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for railroad enthusiasts
in the scale 1:220
and Prototype

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German Magazine for Z Gauge



Plug-in Intercity in the Test

**Excursion into Paper Modelling
Many Autumn New Products**

Introduction

Dear Readers,

The calendar already shows it: Summer is over and autumn is just around the corner. The weather forecasts are warning of the first fall storms. So, now there is definitely more time for our wonderful hobby of model railroading.

On one of the last beautiful days of September, we went out with the **Trainini®** team to take pictures for a topic planned for our anniversary year 2025.



Ralf Junius
Editor

This mission also involved the use of unusual means of transportation for model railroaders. The resolution of where and what we got in front of the lens, however, will only be available to read next year.



Just in time for the season and the weather, Märklin has presented its new fall 2024 models. There are also some beautiful models for us Zetties. Details can be found under our news item “Zetties and **Trainini®** in dialogue”.

Märklin has also been busy before announcing the new fall models and has delivered the 2023 Insider Club model: the ETA 150 battery-powered railcar. We already briefly reported its availability last month. Now it's time to take a closer look at it and its driving trailer.

As I write these lines, we are already on the home stretch for this edition. The last articles just need to be put into shape and the last reports that have been received need to

be added. In the editorial office, the tasks are distributed and organized, everything is running smoothly.

But then one of our editorial colleagues calls in sick, which turns everything upside down. This makes the current edition the second issue in our history that has slipped over the turn of the month.

It is important to us that everyone in our community prioritizes their own health, even though **Trainini®** and the model railroad are very important to all of us. After all, we can only enjoy our hobby in good health in the long term.

I hope that we can offer you, dear readers, some interesting topics and pages in this edition despite the delay. I hope you enjoy the following articles and wish all of you who are sick and our editorial colleague a quick recovery.

Sin-Z-erely,

Ralf Junius

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We thank the Petkelis family and Eisenbahnstiftung for their photo support.

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Cover photo:

In the mid-sixties, the ETA 150 battery-powered railcars with ESA 150 driving trailers epitomised modern local transport. One such high-acceleration unit has arrived at the Grund stop as we stand ready with the camera.

The ETA 150 with ESA 150 from Märklin **The Torch of the DB**

Accumulator railcars were a special species among the electric vehicles of the German Federal Railways, for which a separate series of hundreds was provided in the 1968 numbering scheme. However, they have remained exotic in 1:220 scale until now, which will now change with the Märklin club model 2023. We take a look at this new product and place it in the overall programme.

In a model article, we explain the history of battery-powered railcars on the German state railways and the adoption of this highly topical technology by the Deutsche Bundesbahn (German Federal Railways).



The early bird catches the worm! We catch ETA 150 128 from Limburg depot with attached ESA 150 208 in the first morning light on its main line on the Lahn.

If we look at the role played by the prototype, it is highly astonishing that a model of the ETA 150 was so long in coming. This could also be explained by the technical framework conditions, which for many years would have stood in the way of a miniature at the level supplied.

For the range of applications of the ETA / ESA 150, only the Uerdingen rail bus previously existed on a scale of 1:220, which, despite model maintenance after more than 50 years, still looks quite old. The new product in the form of the 'howling buoy' should prove to be a worthy successor for Era III and is currently Märklin's youngest offspring.

The first impression promises a perfect model and emphasises the demands that the delivered miniatures in the range should fulfil. A version for Era III (item no. 88250) was selected in the original paintwork, i.e., before colour modifications that changed the appearance, at least slightly.

A comparison with the aforementioned rail bus is permitted: While the motor and control car differed externally only by the printed road number, the new ETA / ESA 150 now has the prototypical differences. Despite the product care and high printing quality, this is perceptible in such a way that we would like to call it a quantum leap.



The new ETA 150 / ESA 150 (item no. 88250) takes into account the prototype differences between the motor and driving trailer. This is particularly evident on the driverless side of the ESA (rear) because there is no third headlight and no horn in the roof area and no folding sun visors have been modelled behind the windscreens. A direct comparison with the ETA (front) shows how it would otherwise look.

We can recognise the battery compartments on the floor of the ETA, which the driving trailer is of course not allowed to have. Also missing on the driverless side of the ESA is the upper headlight, which would only be required for a pushed journey.

The dimensions and proportions also emphasise what has already been written, as they have been kept almost perfectly. This also contributes greatly to the harmonious overall appearance. The largest outliers in percentage terms, which are also not obvious, concern the wheel diameters.

Available wheel sets were used for the models, which is why the slight difference between the motor and control car was not taken into account. All other deviations fall within the range of normal measurement tolerances and errors.

The overall appearance of the paint and lettering is a well-known strength of Märklin. Both train cars are painted cleanly and free of dust inclusions in the original colours. RAL 3004 purple red on the car bodies and RAL 9005 jet black on the aprons are applied in a semi-gloss finish. The bogie panels are also black.

Dimensions and data for the ETA 150 and ESA 150 of the DB:

| | <u>Prototype</u> | <u>1:220</u> | <u>Model</u> | <u>Variance</u> |
|----------------------------|------------------------------|--------------|--------------|-----------------|
| Length over Buffers (LüP) | 23.400 mm | 106,4 mm | 106,5 mm | + 0,1 % |
| Height over SO*(rail head) | 3.513 mm | 16,0 mm | 16,3 mm | + 1,9 % |
| Width | 2.954 mm | 13,4 mm | 13,6 mm | + 1,5 % |
| Total wheel base | 17.700 mm | 80,5 mm | 80,4 mm | - 0,1 % |
| Bogie centre distance | 15.200 mm | 69,1 mm | 69,2 mm | + 0,1 % |
| Bogie wheelbase | 2.500 mm | 11,4 mm | 11,2 mm | - 1,8 % |
| Wheel diameter ETA | 950 mm | 4,3 mm | 4,7 mm | + 9,3 % |
| Wheel diameter ESA | 950 mm | 4,1 mm | 4,7 mm | + 14,6 % |
| Service weight ETA | 49 t | --- | 32,4 g | |
| Service weight ESA | 23 t | --- | 30,1 g | |
| Axle format | Bo' 2' | | | |
| Power | 272 PS / 200 kW | | | |
| Permitted maximum speed | 100 km/h | | | |
| Years of construction | 1954 - 1968 | | | |
| Number produced | 232 Units ETA, 216 Units ESA | | | |

* The specified model dimensions refer to the ETA 150 101 to 138.

The coach roofs are correctly painted in RAL 9006 white aluminium and give the ETA and ESA 150 a very elegant appearance, even in the model. Printing was applied using the tampon (pad) printing process.

150 128 and ESA 150 208 from the Limburg depot. The main area of operation is therefore likely to have been the Lahntalbahnhof. The run from Nassau to Wiesbaden printed on the train route plates also originates from this region.

The revision dates refer to the mid-sixties. They complete the picture of flawlessly legible addresses, which are also complete. Anything else would have been a surprise. The printed reproductions of the seals in

the folding doors, which also emphasise this area effectively and realistically, are more of an optional extra.

The road number of the motor car is important for the classification of the prototype: The height dimension of most series (see prototype article) with a flatter roof is decisive for it. On the side of the luggage compartment, we only see a three-part folding door instead of the four-part door from the last batches.



The colour embossing on the side windows and printing on the folding doors contribute to the good overall impression. They also include the rubber seals, which stand out in black against the red car body.

Märklin has worked properly here, which many had not expected, after the first volume representations from the CAD programme still showed errors in this area and the arrangement of the 1st class.

With the features described and only one first class compartment, which is located directly behind the luggage compartment (see photo on page 6), the vehicle can clearly be assigned to the series from the years of construction 1957/58. The above-mentioned operating number, which was printed on it, belongs to this Bundesbahn order.

Strengths and weaknesses

The many details that Märklin has reproduced with sharp engravings or attachments are impressive. Examples include the three-tone horn, the driver's side of the control car without a driver's cab must, of course, do without this. The (prototypically) quite simple bogies dip deep into the apron. However, the slightly different prototypical diameter of the wheels between the ETA and ESA is not reflected in the model.



In the detailed view, we also discover some of the many details on the ESA that characterise the face of this new model: In addition to the windscreen wipers and sun visors, these include the horn on the roof, the side rain gutters and the (shortened replica) electric coupling on the right-hand side of the vehicle.

As in the prototype, the rain gutters on the roof edges are also striking. The windscreen wipers are engraved in the area of the transparent parts. The inner sun visors and the hinged windows in the upper side area of the passenger compartments were also depicted, here, also, correctly highlighted by colour embossing.



In theory a good idea were the apron for plugging on and a replacement part for the electric coupling,...

Among the praiseworthy details, however, there is also one that is quite a challenge, as our test revealed: Märklin has also given the ETA 150 an attachable skirt to make it more prototypical.

It should be mounted on the wagon floor according to the instructions after removing the system coupling. At the same time, the shortened electric coupling (mounted on the left in the view of the driver's cab) should be removed with tweezers and replaced with a full-size replica.

So far, so good, if theory and practice weren't so far apart. On the ETA, the thick mounting pins of the skirts do not fit into the too-small openings in the floor of the car, and on the ESA they fall out on the outside. Only on the inside of the ESA (driver's cab side) can this skirt be attached at all and it

proves to be useless there.



..., in practice, they turn out to be every model railway enthusiast's nightmare: the thickly coated rather than painted apron does not fit straight away, its details are clearly inferior to the model and it always leaves an ugly and prototypical gap. To make matters worse, the electric coupling can only be connected at the end of the ESA without a driver's cab (and falls off again shortly afterwards). At the other three ends of the vehicle, the part to be replaced had been glued on at the factory! We shake our heads uncomprehendingly.

It does not inspire, because a thick gap always remains visible, as the skirt is part of the body on the prototype, but has to be attached to the technically separate chassis on the model. Our sample parts also look as if they have been dip-painted, which means that the non-fit could also be the result of a far too thick layer of paint.

In addition, the brake hoses are only reproduced as an engraved line, which does not even begin to do justice to the detailing of this model. The black paint on the edge of the frame is also not to be found on the add-on part and makes it look like a foreign object. Märklin has omitted the knuckle coupler completely.

If you want to achieve greater fidelity to the prototype here, you are faced with an almost impossible task with the gap and can buy add-on parts from the relevant suppliers to complete it. In our opinion, however, the required purchase price is too high. In the spirit of 'all or nothing,' we therefore argue in favour of omitting parts that cause frustration and are by no means satisfying.



We can still rely on one of Märklin's strengths: the paintwork is almost perfect and the printing is one of the usual strengths. We can read the train running sign without any aids and with a magnifying glass, the home town information as well as the revision data.

However, the manufacturer has also made another faux pas. The electrical couplings, which are also supplied as replacement parts in a transparent bag, are tiny. Fitting them requires good eyes and a steady hand, plus a pair of tweezers as a tool.

Only a few customers will dare to do this, and then perhaps have to realise what we experienced. The replacement part immediately falls out of the designated place and does not find a hold at all. On the opposite side of the vehicle half, the assembly workers at the factory seem to have had the same experience: They only knew how to fix it by gluing this coupling on.

This means that the part, which can be removed according to the instructions, cannot be removed without damage, and the customer is probably unwittingly buying at least some of the models with visible adhesive stains at close range.

The customer cannot be blamed here. The model has been used and operated as intended up to this point, and although the features described are not mentioned in the product description, they are explicitly explained in the enclosed instructions. As these instructions are part of the purchased product, Märklin also has a duty here.

How can such parts, which clearly do not work according to plan, find their way to the end customer? If, contrary to our own documents, they do have to be firmly glued on after all, quality assurance measures in a long process chain should have uncovered this and led to a change or improvement.



A visual plus point is the interior design of the driver's cab and passenger compartment, which follows the 2nd class seats once covered in brown plastic. We would like to point out the visible wire connection to the bogie: This is extremely susceptible to tearing when the body is removed!

In the overall assessment of this innovation, we will have to categorise this point at the end. Our conclusion will certainly surprise you after we have emphasised this in such detail. Let us now close the chapter on the visual assessment with praise for the replica of the interior fittings.

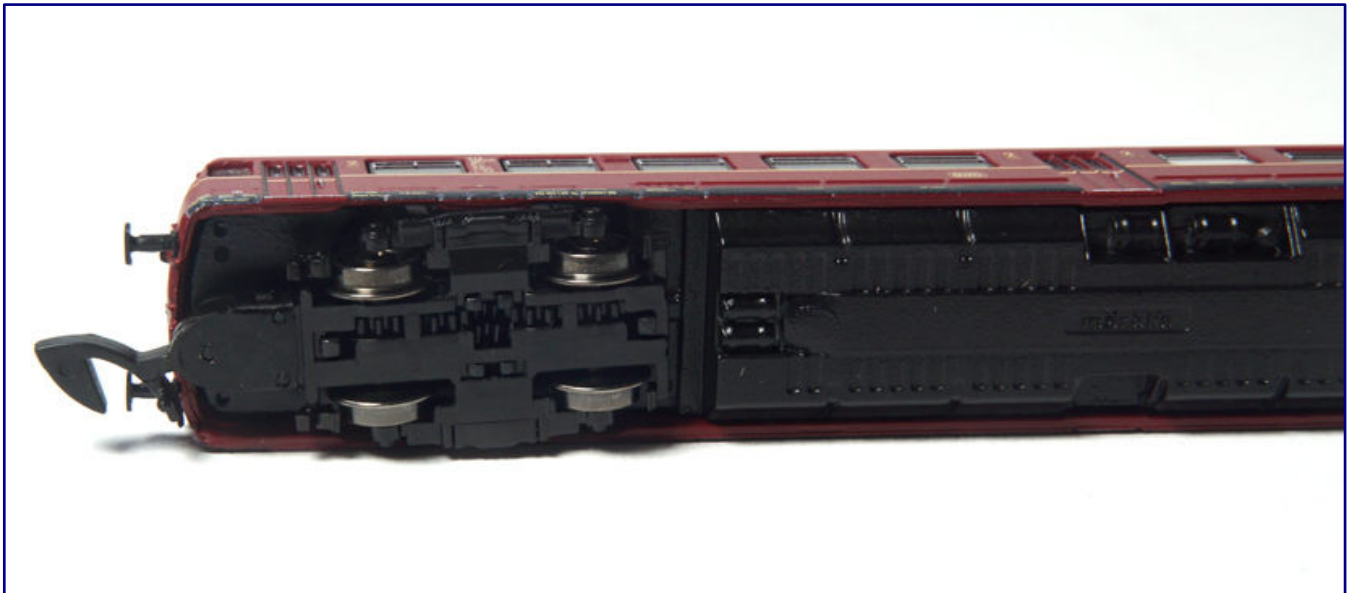
Their brown colour reflects the impression of the plastic-covered benches in 2nd class very accurately. Märklin has managed to reproduce both the driver's cabs and the passenger compartments in an appealing and visible way.

This was not easy, as the motorised carriage also has to hide the drive underneath. As a result, figures can only be used as torsos because there is no footwell for them. For this reason, all parts of the drive unit are built so flat that the view through to the interior could be maintained. A few years ago, this would have been unthinkable, so this is the innovation that club members will be the first to enjoy.

The technical side

It almost goes without saying that the battery powered rail car represents the state of the art at Märklin. Driven by a bell-type armature motor and cardan shafts as well as gear wheels on all axles of the ETA, it also impresses with smooth running and good controllability.

At a track voltage of 0.5 volts, it starts moving gently at the equivalent of 1.4 km/h, and in the test, it certainly also runs over points. Here it benefits from the current pick-up across all four axles and good contact, as the bogies are sufficiently far apart to never have all the wheels on the same pole on a nonpowered section.



Power is taken from all wheels of the model. Unfortunately, the drive gears in the bogies of the ETA are open, and therefore collect dust from the layout during operation. In our opinion, the ideal place for the changeover switch would have been in the carriage floor between the bogies.

The sufficient dead weight, which differs only slightly between the motor and control carriages, certainly also contributes to contact safety. Both have a cast running gear with a body made of plastic. The gear wheels in the powered bogies, which are visible from the outside, are also made of plastic, presumably POM.

At around 8.0 volts, the model reaches the prototypical maximum speed of 100 km/h, while the maximum rated voltage of 10.0 volts allows it to race along the track at the equivalent of 140.0 km/h. From the converted prototype maximum speed, the run-out at an emergency stop is around 58 mm. This is not a record value, but should provide sufficient protection against derailments.

In this way, the gearbox design also recognisably follows the other designs of the recent past: closer to the original and at the same time creating more controllability and control. We recognise this.

We are somewhat disappointed by the train's lighting at this point, as it only becomes visible at a voltage of around 2.4 volts. Our vehicle first starts to move at a leisurely pace and then shows its prescribed signals (head and tail lights) with a time delay.

The passenger compartment and driver's cab lighting, which we very much welcome here, only becomes active later at 3.8 volts. This is a great pity, as this is the only way to emphasise the successful interior design. With today's electronics, it should be possible to power the maintenance-free LEDs first, and then, the motor.



This photo shows just how tight it is under the body: the chassis houses the drive, which is concealed by the relief of the interior fittings. Hidden in the roof area is the circuit board, which is responsible for the upper top light and the interior lighting.

The fact that Märklin wants to listen carefully to its customers is also demonstrated by another innovation. It is always an almost philosophical question whether a locomotive needs tail lights. Some refer to a locomotive travelling alone, others to tail lights switched off on the train side.

This balancing act is even more difficult with a multiple unit because the ETA 150 can be travelling alone as well as carrying the control car or a general cargo car. As a solution, Märklin has now installed a switch for the first time that can be used to switch off the lighting on one side depending on the direction of travel.

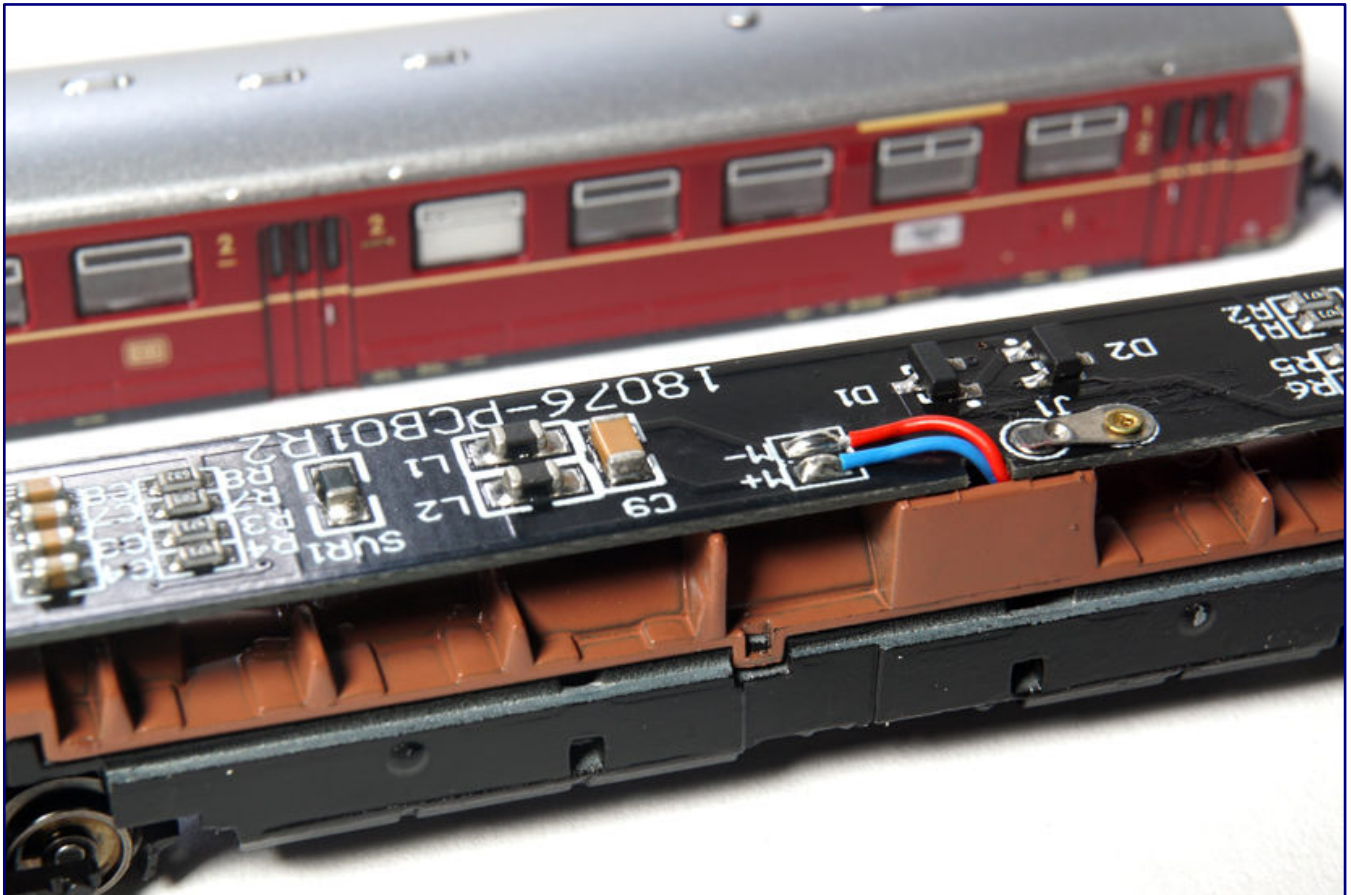
This is designed as a rotary switch, as we know it from the overhead line function of a locomotive, and is located on the circuit board inside. To access it, simply remove the housing and change the switch position, as explained in the instructions.

