

# Laster & Bagger

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Modelle von Lastwagen, Baumaschinen, Kränen



Mit Wettbewerb

GMTS 1:50  
**Krupp-Dolberg  
D 500 HR**

Eigenbau 1:50

**Scania 141**

**English text**



Comrad 1:50  
Liebherr 36 XXT

Sammlerporträt  
Marcel Dudli

Diecast Masters 1:50  
Caterpillar 769



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# Editorial



I would like to give a heartfelt thank you to all subscribers who have voluntarily rounded up their subscription fees. You are making an important contribution towards "unbiased reporting".

## Already the last one!

You have in your hands the last issue for this year! Time for looking back? Or perhaps you would prefer to look ahead to the coming year? What is clear is this: the virus is stubbornly refusing to quit and still overshadows the world's issues and restricts our freedoms. But all the nicer then that we can retreat to our hobby rooms and pursue our passion. Model construction is a large theme in this issue too. It starts with collector Marcel Dudli, who takes great pleasure in the upgraded lorries he makes, continues with the Scania 141 from René Tanner and shows up again with the Cat DD9G which Thomas Wilk made from a kit, then ends with two diorama reports by Tom Blase and Markus Lindner which could not be more different from each other.

On the other hand we have a continuing scarcity of new models to report on which has to be looked at as an opportunity. For example, a rather exotic excavator model made it on to the title page. It is a very interesting story about the original as told by Ulf Böge.

Let us finally cast a careful look into the New Year, where, until the present, no events have been cancelled. It could even get rather hectic. Look at how many are planned after being postponed for two years and are finally to take place in addition to the regularly held events and meets. The 2022 agenda for collectors could look something like this: the Nuremberg Toy Fair at the beginning of February, Modelshow Europe Ede in March, Model bourse Ebianum in April, Weiach Historic in May, the Mini-Bauma in Sinsheim at the beginning of September and the crowning of the year, the Bauma in October!

I hope that, despite all these events you have enough time for your model building and wish you a lot of fun and entertainment while reading this issue.

Daniel Wietlisbach

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## Marcel Dudli collects and builds

# A hobby room with a house

by Daniel Wietlisbach

Marcel Dudli was born as the third of four siblings and grew up in Kirchberg/SG in Eastern Switzerland. His parents ran a restaurant with attached butcher shop and because of being so close to his parents' business, the youngster originally wanted to be a butcher.

However, a short time later Marcel's future turned toward a different path because only a few hundred meters distant from his home were the shop and yard of a gravel quarry where lorries and machinery were parked and maintained. The quarry's fleet of dumping lorries included three-axle Scania 110s as well as Saurer D290B 4x2 torpedo-front with dumping trailers and, later on, articulated trucks with single-axle dumping trailers. When four-axle lorries were allowed to be licensed in Switzerland, the very first Scania 111 cab-over in the country soon stood in the yard. Shortly thereafter a Saurer D330B 8x4 joined the fleet. At age 8, Marcel could already identify the approaching lorries by their engine noises. The drivers knew the tyke waiting at the side of the road and liked to give him rides.

Not much further away was the very well-known repair shop for uti-

**Once in a while one hears 'His house was planned around his hobby room,' accompanied by a knowing wink. Marcel Dudli was indeed that fortunate, and owns a fantastic collection which is peppered with conversions made by himself ...**

lity vehicles (Larag) which not only undertook service and repair work for several brands of lorries but also made alterations and straightened out bent chassis. During their test drives, it was customary for Larag's mechanics to take a break at 'Schwert,' Marcel's parents' restaurant, and so the youngster regularly listened to professionals talking shop. The restaurant had a good reputation among the drivers and was popular with them. It became very clear to Marcel that his future was going to be behind the large wheel of a lorry.

Together with his friends, Marcel liked to play with large plastic models in his sandbox, in particular with a dumper which they loaded until the axles bent. In the colder part of the year, they played inside using Siku models with white lettering on the black plastic wheels. They were very solid, could handle rough play and had the first rear

view mirrors modeled on a toy lorry. Marcel dreamed of a Scania combination because he felt most strongly about them and still does today.

