of the curved ramps on the left, however, steel railings were also used on smaller sections. I chose three variants for the arcades, which were also necessary due to the terrain topography of the layout:

- Completely open arcades, partly in the lower area with slightly recessed parapet walls, because of height differences in the terrain between the front and rear sides of the ramps,
- closed arcades with vertical walls (structurally necessary because the terrain is relatively high on the rear side of the ramp and it is a high wall), and,
- closed arcades with slightly sloping walls (because the terrain is high on the rear side of the ramp, but the wall height is relatively low).

In view of the transportability of the layout, which measures approx. 0.90 x 1.95 m, the main focus for me was on lightweight construction, which is why heavy wooden structures or plaster were out of the question. I therefore chose balsa wood again for this construction, which is very light, but nevertheless stable, if used correctly, and, above all, very easy to work with: no sawing, just cutting with a sharp craft knife.



A cardboard roll with an inner diameter of 3.5 cm was used as the basis for building arches (left). The precise use of a handsaw produced cleanly cut circular segments (photo right).

First of all, however, I was faced with the problem of how to quickly build uniform round arches, of which I needed a large number.

#### Tips for freehand sawing

If no saw gauge or mitre saw is available, the small roll strips can also be cut freehand.

However, there is a great danger that the saw blade will be tilted or skewed when sawing the relatively large diameter, so that the cut-off ring does not have a consistent width.

To avoid this to the extent possible, I mark the width of the ring to be cut off in advance with closely spaced marks. I then do not saw through from top to bottom in one go, but turn the roll a little further after the saw blade has cut through the wall thickness of the material.

And I only, then, continue the cut until the material thickness is cut through again. By slowly guiding the saw blade from mark to mark, I get a ring of relatively equal width.

#### Tips for eliminating width differences

If freehand sawing results in slightly different widths of the ring, I sand them off later, after the round arcs (usually half circles) are already glued to one side of the first balsa board.

This gives me a larger, more stable contact surface and allows me to guide the segment cleanly on sandpaper that is placed on a smooth surface.

The method of bending balsa wood used elsewhere for a wide under-tunneling is out of the question this time because on the one hand the round arches have a (too) narrow radius and on the other hand the effort is too high.

The method of bending balsa wood used elsewhere for a wide under-pass was not suitable for this purpose, one because the round arches have a too narrow radius, and, second, it would have meant too much of an effort.

But, as I also described in volume 1, an ambitious model railroader should always go through the shops with his eyes wide open!

At first, I had the plastic rolls of adhesive film in mind, but I discarded them because, first, the required number of rolls is too expensive, and, second, the precise processing (shortening vertically to the required width) is too time-consuming due to the plastic material.

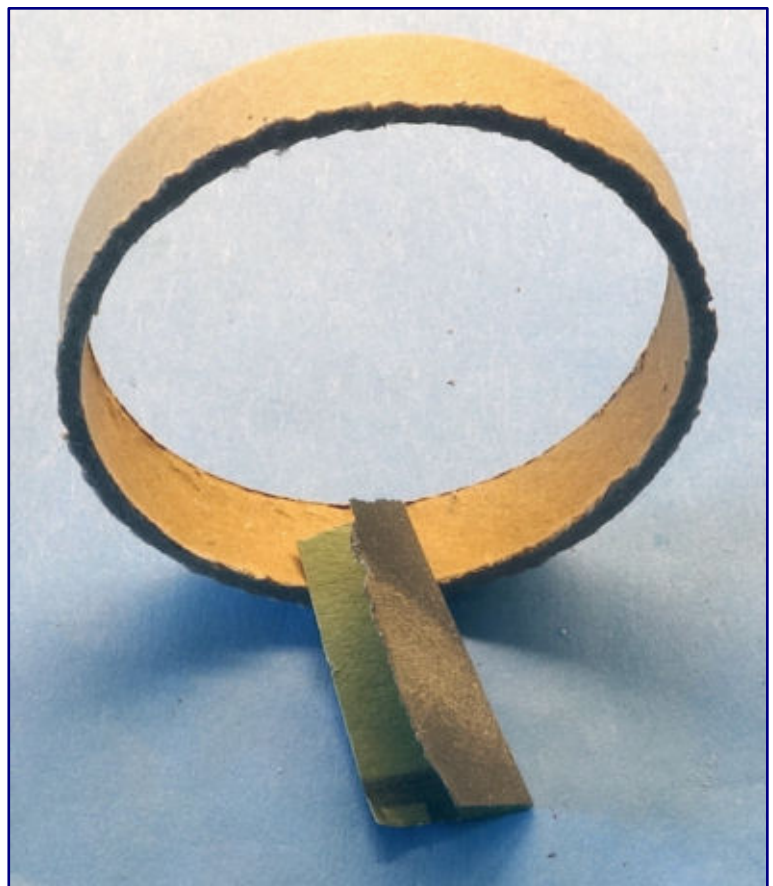
I finally found what I was looking for in the household department of a supermarket: replacement rolls for lint rollers.

These rolls have a cardboard core that is relatively sturdy (approx. 1.5 mm wall thickness) and an inner diameter of approx. 3.5 cm – this corresponds to about 7.70 m in Z gauge, i.e., an ideal dimension for the arcade arches.

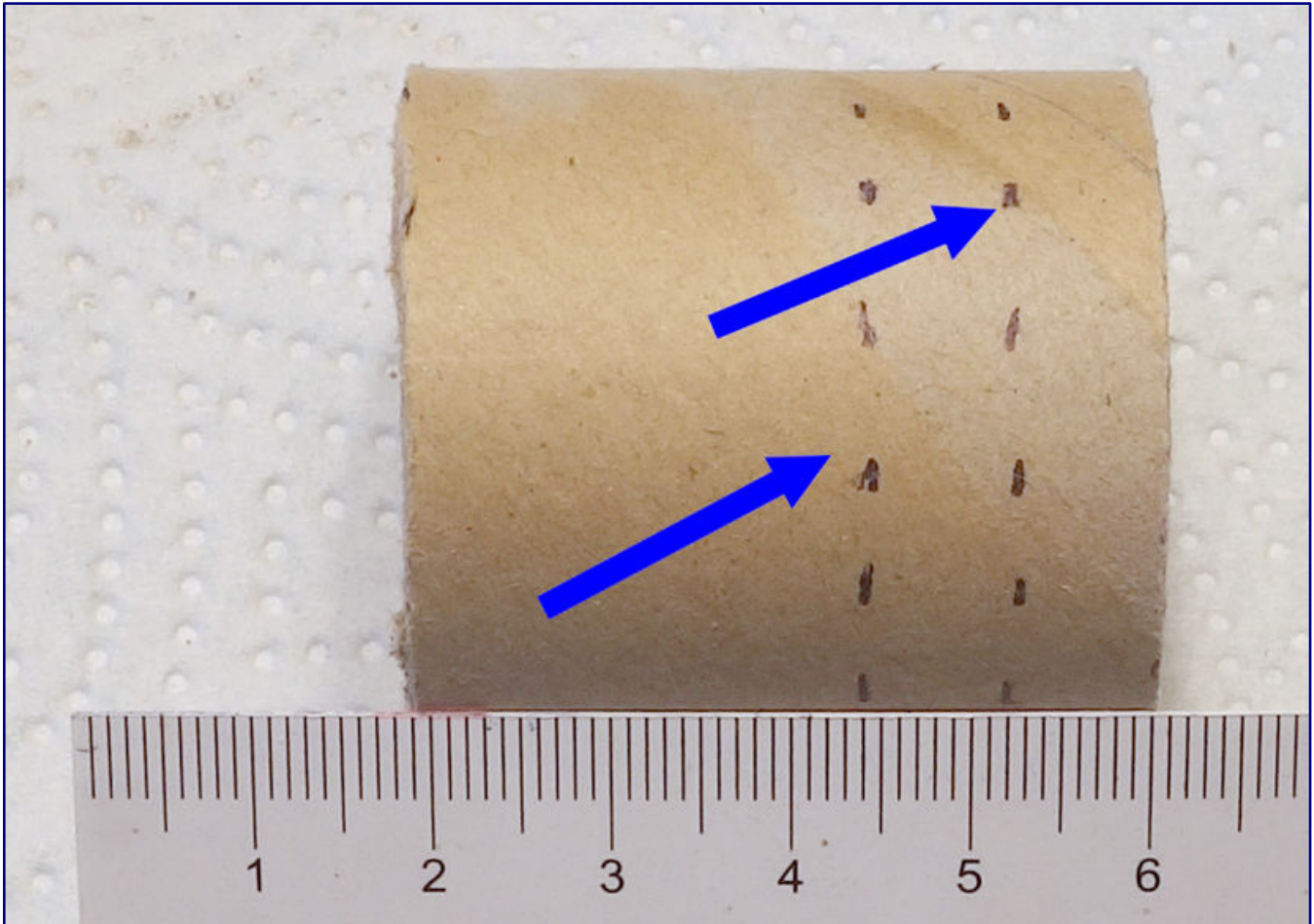
From the approx. 10 cm long roll, I could cut or saw 10 individual roll segments, each measuring 8 mm wide, which then makes for 20 round arches. Each package costs about Euro 1.80 and contains two rolls, which already yields 40 arches.

That should be enough and the price is unbeatable! It is easy to work with a small handsaw, a scalpel and sandpaper, so it was perfect for the intended purpose

Those who know my books know that I build my layouts in the simplest possible way, i.e., without elaborate technical equipment and tools. That's why I did not use the mitre



Rough edges that occur during sawing can be removed and smoothed with sandpaper.



Successive markings with a felt-tip pen provide orientation and are intended to prevent accidentally crooked cuts. After all, one is working freehand here!

saw here either (although I do own one), but a simple hand saw to cut the approx. 8 mm wide roll segments from the long roll.