In fact, this task is considerably more difficult because the housing sits tightly on the chassis and cannot be easily removed. Even spreading it sideways with a toothpick does not loosen its fit.

Then, the obvious thing to do is to carefully pull on a bogie, as this is the only starting point within reach. Silly idea! Unfortunately, this quickly and almost inevitably leads to its demolition, which then includes the electrical connection in the form of wires.

We are happy to be able to spread the housing with a total of four toothpicks so far that we can still reach the switch and recognise the dilemma without causing this damage to the test specimen. We can only urge great caution here and to think carefully about whether this switch-off function should really be used.

As the test progresses, we notice a slight flickering of the lighting in the control car as soon as it is deflected from its direction. It is, therefore, noticeable when travelling through points or entering curves. This phenomenon cannot be explained with certainty, especially as it did not occur from the outset. We therefore consider it to be an isolated case.



In addition to the various lighting components, we see the rotary switch familiar from locomotive models on the right. It is used to switch off the head and tail lights at one end of the vehicle. In our opinion, it belongs in the vehicle floor as an externally operated slide switch.

The current consumption holds no surprises: At transformer position 100, the ETA only draws 17 mA, increasing to 24 mA at 150. If we put it under full load until the wheels spin, we measure 32 mA. These are acceptable and usual measured values for the generation of motors used.

The tractive force of 4.0 grams on the level and another 3.5 grams on a gradient of 3 % are also on a comparable level with other models in the same 'weight class'. The prototype often travelled with a control car and occasionally had an express, mail, course or general cargo car on the hook as well.

Such combinations were not possible in more than three parts, as the low engine output would not have been sufficient for this, and, above all, the battery capacity would have limited the range too much. The battery type 9TM450d could only cover a distance of around 300 kilometres. The tractive power of the model is therefore more than sufficient compared to the large model.

Conclusion

If we add up all the test results, we come to a clear, but perhaps not immediately comprehensible result: The ETA 150 with the ESA 150 has become a successful and overall well-balanced model that should have a long future in the Märklin range.

We recommend placing the switch for the tail light in the floor of the car and making it accessible from the outside. This protects the customer from damage to his model, as he is unlikely to remove the 'little hat' for other purposes.

We are not convinced by the idea of an attachable apron and exchangeable electric coupling (in this form), and it proves to be a frustration and additional risk factor, especially as reattaching the system coupling is another challenge. We are clearly in favour of omitting these parts without replacement.



Change of scene to the Balkan Railway: A unit consisting of an ETA 150 and an ESA 150 is travelling on the line in the Bergisches Land region.

The reason for this is that the enclosed parts do not provide any visual gain and are just as far removed from the original as the factory-fitted system coupling. The new model even looks better without the replacement parts. The only two points of criticism, which are quite serious in themselves, are therefore comparatively easy to remedy and should not weigh too heavily in our judgement.

And, so, the clear strengths of this model predominate: Märklin has successfully mastered the great challenge of constructing a drive unit in such a way that the windows can be designed to be clear and



The stop of this set at the Grund stop gives us the chance to take a final look at the Märklin model, which is well done on the outside, but unfortunately also has some flaws.

transparent. In addition, it was even possible to incorporate an interior that is not recognisable as a relief from the outside.

The interior lighting was also a good move in this context. If the manufacturer follows our suggestion to relocate the switch in future editions, he might solve the problem with the switch-on voltage for the lighting at the same time. And then we would have an almost perfect model in front of us.

Many details, the clean paintwork, and, above all, the even higher print quality make the difference in our assessment, which leads us to nominate this duo for the best new release of the year 2024 in the locomotives category.

Our conclusion could not be more aptly formulated as follows: Unpack, put it on the track, and enjoy the ride! Despite a few faults, this successful new product proves the high value and standard that Märklin attaches to its smallest track gauge today.

Manufacturer of the Model:
<https://www.maerklin.de>

The ETA 150 and its predecessors **On the Way to the Battery Power**

The procurement of the ETA 150 from 1954 was preceded by a three-year process that built on the experience gained with the Wittfeld railcars that had been in service in Prussia since 1907. DB gained further operating experience with a modern vehicle under the name 'Limburg Cigar'. This led to a renaissance of this type of propulsion, which today seems more relevant than ever.

Decades of good experience with the (battery) accumulator railcars of the Wittfeld type procured by the Prussian-Hessian state railways from 1907 onwards resulted in DB starting to think about a modern successor shortly after its establishment.

They were looking for a vehicle with low energy consumption, which favoured electric traction. However, main lines equipped with catenary were only to be found in Bavaria and Baden-Württemberg; overhead wire had not yet been used on secondary lines. This was precisely the strength of the Wittfeld railcars, which carried their traction energy stored in lead-acid batteries.



The Wittfeld battery-powered railcars had been in service in Prussia since 1907. ETA 177 101 makes itself useful on its last days in construction train service in February 1963 during electrification work in the Wupper valley. Photo: Carl Bellingrodt, Eisenbahnstiftung

Another argument in favour of this type of vehicle was that they did not need a locomotive shed for stabling and promised low maintenance costs. Particularly in the winter months, they could be put back into service much quicker than other contemporary vehicles, even after service breaks.

A disadvantage of using battery-powered vehicles was the requirement for enough charging facilities. These had to be available at least in the depots and, if there was insufficient capacity on gradients, also at reversing stations due to the higher energy requirement. The Bundesbahn aligned its plans accordingly.

continued on page 19



This photo was probably a test run of ESA 150 037 (Bww Bremen Hbf) and ETA 177 110 (Bww Kassel Hbf) from the banks of the Fulda near Friedlos on 8 June 1957 (photo above). The ETA 177 110 had been fitted with a new control system that enabled operation with an ESA. Photo: Carl Bellingrodt, Eisenbahnstiftung

The two restored ETA 176 001 and 515 001-6 were presented at the Limburg depot on 1 October 1983 (photo below). While ETA 176 001 was transferred to the DB Museum in Nürnberg (Nuremberg), the 515 was later scrapped. Photo: A. Wagner, Eisenbahnstiftung



ETA 150 533

Vorsichtig verschieben

440 Volt
en darf nur am Schluß
Zuges eingestellt werden

Batterie 201

Photo on page 18:

The front view of ETA 150 533 allows a comparison with the prototypical impression of the skirting panel on the model (photo on page 8) and underlines our judgement. Photo: Petkelis Collection

The first result of all these considerations were the prototypes of the ETA 176 series, known as the 'Limburg Cigar', which proved equally successful and, after evaluating the results of measurements and operating experience, argued in favour of a series vehicle. Eight railcars of this series, which attracted attention with their high starting acceleration, were procured between 1952 and 1954.

Nevertheless, no further units of this series were ordered; instead, the Bundesbahn requested a new railcar that would be based on the successfully tested concept, but would be less expensive to manufacture.



Battery powered railcar parade of the ETA 150 class at the Recklinghausen depot in snowy January 1965. Photo: Willi Marotz, Eisenbahnstiftung

This led to the two pre-series vehicles ETA 150 001 and 002, which were delivered in July 1954. The DB was quickly convinced by the two prototypes and initiated series production. The front window area was redesigned for these units, which were produced from 1955 onwards, and the circumferential garnish moulding under the windows, which was still based on the Uerdingen rail buses, was removed.

By 1965, the fleet had grown to 232 railcars (ETA) and 216 driving trailers (ESA). While the driving trailers were largely identical in design, the motor coaches were spread across different variants and series:

- ETA 150 001 – 018
3rd class (after the class redefinition, 2nd class), battery capacity 352 kWh
- ETA 150 019 – 033
3rd class (2nd class after the class redefinition), battery capacity 390 kWh
- ETA 150 101 – 138
1st and 2nd class, battery capacity 390 kWh

- ETA 150 501 – 627
1st and 2nd class, battery capacity 520 kWh
- ETA 150 628 – 651 (last roll-out)
1st and 2nd class, battery capacity 564 kWh
- ETA 150 652 – 661
1st and 2nd class, battery capacity 548 kWh

The 216 driving trailers differed only in the number of seats per row and thus the overall capacity: ESA 150 001 to 020 had 2+3 seating (92 seats), while ESA 150 021 to 216 offered more freedom of movement and comfort thanks to 2+2 seating (74 seats).

In the ETA, the individual series were differentiated primarily according to their battery capacity and therefore range, but also according to the class layout (number of seats in 1st class and their arrangement in the vehicle).

The biggest differences therefore lay in the layout of the interior, which, except for one variant, was always designed as an open-coach layout. While the 1st class seats were upholstered in velour, the 2nd class seats had brown plastic upholstery, which was extremely comfortable by the standards of the time.



Rush of passengers on the ETA 150 615 to Dortmund-Marten Süd, which arrived in Unna on 24 August 1965 and is turning here. On the left is 78 234. Photo: Willi Marotz, Eisenbahnstiftung

The ETA 150 was designed symmetrically: There were two passenger compartments to the right and left of the central entrance. On side 1 there was a restroom adjacent to the luggage compartment. The vehicles of substructure types ETA 150⁵ and 150⁶ were fitted with a four-, instead of just three-leaved, folding door to make it easier to transport suitcases and bulky items inside.

As this suggests, there were also access doors at the ends. They led into the passenger compartments, which were separated from each other by hinged or sliding doors. The two driver's cabs were not separated from the boarding areas; the driving trailers only had a driver's cab at one end. From ETA 150 561 onwards, a higher roof with a more pronounced curve was also installed, which made them 21 mm higher.

Smooth-running battery powered

With 232 units and service depots all over the country, it is fair to say that the ETA 150 was very widely used on the German Federal Railway. The number of units purchased of this series (designated 515 from 1968; driving trailer 815) also exceeded that of the Wittfeld railcars and made it the typical representative of this type of traction.

Passengers appreciated it because of the travelling comfort it offered, as the bogies and higher tare weight, meant that it ran much more smoothly than the Uerdingen rail bus, which was procured at around the same time. After all, the ETA / ESA 150 also travelled on main and branch lines, so it had at least a partially overlapping area of operation.



The ETA 150 003 delivered by O&K in Berlin-Spandau in May 1955 was the first production railcar of this series (still without a third headlight). It completed its acceptance test in Limburg/Lahn on 14 May 1955 before entering service at the Basel Bad Bf depot. These vehicles offered passengers a completely new level of comfort. Photo: A. Dormann, coll. W. Löckel (Eisenbahnstiftung)

In direct comparison, it was also quieter due to the electric motors, although the typical noise of the nose bearing motors quickly earned it the nickname 'whistle buoy.' In its later livery, it also reminded some contemporaries of 'Maya the Bee'.

Nicknames don't always have to be disrespectful, and they certainly weren't here. Other names by which the battery-powered train was to become known included features such as fast acceleration and the lead-acid batteries of the time: Battery flash, acid bucket, socket intercity and torch express are the most common names here.



This photo of the interior of ETA 150 003 was taken on the same day as the photo on page 21. It is still declared as 3rd class, the former 'wood chair class', as the number above the access door reveals. Photo: A. Dormann, Coll. W. Löckel (Eisenbahnstiftung)

The class 515 was also known as the 'pot-bellied pig' in its final years of operation, particularly by the railwaymen themselves. This alluded to the sagging of the frame in the centre section, which was caused by the heavy accumulators, and could no longer be ignored.

This sagging was an unavoidable consequence of the design and could certainly be described as a design fault. However, it should also be considered that a railway vehicle is designed for a service life of thirty years and the prototypes were used for up to ten years longer.

Whereas in the Prussian Wittfeld accumulator railcars, the power storage units were still housed in the distinctive front ends, which were supported by two axles, the batteries were now located under the frame in the centre of the carriage body, i.e., the weakest point. This unfavourable weight distribution, which could not be fully transferred to the bogies, was the weak point of the successful model.

This was also fuelled by the fact that the batteries had to be replaced approximately every four years because the lead plates were worn out. The batteries came from the Hagen-based company Varta and were only rented, which is why the surviving vehicles are no longer ready for use today due to a lack of power.

Always the latest generation of batteries was installed when a replacement was made, which also increased the capacity of the older vehicles. From 1965, those with 603 kWh were used, which exceeded the stored power of all production series when they entered service.

One advantage of the 515 / 815 series was that it was equipped with fully-fledged pull and push coupling devices, i.e., screw couplings and regular buffers. This meant that the driving trailers could also be

attached to one of the Wittfeld railcars on a case-by-case basis, as can be seen at least from the Wuppertal depot.



The ETA 150 121 comes from the same series as the Märklin model and was also based in Limburg (Lahn). On 2 September 1966, it was probably taken on its main line at Obernhof an der Lahn station. Photo: Alan Brack, Eisenbahnstiftung

However, an express or general cargo railway car could also be transported, as well as a mail car, for which we have not yet been able to find any photographic documentation. Nevertheless, the Bundesbahn seems to have valued this option very highly, as it quickly switched from a Scharfenberg coupling to a standard coupling for the class 628 diesel railcars, which, in fact, became a successor.

Operation of the ETA 150

As already mentioned, the new railcars were particularly suitable for use on flat railway lines. Gradients significantly increased power consumption and shortened the range, especially with a driving trailer and possible freight wagons attached.

The Wanne-Eickel depot in the heart of the Ruhr area became a stronghold of the 515 / 815 series, where the very last units were at home. From there they also reached Wuppertal and thus the Bergisches Land. This is rather an exception and at the same time points to the good infrastructure, i.e., the number of loading points. However, the Aartalbahn, and the Innerstetalbahn (Harz) should also be mentioned.

Apart from the Ruhr area, the main centres of operation were Schleswig-Holstein, parts of Lower Saxony and Rheinland-Pfalz (Rhineland-Palatinate), Bremen, southern Hesse, and southern Baden. Bavaria (Swabia and Franconia) and North Friesland were also important areas of operation – the trains were therefore a 'nationwide phenomenon.'

continued on page 25



Photo above:

ETA 150 580 was based in Hildesheim in 1965 and can be seen here in the station of its hometown. The remaining buildings on the island platform are still being demolished after the reception building was rebuilt in 1961 in a functional style. Photo: Dieter Höltge, Eisenbahnstiftung

Photo below:

At Wuppertal-Nächstebreck, ETA 150 139 (Bw Düsseldorf Hbf) arrives on 28 August 1965 as P 4078 (Hattingen - Wuppertal-Oberbarmen - Wuppertal-Vohwinkel), which on Saturdays did not run as a locomotive-hauled train with a Vohwinkler class 78 tank steam locomotive. Photo: Helmut Dahlhaus, Eisenbahnstiftung

This becomes apparent from the number and names of the home depots (Bw and Bww): Aachen, Augsburg, Basel Bad, Braunschweig, Bremen, Buchloe, Düren, Düsseldorf, Haltingen, Hameln, Hildesheim, Husum, Kassel, Kiel, Limburg, Ludwigshafen (2 units 1955/56), Mainz, Mönchengladbach, München Ost, Neumünster, Nördlingen, Oberlahnstein, Recklinghausen, Rheine, Worms (most important home for south-west Germany) and Wanne-Eickel.

Between 1978 and 1988, they were even used on the Aachen-Maastricht route, thus crossing the border. The Düren depot vehicles used there were also given interior lettering in Dutch. Their service ended in 1995 with Deutsche Bahn AG at Wanne-Eickel depot, from where the last four examples travelled on the 'Nokia-Bahn' (now Glückauf-Bahn) for the Verkehrsverbund Rhein-Ruhr (VRR).



515 590-8 from the Augsburg depot was one of only seven multiple units with a surrounding blue 'belly band'. On 21 August 1976, it is on its way from its hometown towards Weilheim together with the red 515 581-7. Photo: Eckerle, Petkelis collection

The long period of usage meant that the battery locomotives also changed their livery several times. They all entered service in the basic colour RAL 3004 purple red, the roof was painted RAL 9006 white aluminium, while the frame and bogies were RAL 9005 jet black.

The trim line changed colour over time from sand yellow to beige, only the two prototypes originally had trim in white aluminium. More striking, however, was the change in the roof colour to RAL 7015 umbra grey, which was less sensitive to dirt.

The change to the new RAL 5020 ocean blue / RAL 1014 ivory colour concept, which became widespread in this series from 1975, was not uniform. After seven 515s and two 815s had been given the new livery, the DB ordered a modification: the ivory-coloured surface was now pulled down to near the buffer beam on the fronts.

This meant that the blue belly band no longer ran the full width of the front but changed to a narrow strip below the lanterns. The front view of the repainted examples showed an almost exclusively ivory-coloured front. The colour of the skirt also changed quickly: as with the passenger coaches, the RAL 9005 jet black

gave way to ocean blue. An ivory-coloured decorative strip was added at the position of the previous separating edge.



515 009-9 is on its way to Schongau on 28 April 1979 together with 815 704-2 (both Augsburg depot) as P 5811. The motor car is painted in the final livery according to the ocean blue / ivory colour scheme, while the driving trailer still has the original livery but has long since been given an umbra grey roof. Photo: Eckerle, Petkelis Collection

Only four vehicles received the product colours introduced in 1986. In 1993/94, the then Bochum-based manufacturer Nokia financed the repainting of the trains that ran on its doorstep and transported employees to the factory.

This also gave rise to the earlier mentioned name 'Nokia-Bahn' (Bochum - Gelsenkirchen). In return, Nokia received advertising lettering on the side walls of the coaches, which were painted in light grey / mint turquoise with pastel turquoise separating stripes. Barely a year later, these specials had finally had their day at the privatised DB.

As early as 1990, the 515 505-9 was converted into a non-powered conductor rail de-icing car (new vehicle number 732 001-3) for the Hamburg S-Bahn. Two further examples went to the private railway Regentalbahn, which converted the vehicles to diesel-electric drive (VT 515-U series). No further conversions were carried out because a suitable lightweight railcar, the Regio-Shuttle RS1, was now available as a new vehicle.

Due to a lack of maintenance and utilisation options, only a few 'torches' – this designation refers to the battery-powered light at the front and the elongated shape of the car body – were preserved for museum use.

The 515 556-9 was still in service for the Bochum-Dahlhausen railway museum for a short time, before it was finally taken out of service for good. Today, it has been restored to its original purple-red colour, while the 815 672-1 driving trailer, which is also preserved there, has retained its last operating condition. The 515 011-5 at the Bavarian Railway Museum in Nördlingen has also been refurbished, but is also not operational due to a lack of batteries.

With them, the chapter of accumulator railcars on the Bundesbahn was finally closed, and it doesn't look like there will be a renaissance at Deutsche Bahn either. And yet the idea of an accumulator railcar is more relevant than ever.



463 046-3 of the S-Bahn Rhein-Neckar, a hybrid train from the Siemens Mireo family, arrived in Wuppertal-Sonnborn on 8 February 2023 as ST 57389 on a test run (Wiesbaden - Minden). At the end of this article, it symbolises the current renaissance of energy storage system powered multiple units. Photo: Wolfgang Bügel, Eisenbahnstiftung

The idea of an emission-free propulsion system has recently received a strong boost. In addition to hydrogen-based fuel cells, further practical trials are underway with modern accumulator multiple units.

Their main difference to the pioneers of this form of traction and also the 515 series are modern energy storage systems based on lithium-ion technology, which, in addition to significantly lower weight, also enable a much higher storage capacity.

In addition, they should be able to do without stationary charging facilities and draw and store the electricity from the overhead line sections. This also refers to the fast-charging options that were equally incredible seventy years ago. Where this can and will take us remains to be seen. wahren. Wohin uns das führen kann und wird, bleibt bis dahin abzuwarten.

Extensive collection of prototype photos:
<https://eisenbahnstiftung.de/bildergalerie>

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Building a new structure

More than a Piece of Paper!

Paper modelling is a popular activity, both outside and inside the model railroading hobby. However, we have never dealt with it specifically in this magazine, except for the occasional reference to paper models seen at trade fairs and exhibitions. Today we would like to introduce it to our readers with the help of a Herpa kit.

We don't want to sound disrespectful when we use the term paper modelling in this article. After all, paper model kit suppliers usually also use the word cardboard modelling. Our intention is to simply be clear about the individual materials and techniques employed.



Using the Herpa kit 'Airport Tower' (item no. 573061) as an example, we aim at presenting the techniques and advantages of paper modelling.

Cardboard modelling to us means modelling with solid-coloured hard cardboard sheets that are highly compressed and sturdy, converted into kits through laser cut technology, and with the pieces detachable from sheets at separation points.