One day at Larag, a mechanic told the young fan that there now was a shop with Scania models. Of course, Marcel had to see for himself and at the next opportunity he pedaled his bike the 15 km to the shop where he saw it, a Scania in the factory of colours yellow and blue, with canvas top, steerable front axle and even a lifetable third axle; a dream from Tekno! Now Marcel had a new savings goal and soon was able to travel to the shop again, this time with SFr 38 which was the purchase price at the time.

### Job training

The collector didn't particularly enjoy going to school and finished his schooling after the obligatory

eight years, which was still possible at the beginning of the 80s. Marcel was too young to enter as a lorry mechanic apprenticeship. Only after a waiting period of two years would he be able to get one of the very highly desired spaces available, therefore, he decided to train as a roofer first. He was familiar with this profession because his older brother was a roofer and he found that he liked the hands-on work. He completed his apprenticeship at not even 18 years of age and was told to lead a small group of older, but not formally trained roofers. This led to conflicts and heated discussions which, in the end, spoiled his enjoyment of the profession.

Marcel wanted to get his driver's license for heavy motor vehicles as quickly as possible and found a very good driving instructor who supported him. Initially, in 1983, when not even 18 years old, Marcel passed the motorcycle test and he then applied for a learner's license

for a lorry. With a licensed person beside him during the driving lessons, he drove a Mercedes-Benz LP 1113 with a custom-built furniture cargo box. Thanks to these practice drives, the instructor registered him for his test after only two hours of instruction and Marcel passed the exam after only a total of eleven hours of driving.

His first job as a driver, even before he was of age, was with the 'Lagerhaus AG Wil' (today CTW, 'Camion Transport AG Wil'). It was a tightly-run ship. The owner who ran the company didn't allow any tinsel, flags, name tags and other frippery; the vehicles were not supposed to look like circus wagons and the windows should have free vision in every direction. The logistics company began to change its fleet from Scania to Mercedes-Benz. Even though the NG 1932 with its 320 hp, 8-cylinder engine was the more powerful lorry available, the older drivers fought for the older

Scania 110 and 111. Even then, the Swedish lorry was the undisputed 'King of the Road'.

Marcel made trips all over Switzerland, Italy, Germany and Austria and it was quite common that he didn't return from Italy until Saturday to begin his weekend.

After three years he changed employers and was given a DAF 2800 ATI with sleeper cabin; later, he drove a DAF 3300 on his route from Italy to Germany. The radius of his itinerary encompassed Southern Italy to Hamburg. He was away often for two weeks before returning home. After four years, another change in jobs. For his new employer he drove a Volvo F12 articulated truck (1991/92 t) to transport cut lumber to Italy where wood is scarce.

Marcel gave no thought to a hobby like model building or collecting during this time. After marriage at the age of 26, he started a family. Daughter Michelle was born in 1992 and two years later his son Remo arrived. Drivers were not generally paid well. Financial pressures and the long stretches away took their toll on the family life. Despite Marcel changing jobs again and working for the 'Andreas' hauling company in Effretikon (today 'Gatara') at the end of the 90s, sadly, his marriage ended in divorce. Marcel went through a very difficult time but the company supported him throughout. He has driven for them for the last 27 years, currently with a Scania G490 6x2 with a Palfinger truck crane and Jumbo trailer for construction material transports.

Looking back, Marcel says that trips to the Orient would have been interesting for him, but the 'horror stories' he had heard from drivers

### The Collector

Marcel Dudli (56) trained as a roofer and then at just 18 years of age achieved his driver's license for 'heavy motor vehicles' and has been on the road as a driver ever since. Besides collecting, he enjoys the garden and life with his wife, dogs and cats.

He is the father of daughter Michelle (29) and son Remo (27) and since 2014 has been the proud grandfather of his grandchild Leandro. He and his wife Yvonne live in Amlikon-Bissegg in the Canton of Thurgau in Switzerland. He would prefer to make contact with those who would like to visit him and his collection through WhatsApp or SMS at: +41 79 285 02 84.



during their breaks at his parent's restaurant kept him from applying. To compensate for this, there are several models of Orient haulers in 1:50 scale in his collection.