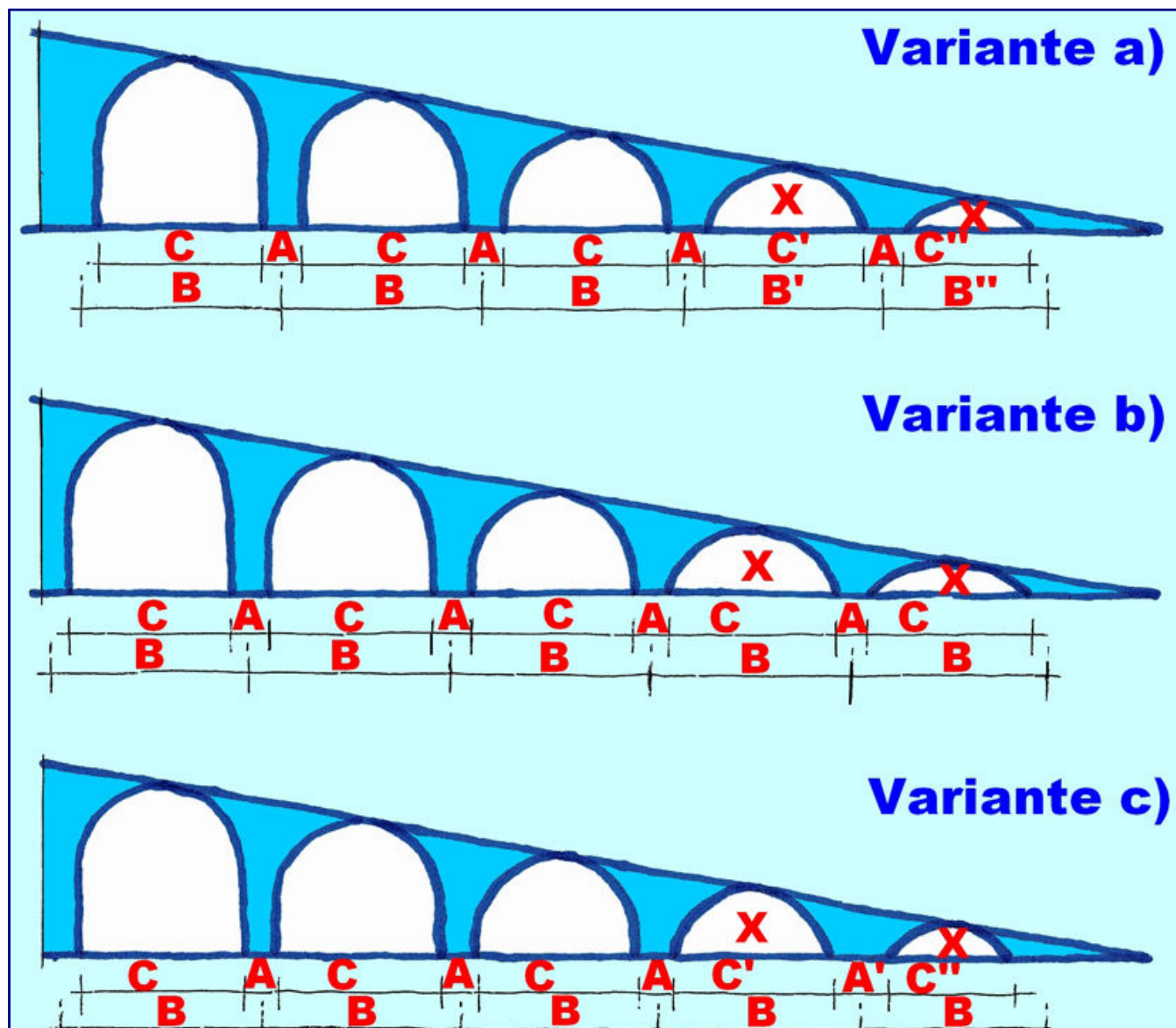
By the way, I did not use a wood saw blade for the cardboard roll, but a metal one. First, cuts are easier to control that way because the fine teeth allow for a smooth and gliding sawing motion, and, second, the cardboard does not tear as quickly because of the finer saw blade structure, which still results in a clean cut.

After cutting the segments, I ran the cut edges over a piece of 400 or 600 grit sandpaper placed on a smooth surface. This eliminates any minor inaccuracies. I also break the edges that may have become slightly frayed during sawing with the sandpaper. This can also be done later after gluing.

After having prepared the cardboard rings, I had to determine the division and spacing of the round arches. There is a special aspect to consider here: Where the round arches do not have a full radius in height due to the ramp becoming lower at the beginning of the ramp, three variants are possible:

- a) If the pillars between the arcade arches all have the same width, then the distance between the pillars decreases from arcade to arcade in the direction of the start of the ramp (while maintaining the same radius for all arches, because the height of the partial arch decreases more and more towards the direction of the start of the ramp, and, thus, the outer dimension of the arch on the base edge becomes smaller and smaller).

- b) The pillars between the arcade arches all have the same width, the distance between the pillars always remains the same, then in the direction of the start of the ramp the radius of the (full) round arch increases from arcade to arcade. The arch strips that do not have a full height radius must all be bent up to different extents; the outer arch dimensions on the base plate remain the same.
- c) The radius of all arcade arches and the distances between the arcade arches remain the same, then the width of the pillars between the arches increases from arcade to arcade in the direction of the start of the ramp. This does not look nice visually and the reason for the different widths of the pillars cannot be understood by the lay observer.



I therefore opted for variant a), because, first, it looks symmetrical, and, second, the (slight) reduction of the distance between the arcade axes in the low ramp area is hardly noticeable, with bushes placed in front of it later on, it is no longer noticeable at all.

All photos and illustrations in this article: Heribert Tönnies

Webages of the author:  
<http://bestagernet.de>



## 81874 "Museum Passenger Train" Starter Set

# Starter Set

Just the right start for all beginners and switchers. In addition to a four-piece set consisting of locomotive and cars you can expect a starter set with an enlarged track oval and power supply.

€ 269,- \*



You can get different track extensions with the sets 8190, 8191, 8192, 8193, and 8194.

# Uerdingen Rail Bus



## 88168 Rail Bus with Trailer Car

German Railroad, Inc. (DB AG) class 796 (former VT 98) motor car and class 996 (former VS 98) control car. Crimson paint scheme. The units look as they did in Era V around 1997.

- Interior details modelled
- LED interior lighting in the control and motor cars
- Motor with bell-shaped armature

€ 209,- \*



The first driving tests (Part 1)

## Track Geometry and Basics

*The passion for the hobby has been awakened, the dream of having your own layout is alive. This moment can mean a crossroads: Euphoria, many topics, big plans and in the end a frustrated retreat or practical learning on manageable works and later starting out big as well as successful. In a new series, Dirk Kuhlmann points out typical beginner's mistakes, teaches the basics and sets initial work tasks that have a key character.*

By Dirk Kuhlmann. Welcome to our new series of reports, which revolves around the most important and basic topics concerning the hobby of model railways in Z gauge. In particular, the newcomer or the returning model railroader is looking for tips or tricks to put his little “treasures”, effectively, in the limelight.



Am Lietwerk – a small piece of a perfect world; at the same time, it is also a good object for practising and rehearsing one's own skills.

In recent months, the members of the **Trainini®** editorial team have been increasingly confronted with questions about the basic structure. We would like to respond to the thirst for knowledge of our readers, who have discovered the most beautiful hobby in the world for the first time or have rediscovered it, with a series of our own.

However, we will not insist on general validity here, but rather act in a supportive manner, with suggestions that have proven to be practicable over the years. The pleasure of model railroading usually starts with a starter kit. Why not?

After all, all the components such as tracks, rolling stock, speed controller with plug-in power supply, and detailed descriptions are there, which is why the fun of playing can quickly begin.

While the train is making its rounds on the oval, thoughts naturally wander directly towards a model railway layout with all of its equipment and possibilities. The look into literature and catalogues now runs almost in parallel. But what would be another sensible purchase?



A knowledge of the track geometry of each track provider is a basic requirement for initial plans. Illustration: Märklin

Treat yourself to a four-axle locomotive (e.g. V 100, V 160 or others) at an early stage and enjoy the driving culture of these modern products.

Extremely slow speeds are no longer witchcraft in this scale: We have tested vehicles that can creep along the tracks at less than the converted walking speed!

And, we would like to deliberately and explicitly add here: We are not talking about digital possibilities. Clean rails and as many power pick-up points as possible on the wheels of a locomotive make this possible, in addition to a good motor with a balanced and smooth-running gearbox.

## Track geometry

We can now extend our simple oval from the starter pack with some useful rails and points. To do this, however, we recommend taking a close look at the track geometry of the mass-production manufacturers in advance, e.g., on the internet or in track plan books.

The following PDF file on the Märklin pages provides a fairly quick overview:



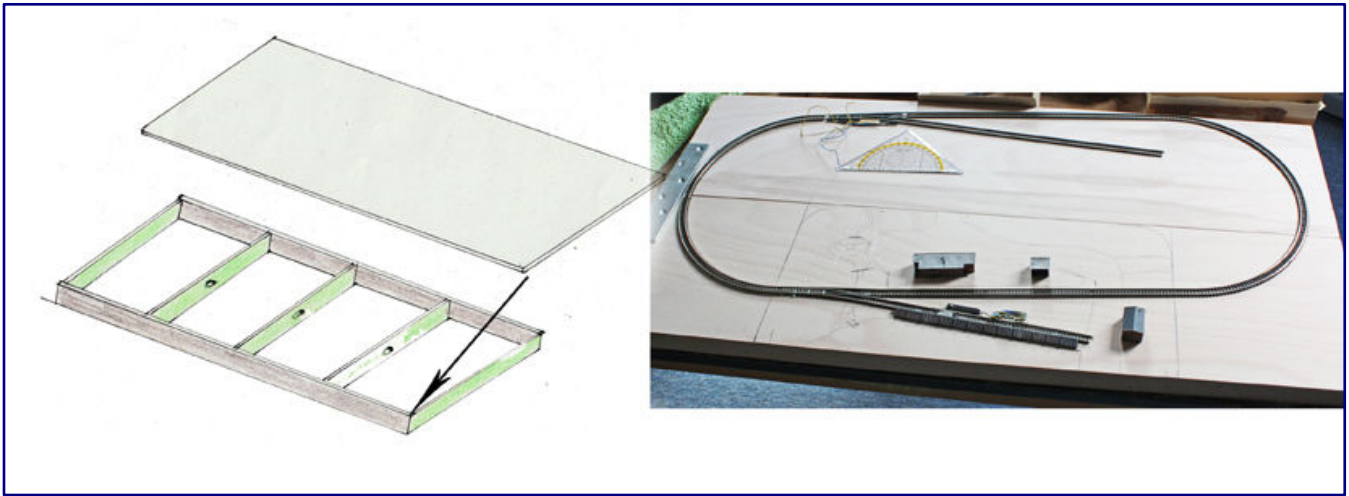
[www.maerklin.de/fileadmin/media/produkte/SpurZ/0296\\_Gleisanlagen-Buch\\_Spur\\_Z\\_komplett.pdf](http://www.maerklin.de/fileadmin/media/produkte/SpurZ/0296_Gleisanlagen-Buch_Spur_Z_komplett.pdf)

From Rokuhan there is this information service:

[www.1zu220-shop.de/media/content/rokuhan/Flyer\\_Rokuhan\\_2017\\_12Seiter\\_A4.pdf](http://www.1zu220-shop.de/media/content/rokuhan/Flyer_Rokuhan_2017_12Seiter_A4.pdf)

Märklin and Rokuhan have structured their track material very sensibly. For many track figures, examples are shown in their instruction documents.

For a first test track, not a simple “railway board” should serve as a base, but directly a nowadays usual box with a cavity for the necessary underground cabling. I will now give you a sketch for this.



These were the first steps towards the later “Strandgatan” layout. A box like this also hides all of the wiring beneath the layout.

This “box with rails” without a landscape could also serve as a test track for your rolling stock in the future. To ensure that our little “darlings” hum along quietly, we recommend a base made of 2 mm cork. You can get this as a roll in most DIY stores. Cork and wood can be glued together well with Uhu Kraft.