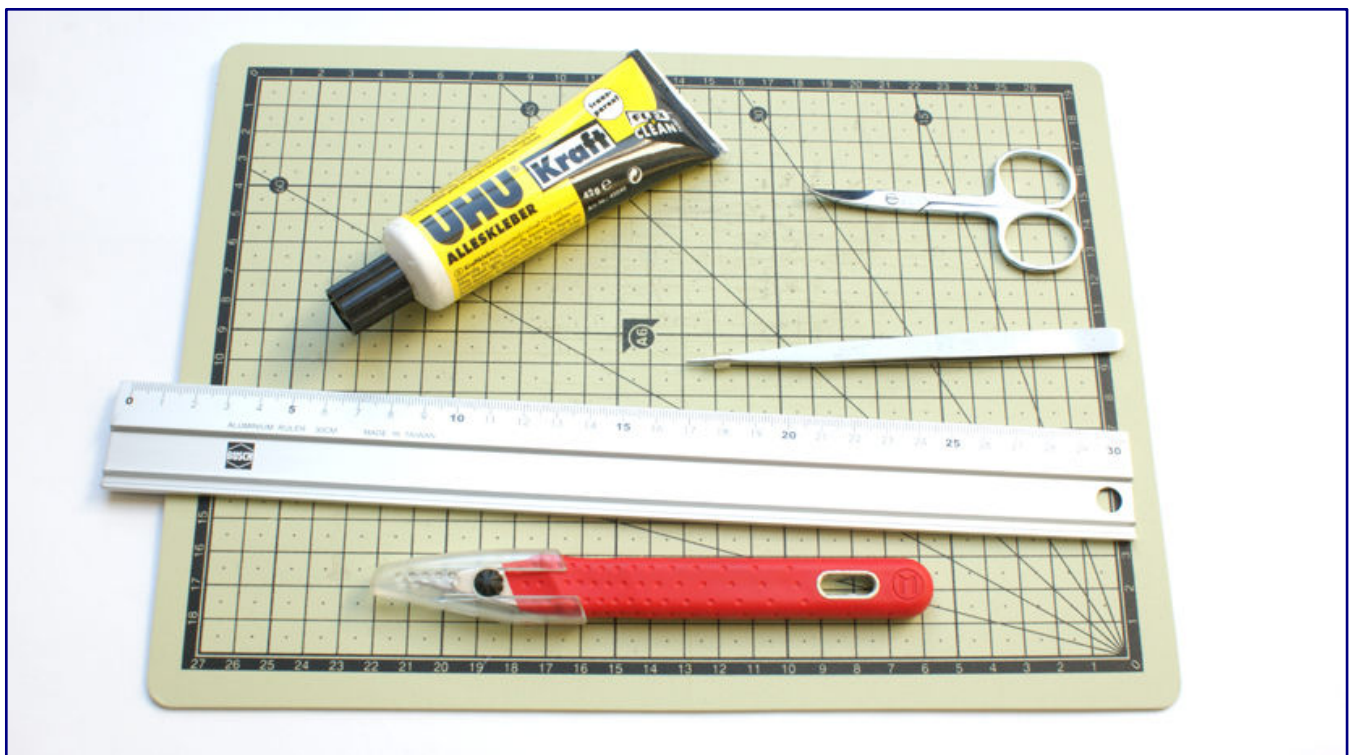
What we call paper modelling, on the other hand, is not ordinary printer or photocopier paper, but a somewhat stronger material with the thickness and strength of a postcard. Like the latter, it has a white base colour, due to bleaching, and is printed in colour.

Cutting out the pieces is left entirely to the modeller, who is guided by markings and lines. Where more stability is required, parts can be made stronger by gluing several layers together ('doubling up').

Compared to laser cut kits, we are therefore talking about very different material properties, application possibilities, construction techniques and different adhesives: If a dispersion (water-based) glue is used for cardboard modelling, paper modelling requires solvent-based all-purpose adhesives.

As you can see, the distinction between the terms is not intended to make a judgement, but merely to correctly describe what exactly is meant here. In the past, we have often dealt with hard cardboard kits from Archistories, Märklin, MBZ, MKB, Modellbau Laffont, and Noch.

Today, it is Herpa's turn. The miniature model company is celebrating its 75th anniversary this year and which occasionally complements its airplane model range with paper diorama kits. We got our hands on the new 'Herpa Scenics' apron/tower floor panels (item no. 558969-001), with the number extension 001 indicating that this product already existed before and has now been slightly modified.



The most important tools and aids for paper modelling have been put together here. In addition, a set square and flat weights can help with building.

More concretely, it is now possible to add to the apron base an air traffic control tower which has been reissued at the same time in a more modern and contemporary design that can be found at more and more airports.

This air control tower kit (573061) is also designed as a paper kit and can therefore be offered to customers at a very favourable price. Low cost is the great advantage of this material and the chosen production method, but at the same time requires certain skills and dexterity from the modeller.

Thanks to the detailed and good instructions, which use a lot of text and very few photos, the project is sure to succeed, provided the buyer takes the time to read and understand them before starting the build!

We would now like to share the most important tricks and tips in this construction report and promote this technique. The result speaks for itself and shows that paper models can be integrated on model railway layouts. However, clear preferences should be established beforehand and paper buildings should not be arbitrarily mixed with buildings made from other materials and production methods.

The reason we decided on doing an airport building is that we don't have a layout or diorama on which we could have set up another building equally effectively. The apron of an airport on our scale seemed very suitable for demonstrating and conveying the desired effect.



The kit is supplied in a transparent sealed bag. After removing it, the envelope with product photos, item number and description is in front of us, and wrapped in it, are the printed kit sheets and the instructions with lots of text and some informative illustrations (on the right in the photo).

Preparations and techniques

It always makes sense to read the instructions carefully before embarking on a new modelling project. This is especially true when working with a new construction method for the first time. Herpa has put a lot of effort into this and offers the buyer a lot of information before really getting started.

This way we also learn something about the model's prototype: It depicts a modern control tower in which only some of the air traffic controllers sit in the control cab at the very top. Others sit in the gondola shaped section below. Depending on their area of responsibility, they monitor traffic in the air, on the runways, the taxiways or the apron.

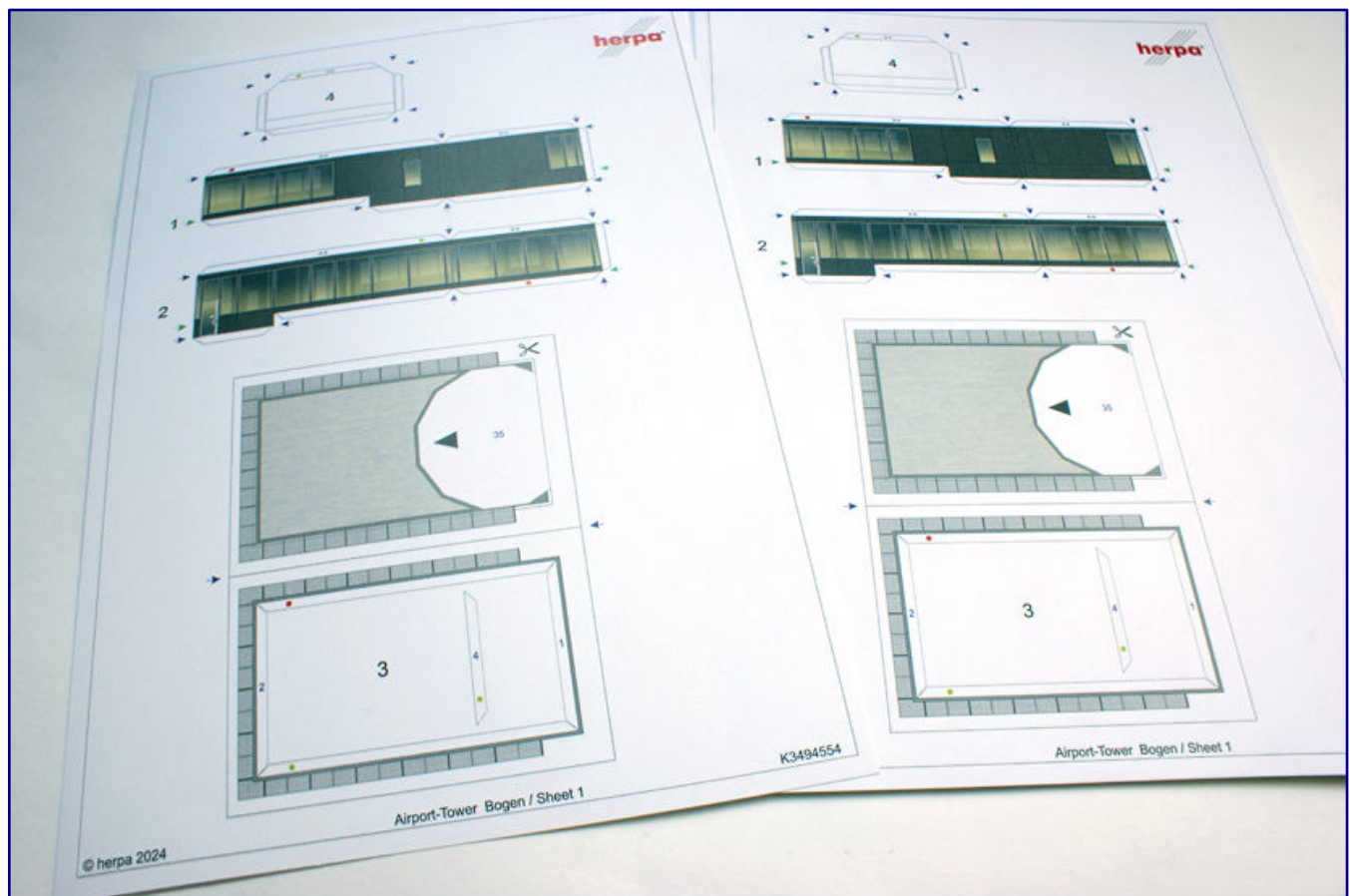
The Herpa model follows the design of the Frankfurt Airport control tower which was completed in 2011, but allowed itself some room for interpretation and deviates in some details. The model was ultimately designed to be placed on the aforementioned base plates, which are used to replicate an airport apron. In the past, the control towers tended to sit on top of a terminal building or stood in close proximity to one another.

After this background information we receive general instructions on building the model and learn which tools and materials are required. We will also list the most important information here in brief.

- **Tools and materials for building a paper model**
- Cutting knife (used and recommended by us: Mozart precision knife with interchangeable blades)
- Ruler or set square for straight cuts (recommended by us: Steel cutting ruler)
- Cutting mat
- Nail scissors (for corners on glue drops)
- Tweezers
- A pin
- Weights for pressing on multi-layer parts
- Paper glue or better all-purpose glue (recommended and used by us: Uhu Kraft and Uhu all-purpose glue)

The kit provider's advice to take sufficient time for the build seems essential to us. We did this and can confirm that it makes a significant contribution to a good result. This is the only way we can allow the adhesive enough drying time and always work in a fresh and focussed manner.

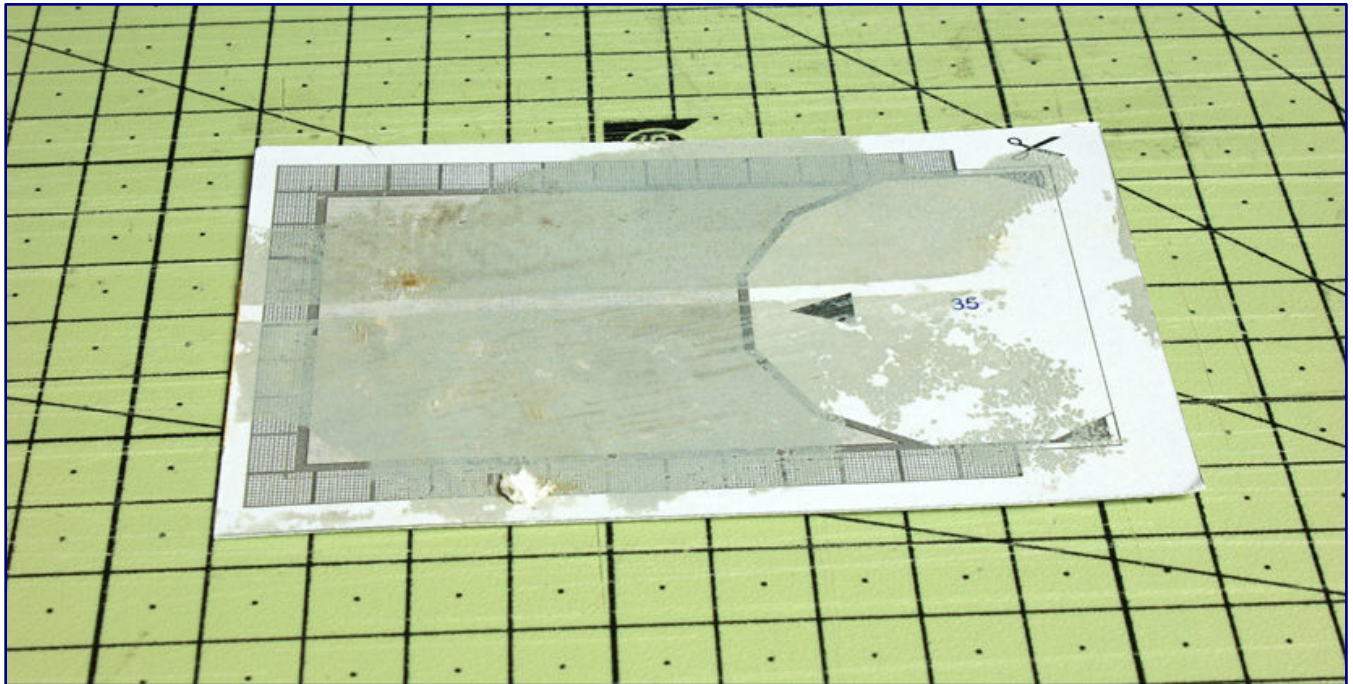
Taking sufficient time is also the only way to ensure that all parts are always cut out exactly, dry-fitted and assembled precisely – i.e., without smeared glue. Herpa is aware that it also has parts in its sheets that are more difficult to handle.



Herpa takes care of its customers: The sheets for the first construction steps as well as very difficult parts are included twice in the kit, to have a second chance, if necessary.

It, therefore, made sense to organise the building sequence in such a way that you can start with the easier building steps and increase the level of difficulty as your experience grows. For very demanding construction steps, such as the very first ones, the required parts can be found twice in the kit.

This gives us a second chance in the event of mistakes, which also happened to us. Our build gets off to a good start, until we have to press a doubled-up part for the first time to prevent gaps from forming. When the glue has dried, we remove our weight and unfortunately discover that glue's solvent has dissolved the colour of our weight and transferred it to the paper sheet.



This spoilt part illustrates just how important duplicate parts can be. Following the instructions, we doubled up this part with an extra layer of paper and placed a weight on top during drying. What we didn't realise: Penetrating solvents attack the coating of the weight and cause its colour to be permanently transferred to the sheet.

At this point, we will familiarise ourselves with all the important construction techniques that are used here. The doubling up applies to parts that have a crease where half of the part is folded over by 180°. There is then a glue surface in the centre. This technique is used where the top and bottom sides need to be printed in equal measure or where greater stability is required.

Always cut out along a ruler, as there are no regular curves to cut here. If this is the case with other kits, they should not be cut by hand if possible. The highest possible precision is always required here until the part falls out of the sheet with exact dimensions.

Herpa describes scoring as the secret of the perfect edge. Folds may be required on rectangular and polygonal moulds, but mostly on the glue flaps. To ensure that they fold easily and exactly in the right place, the paper is scored to about a third of its thickness.

This requires sensitivity, which is quickly acquired. The blade is guided precisely and carefully without pressure. This can be practised on leftover pieces of cardstock, but for starters the parts are also available in duplicate to prevent any mishaps.

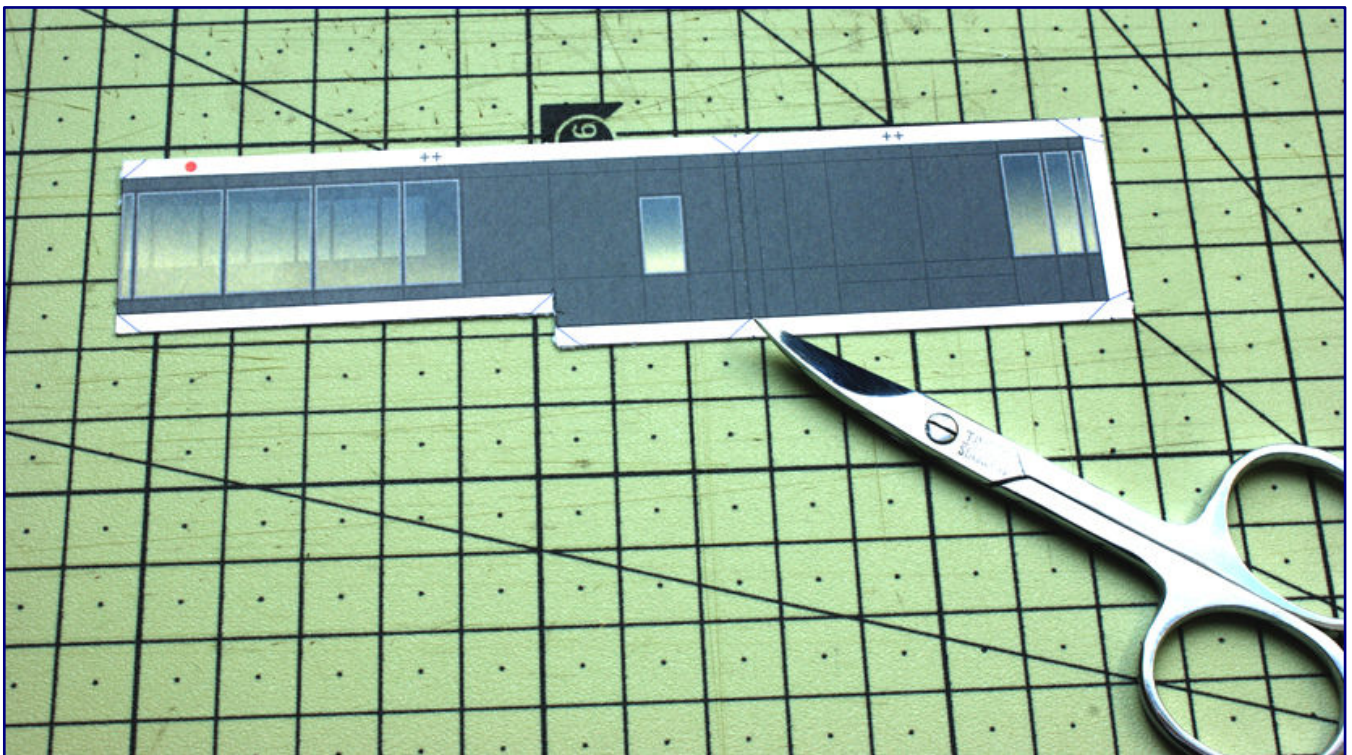
The technique of folding follows and describes the creation of the three-dimensional form from the two-dimensional sheet of paper. All scored edges are bent away from the scoring, usually by more than 90°, before being precisely aligned. For example, the four basic walls of a building are created from a strip of paper, plus the glue flap at the joint edge where the ends meet.

Let's get started!

Once we have familiarised ourselves with the basic steps and perhaps practised a little, we get started. On the sheets of paper, we discover lots of coloured dots and arrows, as well as numbers and symbols. We should also look up their meaning beforehand and double-check with each new construction step.

The kit also works with differently coloured numbers. Black numbers mark the number of a piece in correspondence to the instructions, whilst blue numbers show where two pieces with the same number are joined together. Coloured marking dots can be found at bonding points. Parts and components to be bonded are joined together in such a way that dots of the same colour meet each other.