### Collecting

He met his second wife at a company where he regularly picked up loads and the pair married in 2003. At the same time, a driver friend of his, gifted him three models of Volvo lorries in 1:43 scale because 'they did not fit in his 1:50 collection.' The interest was awoken again and soon Marcel accompanied that collector to the specialized dealer Setec HTM. Items on offer and the models shown in display cases enthused him right away and he couldn't leave the store without his first 1:50 model.

It wouldn't be the last one and so his collection grew to about 650 lorries currently. Because there is no special focal point in the collection it displays great variety and is very colourful. There is a special place for lorries that he has seen personally, or even ones that know the driver of. Models that have a history have special meaning for him.

Of course, to discover 'inconsistencies' on such models is especially

annoying. Because of that, the collector soon started to get spare parts from the Tekno parts service department in order to make his models look even closer to the original. He replaced or added things like snow chains and the correct spare wheel carriers and roof racks. Added to that were antennae and connecting supply hoses between lorry and trailers.

Another great discovery was the swap meet in Houten in the Netherlands which the collector visits regularly together with other drivers and collectors. There he once spent two hours at a stand looking through a binder for company lettering sets and he also discovered the kits with precision fitting parts from PKC.

Only two years ago, the collector dared to attempt his first 'really' big conversion which meant that he had to saw a chassis into pieces and assemble it in a new way. The model in question was the Kenworth K100 truck and drawbar trailer set 'Friderici' which he knew as a tractor and trailer set and wanted one to have in his display case. Inspiration for such a conversion has come from the articles by René Tanner in this magazine. He remembers that a great degree of courage was

required before he was able to put the saw to his first chassis. If he gets stuck during the construction he sometimes puts the model aside. Later, when everything is finished and the model stands in front of him, he is jubilant.

His 'personal masterpiece' is the Volvo F1220 'Orient Express' which he discovered in a photograph and absolutely had to build. For the perfect painting of the cabin, he engaged the airbrush experts from the 'House of Color'. Even for them, the yellow-to-red transition of the paint was a challenge. The cabin ended up costing more than the original model but the joy over the completed conversion is worth more than all the money he paid out. By the way, the canvas covers for his alterations are made from a Styropor block on to which he glued paper in the correct colour shade. The luxurious hobby room in the lower floor of his townhouse is 34 square meters, a paradise in size for a collector and model builder. The rest of the basement rooms had to undergo several design changes until everything worked, as Marcel's wife Yvonne remembers.

## Scania 141 with Schelling trailer

# Lamprecht – DAN Transport

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by René Tanner

This self-employed driver was behind the wheel of all Scania V8 types. This story happened about 30 years ago. It was in about 1989 when I last saw this 141er in the LWT (Lastwagen Terminal AG-Truck Terminal Co.), Muttenz. There it had probably gone through Customs Control and started towards its destination. I was almost ‘bowled’ over by the way the unit looked. For Swiss my eyes it was really an eye-popping lorry: painted in a metallic blue with fine, trendy silver stripes it had a very Danish-looking exterior.

Even though I had retained a good memory of it and could clearly see the lorry combination in my inner eye, there remained many questions before I could build the model, questions which only some intense Internet research could answer. I discovered more and more websites and also many more references on social media. One can disagree over the usefulness of this, but if you are interested in old lorries, there one can find numerous pictures from times past. Finally, after I had almost giving up hope, I found a picture of the Scania in question on a Danish website looking just as it came from the factory. And it

**Not much is known about the driver-operator of the model introduced here. He was from Flensburg and for years drove for Lamprecht Transporte, contracted to the Danish DAN transport company located in Basle ...**

got even better because there were pictures of the whole combination leaving the legendary Transitgarden in Padborg. The images were taken by a German driver who worked for a Swiss hauling company in Basle and who also drove on the Scandinavian route.