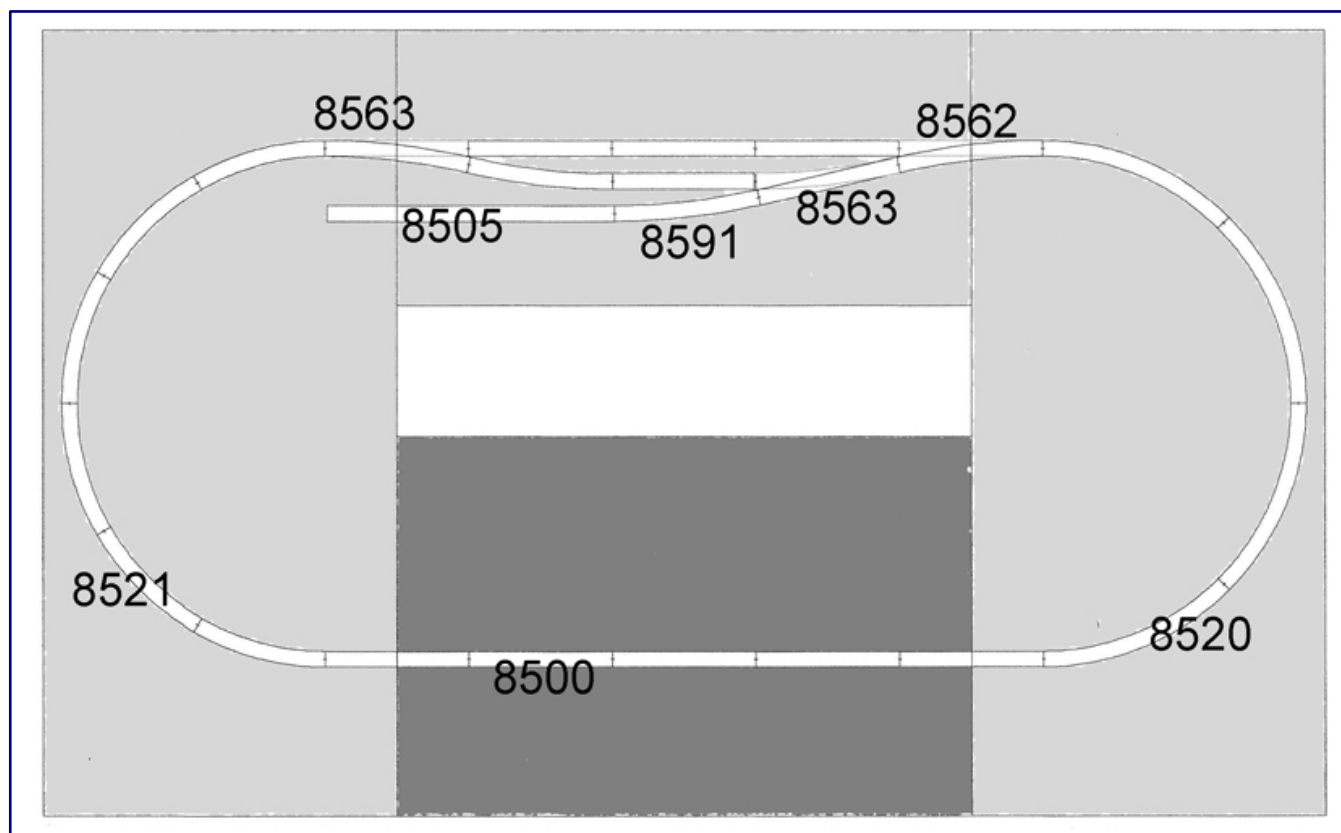


Just for comparison, even the later layout “Bad Rothenzell” (200 x 70 cm) was built following this box system.

## The art of self-restraint

Important: Plan your first showpiece in a manageable size. This is the only way to learn and/or intensify all the necessary handicraft work in a timely manner. If you plan (too) large right at the beginning, frustration often sets in: Beginner's mistakes happen and permeate the entire work, a long time window for all construction steps and hardly visible construction progress at the beginning make the initial euphoria fade away quickly.

A beautiful model railway layout needs time and experience. It starts with the woodwork and ends with the placement of small figures or other details. In between, there are many tinkering sessions of various kinds to be completed. Model railroading is and remains the most extensive hobby of our time.



This is the small plan for the showpiece "Am Lietwerk". The bypass boxes are placed according to the perimeter.

If you start small at the beginning, you can acquire many different skills in a manageable time, gain experience (also from your own mistakes), ensure the important sense of achievement more quickly and lay a foundation for larger projects in the future.

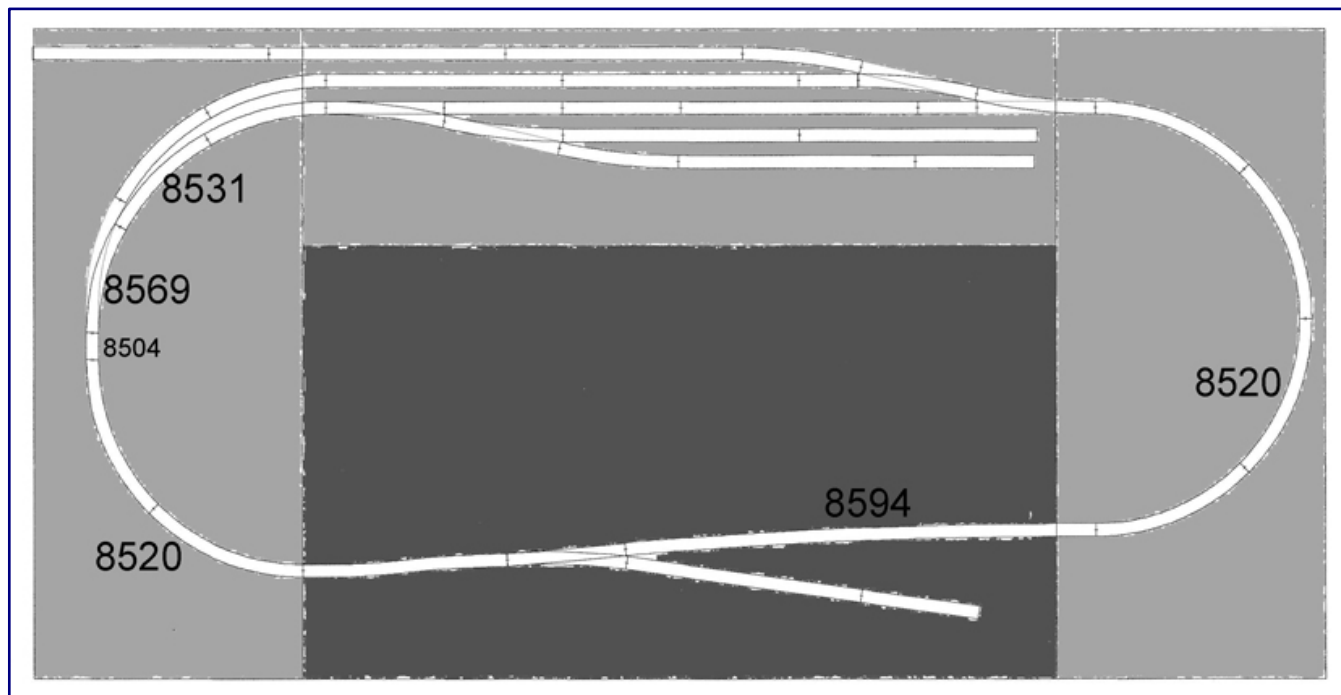
So that the whole procedure does not end in a purely theoretical instruction, we will show you everyday procedures on the basis of selected showpieces.

For a few months now, I have been building two smaller layouts that are excellently suited for documentation. We will go into more detail in the second episode. Exactly these two track plans serve as a template for all further work.

The first version is still a simple oval with an additional passing siding for a second train. With set 1 (art. no. 8191) from Märklin, everything would even be available in one package. The second version is

somewhat larger and has three additional sidings. Here, the other rails and points were bought separately.

Now, I will give you a few tips in advance to make the rail body look good especially in the later designed environment.



In the exhibition layout "Upland," a system for changing possibilities comes into play. Further below, we will illustrate this with a quadruple image.

Märklin offers, for example, two effective components with the siding (8590) and the separating track piece (8588), but even the beginner is bothered after a short time by the rather clumsy attachments for the cable feeds.

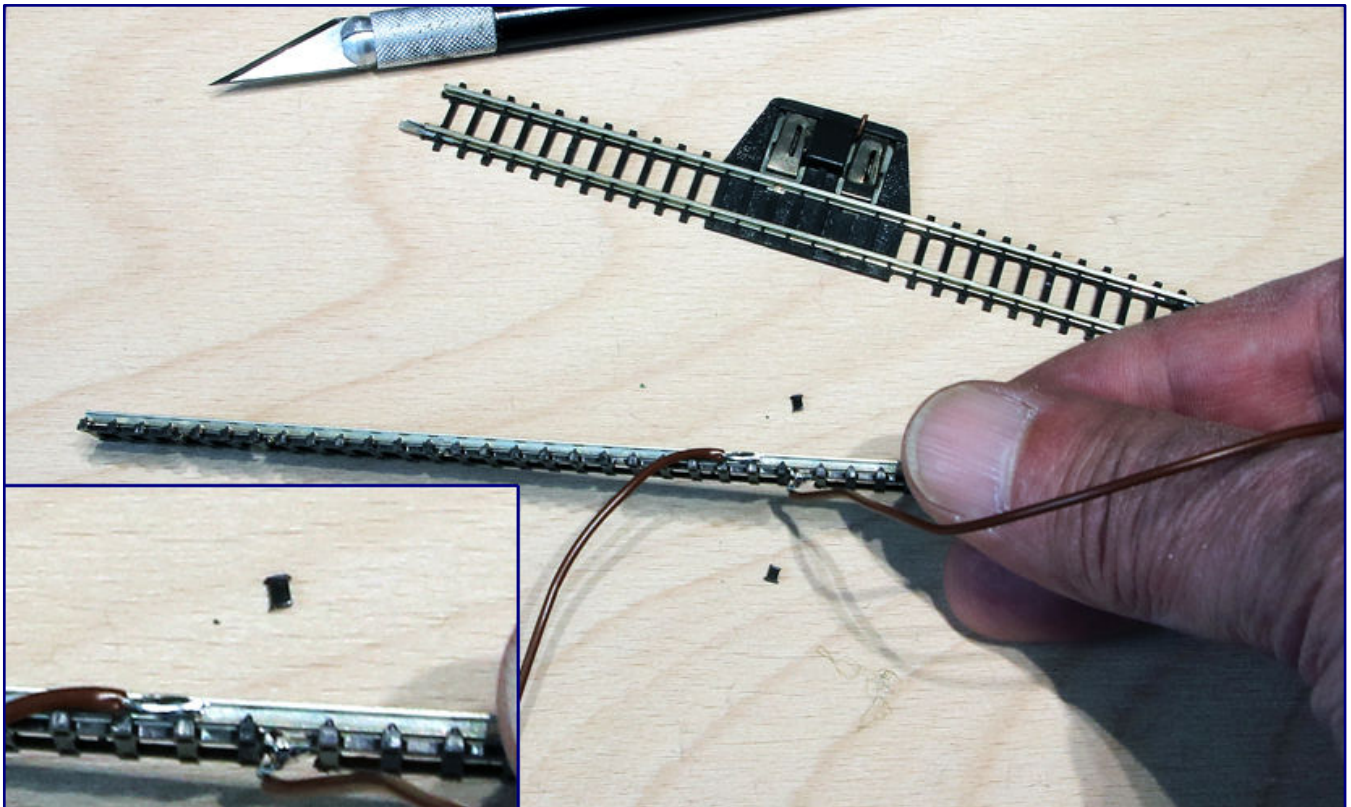
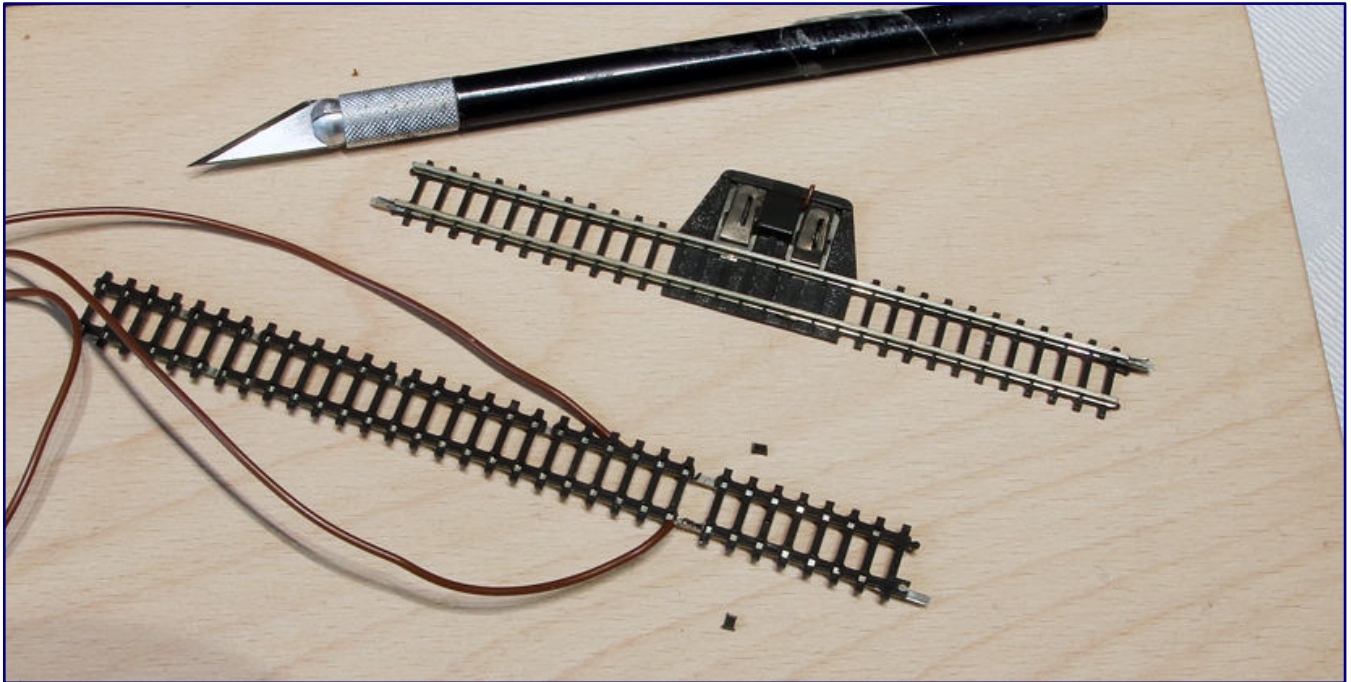
In both cases, the experienced model railroader soldered the necessary cables (mostly) to the track himself. For purely stationary operation, we remove a piece of the connector at the sleeper band and solder the stranded wire to the rail from below. On an exhibition layout, I usually place the soldering points on the outer flank of a rail (see photos on the next page).