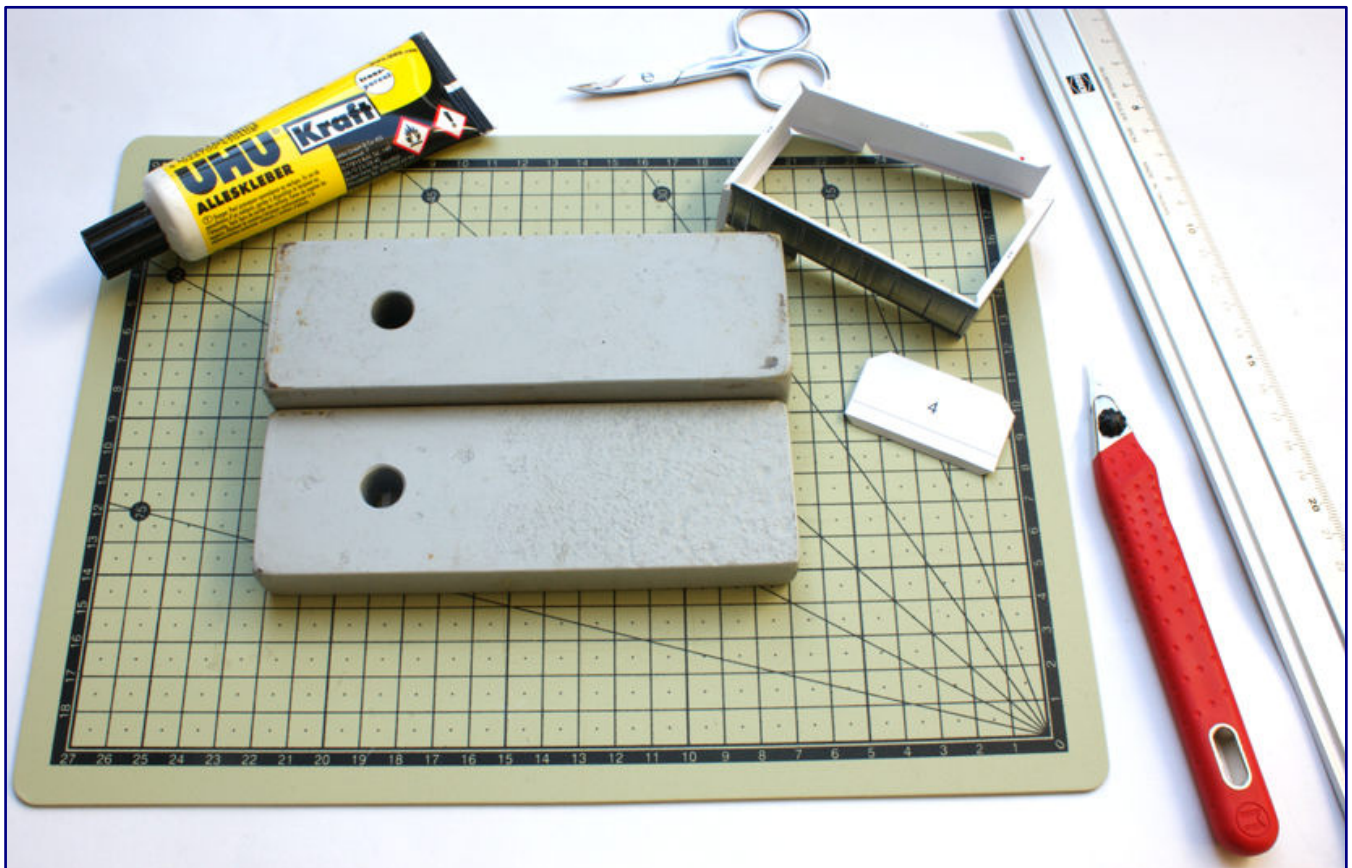
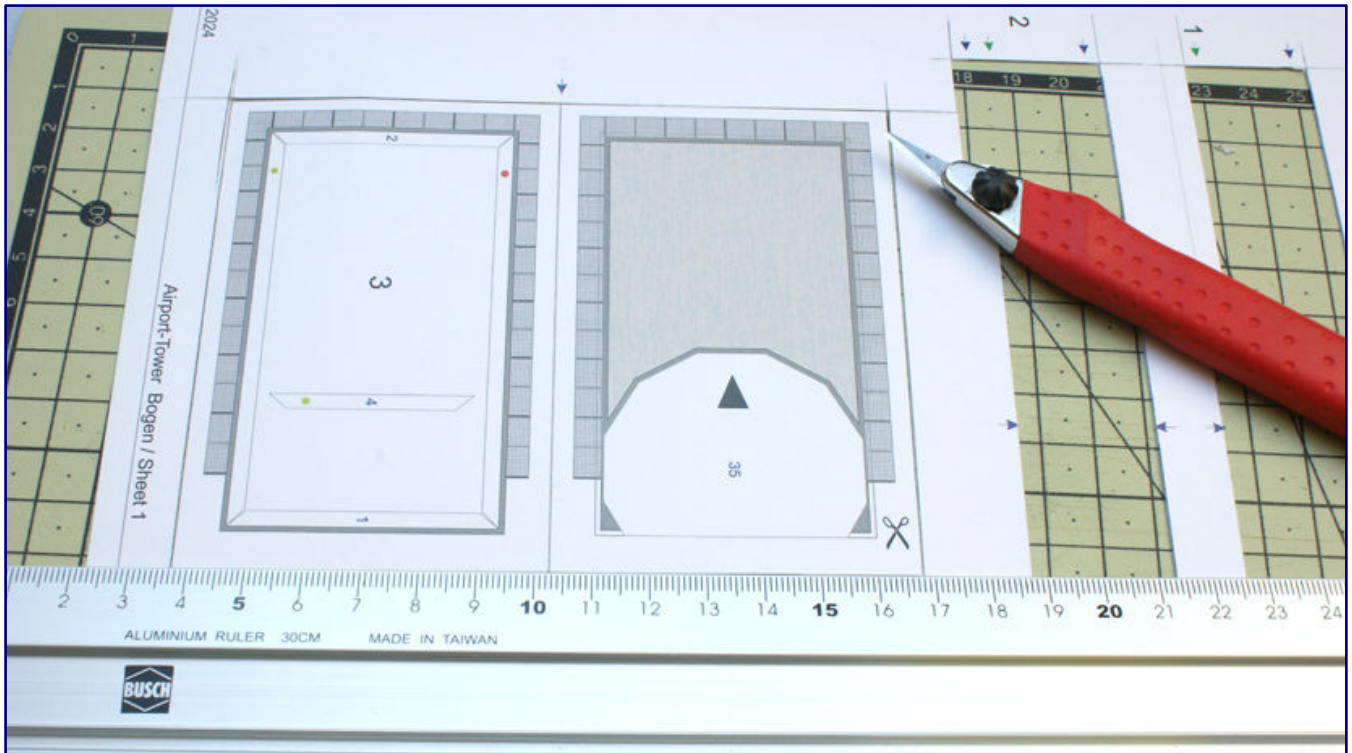
A scissor symbol indicates the surface on which the knife is to be guided in the case of doubled parts. Arrows in blue, green, and red always mark an area where the paper is scored.



We recognise some of the above auxiliary symbols: The two plus signs on the adhesive flaps mark the upper side of the window front, the red dot must later be joined with an identically marked area of the component it is to be bonded with. We now use the scissors to cut the corners of the glue flaps that remain when cutting along the steel ruler.

The colour determines whether this is done from above on the printed side (blue) or on the unprinted underside (red). Green indicates sections that are only scored in partial areas according to the instructions.

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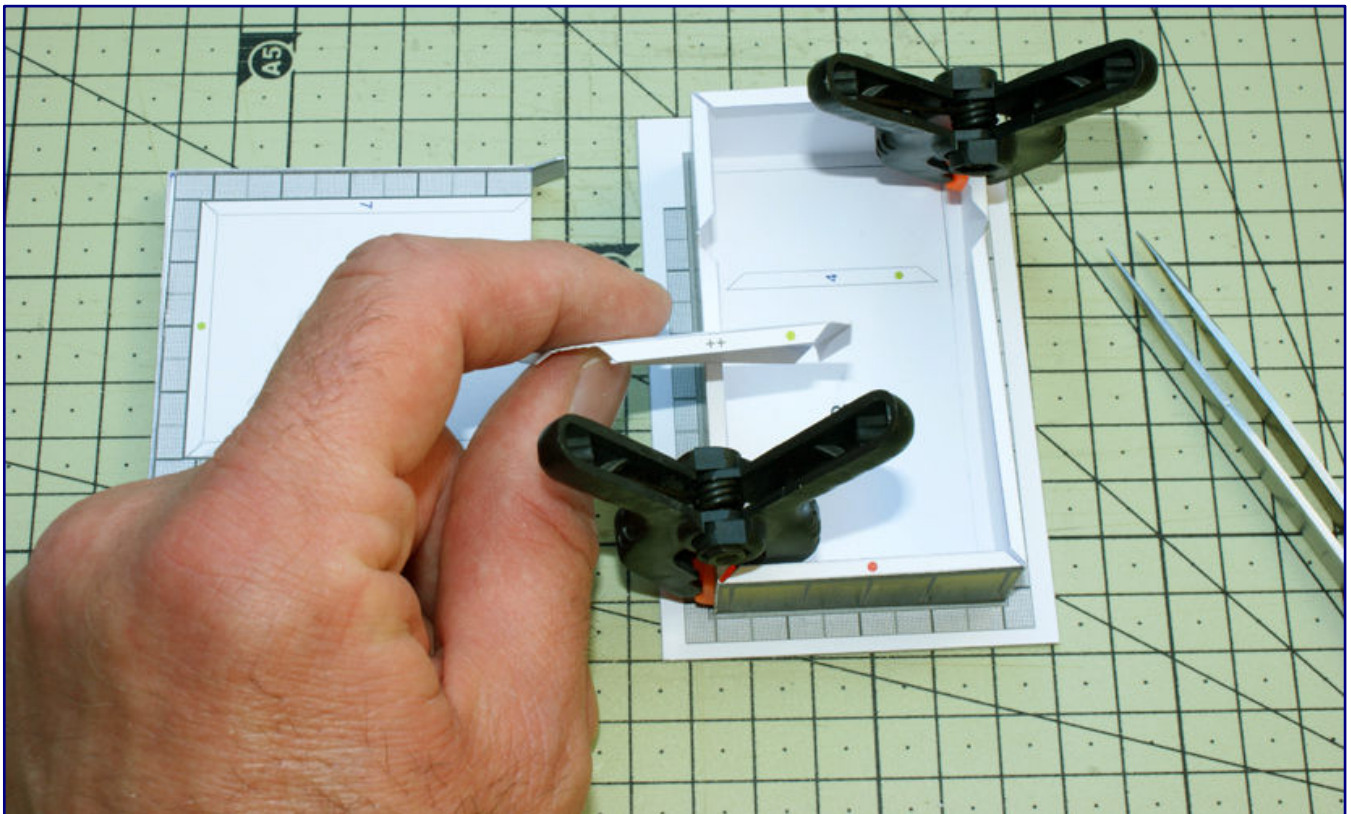


We recognise other auxiliary symbols such as the scissors (photo above), which tells us where the part to be duplicated will later be cut out to the exact dimensions, as well as the scoring line marked with an arrow for folding. The small numbers on the glue flaps and surfaces indicate which component is to be glued here later.

The doubled part is weighted down after gluing (photo below), but this time with an intermediate layer on the paper to prevent the glues solvent coming in contact with the weight.

An asterisk marks optional components that can be omitted – in the case of the control tower, this is the sloping support between the control cab and the level below. Double plus signs indicate the upper side of walls or ceilings.

To start with, Herpa has chosen the platform as assembly group A, which will later sit on the gondola section and support the control cab. We will familiarise ourselves with the cutting and scoring techniques in a moment. A ceiling is also to be added to achieve greater stability.



We used modelling clamps to fix the gluing points of the two components for the surrounding walls. The platform lies upside down in front of us (with the ceiling facing downwards). We check where and how component 4 is to be positioned. The two plus signs mark the top side, the two green dots lie on top of each other after gluing – all clear!

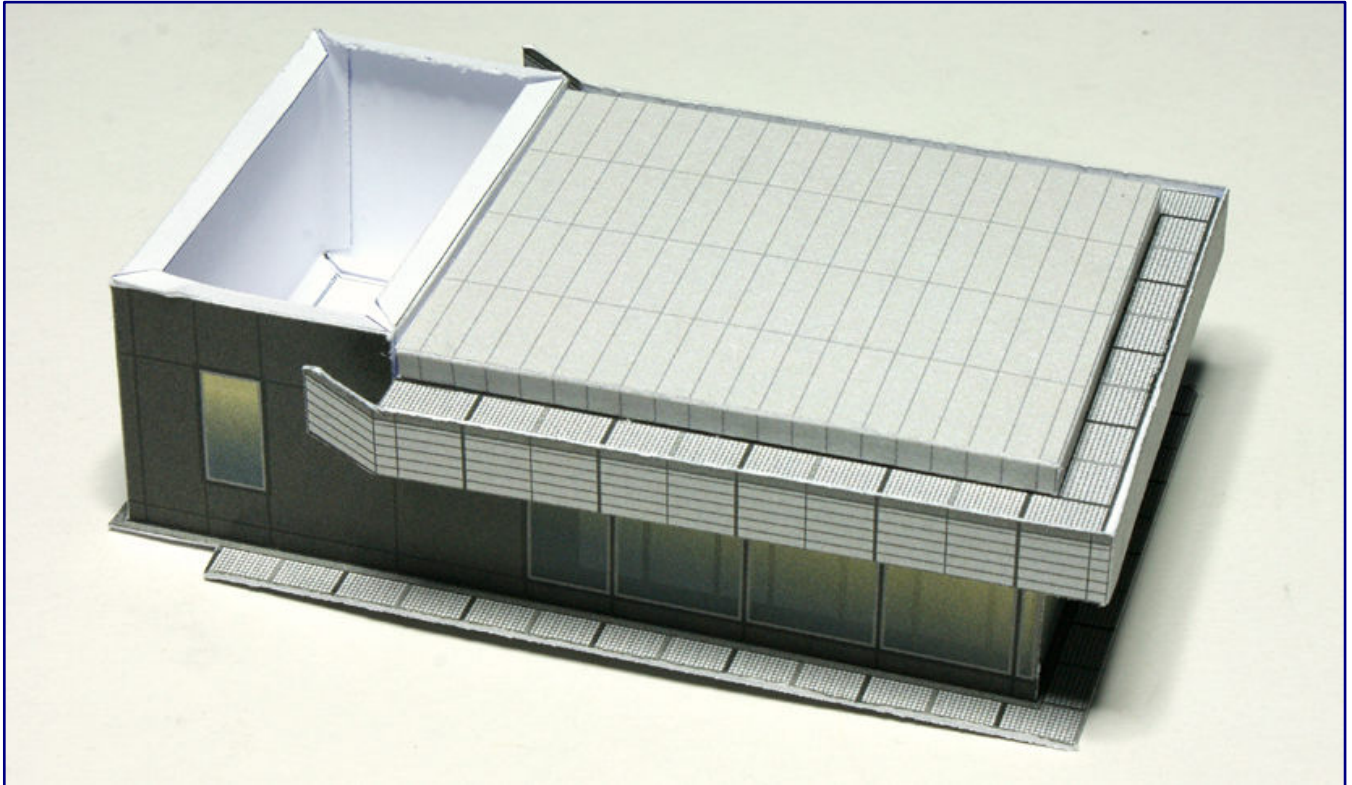
This is where we run into the already mentioned mishap of the solvent leaking through, which is why we have to repeat this step and fall back on the spare parts. A small mishap with major consequences can happen quickly, which is why the manufacturer has taken sensible precautions here.

The platform itself is not difficult to assemble, but together with the floor it already creates some three-dimensional structures that familiarise us with the possibilities of this building technique and with the most important skills in such a way that we gain confidence and routine.

For scoring on the unprinted side, we try to figure out a trick to ensure the best possible fit. Here, we start by trying to see through the sheet of paper and precisely make the necessary marking points on the underside, which will no longer be visible later. This does the job but there is a simpler method which also works in most situations as we later find out.

All the required parts for the individual steps are always clearly listed in advance in the instructions. Drawings at the end of all text explanations of the assemblies show how they are put together at the end,

and how they must be positioned in relation to each other. Contrary to our initial expectations, photo instructions for each work step are not actually necessary.



The finished platform lies on the table in front of us, still upside down. We can now see how three-dimensional structures are created from sheets of paper.

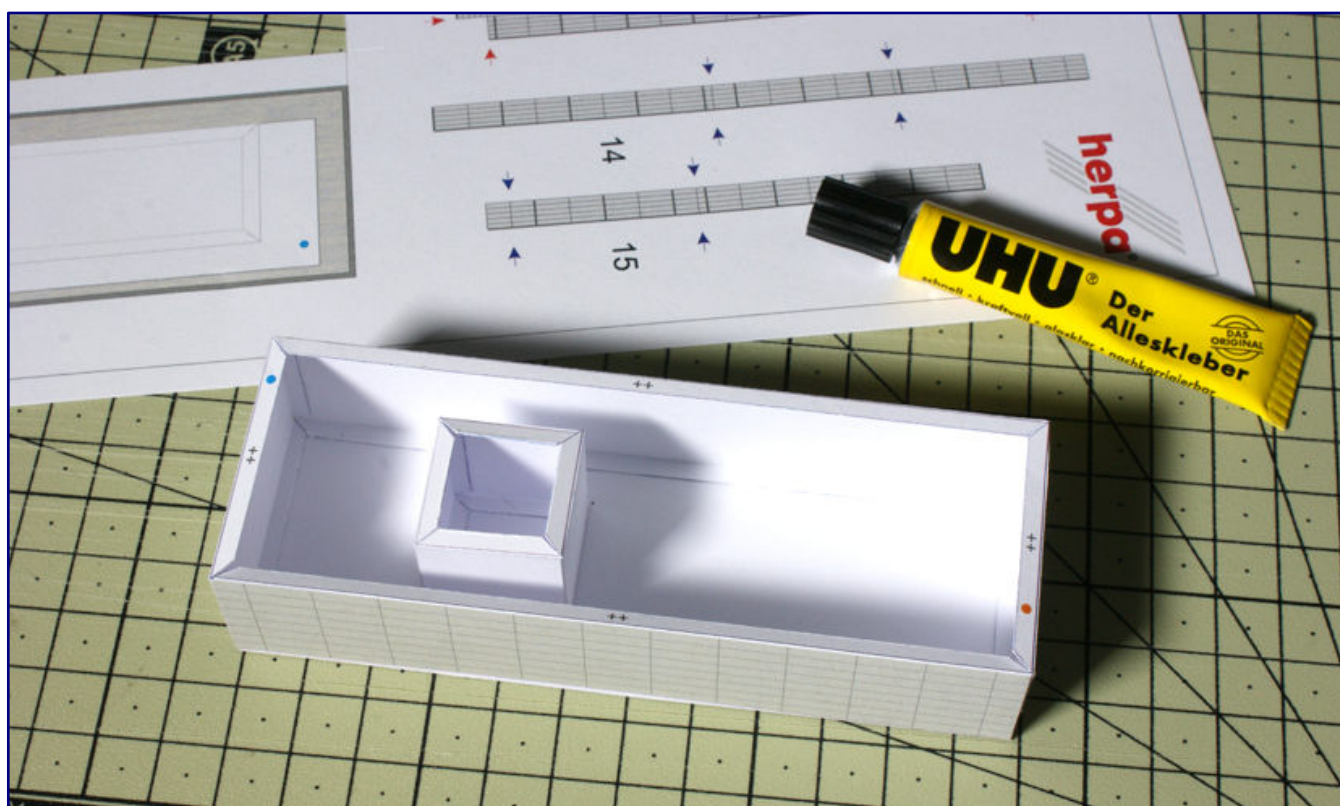
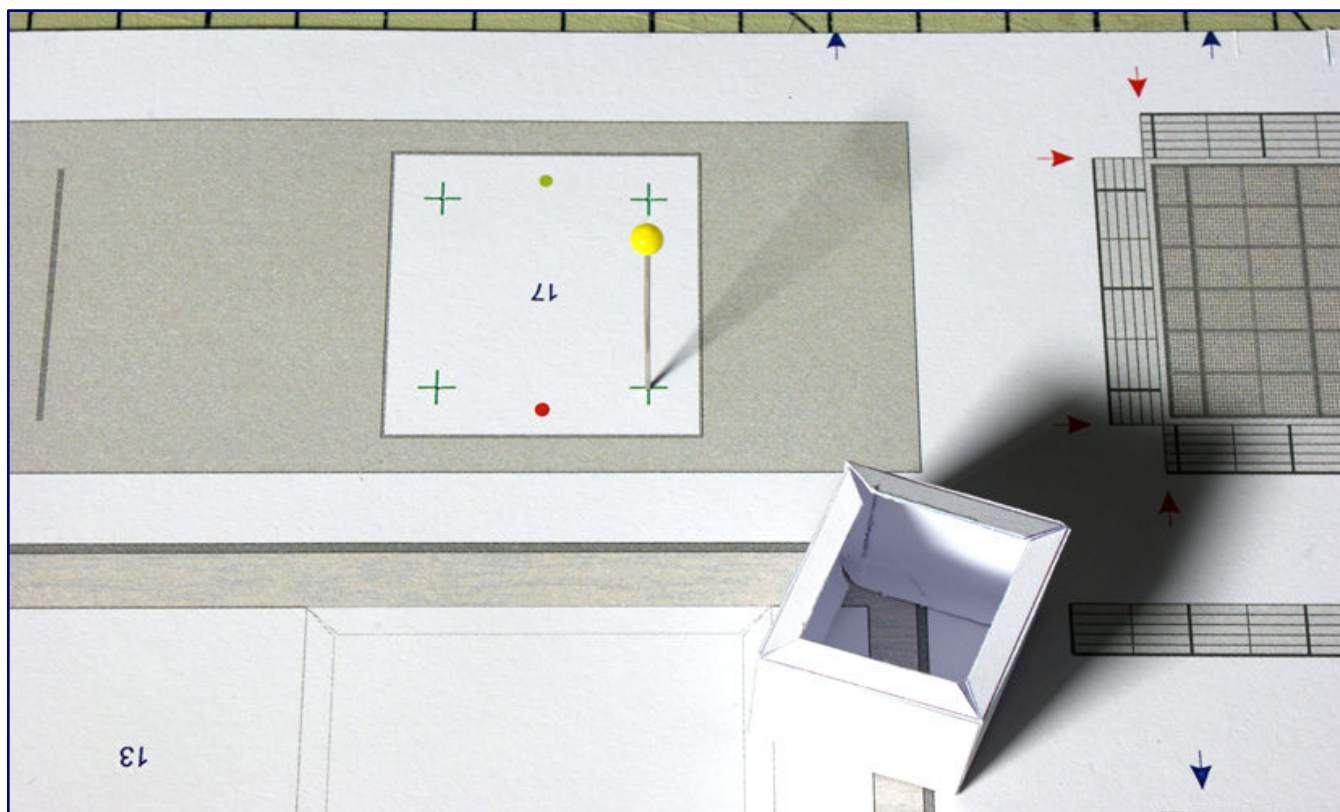
We now continue with the gondola section of the building (assembly group B). This also remains at a manageable level of difficulty with its rectangular basic shape and roof platform. What is new for us here is a green cross marking that indicates the points where to pierce the paper with a pin and thus create markings on the unprinted side for where to later apply glue.

Building the tower is easy and takes relatively little time. It only consists of the four long base walls and two doubled-up parts: one is the ceiling at the top, on which the upper parts of the building will rest, the other is the optional support, which we will of course use for a credible building structure.

At this point we encounter light blue printed surfaces for the first time. In this case, Herpa has used an identification colour to show where to cut out areas within a part. This is due to the fact that the support consists of two struts and would be too heavy as to fulfil its prototype function.

The only astonishing thing for us is that the longest assembly section C in the form of the tower is not to be reinforced by an extra layer of paper. This specifically is where we would have expected a doubling to give this sensitive part of the building additional stability.