The original source of the vehicle in ‘as delivered’ condition could no longer be verified but I suspect that it was sold by the Scania dealer in Stilholt in Saeby. Also, I think that the flat deck was a new addition done somewhere in Denmark. I could not find any pictures for the three-axle Jumbo Trailer. Luckily, the German driver had taken a picture of the whole lorry combination and so nothing stood in the way of beginning construction of the Scania.

The vehicles of the Flensburger’s self-employed driver are worth looking at by themselves. The diehard Scania V8 fan began as an Orient

driver on a red 140er after which he changed to the 141 introduced on these pages. Later on, followed a 142er and then a 143 470 closed the list of all the vehicles which he drove. Interestingly, the cabin of his last lorry was painted silver and decorated with blue stripes, very similar to my own DAF and, as I found out in the end, the same paint shop did both our cabins.

### The model

I should put ashes on my head. I confess to being guilty of completely giving in to the 141 hype. One could also cry, ‘Yet another Scania!’ But these models are truly a joy to build and the quality of the Tekno models used for the conversion is first class. For that reason, the Tekno was not only the donor for the base of the 4x2 chassis but also for the three-axle trailer which I decided not to build as a Jumbo

Trailer. I wanted a very heavy version of a twin-tire Schelling trailer because Schelling, based in Basle, made good, solid products during their golden years. In addition to Schelling, Nüssli, from Mellingen, Aargau (Argovie) guaranteed high quality and many Scandinavian drivers swore by the products of both makers.

I covered the separately screwed-on wheel arch stays on the cabin with 0.5 mm plastic sheet stock to generate more width—a small fault of the Tekno model. The pressed glass, fitted corner window panes were relatively rare on the originals; most preferred the glass alternative. These corners were adapted by applying metal sheet strips twice.

Another fault on the Tekno is the googly-looking eyes in the separately-applied front section. I recommend removing the corner front lights and replacing them with a couple of new, slightly larger plastic pieces then recessing them a bit before gluing in place. The interior still fits despite this

work and the front grill stands out a bit. The headlights can be replaced by lenses found among detail parts designed for the 1:43 model race car market; EquipeTron or Skala43 with their large selections of light lenses are good suppliers. The only luxury detail parts are the large light board, which has a high status in Denmark, as well as the long Starkton air horns which came from my scrap box. Other than that, there is not too much on the Scania and it is exactly that purity that I particularly like.

Of course, the interior was freshened up with a new steering column, a detailed dashboard plus bed linen and curtains which were made from masking tape or paper strips painted to suit the purpose.

I added only a few large tanks and several tool boxes to the chassis of the large lorry. I scratch-built the spare wheel carrier and the rear wheel well stays which I made from 0.3 mm aluminum sheet stock. On the trailer I also adapted the wheel stays and the brake cable

and glued them on. Two storage lockers, one on the left and one on the right completed the trailer chassis.

Both loading decks are made from a wooden block on which I used plastic sheet stock and later 0.5 mm aluminum sheet stock to make the side boards and the center posts. The canvas covers are made from paper, folded then then thrown on and glued. The paint used was a Dupli-Color Car paint without a clear finish coat. Using blue sticky foil, I cut fine, decorative pinstripes and glued them to the silver decorated area; later on, I sealed these with a coat of Microscale gloss. The decals are from René Kohli's Lastwagen-Modelle ([decalprint.de](http://decalprint.de)) which always impresses with its high-quality decals.

For me, this lorry and trailer combination is a further milestone in the history of self-employed Swiss drivers who are being increasingly pushed out of the international market.

## Tinplate

# Forklift from GDR

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by Robert Bretscher

This versatile vehicle with its convertible lifting gear promises a lot of pure play enjoyment.

At first glance, it looks like a cheap toy with its thin tinplate walls, but upon closer inspection it turns out to be a robustly built, full tinplate model as evidenced by the massive steel plate used to re-enforce the bottom of the chassis. Attached to the steel plate and well-hidden are thick brass cog wheels and ample-sized connecting axles in a mechanism that transmits the power of the motor for the movement of the forklift. The electric motor is powered by a 4.5 V flat battery which is discreetly hidden beneath the driver's seat.