This way, in case of a technical defect, the search for the cause would be much quicker. Who wants to spend half the time of a model railway exhibition lying under the layout?

In order to isolate a section of track (e.g., a passing siding) from the whole railway, we use the separating lugs of the respective track suppliers. These are quite ordinary connecting lugs in form, but made of plastic instead of conductive metal.

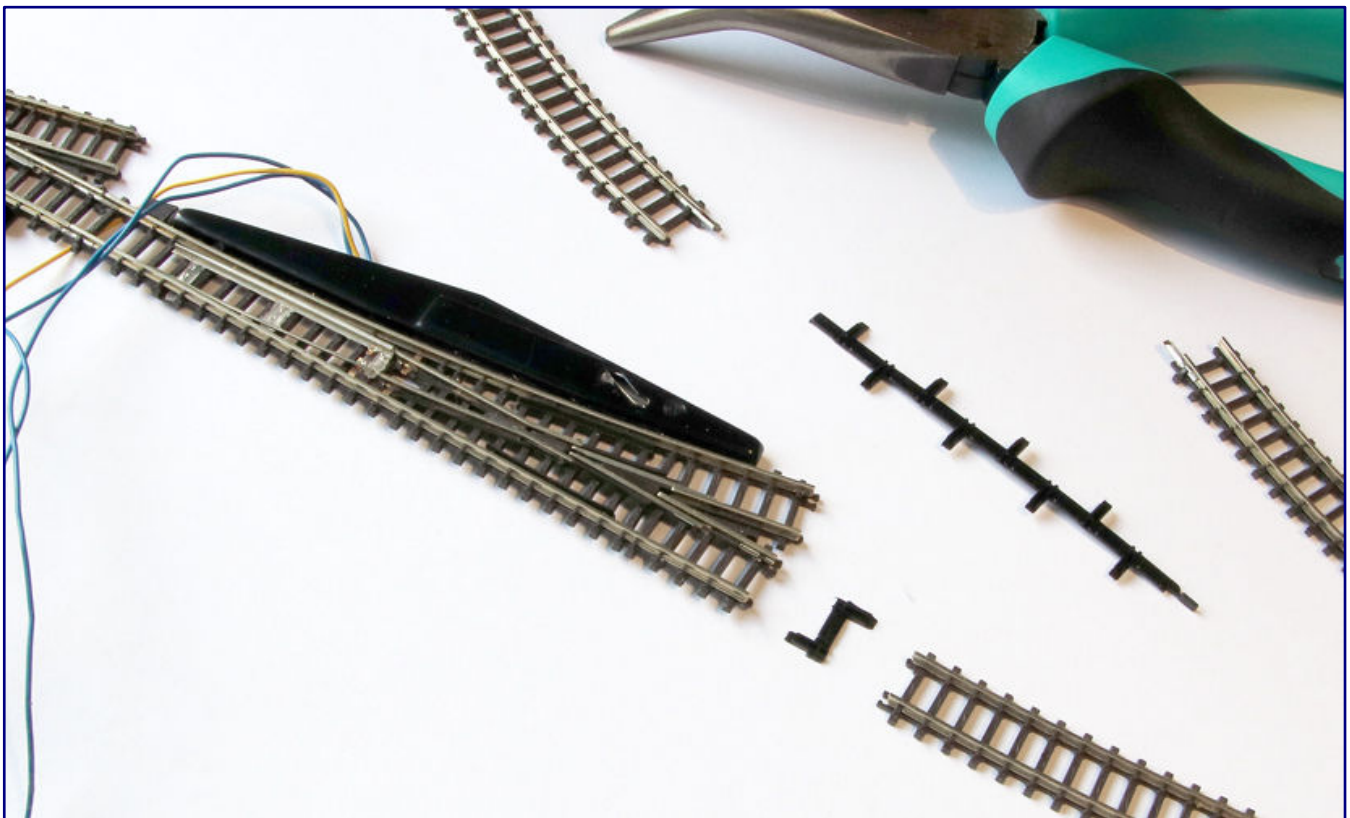
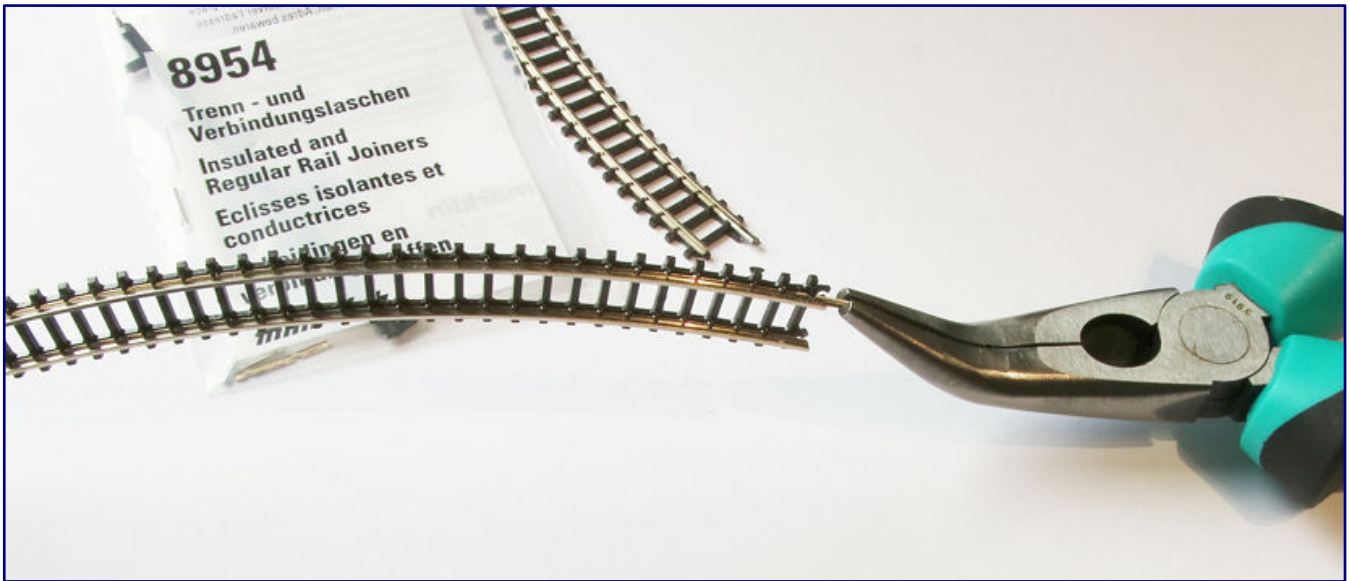
To do this, the sleeper strip is loosened a little from the rail profile and the metal tab is pulled off with a pair of precision needle-nose pliers.

Of course, we now also have to supply this insulated rail section with power. This is done in the same way as the instructions just given. Deviating from this, we now only add a small toggle switch (e.g., Donau-Elektronik, art.no. KS501C or KS134; end customer purchase via Mercur-Versand), then we can simply switch off the current to our train.



The photos show the usual soldering versions of the traction current wires on many model railways, as mentioned on the previous page. The lower one is preferred for exhibition layouts.

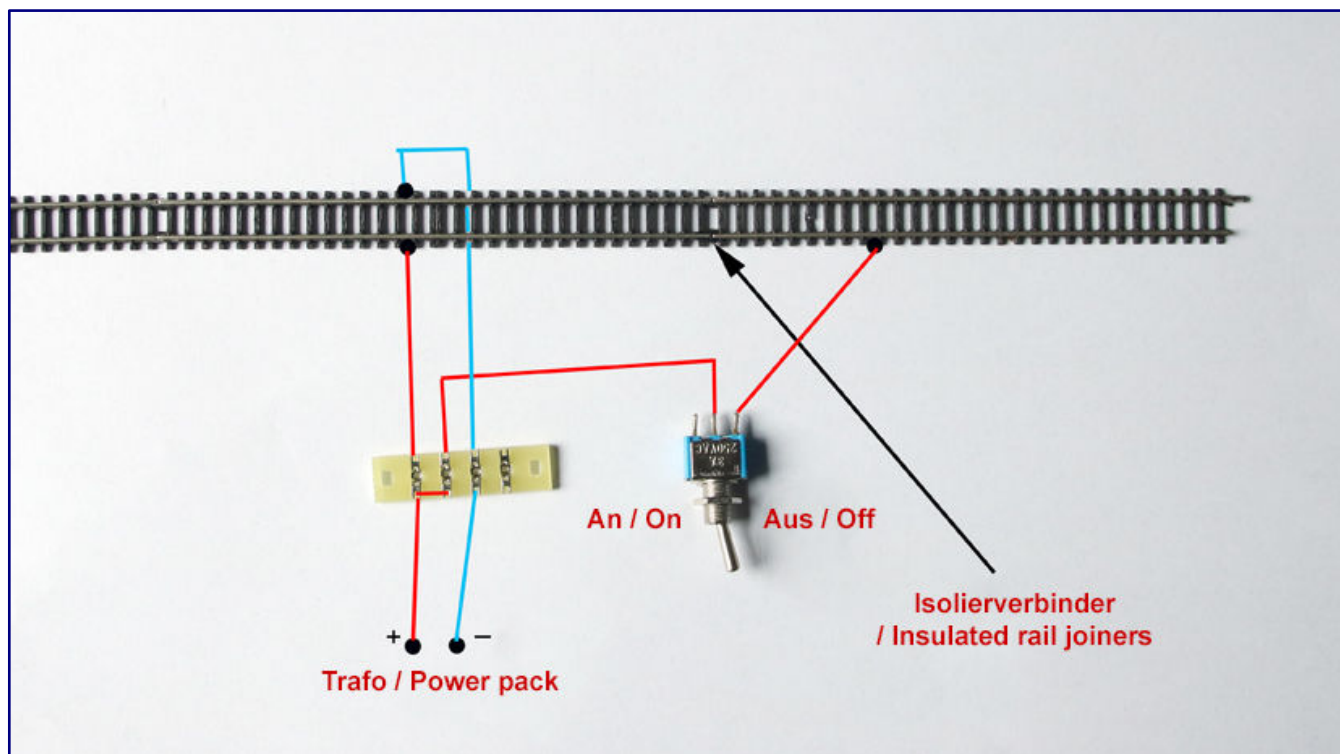
When installing an electromagnetic separator, simply follow the connection diagram, which is provided in every package. It is really simple. You can now fix your track with the track nails from Märklin, I only recommend gluing for final track structures.