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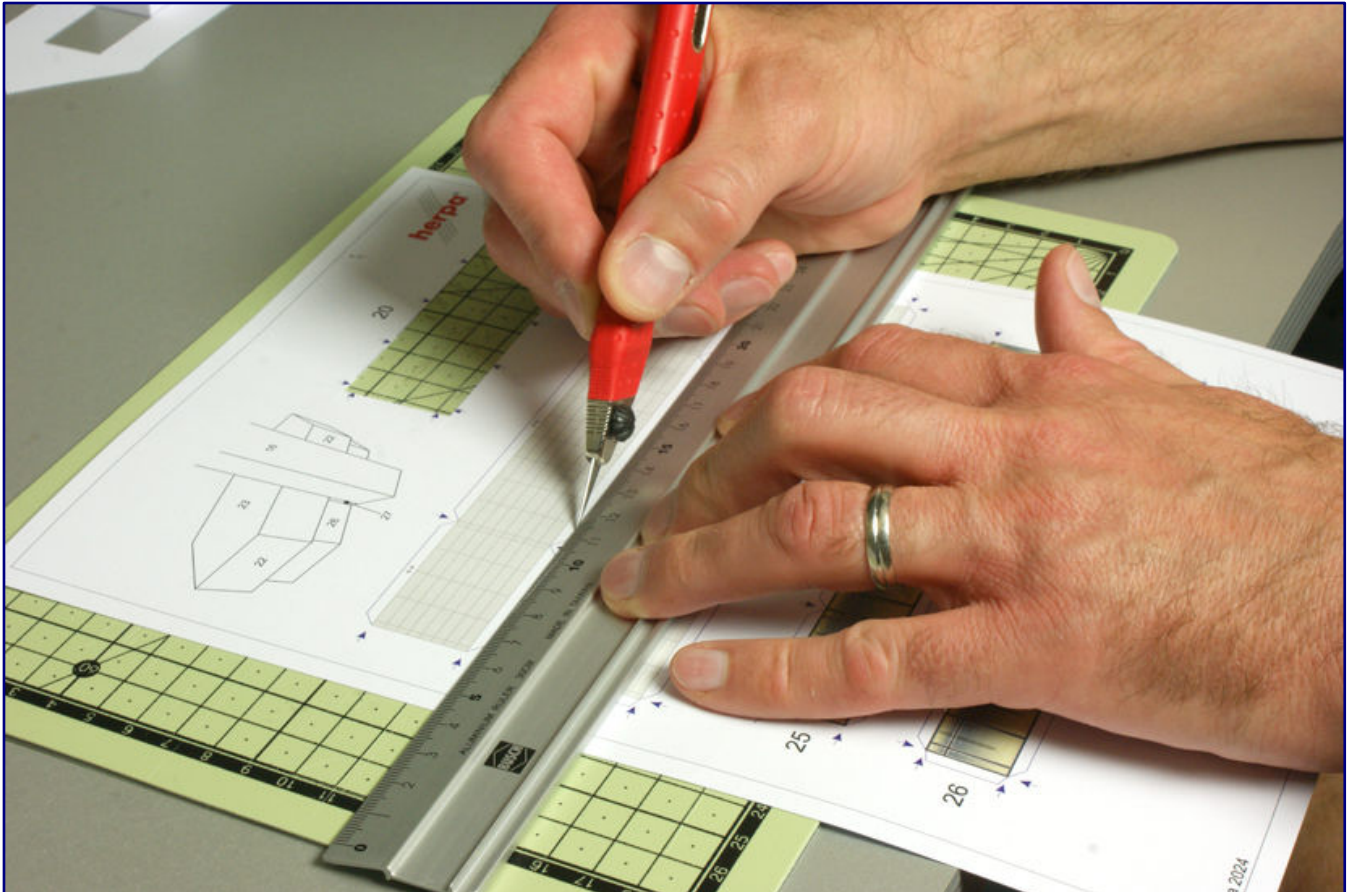
The cube is open at the top and bottom (photo above), which is intended to increase stability in the centre of control cab. It is glued to the unprinted side of the control cab floor, while component 17 is later fixed to the printed side. To mark the gluing point for the cube exactly, push a pin through the intersections of the green crosses.

After gluing and attaching the outer walls, the mentioned cube can be seen inside the building (photo below).

It's getting more demanding

We have already reached the last two sections, D (base building), and control cab (E), and we are increasing the difficulty of the build. The base building, which will later support the tower level, is an octagon.

This increases the need for precise cutting and folding in order to fit and glue the ceilings and floors accurately. The process should be practised through dry fitting tests to avoid visible glue stains later on.

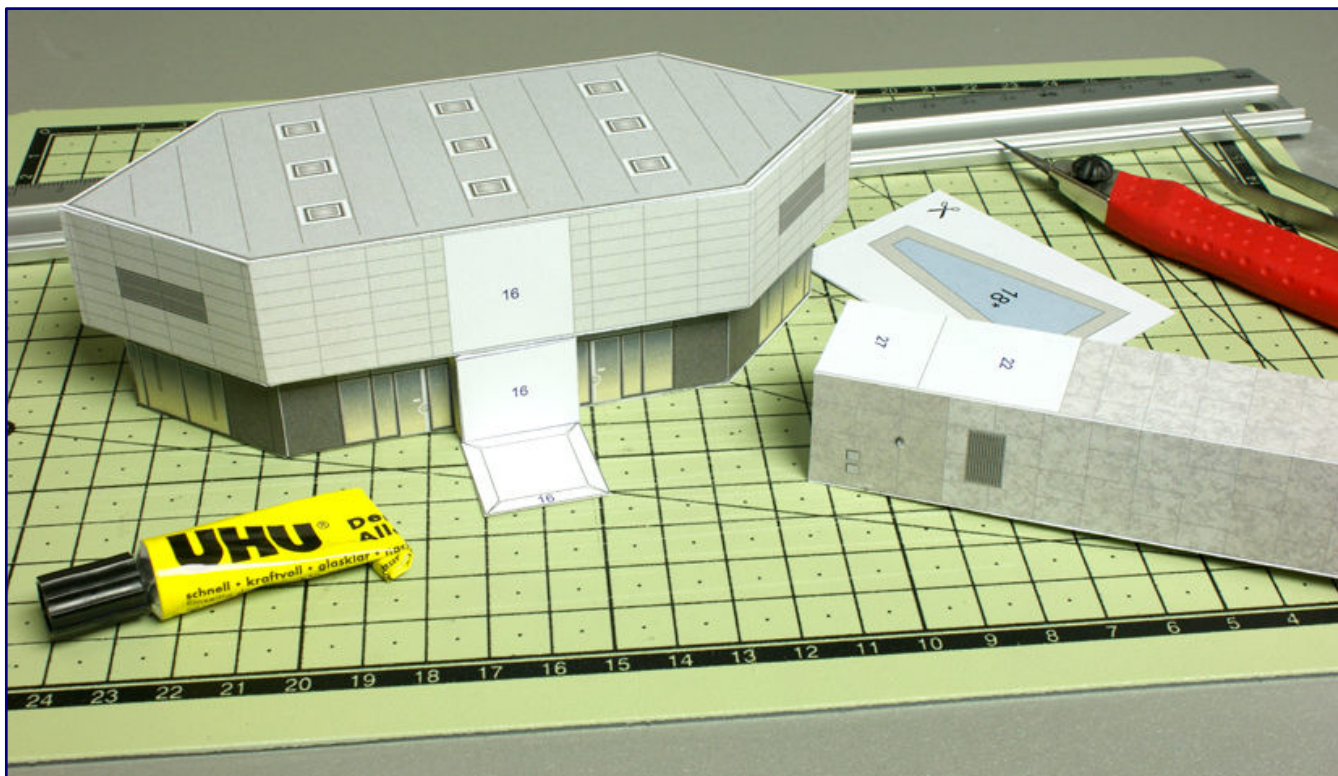


Many components now need to be cut out and shaped for the base building. Rectangular floor plans are now a thing of the past, as you can see from the illustration printed on the cut-out sheet for placing the parts.

And again, areas within parts must be cut out, which is useful for access with fingers and tweezers when the glue flaps are to be finely aligned and bonded. Precision is also required because the two storeys have different dimensions and an intermediate section is to be added to form a transition from the narrower ground floor to the tower and further increases its gluing surface on the building.

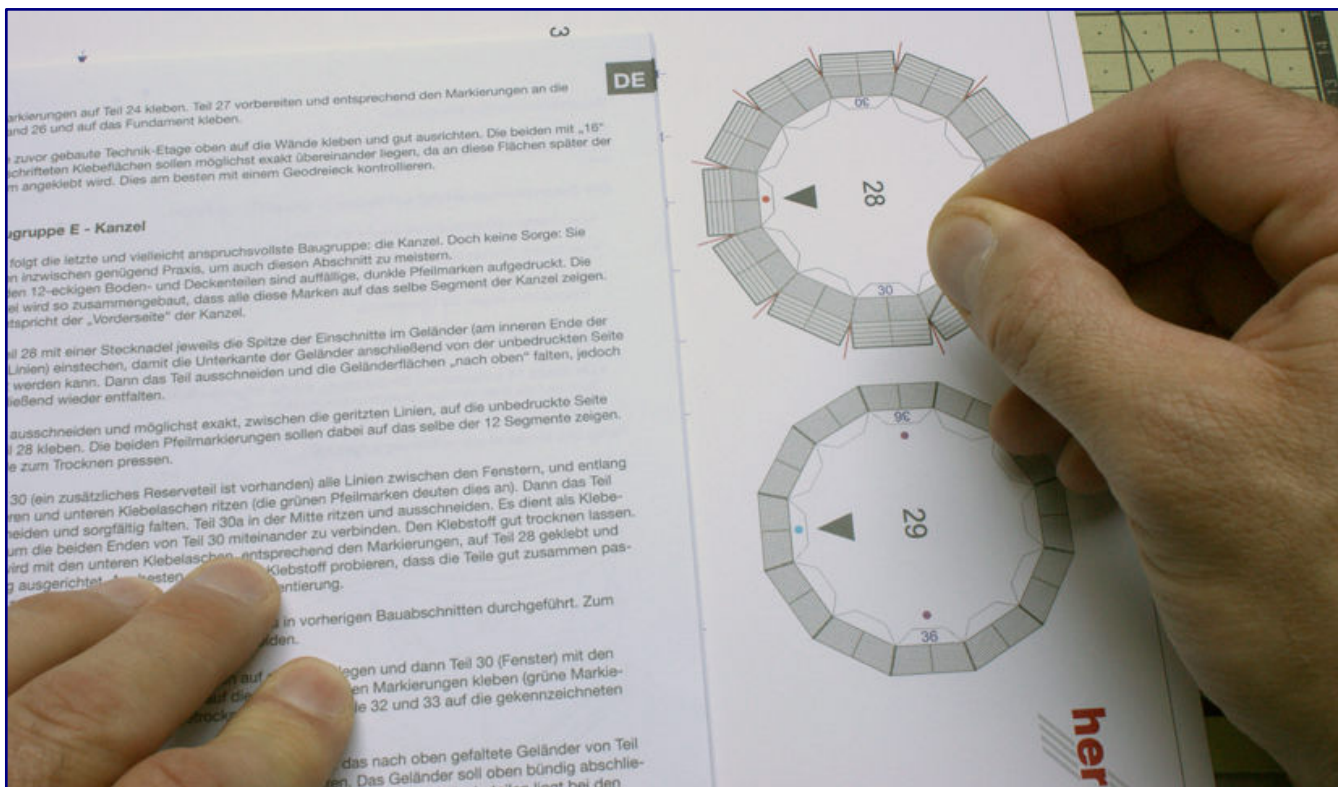
We realise that we are up to the challenge and now move on to the final stage: the polygonal control cab section. Herpa itself reassures its customers in the instructions that they have now acquired all the skills needed to master the tasks now laying ahead.

Due to the basic twelve-sided shape, there are a large number of cuts and folds, all of which are short and must be made precisely, to avoid damaging a component. We turn the sheet countless times on the



The base building is now also completed. When aligning sections with each other, the main focus is on gluing the floors and ceilings in order to work flush without causing glue stains. Now we check the fit with the tower (protruding into the photo on the right). We then cut out the light blue area in component 18 (optional support for the control cab), and then the doubled component itself.

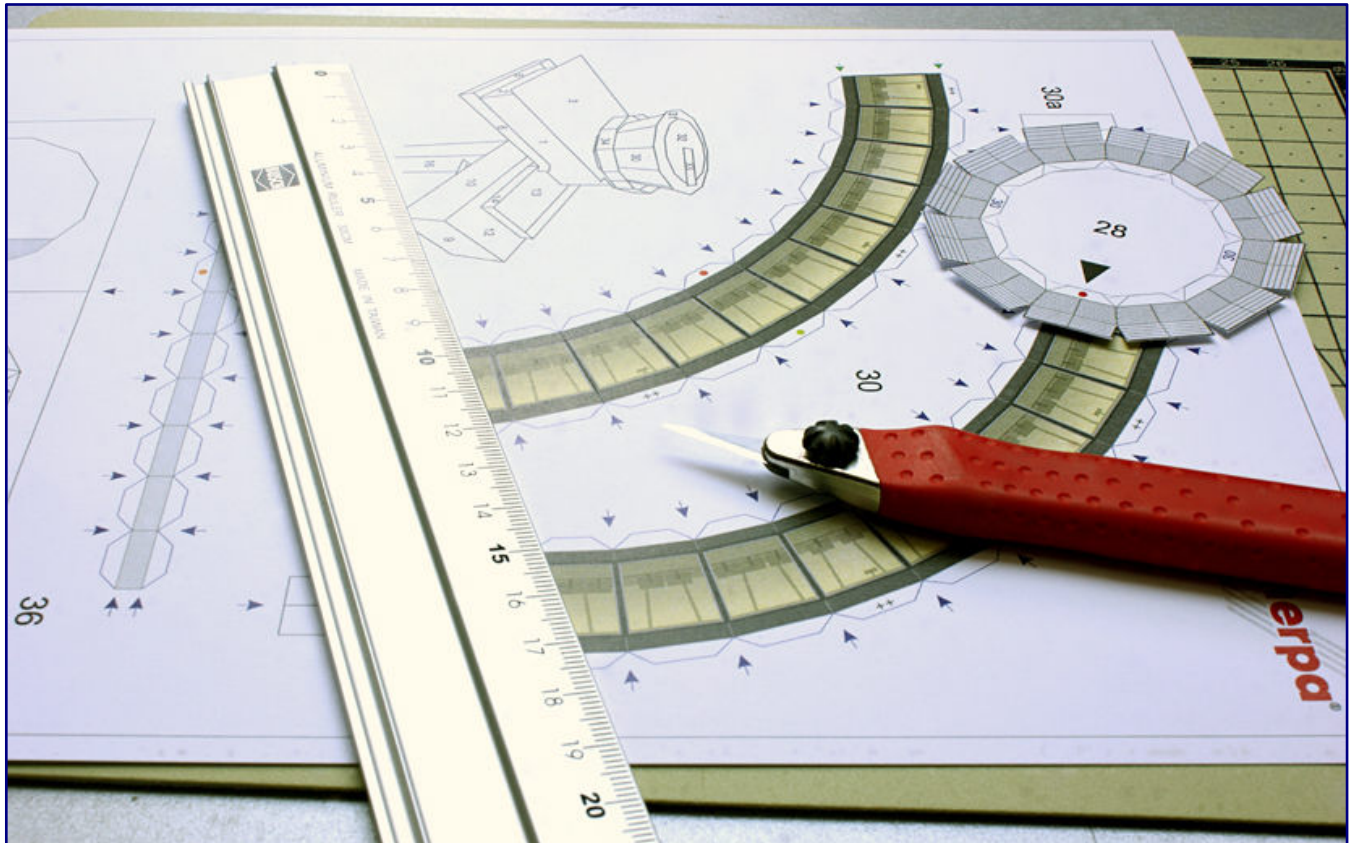
cutting mat until all the preparations have been completed and some parts have been doubled up in accordance with the instructions.



Now, we start scoring along indicated lines for folding the control cab railing that is still to be attached.

Scoring is also necessary from the non-printed underside because we have a circumferential railing in front of us that is also to be doubled on the outside. The manufacturer has printed red lines here, at the end of which the pin is pierced. It now marks exactly from where to where the scored cut should run on the opposite side.

Although the control cab is relatively small compared to some of the previous sections, it consists of many parts, and, as explained, makes for most of the work steps. When we have also completed this task, all five sections lay neatly finished in front of us. The next step is to assemble them, which we do not do at random.



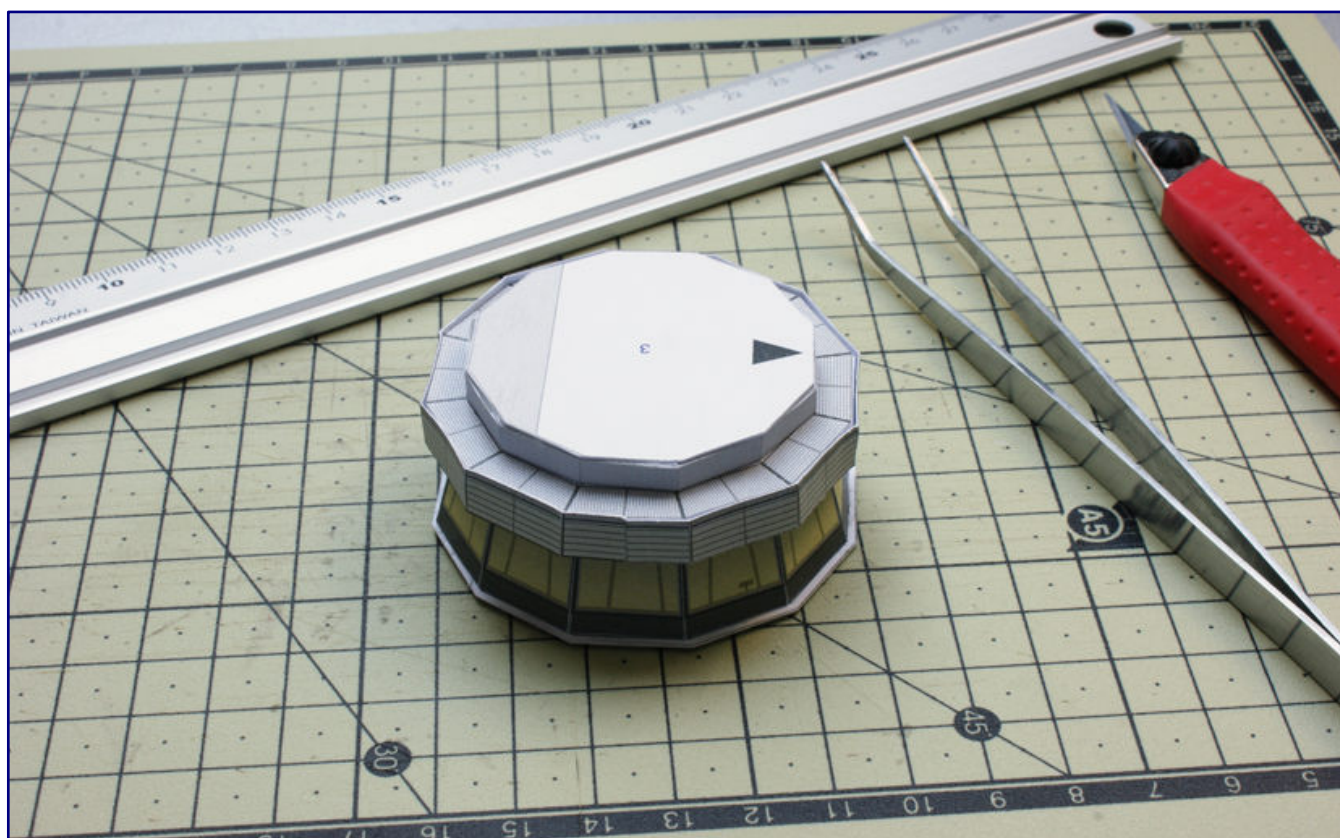
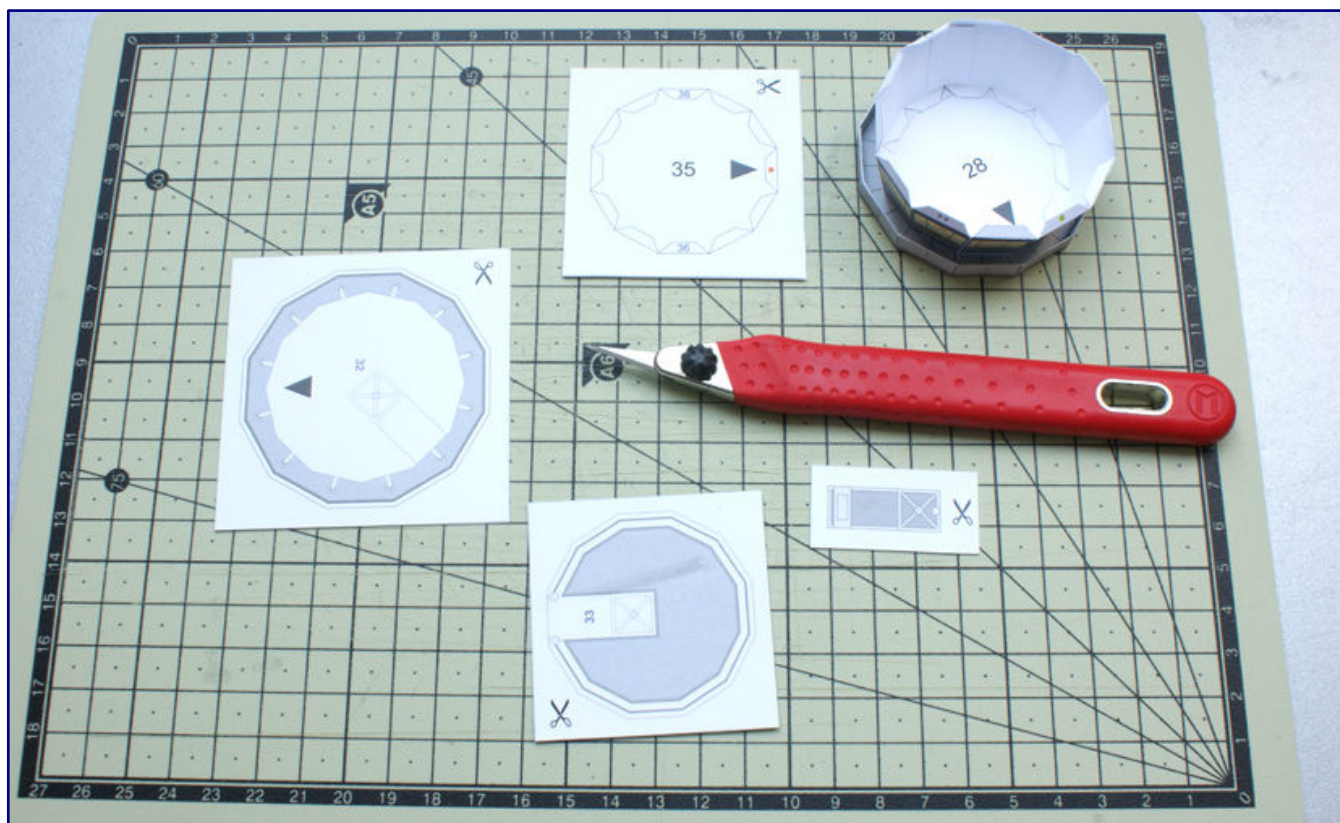
More often than with any other component, the steel ruler must be repositioned for the many short cuts and carvings. The twelve-sides of the control cab require a lot of time, but will later also be the component that first catches the viewer's eye.