Beside the seat are two levers that operate the back-and-forth

**Forklift 'Stagor' from MS-Brandenburg is a solid, 60s, all-tinplate model from the former GDR ...**

movement of the vehicle and as well those of the lifting gear. The straight ahead running and other typical movements, like the very tight turning curves, are easily managed. The problem of the lifting mechanism was solved in a very interesting way: it uses a threaded rod which in turn powers a turning cylinder and so smoothly and continuously lifts up the load. Furthermore, the forklift was given a crane arm and two removable forks.

An additional matching trailer was available separately. The vehicle runs at a comfortable walking

speed along the dining room table and has no problem managing even dangerously steep inclines. The MS-B company from the former GDR was responsible for the production of this marvelous toy. The letters of the company stand for "Mechanische Spielwaren Brandenburg". This East German VEB (Volkseigener Betrieb- Company owned by the people) was founded in 1956 and was a successor of the then world-renowned toy maker Lehmann which was expropriated during GDR times.



## In the shadow of the cable excavators

# Krupp-Dolberg D 500 HR

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by Ulf Böge (original) and  
Daniel Wietlisbach (model)

Despite the short production span, the light blue excavators are for many enthusiasts the epitome of the re-construction time in Germany after the end of the Second World War. The small, universal cable-controlled excavators were once produced in remarkable numbers. Less known, perhaps, is the only hydraulic version with which the company wanted to meet market demands of the time.

Everything began in Dortmund. There, in 1878 the firm of Dolberg AG was founded as a trading company for construction and light rail supplies. A first excavator was sourced from the US via Austria and as type 'Erba' was sold with reasonable success in Germany. In 1933, Dolberg took a chance and in his other factory in Berlin began the development of their first universal excavator of the 'KD 65 Robust' type. However, the war put an end to any further developments. The Glaser & Pflaum Company was also headquartered in Dortmund. It had shares of Dolberg and, as a specialized dealer sold construction supplies and also light construction railway equipment from Krupp. Because of these connections, both companies belonged almost entirely to the Krupp Group of companies. Bit by bit, the production sites

**The time period of the excavators from Krupp-Dolberg was relatively short. These construction machines from the Krupp organization were produced for only about 15 years. With the D 500 HRG, MTS has produced yet another fine cast resin model ...**

of both companies were amalgamated on to one site.

After the war, Glaser & Pflaum commenced the development of the small D 200 excavators. This was the starting point for the sensational success of all the company's other excavators. In 1953, the company was re-named Dolberg-Glaser & Pflaum.

The new small excavators, D 200 and D 300 quickly became best sellers, and perhaps it was their great success which moved the umbrella company in Essen to imprint their name on them beginning in 1959 because they wanted a stronger market presence. From then on, the excavators were branded as Krupp-Dolberg. Another first was the prominent display of brand's three rings on the blue machines. In the meantime, the Krupp-Maschinenbau (Krupp machinery fabrication) had grown substantially. In addition to its construction machines which were continuously extended

by adding brands like Fiat, Hanomag or Zettelmeyer, they offered engines from their own production: cars and lorries, train engines as well as cranes from Krupp-Ardelt. Resulting from that growth, the types of excavators available grew to five by the middle of the 1960s.

At that time, the greatest watershed moment of the excavator market occurred: hydraulic machines were offered by more and more companies and slowly the demand from users increased. By this time, Liebherr, Atlas and O&K had small, reliable hydraulic excavators on the market and the customers were ecstatic about the advantages of these machines. They were much more sensitive, accurate to the target and they had powerful digging capabilities. These more compact, new concept excavators which required less maintenance soon started to push the existing cable-controlled excavators out of the market. Krupp-