With a little skill and a pair of needle-nose pliers, the rail connectors can be removed quite quickly (photo above). Separating tabs later provide an insulated piece of track (photo below).

With these simple possibilities, you can already do a little operation and now, at the latest, everyone's imagination should run away with them: A station is needed, accompanied by a larger workshop for locomotives, ... oh yes, ... a goods dispatch, ...stop!

To begin with, limit yourself to one or two themes that can be implemented on our proposals due to lack of space. Don't worry, even the greatest model railway professionals sometimes have to struggle with this – over and over again.



This is a simple plan for an isolated section of track. With this, a locomotive can be de-energised at any time while another train makes its rounds.

Back to our two examples: “Am Lietwerk” (approx. 40 x 25 cm) is set in the surroundings of the town of Warstein and mainly shows a single-track line at a block signal box. The slightly elevated position on a railway embankment shows off our rolling stock very well. The scenery is only rounded off by a lot of landscaping. The work is limited to a single theme.

“Upland” is 66 x 36 cm in area, more than twice the size of our first example, and thus offers two themed areas. On the one hand this is a simple stopping point for local trains and on the other hand a coal yard, which has a siding. Here, local goods trains could deliver fuel and pull off empty wagons. “Upland,” by the way, refers to an area near Willingen and Diemelsee in the Hochsauerland.

Have you noticed anything? Only the examples mentioned are given a landscape here, but not the so-called bypass. And it gets worse!

The designed “scene boxes” are to be removable in the future, and a new scene of the same size could fill the gap. A highly modern concept, and there is a possibility that it might even be approved later as an eye-catcher in the living space by the spouse. Even the professionals are picking up on this design again and again.

On the photo, which is divided into four parts, you can see the implementation at “Upland.” “Am Lietwerk,” on the other hand, has open segment boxes, an enlargement of the track is possible at any time.

You may have noticed that I have not addressed the issue of a digital railway at all. I am not an opponent of this technology. However, a slow and controlled introduction to it would be highly advisable.

Don't let experienced model railway enthusiasts “impose” a system on you. Everyone is convinced of their own technology and goes their own missionary way, especially in the clubs and forums.



A transportable diorama is a suitable and manageable first work for learning and practising various techniques. Cleverly designed, it can be expanded into a small layout at any time, as illustrated here in four photos:

Photo 1 shows the box for the later Upland motif.

Photo 2 shows "Upland" with matching and removable background box.

Photo 3 shows the insertion of "Upland" into the large bypass box.

Photo 4 shows the complete raw state of the new layout.

Upgrading your track is possible at any time and the degree of satisfaction is more likely to increase, if you give yourself the chance to learn in meaningful and self-contained individual steps – quasi stages.

From all these explanations, a mnemonic sentence emerges that should not leave your thoughts: Give the important topics of design the time they need, and a result is achievable.

In the next episode I will show you the construction of a saw plan for our two layouts and other small track work.



This final photo montage shows the “Lietwerk” finished (left) and in shell (right).

For those who would like to “try out” a little landscaping until then, the **Trainini®** issues, from May to December 2017, are recommended. Another tip for planning a larger layout at a later date would be to take a look at the 2020 editions of **Trainini®**. The construction of “Diemeltal” is documented there.

**Webpages of the author:**

<http://www.helenensiel.com>

**Sources of supply for presented material:**

<https://shopware.donau-elektronik.de>

<https://www.maerklin.de>

<https://www.mercur-versand.com>

<https://www.rokuhan.de>

<https://www.uhu.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.

Modellgebäuden Wirkung verschaffen

## Ausflug in die Vergangenheit

*Wenn ein Buchtitel den Begriff „Perfektion“ benutzt, dann fühlen sich besonders erfahrene Leser angesprochen und wittern eine spannende Lektüre. In diesem Fall lenkt das Wort jedoch von der Zielgruppe ab und weckt das Risiko, den Buchkäufer zu enttäuschen. Woran der Titel krankt und für wen er dennoch sinnvoll und hilfreich ist, das arbeiten wir in unserer Besprechung heraus.*

Thomas Mauer  
Modellgebäude in Perfektion  
Vom Bausatz zum Supermodell: Farbe, Details, Inneneinrichtung, Licht

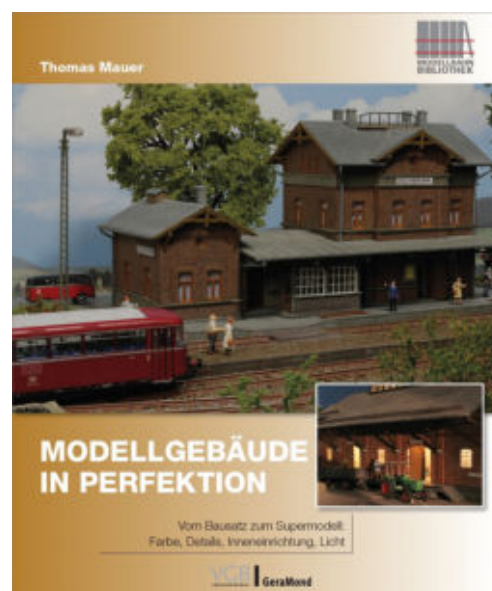
VGB Verlagsgruppe Bahn GmbH  
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Gebundenes Buch  
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112 Seiten mit ca. 300 farbigen Abbildungen

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„Endlich Leben in der Bude!“, verspricht Autor Thomas Mauer in seinem Vorwort zum vorliegenden Titel. Das trifft völlig unseren Nerv und so sind wir gespannt auf die Lektüre. Am Ende können wir ein positives Gesamtfazit ziehen, doch dieses Buch lässt leider auch viele – zu viele - Möglichkeiten aus.



Das Themengebiet, das der Titel verspricht, scheint schier unerschöpflich. Es würde jeden Beitrag in einem Modellbahnmagazin sprengen: Gebäude lassen sich schon mit Farben verändern und aufwerten, mit eigenen Details individualisieren oder näher an ihr Vorbild rücken, mit einer Inneneinrichtung zum Blickfang des Betrachters machen und effektiv beleuchten.

Blicken wir auf den Umfang von gerade mal 112 Seiten, stellt sich schon vor dem Lesen die Frage, wie viele Fortsetzungen und Vertiefungen es wohl geben mag. Und genau hier liegt der Kern des Problems: Es werden viele Themen angerissen und vorgestellt, aber irgendwie bleiben sie alle an der Oberfläche. Das Buch bleibt eher mit vertanen Chancen als mit seinen Inhalten in Erinnerung.

Wie ein Synonym dafür stehen schon die Bilder im Vor- und Nachsatz: Sie zeigen eine Laderampe und eine Gleiswaage, die allenfalls als Randerscheinung mit Gebäuden zu tun haben. Und so fährt der Autor zwar ganze 18 Kapitel auf, aber wenn wir inhaltliche Überschneidungen und „Randnotizen“ streichen, dann wird die Luft schön dünn.

Der Verlag schreibt in seinem Kurzportrait: „Das Angebot an Gebäudemodellen für die Anlagenausstattung ist schier unüberschaubar.“ Dem stimmen wir zu, nur vermittelt das Buch eben das überhaupt nicht.

Die moderne Laserschnitt-Technik, die sich immer größerer Beliebtheit freut, ist gerade ein einziges Mal in diesem Werk vertreten.

Die sich mindestens ebenso rasant verbreitende 3D-Druck-Technik kommt in diesem Buch überhaupt nicht vor, auch den Kleinserienklassiker des Resingusses, lange Zeit nicht nur von Artitec praktiziert, suchen wir vergebens. Allenfalls ein vollständiger Eigenbau oder auch der Papiermodellbau wären in diesem Werk wohl wirklich fehl am Platze gewesen.

Und so spielt der verbleibende Plastikmodellbau mit Polystyrol hier nicht nur eine Hauptrolle, sondern fast den Alleinunterhalter. Einer Technik aus dem letzten Jahrhundert, die langjährige Modellbahner bestens beherrschen sollten, bietet Thomas Mauer hier eine Bühne für ihre Abschiedsvorstellung.

Nur ein einziger Hersteller hält mit seinen Marken bis heute verbissen an ihr fest und ignoriert beharrlich die moderneren Alternativen. Genau diesem widmet der Autor übrigens fast das gesamte Buch und macht Markenklassiker wie Faller oder auch Auhagen zu Statisten am Rande.

Gerade in der ersten Hälfte der Lektüre haben wir mehrfach das Buch zugeschlagen, um den Titel noch einmal zu überprüfen. Wir waren unsicher, ob wir hier nicht ein bezahltes Firmenportrait vorliegen haben. Das gibt es nämlich auch, stammt vom gleichen Autor und ist im selben Verlag erschienen. Dieses Buch könnte daher eine Resteverwertung nicht veröffentlichter Kapitel sein.

Das klingt vielleicht böse, ist es aber nicht. Es zeugt nur nicht von journalistischer Sorgfalt und dem Ziel, breit zu informieren. Der Autor entwertet seine Arbeit selbst, indem er sie zu nah an einen einzigen Anbieter im Markt rückt. Und damit kommen wir nun zum Thema Licht, das hier auch ausführlich behandelt wird.

Die Zeiten, in denen ein Glühlampensockel mittig in ein Haus gestellt wird und alle Fenster be- und Wände durchleuchtet, sollten lange vorbei sein. Abschirmmaßnahmen für Mauern, dunkle Zimmer und ein Blick auf Möbel und Menschen in beleuchteten Räumen sind das, was modernen Modellbau ausmacht.

Das wurde richtig erkannt und wird durchaus mit guten Ideen präsentiert. Unglücklich erscheint aber der Hinweis, dass es beim lang zurückliegenden Bau vieler Häuser noch keine Alternative zu (Mikro-) Glühlampen gab – also doch alter Wein in neuen Schläuchen? Auch bei den neuen Angeboten scheint die Zeit stehen geblieben zu sein, denn wieder beschränkt er sich unnötig auf den einen einzigen Anbieter, dessen Häuser er hier schon fast aufdringlich bewirbt.

Was die jüngere Vergangenheit an Effektbeleuchtungen, darunter startende Leuchtstoffröhren oder Fernsehsimulationen, hervorgebracht hat, werden Sie in diesem Buch nicht finden. Dieser Platz wurde für Laderampen und Gleiswaagen verschenkt.

„Alte Hasen“ und marktkundige wie versierte Modellbahner können auf dieses Buch daher getrost verzichten, weil es ihm an Vielfalt fehlt. Neu- und Wiedereinsteigern bietet es hingegen eine gute Plattform, denn es ist ein Anfang und ein guter Start ins neue Hobby.

Die Schritt-für-Schritt-Anleitungen und auch ein durchdachter Umgang mit verschiedenen Farben liefern für diese Zielgruppe wertvolle Informationen. Sie erleichtern den Einstieg ins Hobby, ohne die Themen zu überfrachten und ihren Leser zu überfordern. Und damit passt dieser Titel sehr gut zum Start unserer kleinen Artikelreihe für Anfänger.

.....  
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<https://www.vgbahn.shop>  
.....