The instructions recommend a fixed sequence, which we largely stick to, and which works well. This ensures that it is easy to handle and the tower, which only consists of one layer of material, is not repeatedly stressed by several pressing processes.

Firstly, the platform (A) is connected to the gondola section (B). The control cab (E) can then be glued onto this assembly. Its position is at the top of the platform. Deviating from the plan, we now glue the tower (C) to the base building (D) and align it exactly vertically.

We now have two large assemblies in front of us, which we leave to dry before joining them together. It is important not only during these steps to follow the instructions with numbers and marking points so that all the parts come together in the right place and in the right way.

continued on page 44



The roof of the control cab consists of no fewer than four parts (photo above), all of which were doubled up, as indicated by the scissors symbol for the final cutting. The floor of the control cab (photo below) also poses challenges, as the ring base is not higher than the width of the gluing flaps to be folded. It is also important that the alignment of the base (arrow marking) is observed so that the control tower can be glued correctly to the platform.



The sections are joined together to form two main assemblies (photo above) largely according to the instructions. After drying, they can also be joined, and the control tower takes on its final shape. The very last step (photo below) is to glue the angled support between the tower shaft and the gondola section with a steady hand and a little glue.

Now comes the final step of our project: we place the support between the gondola and the tower. We do this as a dry run to check how accurately this part can be placed on both line markings. After all, the thickness of the glue joint at both ends only corresponds to the material thickness, i.e., the thickness of two sheets of postcard paper.

However, this should be possible and therefore we do not want to do without this important component. We carefully apply a thin layer of Uhu all-purpose glue to the thin edge so that none of it gets onto the surface above or below. No sooner said, than done – it's easier than we thought.



The control tower is finished and has taken up its duties on the new apron slabs. Now we can finally dream of summer, sun and sea and forget about autumn with its miserable weather!

Our first paper model building project is complete and after the obligatory drying we are delighted with the result. As the sun shines and we can take good photos in the natural midday sun, we assemble an airport scene with the new apron plates, for which this control tower has been laid out, and other accessories to create a holiday atmosphere.

As it gets cooler outside, the days get shorter and often rainy and stormy, we daydream of warm summer destinations elsewhere which are only a plane ride away...

Kit supplier:

<http://www.herpa.de>

Adhesive and tools:

<https://www.uhu.com>

<http://www.peter-post-werkzeuge.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.

Im Bergischen Land

Der Balkanexpress

Fällt der Begriff „Balkanbahn“ oder „Balkanexpress“, dann denken viele gewiss an Fernzüge mit Fahrtzielen in Südosteuropa. Doch weit gefehlt, denn hier geht es um die Geschichte einer Nebenbahn im Bergischen Land, die von ihren Anwohnern liebevoll diesen merkwürdigen Namen erhielt. Ein spannendes Buch beleuchtet deren Geschichte, die eingesetzten (und Zetties wohlbekannten) Fahrzeuge, die Betriebswerke und den leider unvermeidlichen Rückbau.

Kurt Kaiß
Der Balkanexpress
Die Eisenbahnverbindung Remscheid-Lennep – Opladen
aus der Reihe „Rheinisch-Bergische Eisenbahngeschichte“

Verlag Astrid Kaiß
Leichlingen 2022

Gebundenes Buch
Format 15,3 x 21, cm
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ISBN 978-3-9818345-3-6
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oder im Fach- und Buchhandel

Bitte nicht falsch verstehen – der hier behandelte „Balkanexpress“ verkehrte nicht etwa in Bulgarien oder Mazedonien, sondern in Nordrhein-Westfalen! Wegen ihrer Lage abseits der Magistralen erhielt die Zweigstrecke von Opladen hinauf nach Remscheid-Lennep diesen Beinamen, der Ortsunkundige vielleicht etwas in die Irre führen mag.



Der Eisenbahn-Experte Kurt Kaiß aus Leichlingen (Rheinland) hat in der Hochwasserkatastrophe 2021 viele seiner Werke verloren. Dieses Stück Zeitgeschichte stellte er erneut zusammen. Die gegenüber der Erstauflage aus dem Jahr 2000 um 88 Seiten erweiterte Neuauflage behandelt in großer Ausführlichkeit die 1881 eröffnete Verbindung zwischen den früher bedeutenden Bahnknoten Lennep und Opladen.

Die kaum 30 km lange Strecke war zu Beginn ihrer Entwicklung ein wichtiger Impulsgeber für die industrielle Entwicklung des bergischen Raums. Der Güterverkehr entwickelte sich daher beachtenswert, jedoch konnten die erwünschten Zahlen für das Beförderungsaufkommen im Personenverkehr nie erreicht werden. Trotzdem erfolgte in den Jahren 1908 bis 1910 sogar ein zweigleisiger Ausbau der Strecke.

Im Jahr 1958 wurde dann aber schließlich der Rückbau von zwei- auf den eingleisigen Betrieb durch das Bundesverkehrsministerium beschlossen, verbunden allerdings mit der gleichzeitigen Aufwertung zu einer Hauptbahn.

Zum Sommerfahrplan 1983 wurde die Strecke jedoch wieder zu einer Nebenbahn degradiert und der Mittelabschnitt zwischen Wermelskirchen und Hilgen sogar stillgelegt. Die restlichen Schienenwege wurden schließlich 1991 (Opladen – Hilgen) und 1994 (Lennep – Wermelskirchen) außer Betrieb genommen.

Der Autor nimmt uns mit auf eine Zeitreise, verbunden mit vielen historischen Fotos und Gleisplänen. Im wahrsten Sinne des Wortes werden jeder einzelne Bahnhof und auch die unscheinbaren Haltpunkte im Buch erwähnt. Das Lesen der sehr detaillierten Inhalte ist wie eine Reise mit dem Schienenbus: Wir klappern die Strecke mit nicht zu hoher Geschwindigkeit ab, bis wir am Ende der Fahrt in Opladen ankommen.

Natürlich kann der Schreiber dieser Zeilen nur den Versuch starten, das Werk von Kurt Kaiß höchst objektiv zu rezensieren, immerhin wohnte er zur Schulzeit in unmittelbarer Nähe zur „Balkanstrecke“, kannte diesen Schienenweg in seiner ganzen Ausführlichkeit mindestens seit seinen ersten eigenen Exkursionen 1968 und wäre damit vorbelastet.

Der einheimische oder auch ortskundige Leser könnte nun auch mit seinen alten Familienfotos aus der Kiste weitere Aspekte an Herrn Kaiß liefern, dann würde sich das Buch aber leider in den Details verlieren. Diese Neuauflage ist inhaltlich mit Wort und Bild ein fein dosiertes und mit hoher Sicherheit auch das finale Werk zum „Balkanexpress“.

Die Bildauswahl ist gerade auch für den Modellbahner in den beliebten Epochen III und IV sehr entgegenkommend, denn hier reizt auch der Nachbau eines Streckenabschnittes in seinem favorisierten Maßstab besonders; als Zugabe gibt es lobenswerterweise gar reichlich Übersichtsskizzen und Bahnhofspläne.

Kurt Kaiß führt den Leser nicht nur wortreich und, wie schon angeklungen ist, detailliert durch das Buch. Er beherrscht die hohe Kunst, seine menschliche Note in den Text einzubringen, manchmal auch gepaart mit einer gepflegten Kritik gegenüber, sagen wir, Entscheidungsträgern.

Sogar der heutige Zustand der stillgelegten Strecke und eine mögliche Wiedergeburt werden umfangreich beschrieben. Mit kleinen Bahngeschichten von gestern schließt dieses äußerst empfehlenswerte Buch letztendlich noch amüsant ab.

Sollten sie zufällig in der Gegend sein und möchten den nun auf der ehemaligen Trasse vorhandenen Rad- und Wanderweg benutzen, nehmen sie dieses Buch mit in das Reisegepäck, es lohnt sich! Allein schon die sehenswerte Landschaft links und rechts des Bahndamms, wird Sie begeistern.

Wie mag wohl die Fahrt und Aussicht in einem VT 98 oder ETA 150 ausgesehen haben? Mit der Lektüre im Rucksack, die immer wieder auf der Fahrradfahrt herangezogen wird, wird all diese Nostalgie lebendig und nachvollziehbar.

Gewiss versprechen wir nicht zu viel, wenn wir behaupten, dass es nach der Rückkehr in den Fingern juckt, dieser in Teilen idyllisch wirkenden Strecke ein modellbahnerisches Denkmal zu setzen. Übrigens diene sie auch dem AW Opladen immer wieder dazu, frisch reversionierte Fahrzeuge einer Probefahrt zu unterziehen. Das erhöht den Reiz fürs Modell noch mehr.

Selling contact:
Ra10ak[at]freenet.de

Dampfverkehr an der Staatsgrenze **Die Grenzgänger von einst**

Die Dampfzeit-Filme von Ton Pruissen, die bei der Nord Süd Express GmbH verlegt werden, sind für uns die Filmentdeckung der letzten Jahre. Mit Teil 7 wird diese Erfolgsreihe auf bekanntem Niveau fortgesetzt. Gefertigt wurden die historischen Aufnahmen wohl in ganz Deutschland. Für die jüngste Ausgabe reisen wir nun in die niederländisch-deutschen Grenzregionen und werden auf gewohnt hohem Stand informiert und unterhalten.

Ton Pruissen
So war sie damals, die DB – Teil 7
Vom Niederrhein nach Rheine

Nord Süd Express GmbH
Hattenhofen 2024

DVD-Video
Bildformat 4:3
Tonformat Dolby-Digital 4.0
Sprache deutsch
Laufzeit 50 Min.

Best.-Nr. 101008
ISBN 978-3-949665-24-0
Preis 16,80 EUR (Deutschland)

Erhältlich direkt ab Verlag
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Zuletzt vor zwei Monaten haben wir hier einen Dampflok-Film von Ton Pruissen vorstellen dürfen. Es ist einfach unglaublich, welch einmaliges Filmmaterial dieser Eisenbahnfreund aus den Niederlanden auch fast fünfzig Jahre nach dem Dampflokabschied noch zu Tage fördert.



Seine neueste DVD erschien Ende Mai dieses Jahres und reiht sich nahtlos in die Reihe „so war sie damals, die DB“ ein. Dieses Mal entführt uns Ton Pruissen in die Grenzregion zwischen den Niederlanden und Deutschland, weshalb auch die Grenzbahnhöfe im Fokus stehen.

So sind auch dieses Mal wieder spannende Filmmomente garantiert. Wie schon gewohnt, stammt das eingesetzte Bildmaterial nicht nur vom Produzenten selbst, sondern auch von befreundeten Filmbegeisterten, die teilweise auch gemeinsam mit ihm auf Fang waren.

Ebenso einmalig ist auch bei diesem neuen Film der hohe Digitalisierungs- und Nachbearbeitungsaufwand für die analogen und nun mal schon alten Zelluloidstreifen. Jedes Mal sind wir gespannt auf das Ergebnis, das stets eine bestmögliche Qualität von Bild und Ton hervorbringt, die einst üblichen Bildstörungen fast auf Null reduziert und dennoch nicht seine Authentizität einbüßt.

Neben den besonderen Motiven und auch seltenen Dampflok-Baureihen ist das die entscheidende Stärke bislang aller von der Nord Süd Express GmbH verlegten DVD-Filmdatenträger. Bekannt sind die wiedergegebenen Szenen durch die Reihe auch in diesem Fall nicht.

Der Verlag beschreibt den Inhalt der DVD selbst wie folgt: „In dieser Zusammenstellung historischer Eisenbahn-Filmszenen lässt Ton Pruissen die Dampflokzeit in der deutsch-holländischen Grenzregion

zwischen Niederrhein und Rheine wieder aufleben.“ Beschrieben werden die verarbeiteten Sequenzen folgend als authentisch vertonte Originalaufnahmen aus den sechziger und siebziger Jahren.

Tatsächlich ist das aber nur eine sehr verkürzte und bescheidene Zusammenfassung. Gefunden haben wir auch Aufnahmen aus dem Jahr 1954, sonst hätten keine niederländischen Dampflokomotiven mehr Eingang finden können, und einen Schlusstrich Ende 1977 mit den kalt abgestellten und vieler Teile beraubten Dampflokomotiven im Umfeld des Bw Rheine.

Auch inhaltlich erleben wir die ungeheure Themenbreite einer filmischen Rundreise: Sie beginnt in den NS-Grenzbahnhöfen Venlo, Arnhem und Hengelo und führt jeweils über die Grenze in die nahen Bahnhöfe auf deutscher Seite. Dabei passieren wir auch bekannte Unterwegshalte wie Kaldenkirchen, Schüttorf oder Salzbergen und erleben die Kleinbahnen Rees–Empel und Wesel–Rees–Emmerich.

In Emmerich, Wesel, Rheine, aber auch dem mitten im Ruhrgebiet liegenden Bw Wanne-Eickel erleben wir weitaus mehr Baureihen, als die DVD-Hülle ausweist. Notiert haben wir uns die Baureihen 01 Neubaukessel, 03, 03¹⁰ Neubaukessel, 011, 012, 23, 38, 41 (mit Altbaukessel und als 042), 44 Kohle und Öl (auch als 043) sowie 50 und 78.

Doch damit ist das Repertoire noch lange nicht erschöpft. Bei den NS tauchen auch elektrische Triebwagen, ein „Hondekop“ (Hundekopf) und die Reihe 100 auf, bei den deutschen Fahrzeugen sind die V 200⁰, Köf 2 oder die V 100 zu nennen. Die wenigen Farbsequenzen dieses Films gelten der Baureihe 012, 104 und 110 (Bügefalte) und stammen aus Rheine.

Dort sind rund 20 der insgesamt 50 Minuten Laufzeit entstanden. Im Vergleich zu vielen anderen Angeboten stammt der Schwerpunkt aber schon aus der Zeit, bevor Rheine die Eisenbahnfreunde in Scharen anzog. Deshalb erleben wir vor allem mit der 03 und neubekesselten 01 eben die Schnellzugmaschinen, die sonst nicht im Film zu erleben sind.

Großer Dank gebührt Ton Pruisen wegen der Aktualität in Bezug auf unsere Spurweite auch für die Einsatzdokumentationen des ETA 150 und ESA 150, die zeitweise ebenfalls in Rheine beheimatet waren. Sie liefern uns, wie auch das zeitgenössische Bild bunter Güterzüge und an Personenzüge angehängter Güterwagen wertvolle Ideen und Anregungen für die Modellbahn.

Auch als Regisseur hat der Produzent gute Arbeit geleistet. Abwechslungsreiche Perspektivwechsel lassen das Betrachten zu keinem Zeitpunkt langweilig werden. So blicken wir auch auf die Arbeit in den Lokschuppen oder schauen aus dem Haus des Drehscheibenwärters auf die zu wendende Lok.

In bewegten Bildern festgehalten wurde auch weiteres Personal beim Restaurieren der Dampflokomotive oder beim Schichtwechsel. Selbst Foto- und Filmfreunde tauchen immer mal wieder vor der Kamera auf und erinnern uns an die vielen Jahrzehnte, die zwischen Aufnahme und Ansicht liegen.

Selbst seine Freundin hat er kurz beim Betriebswerk-Besuch gefilmt und betont, dass er ihr seine große und lebenslange Liebe in Form der Dampflokomotive vorgestellt hat. Kurzerhand hielt sie dann auch ihn vor einem der von ihm so bewunderten Stücke fest, während er betont, dass sie diese Leidenschaft immer mitgetragen hat.

So findet ein in Bild und Ton guter, inhaltlich gekonnt arrangierter und auf jeden Fall spannend aufbereiteter Film ein beinahe schon romantisches Ende. Freilich wird das erst beim eigenen Anschauen lebendig und greifbar – deshalb sollten Sie ihn keinesfalls im Regal stehen lassen!

Publishing pages:
<https://www.nordsuedexpress.de>



Modellbahntage im Lokschuppen Hochdahl

Für große und kleine Modellbahnfreunde viel zu entdecken.

Präsentiert werden Eisenbahnanlagen
von Modellbahnclubs und -freunden aus
Erkrath, Düsseldorf, Wuppertal, Köln, Mettmann und Hochdahl.

Anlagen und Modelle in verschiedenen Spurweiten
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Eintritt 2 Euro für Erwachsene.
Jugendliche ab 14 Jahre zahlen 1 Euro
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unter 14 Jahren ist der Eintritt frei!

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.

To the special Z gauge exhibition in Schramberg:

I would like to thank you for your renewed advertising in the August magazine for the Schramberg Railway Museum.

During my frequent visits to Schramberg, I was able to see for myself that the layout works well there. In the meantime, the latest generation of Märklin trains are being used, which run their routes without any problems – and above all at a respectably slow speed. This is due not least to the good support provided by the staff.



Photo: Eckard Jehle

I am always surprised that the thirty-year-old system still holds up so well in continuous daily operation – which has never happened in my case!

Eckard Jehle, Pfinztal

Reader's impression of the ETA 150 from Märklin:

In **Trainini®** 8/2024 the following sentence was written about item no. 88250 (Märklin): “We have also found some weaknesses and requests for improvement (...)”

An impression or wish for improvement on my part would be:

1. The light should be off in the driver's cabs facing each other in tandem operation (see photo).
2. The downpipe under the toilet at the ESA should (perhaps) be fixed with a drop of glue.



This is how our reader imagines a correctly switched-off light in the right-hand railcar section when the driver's cab is not occupied.
Photo: Hartmut Schnittjer

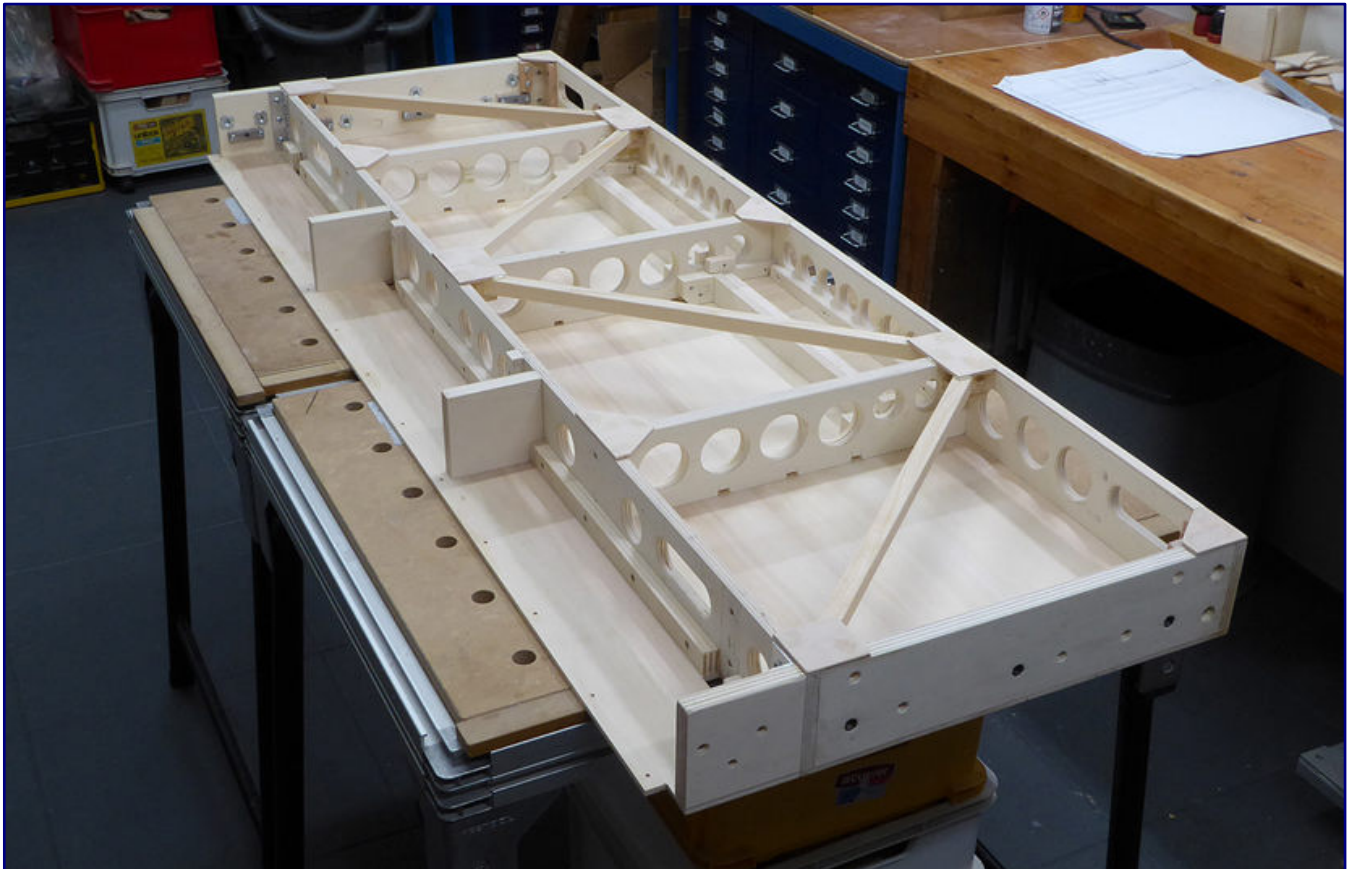
Another craft tip: If the downpipe is turned round, it can be used as a siren on buildings.