Dolberg had to react to this new market reality and did so at absolutely the right time. For example, in 1964 they released the new D 500 HR excavator with a chassis that had crawler tracks, as well as a mobile version, the D 500 HM. With a weight of around 14 tons and a 0.5 m<sup>3</sup> bucket capacity, the machines were in a very sought-after performance class, but they could not hide their plain heritage. Too many of the optical features were retained from their cable-operated excavators and so the mechanically-powered excavator chassis of the D 500 HR in contrast to the more common tractor-based hydraulic chassis with lifetime lubrication systems did not look very modern. Even the mobile excavator was given the pre-existing chassis from the cable-operated excavator D 451 M. This gave the impression that these hydraulic excavators were just modified cable-operated ones. Other manufactures had developed their new machines from the ground up. Perhaps Krupp-Dolberg had lost their time advantage, because in 1966 alone, the D 500 HR had to compete against ten other models. Among them were some that had had a strong market presence for years like the O&K RH 5M, the Gatra R 60, the Liebherr R 500, the Atlas 1500 or the Poclain TC 45. The large success did not materialize and to make things even worse, a crisis in the construction industry developed. These were probably the reasons that there would be no further hydraulic excavators from Krupp-Dolberg, because only a year later, the corporate group decided to stop the excavator production completely. However, the name Krupp-Dolberg

remained in existence. Now, as in the beginning, it is a construction machine dealer with a large brand portfolio. Other construction industry products were high in demand, for example, the Krupp-hydraulic hammers led the market for many years. But that is another story.

### Models form GMTS

It is an open secret that GMTS models are made largely by Dan Models from Romania. Dan Silvestru from Ploiesti has made himself a name producing fine resin cast models and has become known for the models of several different Euclid dumpers in 1:50, among other products.

Even though for collectors, metal is the preferred material for models, one should not forget the advantages of a resin cast model. The lower production costs allow for smaller production runs and so special models that would never be produced in large series because they could not be sold in large numbers are produced. Resin casting also gives sharper edges and usually shows more, finer detailing, always presuming that the builder of the prototype model is a master of his trade. Resin models are often refined with brass and photo-etched parts which gives them a high degree of detailing. On the opposite side of the fine, filigree-like detailing is the limited amount of functionality which is a drawback especially

on models with crawler tracks and equipment that moves such as excavators or ladders.

After the D 200 and D 300, the model of the D 500 HR is the third Krupp-Dolberg brand model. It arrives in a cardboard box securely screwed down to a base plate. In order to protect the fine upper structures of the model during transport, the excavator is surrounded by foam cut to size to secure it.

The first impression is convincing and when the main dimensions are measured it checks out correctly which confirms that the proportions are well replicated. The lower chassis has been made exactly correctly and the two dummy track carriers are very finely engraved. The filigree, spoked wheels with the ‘webbed’ spokes are a true copy of the original ones. The tension chain below the X-frame has been modeled and also the four pierced lifting rings for the safe transport of the excavator.

On the plain upper chassis all doors, hinges and grips have been simulated and the ventilation blinds are modeled raised from the surface. At the rear is the exhaust and on the boom head hinging point is the prominent hydraulic distribution valve with all its supply lines. The work spotlight is especially convincingly modeled; it has a chromed interior surface and glass lens.

The cabin is also very well replicated and the large windows allow a good look at the rather Spartan 60s work space. The windows fit flush and have the typical white frame printed on. The window wiper is made from a photo-etched part which has been separately applied.

#### At a glance

- + Shape
- + Detailing
- + True to scale

Let us now look at the equipment. It is moveable but it cannot be arrested in any position because of the material used. That means that the bucket has to rest either on the shelf in the display case or in the dumping bin floor of a lorry. The shapes of the boom, jib and bucket are very nicely matched to the original. Hydraulic lines are fully modeled and at the approp-

riate places are made from rubber. The filigree-like finish of the hydraulic cylinders fulfills all wishes. If the boom is lifted too high the piston rod falls out of the lifting cylinder, however, it is very easy to replace. The paint has been applied faultlessly and is not too thick. The lettering is made from decals; the clear film is partially visible but the majority of the decals are very

cleanly applied. The D G-P logo is not quite correct. On this excavator the Krupp rings had already been applied as original photos from that time clearly show. To sum up, it can be said that the Krupp-Dolberg D500 is an all-round successfully executed model. Probably the only way that a model would have ever been produced was to have it made from resin castings.