Legendärer Mercedes-Benz /8

## Das Erfolgsauto mit dem Stern

*Autos waren das Sinnbild für den Wirtschaftsaufschwung nach 1949 und bezeugten den Status ihrer Besitzer. Einen Stern auf der Haube konnte sich wahrlich nicht jeder leisten, als Taxi ließ sich aber durchaus in solchen Genuss kommen. Und doch wurde der Strich-Acht zum ersten millionenfach verkauften Mercedes-Benz. Damit gehört er auch auf die Modellbahn und hat sich ein eigenes Portrait wahrlich verdient.*

Alexander F. Storz  
Mercedes-Benz/8  
Der Millionen-Seller

Motorbuch Verlag  
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Alexander Franc Storz, Jahrgang 1965, hat Geschichte, Deutsche Literaturwissenschaft und Philosophie studiert. Er arbeitet als Journalist im Bereich Automobilhistorie für verschiedene Fachmagazine. Auch als Buchautor ist er uns aus dem Motorbuch-Verlag durch einige Titel bekannt.



Der Name verspricht uns eine gute Besetzung für das Portrait eines Autos, das eine Legende geworden ist und einen Meilenstein in der Firmengeschichte von Mercedes-Benz darstellt. Leider klafft hier im Maßstab 1:220 immer noch eine Programmlücke.

Gerade mal das Coupé hat es als Modell ins Märklin-Programm geschafft. Die viel wichtigere Limousine, die als einziger Mercedes in Deutschland sowohl die Taxi-Farben Schwarz als auch Hellelfenbein getragen hat, lässt bis heute weiter auf sich warten.

Das vorliegende Buch kann die Lust auf ein solches Modell bei den Modellbahnern wecken und vielleicht auch einschlägige Kleinserienhersteller auf den Plan rufen: Dieses Auto fehlt und das zu besprechende Typenportrait führt es auch dem letzten Autofreund vor Augen.

Dieses vollmundige Fazit gleich zu Anfang wagen wir, weil der fachlich versierte Autor keinen der wichtigen Aspekte auslässt, die diesen Fahrzeugtyp zum Erfolgsmodell (und heute beliebten Klassiker) gemacht haben.

Für viele unserer Leser wird er damals ein Traum gewesen sein, der im Gegensatz zu manch anderen noch das Potenzial hatte, Wirklichkeit zu werden. Wer dienstlich reisen musste und ein Geschäftsauto bekam, der wird sicher Bekanntschaft mit ihm gemacht haben. Alle anderen haben zumindest mal als Taxi in ihm gesessen.

Der Strich-Acht war und ist sprichwörtlich bekannt wie ein bunter Hund: Als er 1968 erschien, kannte ihn schon bald jeder. Diese Mittelklasse-Limousine war damals eben auch der Mercedes für Markeneinsteiger.

Mit knapp zwei Millionen gebauten Exemplaren brachten es die Vier- und Sechszylinder-Baureihen zusammen auf die Gesamtzahl aller vorangegangenen Mercedes-Nachkriegsbaureihen. Und heute treffen wir historische, bestens gepflegte Fahrzeuge auf Ausstellungen, wo sie stolz vorgeführt werden.

Alexander F. Storz versteht es wieder einmal, diese besondere Geschichte zu strukturieren und zusammenzufassen. Er beschreibt die Generationen der Mittelklasse-Fahrzeuge, die die Marke mit dem Stern nach 1945 angeboten hat und ordnet diesen Erfolgstyp in den geschilderten Kontext ein.

Gefolgt wird dieses Kapitel von seiner eigenen Entwicklungsgeschichte sowie den ausführlichen Vorstellungen der einzelnen Baureihen und der folgenden Modellpflege. „Die nüchternste Form der Perfektion“ beschreibt dieses Auto kurz, aber absolut treffsicher. Nicht vergessen wurde auch das bereits erwähnte Coupé – das erste überhaupt auf Basis der Mittelklasse bei Mercedes-Benz.

Doch was wäre eine solche Abhandlung ohne den Blick auf all die Kuriositäten oder auch Alltagsbegegnungen? Taxis im In- und Ausland, Kilometer-Millionäre, Umbauten oder auch Sonderfahrzeuge wie Bestattungswagen und Ambulanzen belegen, wie vielseitig das Gesicht des Strich-Acht in aller Welt einmal gewesen ist.

Unterlegt mit technischen Daten und einem weiteren Kapitel, in dem er sich als Versuchsträger zeigt, wird das Portrait rund und schlägt sogar eine Brücke in die Zukunft zu seinem Nachfolger, ebenso schon lange Geschichte ist (und auch noch eine Buchwürdigung in diesem Verlag findet).

Eine gute Mischung aus Werks-, Werbe- und Alltagsfotos unterstreicht die vielen Facetten, die sich in diesem Buch wiederfinden und zu einem runden Ganzen verschmelzen. Den meisten ist ihr Alter anzusehen und besonders Alltagsaufnahmen mit Auto aus dem Familienalbum sind handwerklich häufig nicht perfekt.

Aber – und das ist entscheidend – sie sind und wirken authentisch. Schließlich liegt keine historische Werbebroschüre der Daimler-Benz AG vor uns. Die Begeisterung für dieses Auto, die immer zu spüren ist, wirkt ehrlich und packend. Und so sind auch der Lesefluss und das Lesevergnügen von der ersten bis zur letzten Zeile gegeben.

Bei Freunden historischer Automobile und besonders dieser Marke sollte dieses Buch im Regal stehen. Modellbahner mit automobiler Bezug und Wunsch nach zeitgenössisch korrekter Anlagenausstattung sollte es ebenso wenig fehlen.

.....  
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: .....

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.**

**Praise for the May issue and our website:**

Thank you for another very interesting issue! And the new homepage doesn't look bad either.

(...) And another question: Couldn't the button "Download" be labelled in the correct German "Herunterladen"?

Kyrill Makoski, by E-Mail

Response from the editors: We were very pleased to receive this praise and a lot of other enthusiastic feedback, including suggestions for improvement, about our new website. We did not receive all of them as letters to the editor intended for publication. The response has overwhelmed us, and gives us fresh impetus. We have immediately implemented the re-labelling of the button, as well as other suggestions for refinements to the design from other readers.

**Our new pages inspire:**

Congratulations on the new website. From my point of view, you have succeeded very well in implementing the "design language" that we are used to from the magazine.

The website not only looks modern, it is also clearly structured. Apart from the short presentation of the individual issues of your magazine (Magazine > Issues > [Year]); I also like the news section (Current News > News Articles).

For this, a very big praise – besides the already obligatory thank you for your tireless work around Z gauge.

Thomas Heß, by E-Mail




## Table of contents

The following linked table of contents helps you to find historical or current articles via magazine categories and headings and to access them page by page. It can be sorted according to various criteria.

To the table of contents

2021 2020 2019 2018

Jump to issue



May 2021  
Issue 190  
International Edition  
Full magazine magazine  
for German and non-German  
speaking readers  
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www.trainini.de  
19.05.2021  
60 pages

**Trainini**  
German Magazine for Z Gauge

A Heavyweight Comes to Race  
Model Railway Photography for Beginners  
A Perfectly Good Model Railway

### Trainini 05/2021

Issue 190


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### Topics:

**Model**  
Revised NOHAB from Märklin  
A new Heavyweight  
MAN 630 from Ratimo-Z  
The perfect Complement

**Technology**  
Guide to Model Railway Photography (Part 1)  
Successfully photographing Model Railways

**News**  
Staying in the conversation (part 3)  
HOS Modellbahntechnik: To live for Model Making

 Download

### Feedback and wishes for the new webpages:

Congratulations on the redesign of the Trainini website. You have put a lot of work into it, well done!

Overall, the site now looks much more modern. I especially like the eye-catching photos in black and white. I'm a big fan of b/w, the photos have much more flair. Of course, the search function via the issues is also great.

I think it's a shame that your previous craft projects haven't found a place. You put so much work and effort into them and made interesting things. That should not be left behind.

It is also a pity that the page does not scale appropriately for normal PC screens. For example, the providers' page (<https://www.trainini.de/spur-z-welt/anbieter>) is limited to 3 columns, 6 would probably fit on all standard 16:9 screens, 8 would fit on my screen. It's clear that laptops and mobile phones have small screens. And if everything were already perfect, you wouldn't have anything left to improve. :)

I wish you all the best for the future, it's unbelievable what you do in your spare time. Many a paid magazine can take a page out of your book.

Kay Anbuhl, Berlin

Editor's reply: We have reviewed the link lists under the page heading "Spur-Z-Welt" in response to this tip and have reworked them. Instead of three entries per line, we have now placed four entries per line, which turned out to be optimal with the tested monitor and browser settings. The page layout otherwise adapts to the output device and changes the display for 4:3 screens or devices with a portrait display such as mobile phones.

Handicraft projects or model ideas are not to be permanently omitted. Together with gallery pictures from readers and also film contributions, they are planned as a further expansion stage, which we will add to at a time yet to be determined.

#### **Prototype detail explained on Märklin tank models:**

Unfortunately, I only now had the chance to read your exciting magazine. I noticed the following small details in your article: The additional device on the Leopard 1A1's visor is not a thermal imaging device, but a classic aiming spotlight with white or infrared light. It had a range of up to 800 metres.

The device was also used on the other variants up to and including the 1A4 and also on older types such as M47, M48 or Kanonenjagdpanzer (cannon fighter tank). In all types there were infrared night vision devices, which were then installed at night in place of the glass angle mirrors. I was still shooting with the headlamp on the Leopard 1 until 1982. "Real" thermal imaging devices were not available until the 1980s with the 1A5 and the Leopard 2.

The Leopard 1 main battle tank was developed in the 1950s. The first batch (0-series) had already been in service on military training areas since 1963. The first series models were handed over to the then Minister of Defence (Kai-Uwe von Hassel) in 1965.

From this point of view, there could well have been SSy 45s that had not yet been redesignated in 1965, or they were transporting the 0-series from the factory to the tank troop school in Münster in 1963. So, all that remains is the inconsistent running gear of the Sym45.



In 1988, the Bundeswehr's M48 battle tanks are loaded in Stetten am kalten Markt. The precision with which the extra-wide vehicles are moved onto the heavy-duty trucks can be guessed. At the back of the turret the headlight box can be seen almost in the middle, which is on the front of the Leopard 1A1 (Märklin model). Photo: Christian Liebau

Nevertheless, I am highly satisfied with both models, especially with the level of detail of the “Leos,” you can even see the tools attached to the outside and small maintenance openings, as well as the protruding exhaust trims, super!

Attached is a photo of the loading of the M48 over a head ramp onto such wagons, 1988 in Stetten am kalten Markt (...). The big square box on the turret of the main battle tank holds the mentioned headlight, it was also used on the Leopard 1 as you can see on the models. (...) From the driver's point of view, loading was always a great challenge, because the extra-wide tanks had to be kept on track with centimetre precision in order not to exceed the loading gauge.

Instead of using modelling clay, we then fixed the tanks (...) with wedges and crosswise tensioned chains on floor rings that were manually tensioned with spindles. I think there was even a model chain in 1:220 (...).

The ambulance squad depicted by Mr. Schnittjer in the May 2021 issue was obligatory during loading, you could also use an M113 from Z-Panzer, for example. Normally, the escort vehicles drove on the road, but “on the set” there was always the VW-181 bucket truck or the MB off-road vehicle of the company commander, a 2-ton Unimog for supply (with food and for the chains and wedges), and a recovery tank, in the eighties also on Leopard 1 basis (...).

The soldiers were accommodated in a “nicely aged” 2nd class car, e.g., a green 8721, just like Mr Schnittjer did. Harnessed was the BR 216 or 218 in old red (strangely enough, I have seen the beige-blue ones very rarely in southern Germany).

Christian Liebau, by E-Mail

Editor's reply: Our reader did some more research in further correspondence and confirmed that the tank was not equipped with the aiming light until the 1970s, which is why a wagon marking before 1964 does not fit this version. A three-part wagon pack is also not “accurate.” It would have made more sense to have at least four wagons and tanks, which would have been a tank platoon (Gruppe --> Zug --> Kompanie; Group -> Platoon --> Company) in the structure of the time. A full company would have consisted of twelve tanks plus a chief tank, which would have resulted in as many as 13 tanks loaded onto 13 heavy-duty vehicles.