Hartmut Schnittjer, by E-Mail

Reader tip on 'The foundation of every system' (Trainini® 8/2024):

In **Trainini®** 8/2024 it shows how to construct a system substructure in the familiar way, as an open box construction on one side. The disadvantage of this construction method for transportable systems is that an open box construction warps easily, unless it is constructed very heavily or with relatively high sides.

I am therefore using a new construction today. As I have previously built the same substructure with the same dimensions as a classic box construction, I can make a good comparison. Despite the rather heavy construction (18 mm plywood with 9 mm decking, high sides and cross joints as well as fixed corner joints), the old construction could still be twisted, in my opinion too much for the planned structure.



This proposal for a torsion-resistant system box has already proven itself in practice with our reader and also remains moderate in terms of weight. Photo: Reinder Rutgers

The new construction is around 40 % lighter and de facto torsion-free. This is achieved by means of diagonal bracing made of 18 x 18 mm wooden bars (see photo). These are cut exactly to size and glued in place using connecting plates and construction wood glue.

If for some reason, for example because the system is very vulnerable or is often transported, you want a very stable or very light base, I can only recommend this construction method!

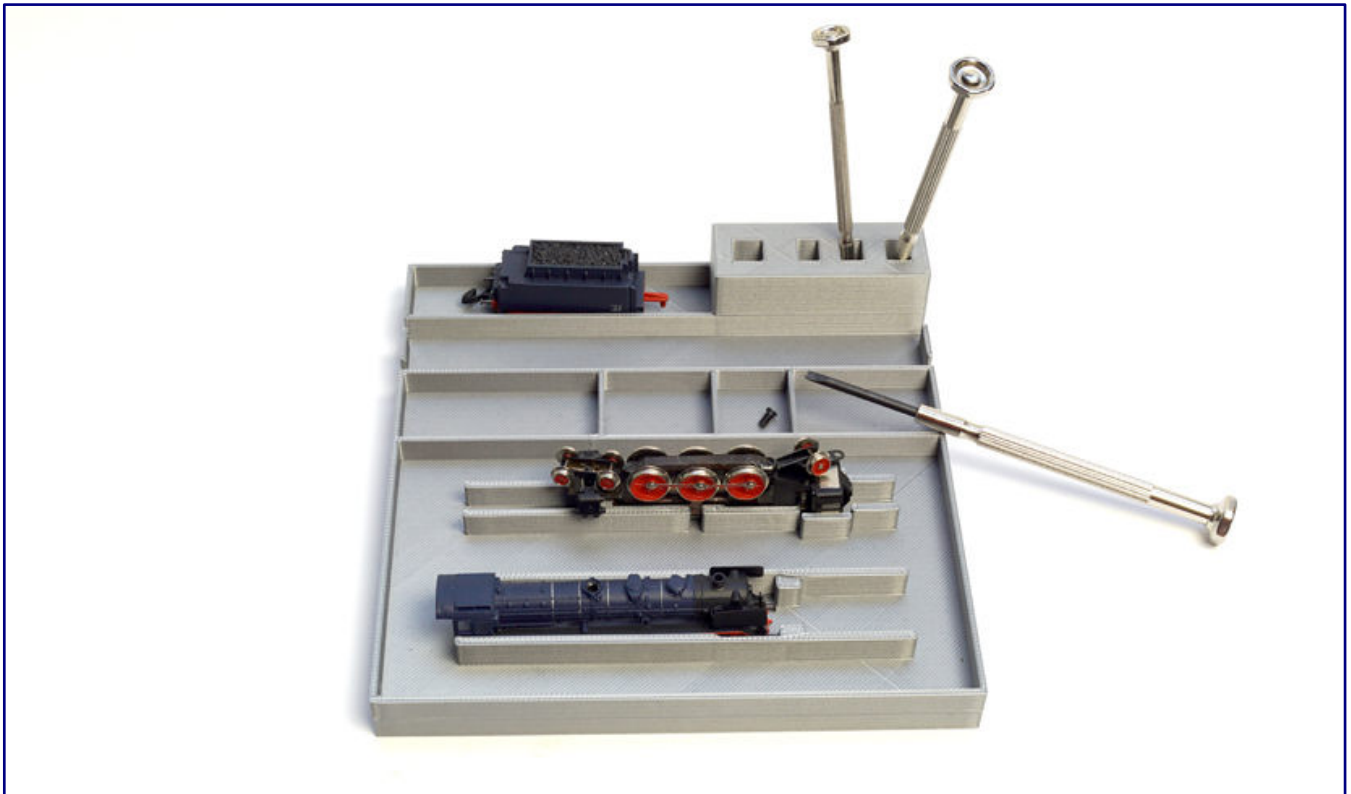
Reinder Rutgers (Nederlands (Netherlands)), by E-Mail

Editor's reply: We are delighted and thank you for this valuable piece of advice, which will certainly help many readers with their installation projects. After all, the series in which the reference article appeared is aimed primarily at beginners and those returning to the sport.

Practical maintenance aids from Simateck:

Michael Smolinski has been offering various work and workshop plates through his company Simateck for several months now. They are intended for maintaining and cleaning various Märklin Z-gauge models. They are currently only available via the eBay sales platform, where he can be found under the seller name 'torsysteme24-shop.'

What all tools have in common is that they are intended to fix entire locomotives or assemblies of them in a defined position so that the model railway enthusiast can carry out important work on them using both hands.



This photo shows the original and closely modelled version of the Simateck maintenance plate. It is suitable for various steam locomotive models constructed on identical or very similar running gear. A modular system is now available, which we intend to present in a detailed practical report at a later date.

These valuable helpers have evolved from model-specific components into a modular interchangeable system on widely usable base plates. If the customer is satisfied, their own system can be further expanded to save costs.

The impetus for this came from his own experiences: The dream of having your own model railway means that your own fleet of vehicles grows without getting the necessary run-out. Dirt and gummy lubricants get on the small models and the need for cleaning and maintenance is immediately apparent.

Too few hands and models that tip over and then partially or further disintegrate can cost nerves. Something needed to be done about this. It quickly became clear that the central holding aid could also be usefully supplemented by small parts compartments or tool trays.

The company's own development goal is therefore to build a suitable insert module for every Märklin model in the future and thus expand recurring locomotive maintenance not only in the personal working environment.

And that's why we'll be taking a closer look at it in the near future, so that we can then demonstrate in detail how to work with these aids as part of our maintenance and care series.

New autumn products from Märklin:

Märklin announced the new autumn 2024 models shortly before the editorial deadline. The 40-page brochure also includes some models for our gauge. However, the new steam and cleaning distillate, which can also be useful as a cleaner for our tracks and models, should perhaps be mentioned first. It is available in bottles of 50 ml (item no. 02422) and 250 ml (02423).

For the MHI, Märklin is using an earlier Bundesbahn model train: the Rheingold from 1962, pulled by the cobalt blue and beige Bügelfalte E 10¹² (88415), which, unlike the prototype locomotive, has a handle bar running around the front, which would have been corrected with a changed road number from 1963. We consider what the manufacturer sees here as a compromise to be a mistake (which can easily be rectified by the customer).



This Rheingold appears in two car sets (item no. 87284 & 87266) as well as the separately available locomotive (88415) as a special series for the Märklin dealer initiative. Photo: Märklin

The six-car train in identical livery is divided into car sets 1 (87284) and 2 (87266). The first contains the DSG WR4üm-62 hump dining car as well as one Ap4üm-62 large-capacity car and one Av4üm-62 compartment car. Because the train is not complete without the AD4üm-62 observation car, we find it together with two other Avüm-62s in the second package.

As with the locomotive, Märklin ignores the chosen shape of the glass dome here, which matches the examples built in 1963 for the Rheinfeil. They did not have the 'Rheingold' lettering under the lookout area that is to be printed here, but they were also used in the Rheingold runs. All of the cars are equipped with close couplers.

The 'Sparkling Wine Transport' boxcar set (82553) consists of two factory-patinated GI Dresden cars and is for Era II. The light-coloured sides with the advertising for Kessler-Sekt GmbH from Esslingen are reminiscent of an earlier Märklin museum car.

Fans of Era IV will be treated to two new products. First of all, the class 038 steam locomotive with tub tender (88909) should be mentioned for friends of the German Federal Railways. It continues the bronze investment casting series and appears for the first time with three domes on the boiler.



The bronze precision casting gives us Zetties an interesting mould variant of the Prussian P8 as class 038 with tub tender and Indusi equipment (88909). Photo: Märklin

The induction box protruding from the right side of the cab and the reproduction of the Indusi locomotive magnet, also on the right side, are also striking. Technically, the locomotive, like the previously mentioned crease, follows the current Märklin state of the art.

The Reichsbahn, which was located across the German-German border at the time, received a steam snow blower with coal tender (87360) for its fleet. The classification in the number range of the passenger coaches makes it clear that it appears without an accompanying



The Henschel steam snow blower (87360) appears individually with the DR markings for Era III. Photo: Märklin

locomotive, which can therefore be added, at will. As with the earlier editions, the snow blower wheel is electrically powered.

Even Era VI has not been forgotten by Märklin. The Vectron now appears as the ČD-Cargo class 383 electric locomotive from the Czech Republic (88235). This still very young design bears an advertising imprint of its railway administration, Märklin sees it as a draught horse for the container wagons from the wagon display delivered a few months ago.

Great new figures from Amsterdam:

Three new figure packs from Artitec (<https://artitec.nl>) have arrived from Amsterdam. Three 'Carpenters 1920 - 1990' (item no. 5220002) can now get to work with the four 'Industrial shunters' (5220005). They will undoubtedly cut a fine figure thanks to their authentic postures, good detailing and successful application of paint.



Artitec delivered three new figure sets in September: 'Carpenters 1920 - 1990' (item no. 5220002; left), 'Industrial shunters' (5220005; centre) and 'Tractor driver' (5220006; right). Tractor and hay wagon are not included with the figures.

This also applies to the three 'tractor drivers' (5220006), which were also delivered a little later. These seated figures are primarily intended for Artitec models, but will certainly also be found on other models in the future and liven them up in the same way.

Asoa announces farewell:

Klaus Holl and his brand Asoa (<https://asoa.de>) are not only well known to gauge 1 enthusiasts. He has been offering ballast and other modelling materials for almost all sizes for 38 years. However, for reasons of age and health, this will soon come to an end, as he announces on his own website.

He is proud to have made a small contribution to the enormous development in landscape design. With such modest words, the company thanks its customers and sales partners and asks them to stock up again if they have any existing requirements.

Only the sale of accessories for gauge 1 will be continued until the stocks of ballast and other design material are exhausted. Previously, as many products as possible were produced from existing stocks and stored, in order to sell them off gradually.

We regret this step, but we can certainly understand it. We wish Klaus Holl and his staff all the best for the future and, above all, good health.

Autumn new products also at Faller:

The kit and accessories supplier Faller (<https://www.faller.de>) from the Black Forest has also presented autumn new products. In addition to various accessories, two new kits for our scale are also included.

The five-stall roundhouse 'Freilassing' (item no. 282725) is the highlight of the new products awaiting customers. With its sandy yellow and white façade, it draws attention to itself and at the same time locates itself in Bavaria.

Its ridge turrets and side and rear windows liven up the appearance and follow the listed original, which is now home to a railway museum (lokwelt.freilassing.de) and also houses vehicles from the Deutsche Museum in Munich. Surprisingly for us, this new mould is a plastic kit that fits the divisions of the Märklin turntable and can accommodate steam locomotives up to 120 mm in length.



The main novelty for autumn 2024 is the five-stall roundhouse 'Freilassing' (item no. 282725), a classic polystyrene kit. Photo: Faller.

The hard cardboard kit of the sawmill (282751) is the colour version of a product that was released a few years ago, which looks very appealing and harmonious with beige-filled compartments in the chassis and red-brown shutters. The water wheel, dog kennel and wooden elements complete this range.

Island moss is available in the colours green (170431) and olive green (170432) in 50 grammes each for designing layouts. This relic of landscaping from the seventies and eighties can still achieve good results today if it is suitably flocked. Faller now also offers its rock foils in DIN A3 sheets in red-brown (171803) and light grey (171804).

The brochure also lists four adhesives that can also mean a product change: Expert all-purpose adhesive (170484; 30 g), ballast grey embedding glue (170662; 260 g), Expert plastic adhesive (170492; 25 g) and ballast adhesive (170481; 100 g). The new 'Guide to layout construction' (190852 | 190852GB) is

designed to cover all gauges, but the content on the Faller car system and in-house funfair modelling will not meet the needs of the Zetties.

AZL continues to deliver in September:

Some locomotive and car models are currently being delivered by American Z Line. The first of these is the EMD SD70ACE of Union Pacific in the historic Katy livery (item no. 63109-4B). The black EMD SD50 (65000-1 / -2), on the other hand, is painted in the livery of its operator Norfolk Southern.



Current deliveries include the BNSF's EMD SD40-2 in swoosh livery (item no. 64210-1; photo top left), the Norfolk & Western's ALCO RS-3 (63322-1; photo top right), Ortner bulk freight wagons for the SCL (905359-2; photo bottom left) and the Rio Grande's 4180 compressed air unloading wagons (916032-1; photo bottom right). Photos: AZL / Ztrack

The EMD SD40-2 from BNSF is offered in the so-called swoosh version with three different operating numbers (64210-1 to -3). The Norfolk & Western ALCO RS-3s returning to the programme in the Phase III design also have a striking appearance (63322-1 / -2).

The 4180 pressurised air unloading wagons, which are available in double (916032-1) and quadruple (906002-1) packs, are now arriving for the Rio Grande. The orange colour of their paintwork makes them an eye-catcher in the goods train wagon formation.

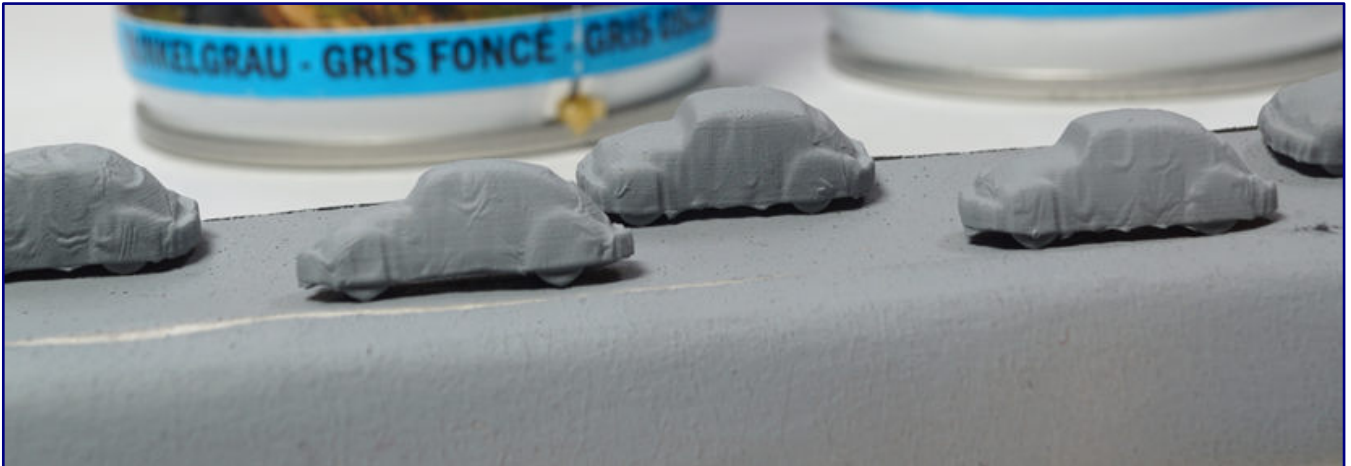
Ortner bulk goods wagons for the Seaboard Coast Line (SCL), on the other hand, are available in two sets of two (905359-1 / -2). The wide-view freight car for the Canadian Pacific also appears with two road numbers (921024-1 / -2). Individually offered are 53-foot containers from CSX Intermodal (95107).

Photos of all new products can be seen on the manufacturer's website (<https://www.americanzline.com>).

MrZtraX is very active again:

Raffaele Picollo from Genoa has been very active since the release of the Märklin Off 52 car transport wagons and has revised his 'Beetle under tarpaulin' planned as a suitable load and developed it to series maturity.

The drape of the tarpaulins and the number of variants shown have been improved once again so that the observer cannot recognise any repetitions. The result is 16 different variants, which means that there is not a single repetition within a Märklin wagon pack.



The drapery of the 'Beetles under tarpaulin' by MrZtraX has been revised once again. The models are now also available. Please note: Our photo still shows the original hand samples, on which the manufacturer's markings have not yet been applied.

The 3D printing solutions are offered as blanks (item no. VWKÄTP-16R) or finished models (VWKÄTP-16P) under its MrZtraX brand (<http://www.mrztrax.com>). At the time of going to press, we had only received samples of the first designs.

We would like to honour the final models with a separate report as soon as they and the 'Opel under tarpaulin' of the Modellbahn-Union are available, in order to give our readers suitable loading and train formation suggestions.

Märklin deliveries in September:

With the class 78 passenger train tender locomotive (item no. 88069), the matching locomotive for car set 87503 has now also been delivered, the availability of which we had already reported. The Prussian locomotive bears DR Era III markings and follows one of the locomotives that were equipped with Witte wind deflectors for island operation due to strong winds.



The DR class 78 for operation on Rügen carried Witte wind deflectors (art. no. 88069). Photo; Jörg Erkel | 1zu220-Shop

These give the steam locomotive a completely new, albeit authentic, appearance. With a bell-type armature motor, directional LED lighting, complete and movable linkage, reproduction of the brakes and sand pipes as well as rail scrapers, it is also technically up to date.

Christmas coach 2024 (80634), a Ci wü 04/05 passenger coach in the basic colour violet with a snowy landscape decorated with fir trees, was also delivered in the current reporting period.

Summer party in Neuengeseke:

On 25 August 2024, the Soest model railway enthusiasts (MES 03 Soest e.V.) celebrated their summer festival with a day of operation on all club layouts. The club's own LGB modular layout, which is for sale, was also on display in the outdoor area in Neuengeseker Heide.

With coffee and cake or sausages from the barbecue, it was a good place to spend a few hours and talk shop. For Zetties, a visit was worthwhile because a large pur-Z segment layout can also be seen, which is being built again as part of the addition of a staging yard. It is operated digitally in DCC format using the z21 control centre from Roco.



181 213-0 'Saar' leaves the staging yard with a container block train during the summer festival and sets off on a journey across the club's large segment layout.

As an addendum to the 20th anniversary of the association last year, we also honoured the event with a feature on **Trainini TV**, which was released on the same day. Most of the sequences were already produced last year, but there was a sound glitch during the accompanying interviews, which is why the film could not be completed in time for the anniversary year.

News from Busch:

Unfortunately, the accessories and design material manufacturer Busch announced a relocation at too short notice to be able to inform our readers in time, which it celebrated with a festive opening ceremony.

The distribution centre and production facility have been relocated from Viernheim to Schönheide, where for the first time there is also a factory outlet for end customers and specialist dealers are shown the perfect presentation of their own products to specialist dealers.

The Aqua-Liner for water design (item no. 7169) was presented as a new product that can also be used for Z scale: simply press on the bottle and mould the pasty mass that emerges into a smooth water surface - that's what the manufacturer promises.



Publishers publish the calendars 2025:

One by one, the relevant publishers are now releasing their various calendars for the coming year. At VGB | Geramond, this is so far only 'Modellbahn-Träume (Model railway dreams) 2025' with outstandingly photographed layouts by Joseph Brandl.

K-Verlag, on the other hand, has already announced the availability of all its calendar editions. In addition to series-related photo calendars or calendars on narrow themes of the prototype, 'Modellbahnen 2025' (item no. 5943) should be mentioned here in particular.

Of course, there will also be another **Trainini Fotokalender 2025** for self-printing. The image selection has not yet been finalised, but publication is planned for around mid-November.

Herpa relocates production parts abroad:

As early as 29 July 2024, Herpa announced that, like most companies in Germany, it was suffering from the weak economy with sluggish consumer spending and reluctance to buy as well as high energy costs. A scenario developed with an economic consultancy should therefore take effect:

“Due to market changes and a significant decline in sales, Herpa Miniaturmodelle GmbH is forced to relocate parts of its production abroad. This strategic decision is necessary to ensure that the remaining production can continue to be efficiently and profitably secured at the Dietenhofen site.”

It was not clear from the information which production parts and to what extent this concerned. However, factory tours at the annual summer festivals suggest that the aircraft collection has not been produced in Dietenhofen in the past either, as only the production of car models was demonstrated there.

It therefore remains open and questionable for us whether production at the German home location will continue to any significant extent after the measures described have been implemented. We also question the focus on the ability to deliver goods during the relocations, as in our experience, announced delivery dates have only been met in a few exceptional cases and have sometimes been exceeded by a year or even longer.

In mid-September, it was then announced that Johannes Kraus had joined the management team at the beginning of the month. He has been with the company for 24 years and is very familiar with the processes and structures, according to reports. The dual leadership is to end on 1 January 2025 with the departure of Dipl.-Ing. Hermann Prinz zu Leiningen in order to take on new tasks in the family business.

Johannes Kraus plans to make Herpa competitive and future-proof through effective production methods, adapted sales structures, and the development of new sales markets.

Snack stand at Yellow Dwarf:

A donut stand (item no. 60485) has been announced by Yellow Dwarf (<https://www.yellowdwarf.eu>) as a new product for September. Such a stand for this pastry can certainly find its place outside the USA, as this sweet is also offered in Europe at fairs and Christmas markets, funfairs or even at local supermarkets daily.

Another farewell is imminent:

Jörg Seitz informed us about the imminent end of his small series production. As can now also be read on the JSS-Elektronik website (<https://jss-elektronik.de>), business operations will end on 31 December 2024.

In addition to various digital components, the product range also included locomotive decoders that understood the MM protocol and were therefore designed to use Märklin components for our scale even in the first digital years of Z gauge. The CAN interface is still available, which is presented and offered on the company website.



Some colour work on the blank is required until the donut stand (item no. 60485) looks like the one in this photo. Photo: Yellow Dwarf

Owner Jörg Seitz ends his information to our editorial team with the 'best thanks for the always great cooperation and the great articles'. We can only return his thanks and are delighted that he will remain loyal to Z gauge and our magazine in his private life.

The Panzer-Shop NL is active again:

'Due to the popularity of the last Z scale new products, we have decided to invest even more time and effort in the Z scale!', says the supplier Panzer-Shop NL (<https://www.panzer-shopnl.de>). A number of new products have now been added to the website, which is currently celebrating its 5th anniversary.

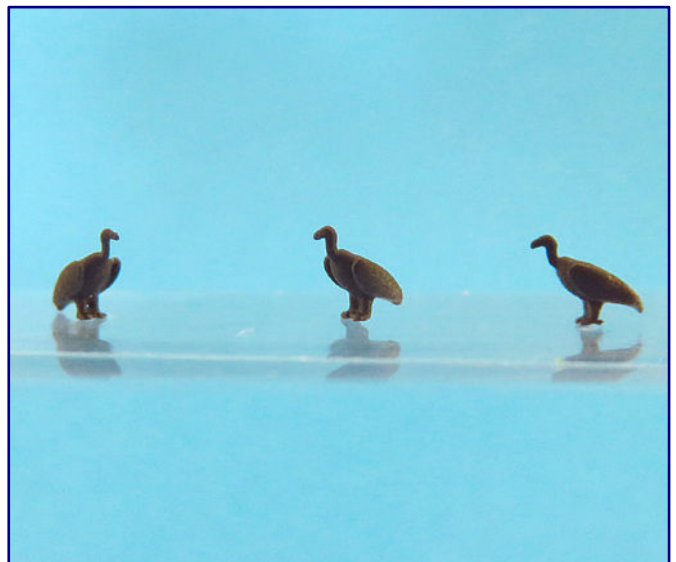
The new products to be found there include civilian and military vehicles: Iveco Magirus 110-17 with flatbed or tarpaulin (for the THW), the Magirus-Deutz M11 as a tanker, the Magirus-Deutz Jupiter in the versions for the fire brigade and as an air force tank.

Other interesting models include the 16-12 fire-fighting vehicle based on the Mercedes-Benz NG ('New Generation'), the classic Unimog 404 with flatbed and the Volkswagen T3. The ZIL-157 lorry with tarpaulin and the Zremb P-402 and Transporta P-32 trailers are more representative of the former NVA fleet.

The M35 2.5t 6x6 lorry and the M5A1 half-track vehicle were widely used by the US military. The supplier assigns the Bandvagn 206 to the military vehicles of the Netherlands. Jagdpanzer IV, Tiger I main battle tank and Sd.Kfz.9 storage crane are modelled on Wehrmacht vehicles. The MAN KAT1 6x6 with tarpaulin is a Bundeswehr off-road lorry.

New animal figures at Klingenhöfer:

'The vulture knows...', it goes through our heads and sometimes we might want to ask him personally in 1:220 scale. That's why there are now 0.4 cm long specimens of these scavengers (item no. Z-TG08) available from Klingenhöfer Miniatures (<https://www.klingenhoef.com>). The griffon vulture was selected as it is versatile and has also been reintroduced to parts of Germany.



The hippopotamus with head on top (left) and three griffon vultures (right) are the latest new products from Klingenhöfer Miniatures. Photos: Klingenhöfer Miniaturen

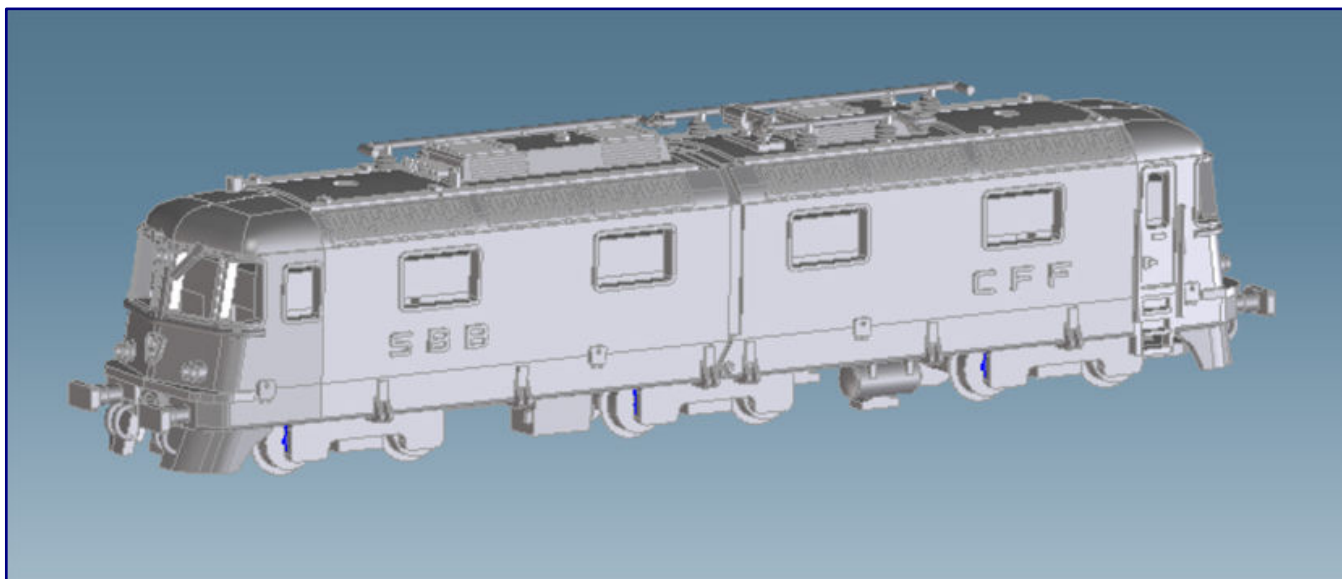
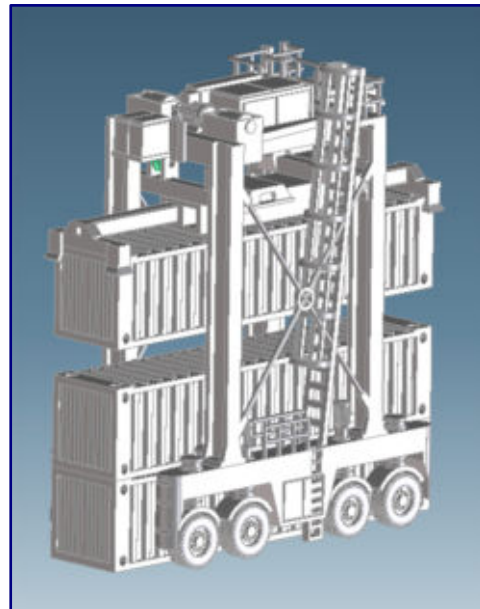
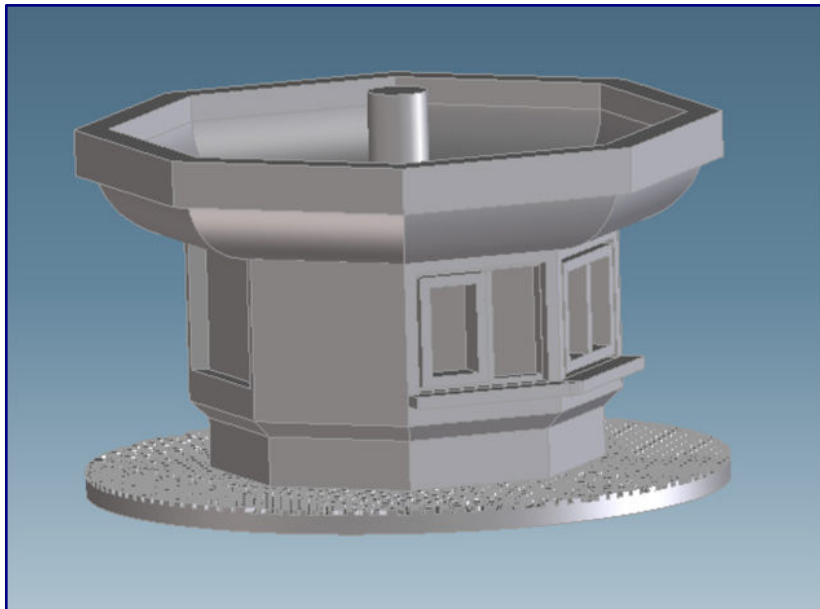
The provider itself encourages creative use: a vulture perched on a gravestone may liven up a cemetery scene or evoke film memories, but in addition to the wild, it can of course also live in a zoo or enrich a bird of prey flight show.

The hippopotamus (Z-TN03-1) is zoologically called a hippopotamus and thus already indicates that it will by no means be sighted in the vicinity of pyramids. The ponderous-looking pachyderm is more likely to be found in a Z gauge zoo, where fences or glass panes ensure the protection of animals and humans. The model holds its head high, but does not show its huge teeth. In fact, these animals can be very dangerous to humans

Also active during the summer break:

The announced summer break is not yet over, as NoBa-Modelle (<https://www.noba-modelle.de>) is already informing us of the first new products that will soon be available. The first is a mushroom kiosk (art. no. 4136 ZR / 4136 ZRF), which has the shape that gives it its name, but should not be confused with the 'milk mushrooms.'

A 'Straddle Carrier' (3202 ZR / 3202 ZRF) is a contemporary shunting and stacking vehicle for shipping containers of various sizes. This is now also new in the programme and is shown with three containers, which certainly illustrate its function.



Mushroom kiosk (item no. 4136 ZR / 4136 ZRF; Photo above left), 'Straddle Carrier' (3202 ZR / 3202 ZRF; photo above right) and the Re 6/6 as a prototype with split locomotive body (5026 ZR / 5026 ZRF; photo below) are the first autumn new products at NoBa-Modelle. CAD representations: NoBa-Modelle

The Swiss Re 6/6 locomotive (5026 ZR / 5026 ZRF) with a length over buffers of 88 mm had a somewhat longer lead time. It is not identical to the Märklin model, but is a prototype with a split locomotive body. In this context we refer to our article (with prototype photo) in **Trainini®** 5/2024.

The locomotive is driven by two adapted Shorty bogies; a non-driven Rokuhan bogie with current pickup is used in the centre of the locomotive to ensure sufficient contact safety.

New Carstens book to be published soon:

On 15 October, the next part of the renowned book series 'Güterwagen Band 10' will be published, which has been gradually covering all types of freight wagons in a structured and well-founded manner for around thirty years. Part 10 will once again be published by Stefan Carstens himself (<https://www.stefancarstens.de>).

This volume, which will soon be available, is now dedicated to the low-loader and carrying beak wagons and thus to a particularly interesting type family in the model, which is capable of attracting the attention of observers. In terms of content, the development from 1869 to the present day is described. Among other things, it focuses on the role of Krupp as a manufacturer and the influence of the energy suppliers.

The distribution partners are still Modellbahn-Union, Lokomotive-Fachbuchhandlung and Asoa. Presumably this title will also appear in the electronic distribution of the Eisenbahn-Kurier.

US shunting steam locomotive has been delivered:

Rokuhan has delivered its 'USRA 0-6-0 Switcher' light switcher steam locomotive to the United States. The patterns for this new product were standardised by the USRA, which existed between 1917 and 1920, and were built by ALCO between 1918/19 in a total quantity of 255 units.

In addition to shunting service, the running axle-less steam locomotives were also at home on branch lines and were used by many railway companies. The Baltimore & Ohio, which had three road numbers in the first edition, owned 40 of them.



The USRA 0-6-0 'Switcher' initially appeared at Rokuhan in the Baltimore and Ohio version. There are three road numbers to choose from, including the 386 shown here (Art.-Nr. T040-1).

There is a choice of running numbers 386 (item no. T040-1), 353 (T040-2) and 365 (T040-3). All three models are identical in construction and are factory-fitted with claw couplers that match those of AZL, Micro-Trains, and WDW Full Throttle. The headlights are illuminated and the smallest passable radius is 195 mm.

As this new product marks Rokuhan's entry into the US market with rolling stock, we will be taking a closer look at the models now that they have arrived in our editorial office. A detailed presentation with a test report will follow here soon.

Trade fair in Friedrichshafen:

From 1 to 3 November 2024, the Friedrichshafen Exhibition Centre on Lake Constance will once again host Faszination Modellbau, an international model railway exhibition with an unchanged concept, which will also once again host a real steam meeting.

Z-Freunde International e.V. will continue to act as the general exhibitor for the Z gauge on an area measuring 14 x 7 metres. What will be on display and whether there will be any premières in 1:220 scale at all was not announced before the editorial deadline.

We recommend that those interested in visiting the trade fair keep up to date with all the latest information on the trade fair website: <https://www.faszination-modellbau.de>.

Modellbahn-Union affected by a fire:

The 'Cars under tarpaulin' in version 2 (item no. MU-Z-A00137) for loading the equally new Off-52 units from Märklin, already announced in **Trainini TV** episode 29, are now available from Modellbahn-Union. This load duo, which is based on historical Opel models, is also available ready-painted (MU-Z-A50137). We would like to present this new product in detail as soon as we are able to do so.



The fire in a hall on the neighbouring property unfortunately also affected the business premises of the Modellbahn-Union, which is why the shop and repair operations as well as deliveries from these warehouses have to be suspended for the time being. Photo: Modellbahn-Union

Unfortunately, the warehouse sales had to be cancelled for the time being and the RTS landscaping seminars cannot take place as long as the building is unusable. The reason for this is the fire in a neighbouring hall on 28 September 2024. Although the fire brigade was able to prevent the flames from spreading to the Modellbahn-Union building, penetrating extinguishing water caused damage to the warehouse, shop, and workshop.

The retailer has therefore decided not to accept any new orders until it is clear which products have been damaged or destroyed. The order function for all items, apart from new products, is deactivated for the time being. Information on current orders will be provided as soon as this is possible and the further course of events can be assessed.

The head office in Issum in the Lower Rhine region, which is also the production site, remains unchanged. Goods produced in-house, which can therefore be offered unchanged, are labelled in green on the company's own website. This also applies in principle to the aforementioned Z gauge new product.

3D printing provider Hoimat:

A relatively new small series supplier for Z gauge is based in Kronshagen. From there, Zhuoya Guan offers various models for Z gauge under the trade name Hoimat (<https://www.hoimat3d.de>), which are produced using 3D-printing.

These include familiar-looking buildings, but also more unusual accessories that are rather rare in our scale, such as the Westerheversand lighthouse or a modern bus stop shelter.

We recommend that interested parties browse through the pages with a focus on their own requirements. As far as we know, this manufacturer is also happy to receive suggestions.

Z-Otti offers three new products:

Hans-Jörg Ottinger attaches great importance to the fact that not only professionals can assemble his kits. The construction is therefore designed so that as many bends as possible are made and it should be possible for anyone to solder the remaining parts.

The basic material of the kits is 0.2 mm thick nickel silver sheet, a detailed photo description is always included. With these basic explanations, we now present two autumn new products: The class 628 / 629 diesel multiple unit has a medium to easy level of difficulty.

Printed bogies with motor and bogie mounts are available for motorisation. Optionally, this can also be achieved with slightly customised Rokuhan parts (Noch 97767 / Rokuhan T011-5).



Z-Otti offers the class 628 / 629 diesel multiple unit in two versions, here a model made from etched parts. Photo: Z -Otti | Hans-Jörg Ottinger

The roof superstructure and fan cowls as well as the exhaust are included as 3D printed parts and are plugged in. The sturdy buffers are turned parts made of brass and therefore do not break off. Professional sliding picture labelling is also available for this model.

This multiple unit is also available as a completely printed body to accommodate those who do not dare to use an etching kit. The brass buffers are also used, and the same running gear parts can also be used.

The second autumn new product is the DR mainline diesel locomotive of the V 180 GFK series, the so-called 'Schlägermütze' (slugger's cap). It has a striking appearance and was the largest diesel locomotive built in the GDR. The model is intended to alleviate the repeatedly lamented lack of East German railway vehicles.



The DR's V 180 in its version with a GRP driver's cab was called the 'slugger's cap.' It is the second autumn new product to be released by Z-Otti. Photo: Z-Otti | Hans-Jörg Ottinger

In this case, the locomotive body is made entirely of nickel silver, while the roof is printed from resin. An exact position is achieved by means of precise mounting openings for insertion. The buffers are also included here as brass turned parts. The running gear of a Märklin-103 can be used for motorisation.

However, the coupling hooks have to be removed because they do not harmonise with the front aprons, which extend far downwards. Curved spring steel wire hooks are to be used in their place.

The offer can be viewed and ordered at <https://zotti.lena-johannson.de/shop>. We are currently considering moving to our own server.

Collector's pack from WDW Full Throttle:

WDW Full Throttle (<http://www.wdwfullthrottle.com>) has put together a new collector's pack (item no. FT-COL70). It consists of two reconstructed 34-foot refrigerator cars that could not be more different in appearance.



These two refrigerator cars were put together to form a new collector's set (item no. FT-COL70). Photo: WDW Full Throttle

One is for the food producer Hormel and stands out with the basic colours oxide red, yellow and green, the other has light blue as the front wall and roof colour with metallic side walls and large lettering 'Ice.'

This type of wagon was developed shortly after 1900 and heralded the era of insulated or refrigerated wagons, which made it possible to transport goods requiring refrigeration over long distances.

Full throttle products are available in Germany from Case-Hobbies (<https://case-hobbies.de>), among others.

Shortly before the editorial deadline:

The last new delivery we would like to consider is the Corail wagons from Azar Models (<https://azar-models.com>).

Compared to last year's announcement, the manufacturer has changed the configuration of its range, but has also switched to a large-scale production process with plastic injection moulding.

We are also highlighting the SNCF Corail carriages because they are not only suitable for domestic use in France and should help to build up a market in our western neighbour. The car type is recognisably different from the usual due to its differently positioned entrance doors and has also reached Germany.



Azar Models now supplied the Corail coaches, here the pack with one 1st and one 2nd class coach (item no. V01-ORP1) in the original livery.

Combinations from this new product also perfectly complement Rokuhan's class 181² electric dual-system locomotive, which is perfectly equipped for long-distance cross-border transport with them.

Azar Models offers packs of two carriages each. 1st and 2nd class (item no. V01-ORP1) and two 2nd class coaches (V01-ORP2). The external impression of the delivery is at such a high level that we want to take a closer look at these models and present them in detail as soon as possible. Azar Models' sales partner in Germany is the 1zu220 shop (<https://www.1zu220-shop.de>).



Azar Models also announced the availability of a building model (BAT001), which recreates a Citroën car workshop, as well as the first in-house starter packs (AZP1 & AZP2).

The starter sets each contain a BB67400 diesel locomotive in a different design, three goods wagons, a Rokuhan track oval and the in-house speed controller.

Photo left:
Two starter packs from Azar-Models with different versions of the BB67400 diesel locomotive are now also on the market. Photo: Azar Models

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