#### **Reaction to the photo course in the May issue:**

I tried to implement Dirks Kuhlmann's photo tips, and put the photos in my cloud. I uploaded the original photos as well as 1 - 2 details per photo.



This is one of the results of photographing the model railway after tips from Dirk Kuhlmann. Photo: Jörg Endreß

The cars are Märklin's infamous "erasers," which I spiced up with some paint. I treated many parts as well as the insides of the 4 Eaos with rust paste and rust fluid (mixed), which I had found in a craft store.

Jörg Endreß, Bremen

**We had to answer the following reader question:**

As I have been an avid reader for years and have also taken some tips from the magazine, and am currently preparing a layout, I would like to ask today:

Is there an easier way to get rid of the print track grid on 3D printed models, e.g., car models, without a lot of filling and sanding, as this is actually impossible with the moulds of, e.g., vintage car models without losing the basic shape.

But maybe one of you has already had this experience and experimented a bit and found a suitable solution. I am grateful for any tips.

Peter Lambert, München (Munich)

Editor's answer: The print mark grid cannot be prevented in 3D printing. It is only visible to a greater or lesser extent depending on the printer and its resolution, the printing process and the print orientation in the output device. We do not see any alternatives to sanding, but sometimes it is possible to do without filler, which is applied by hand. It is conceivable to use fine spray filler with the spraying apparatus, a method that is also used in car construction for the prototype - there this layer is called "filler" for smoothing the finest unevenness.

Of course, this requires preliminary tests, suitable material and a little practice. With the following suppliers of car models (in alphabetical order) we have so far found – thanks to resin as a printing material – no, or hardly any need for reworking: A2 Models (Netherlands; only for sale now (no new models)), EtchIT-Modellbau, NoBa-Modelle, Zcustomizer and Z-Doktor Modellbau.

**Novelty in preparation at Ratimo-Z:**

Rainer Tielke (<https://www.rainer-tielke-modellbau.com>) is currently working on a new product that he showed us when we corresponded about the article on his MAN 630 in the last issue. This is another vehicle from military service, the Willys Jeep.



Framed by MAN 630s in the foreground are two Willys Jeep models that will soon enrich the Ratimo Z range. They can be seen with the windscreen upright (left) and folded forward (right). Photo: Rainer Tielke

It will be offered in different versions, both as a recreational vehicle in different colours and in the widely known military version. Both will be available with the windscreen up and the front folded down. The delivery date is not yet known to us.

#### **Märklineum finally opened:**

Without celebration and big announcements, the exhibition in the Märklineum was opened on 18 June 2021. Previously, it had been unclear for a long time when Märklin's company museum could be opened to the public to its full extent. At last, the latest infection figures allowed the long-awaited step to be taken. Nevertheless, a large opening ceremony had to be dispensed with. Märklin announced that it would make up for this as soon as it could be reliably planned and carried out.



Managing Director Wolfram Bächle cuts the red ribbon, symbolically opening the way to the company exhibition and the Märklineum's large display. Photo: Märklin

The exhibition can be visited from Tuesday to Sunday between 10:00 and 18:00. Due to the necessary limitation of the number of visitors to the permitted extent, tickets can only be purchased electronically in advance. For this purpose, there are two time slots daily for admission, in the morning from 10:00 to 13:30 and at noon from 14:30 to 18:00. The link for ticket sales is: <https://www.maerklineum.de/de/besuchereinformatio/ticketshop/>.

A local film report on the opening and the exhibition is available on Filstalwelle at the following link: <https://filstalwelle.de/video/2021-06-18-bahn-frei-fuers-maerklineum>.

#### **Redutex films now available through 1zu220-Shop:**

With the 1zu220-Shop (<https://www.1zu220-shop.de>), a German distributor with a wide reach is now also active in the distribution of Redutex texture foils for model making. These products, which originate from Spain, became popular in larger gauges through the accessory manufacturer Noch, who, however, only offered a selection of Redutex products.

For the articles that can be used in 1:220 scale, we were previously unaware of any supplier in Germany, and importing them ourselves from Spain was usually not in a sensible ratio between material value and shipping costs.

The specialist dealer who is certainly best positioned for the Z scale has now sensibly expanded its range, and offers a range of brands for this on no less than five Internet pages. Houses, roofs, walls and even roads can be designed with the printed and texture foils. There are hardly any limits to one's own creativity.

The direct link to the offer is: <https://www.1zu220-shop.de/Redutex:::1100252.html>.

#### **New from American Z Line:**

In English, interested readers can follow a conversation between Robert J. Kluz (distributor) and Hans Riddervold (co-owner of AZL) about the on-going projects of this manufacturer. The video for May 2021 can be found at the following link: <https://youtu.be/-jDGTUCWyVc>.

Of course, there are also new deliveries to report: The EMD E7 diesel locomotive has now reached the dealers as an A-unit in the almost black-looking Brunswick green livery for the Pennsylvania with five yellow decorative stripes (item no. 64605-1 / -2).



Another version, namely a red and silver painted version of the Southern Pacific A and B unit (64601-1\_SET to -3\_SET) belongs to the Golden State passenger train that travelled between Chicago and Los Angeles for 66 years.



EMD E7A in Brunswick green (Item no. 64605-1; Photo above) and Golden State train set (64601-2\_SET; Photo below). Photos: AZL / Ztrack

The prototype can also be purchased as a ten-car train set (64601-1 / -2) in slightly different designs. Nine different cars to complete the train sets with different car numbers are also available for purchase individually (73048-5 to 73948-1).

The 8,000 gallon tank car from 1917 is now offered in black paint with Koppers lettering. Available are a single car (915003-1) and sets of two (915033-1) and four (905033-1), each.

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

#### **Convincing Artitec model delivered:**

Artitec recently delivered a vehicle designated as "BRD MAN AE Cargo" (item no. 322.032). This truck belonged to the early equipment of the German Federal Armed Forces and is finely detailed, matt and colour-coordinated.

All in all, the model makes a very realistic and well-done impression. It reproduces the MAN 630L2 AE 5t mil gl/glw truck with two-piece 5 m unit sprayer (from year of manufacture 1960/61), which was once most frequently used by the Bundeswehr (German Armed Forces). Characteristic features are the rear single tyres, and a (front) cable winch as additional equipment.



The new Artitec model of the MAN truck for the Bundeswehr (art. no. 322.032) looks successful in every respect: Detailing, paintwork and lettering.

The prototype belongs to the same vehicle family as the Ratimo-Z models presented in the last issue. Nevertheless, they are a supplement and not a competing product, because different versions of the MAN-630 series were reproduced by both suppliers.

Suggestions for use on the home layout, based on Christian Liebau's letter to the editor, were planned for this issue, but had to be postponed at short notice due to unplanned events. They will appear at the next opportunity.

#### **New DDR model at EtchIT-Modellbau:**

EtchIT-Modellbau has introduced a new vehicle as a novelty based on a prototype from the former GDR. The RS01/40 "Pionier" wheel tractor (art. no. XD183\_Z) is an important milestone in socialist tractor construction in the 1950s.

The kit produced in the DotHIRES process, which contains all the necessary 3D printed parts in unpainted form, was implemented as an electric starter. This is recognisable by the battery boxes on the left and right in front of the (removable) driver's cab.

The new heavy-duty low-loader trailer (XD130\_Z), which offers plenty of space for heavy vehicles and other goods, is also produced in the same way. The model includes drive-on ramps and trestle supports. A suitable tractor unit (XD016\_Z) has also been in the range for some time.

These and all other new products for all gauges can be viewed and ordered on the following page: <http://etchit.bplaced.net/data/etchIThome/index.html>.

#### **Wagon exclusive pack available at the 1to220 shop:**

A freight car set produced by FR Freudenreich Feinwerktechnik exclusively for the 1zu220 shop (<https://www.1zu220-shop.de>) is now available for delivery. Ordered about a year ago as a "Corona demand boost", Jörg Erkel was now able to receive the delivery and supply his pre-orderers.



The new wagon set "Era III Part 1" (item no. 49.019.04) is available in four parts from the 1zu220-Shop, produced by FR Freudenreich Feinwerktechnik. Photo: Jörg Erkel / 1zu220-Shop

The "Wagon Set Era III Part 1" (Item No. 49.019.04) consists of the following four models: a chrome oxide green service freight car of the type "Oppeln" with brakeman's platform of the DB, an open freight car Omm 32 (ex "Linz") of the DB, an aluminium-coloured pointed roof car series F of the FS with EUROP lettering, and a covered freight car Gms 54 of the DB.

The composition is intended as (first) part of a transfer train for main and branch line traffic. Only the service freight car should then be exhibited and used separately – for example in an auxiliary train – if the model railroader wants to stay close to the prototype: Service cars were not intended for public transport, and, therefore, did not run in the train reproduced here.



If there is sufficient interest, a second set of wagons of similar size but with different types of wagons is planned. With it, the wagon group should then grow into a stately unit.

#### The current deliveries from Micro-Trains:

The fourth tank wagon of the "Sweet Liquid" series with inscriptions from Miranda Sugar (art. no. 530 00 520) was added by MTL. The prototype had a length of 39 feet, the basic colour of this wagon is black, on which the inscriptions are printed in white.



The tank wagon "Miranda Sugar" (Item No. 530 00 520; Photo above) is wagon number 4 of a series. This example of the ICG (533 00 51; photo below) also belongs to the recently delivered bulk freight wagons.

Open bulk freight wagons with 33 feet prototype length in black (Southern) and brown basic colours (Southern Pacific) are now available for and in delivery (533 00 151 / 152 & 534 00 121 / 122). Particularly striking are the Illinois Central units (533 00 051 / 052), which in addition to white service markings also have striking orange adjuster markings and logos.

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

**There is something going on at Busch:**

In the middle of the month, the accessories manufacturer Busch from Viernheim announced that it had found a new majority shareholder in MEG Modelleisenbahn Gesellschaft mbH in Weiden. The Vallen and Schumann families sold their shares to the new owner with retroactive effect from 1 January 2021.

This young group of companies in the model railway sector had already taken over Silhouette Modellbau GmbH (with the additional Mininatur brand) in recent years, and Lenz Elektronik GmbH in 2020. Busch, the latest acquisition, is now the third in the group.

According to company information, the idea of integrating Busch into a group of companies and, thus, maintaining it permanently arose in the context of the search for a successor for Jörg Vallen as the previous majority shareholder. Accordingly, it was not possible to find a successor within the family. The external image of Busch GmbH & Co. KG and the management by Jörg Vallen will, therefore, not change.

**Märklin deliveries for June:**

With the local train set (Item no. 81356) Märklin has finally delivered a long-awaited new item. With it, the class 141 electric locomotive now comes into the normal catalogue programme via an MHI special series.

In addition to the chrome oxide green painted locomotive for Era IV, the new products delivered include a three-car local train made of silver pieces. The driving trailer with Karlsruhe head without orange warning stripes seems strange at first, but it is based on the first prototypes of this new head shape. We will discuss the design, weaknesses and strengths of the locomotive and wagons in more detail in the next issue.



The recently delivered 212 067-3 in its original livery (item no. 88214) is intended for a construction train whose coaches have not yet been delivered.

At the same time, another novelty, the crimson class 212 diesel locomotive (88214), which was announced this spring, is coming into the trade. The well-done and well-running mainline locomotive is intended for a wagon pack (construction train), which is still waiting. For the first time, this model makes the extremely popular locomotive available individually in its original livery, but with the markings for Era IV.

At the same time the class 37 (88032), the former class 24 steam locomotive, was in service in the east of the present-day Federal Republic of Germany. With warm-white LED lighting, functioning linkage, and brake replicas as well as a bell-shaped armature motor, it also shows itself to be technically up-to-date. Behind its EDP number 37 1009-2 is the later, and still preserved, museum locomotive 24 009, which was later sold to the West and kept operational there.

At home in Era III is the E 18 of the DB in steel blue livery (88088) with (only) a silver-coloured separating stripe between frame and body. This is the standard livery of the express locomotive, which was missing as a model until today. Despite always having good driving characteristics, Märklin was able to improve on this thanks to product update, because the new model now also has a bell-shaped armature motor, in addition to warm white LED lighting.



With E 18 32 (88088) Märklin has now delivered an important, and, so far, not previously offered version of the shapely express train locomotive. With it, another running gear was converted to a bell-shaped armature motor.

More modern is the unloaded car transport wagon DDm 915 (87094), which also comes from the DB stock. With its chrome oxide green colouring, it corresponds to the operating condition of Era IV, and is perfect for supplementing passenger trains transporting (passengers') cars.

The two-axle old construction tank car with brakeman's cab (82325) has also arrived at the dealers. Its ultramarine blue paint scheme and lettering identify it as the property of BV-ARAL AG Bochum. Its prototype was employed by the Bundesbahn.



The ultramarine blue Aral tank car (82325; photo above) complements the previously released model. The enclosed Büssing truck was apparently newly designed, because it has some functional and shape differences to the previous model. Intended for modern freight traffic is the three-part pack of sliding wall cars (82418: photo below) from different owners.

It was already announced with the 2020 spring new products, after its grey predecessor with brakeman's platform, which was also designed to match Era IIIb, was surprisingly well received by our readers and other customers.

Like the predecessor model, the now delivered wagon also has a separately applied Aral company logo, the so-called diamond. This time, the delivered new products also include a Büssing truck with an Aral tank loaded on its flatbed. What is new about it is that it has rotating rubber wheels and a glass insert in the driver's cab.

The last new product delivered is a sliding wall car set (82418) for Era VI. It consists of three large capacity sliding wall cars in current operating condition. These are one each of Habbillnss (SBB Cargo), Habbiiins 17 of Transwaggon Zug/Switzerland and Habbiiilns of Rail Cargo Austria.

The construction of the three models is still a very new form, which was previously only offered as wagons of the Swiss Post and differs significantly from the previous offers in the shapes of the outer wall panels.

#### **Bad news from Z-Modellbau:**

On the pages of the small series manufacturer Z-Modellbau (<http://z-modellbau.de/de/>) from Chemnitz, we have now found sad certainty on a subject that we had already feared after an order rejection. The

manufacturer writes there: "Due to my poor health, I regret to inform you that I can no longer accept orders."

One of the most exciting chapters in the small series history of our gauge could thus come to an unexpected end. We would like to remain hopeful and at this point wish Dr. Andreas Scheibe only the best for a full recovery of his health.

**Noch delivers new products:**

At Noch, the detail markers (art. no. 61155) are currently available, consisting of six paint pens in the colours black, white, silver, yellow, red and brown. Water-based acrylic paint from their 2 mm wide tip gives coloured accents to tyres, window and door frames, insulators on telegraph poles, metal parts or goods wagons.



The five detail markers (art. no. 61155) will help in future with some colour work on the layout or also on models. Photo: Noch

They adhere to many substrates such as metal, plastic, wood, paper, glass, ceramics and dry matt. They are preferably used where it is not worth opening a paint can and having to mix and clean the tools after small jobs.

Interesting for Z gauge can also be the new pine trees (21992) thanks to their height of 8.5 and 11.5 cm. Although they are stated as for H0, TT and N gauges, Zetties can benefit here from the fact that trees are clearly reproduced too small almost through all scales. So, if you want to recreate Mediterranean landscapes to recall your last holiday, you don't have to give this product a wide berth even in small scale.

**Possible problems with wood procurement:**

Readers from many regions report a shortage of wood at carpenters and DIY stores. We have also had to make such experiences in one of our projects. Although it is primarily construction timber that is affected, there are also delivery and supply problems with plywood, MDF and even chipboard.

Unfortunately, this also has an impact on our hobby. The “Landtag intern”, parliamentary magazine of the state parliament of North Rhine-Westphalia, also recently reported these shortages for the most populous federal state. Industry trade journals are also currently dealing with wood shortages and their causes (example: Verkehrsrundschau (Transport Review) / <https://www.verkehrsrundschau.de>).

Various sources mentioned damaged wood from the last two summers, which were too dry and could not be taken out of the forests in time, that was not (no longer) usable. A strong increase in demand could be observed, especially in the United States of America and China.

The situation is aggravated by the fact that national forestry enterprises have entered into long-term supply commitments in favour of these two countries, which make it even more difficult to satisfy domestic demand, which has also risen again in the meantime.

Model railway enthusiasts of all gauges are certainly well advised not to plan too short term, and too tightly at the moment, to examine possible alternatives, and to remain able to work in their own hobby room, thanks to a forward planning.

#### **Useful new products from Schrax:**

New in the range of this small series manufacturer (<https://www.schrax.com>) is a 200-litre steel barrel. The models are made of synthetic resin and are produced in various colours. They are supplied in the regular colour assortment. However, please contact the supplier if you have any other colour requirements.

The basic form of the roller beaded drum shown here was invented shortly before 1900, which makes the new models flexible in use. Mostly fuels, lubricants and chemicals are stored or transported in them. To make this visible in the miniature, a closed version, and an empty barrel without a lid are offered.



The walls have been reproduced as filigree as possible. However, the peeping through of the material can be easily and effectively remedied with a little paint. This makes it the better alternative to visibly out-of-scale wall thicknesses.

200-litre steel drums in various scales, designs and colours are now available from Schrax. The H0 gauge examples are shown here, as an example. Photo: Schrax

#### **Current new products from NoBa-Modelle:**

Shortly after the May issue was published, we received information about the following new NoBa products (<https://www.noba-modelle.de>). We would like to mention in more detail the Büssing President 14 with Emmelmann body, which goes back to a customer suggestion. Thanks to good contacts, we were able to assist in finding original documents.

The model, which is very successful and whose only problem is the flush reproduction of the windscreen in order to preserve the characteristic shapes, is available as a resin blank (art. no. 6378R) and as a finished model (6378RF). We are planning a short superstructure proposal for this model in a later issue.



The Büssing President 14 service bus from NoBa-Modelle (item no. 6378RF) has an Emmelmann body. Photo: NoBa-Modelle

The MAN 6 x 2 refuse collection vehicle (6377R / 6377RF) for modern model railways also looks appealing. Motorbike enthusiasts will be delighted with the addition to the range of the Royal Enfield Interceptor (6959) and the Continental (6960R).



The refuse collection vehicle (6377RF; photo left) has a current prototype. The concert stage 10411R; photo right), next to which the WC wagon (6152R) can be seen cut in, has a somewhat broader temporal application. Photos: NoBa-Modelle

Agriculture and market gardening are newly served with the following products: three fruit crates (10319R), small harvest tractor (6616R), a matching trailer with fruit crate (6617R) and small harvest tractor with trailer and fruit crate (6618R).

The new concert stage (10411R) will be used for music events, and the toilet trolley (6152R) that is to be installed is a result of official requirements. The scene can be framed with four deciduous trees without foliage (10320R), which allow a great deal of freedom in the hanging of leaves. Other new products are a field shed (4125), "Food Truck" (6206R) and the auto transporter (6062R).

#### **Further new products available from the end of June:**

From the end of this month, the two new products from Modellbau Laffont, which we presented in February, will be available. The boat repair building (art. no. Z3201) for epochs III to VI features finest engravings in solid-coloured architectural hardboard and has (without roof overhang) basic dimensions of 101 x 60 x 35 mm.

The modern commercial hall with rolling gates (Z3301) is manufactured in the same way as a kit and can be represented with open or half-open gates. Usable from Era IV, the basic dimensions here (again without roof overhang) are 109 x 65 x 35 mm.



The boat repair building (art. no. Z3201; photo above) and the modern commercial hall with roller doors (Z3301; photo below) are valuable commercial buildings for many layouts and are now available. Photo: Modellbau Laffont

The lasercut kits can be found and ordered on the following page: <https://modellbau-laffont.com/c/bausaetze-spur-z-massstab-1-220>.

#### Useful tools for DIY projects:

Bending tools are useful aids for self-builds and for assembling kits from etched parts. These consist of two-dimensional metal sheets that are cut, bent or folded to give them their final shape. They are joined and reinforced by gluing or soldering.

If something has to be bent or folded, the grip should be right, because nickel silver in particular does not allow any corrections or reworking – the material could quickly break. Precision and feel are, therefore, required.



The mini needle-nose pliers from Revell (art. no. 39079; left), the moulding pliers for photo-etched parts (300074067; centre) and the needle-nose pliers with scratch protection (300074065; right), the latter two from Tamiya, are presented to you as valuable tools for model building.

This is where special and often expensive bending aids come into play. In many cases, bending pliers can be a good alternative or a useful addition. We would like to briefly introduce three different examples at this point:

- Mini Needle-nose Pliers from Revell (Art.-Nr. 39079)  
The smallest and cheapest model is well suited for gripping and shaping the smallest parts such as steps on Z-gauge models. Where it is also too big, only tweezers or tweezer pliers will then help.
- Moulding pliers for photo-etched parts from Tamiya (300074067)  
Thanks to its narrow gripping surface, it offers good accessibility in many applications. The angular shape of the outside of the pliers also allows very precise bending at a 90-degree angle.
- Needle nose pliers with scratch protection from Tamiya (300074065)  
At first glance, they look like ordinary pliers, which is basically what they are. What sets them apart are the replaceable Teflon gripping surfaces in the pliers' jaws. They protect sensitive parts from being scratched when they are gripped with them.

It, therefore, not only provides valuable help when working on many fine etched parts, but is also recommended when electronic parts or other components are involved that need to be handled carefully.

#### **Herpa new products for autumn 2021:**

Herpa has now announced the two Boeing 757-200s as new items for the months of September and October 2021, which we had already announced (with item numbers) in the February issue. They are now joined by the Boeing 747-400 as "Ed Force One" from "The Book of Souls World Tour 2016".

Hard to fit on standard model railway layouts, it will appeal all the more to friends of this music group. It is offered as a Wings model (art. no. 571609; with attachable chassis parts) and as a Snapfit model (613293; different scale 1:250).

Other Snapfit models, but this time in the usual 1:200 scale here, are:

Alitalia Airbus A330-200 (Art.-Nr. 610933-001),  
TAP Air Portugal Airbus A321neo "Retro colors" (613316) and  
Lufthansa Cargo Boeing 777F "Cargo Human Care" (613354).

In the area of Wings new products in 1:200 scale, the following new products are to be listed for European motifs:

Lufthansa Boeing 727-200 zu "50<sup>th</sup> Anniversary of 727-200 introduction at Lufthansa" (571326),  
German Airforce Transall C-160 LTG 63 „Retro Brummel" (571562),  
Russische Luftwaffe Tupolev TU-95MS (571579) and  
KLM Lockheed L-1049G Super Constellation (571616).



A Boeing 727-200 (art. no. 571326; photo above) commemorates the 50th anniversary of the introduction of this type at Lufthansa, while the new-shaped air jet deflectors (571586; photo below left) and the Ziegler fire-fighting vehicle in the design of Hamburg Airport (571548; photo below right) expand the range of accessories.

Worth mentioning is the colourful model of the Coulson Aviation Boeing CH-47D Chinook (571517), which carries a US registration. In the accessories section, the Ziegler airfield fire engine in the colours of Hamburg Airport (571548) is offered.

In February, new moulds for the accessories range were announced. One such will soon appear in the form of air jet deflectors (571586), which are probably indispensable when designing airfields. The pack contains ten elements in three different lengths or designs.

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