## Evolutions set dump truck from DM in 1:50

# Cat 769

by Daniel Wietlisbach

Securely screwed down on a plastic base and additionally protected beneath a transparent plastic cover, both models arrive safe and sound at the collector's home. The English language leaflet included with the models traces, in short form, the development of the 40-ton articulated dumper as well as the larger units, up to the present.

In 1962 Cat began development of the rigid-frame dumpers with the 769. Despite its rather limited carrying capacity of 31.8 t, according today's standards, the 769 proved to be a success story. The 769 with its 375 hp engine was produced for 43 years until the introduction of the D series. The successor, Cat 770, first appeared in 2007.

As with most sets of the Evolution series, the new machine comes from the producer's current program

**Sometimes available, but never in large numbers; it took a while until this Evolution set with its two articulated dumpers arrived. Here we introduce the 769 ...**

but the older Cat 769 is a completely newly developed model. Therefore, we are limiting our observations to the Cat 769 in 1:50.

The true-to-scale model is made largely from metal and feels nice in the hand. Those who already have the earlier version from CCM in their display cases will undoubtedly want to put them side by side. When seen thusly the immediate difference is their size due the scales of 1:48 and 1:50. There are further differences which are mostly in the details; for example, the engine has not been replicated nor does the simplified running board below the cabin on the DM. Otherwise, the new model

have no reason to hide from its larger brother.

The wheels are finely engraved and have rubber tires with profiles true to the original. The front wheels can be turned using the two hydraulic cylinders and the steering linkage; the two mud flaps are made from a thin rubber material. Suspension and shock absorbers at the rear axle are only hinted at but the prop shaft is completely modeled, including the gear box. On the left of the main frame is the hydraulic oil tank, on the right side are two compressed air tanks and in front is the exhaust.

The radiator grille is made from a separate part which is a good re-

presentation. The holes are only hinted at but because they are painted black, they look authentic. The same goes for the pairs of front lights. The shape of the engine hood is completely correct and the fuel tank, battery box as well as the air filter unit are nice. The design lines of the cabin are pleasant. The rubber around the windows is printed on in black; the plastic glass sits behind the window openings and so the thickness of the cabin casting can be seen. The window

wiper is part of the metal casting. Plastic handholds and rear-view mirror are separately mounted parts. As usual in this series, Bob Senior is glued down and sits behind the driving wheel.

**At a glance**

- + Metal content
- + Detailing
- Engine is missing



The bin is dumped out using two-step hydraulic cylinders on which the first step is made from chromed metal and the second from a silver-coloured plastic material. The dumping bin is made from a single casting and has the correct number of exterior re-enforcement ribs. The moveable stone deflectors are attached on the underside.

This authentic unit has been painted in the nicest Cat yellow and the rather sparse, printed-on lettering is sharp and legible.

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**Volvo M 162 CZT 8x2/4**  
**Johu's big day**

by René Tansse

The lucky man in his red 50s picks up his papers and closes the last sip of coffee. Then he does his morning routine and walks through the snow down the hillside towards his small holiday house in the town of Kalamo in Finland. "It is freezing cold," he thinks to himself. His wife and the kids are still asleep but will awfully soon be up. Johu Koppola, an independent truck developer, has spent the last 18 years of his life building a long-time dream.

**The temperature gauge outside the kitchen window shows -28 degrees Celsius as Johu brews his cup of coffee. Today is his big day ...**

His career started by driving a military-looking Volvo. Later he loved used Jyni and Kouto Stone. His latest Volvo was the predecessor of the M type, introduced two years ago. The KB 117, the first truck with a tilting cab as a standard feature, was built only in a small series, the remainder being a wild experiment. But today, spring 1973, the war is over. The old KB has been parked beside the barn.

His friend is waiting for him in his bath. The steam engine exhaust hoses while climb into the rigid morning air, and they can start out. The trip goes just many lakes to the main factory in Kari. Waiting for him is a brand new Volvo M 162 CZT and the JEP trailer, constructed for Johu to his specifications, made for Johu to his specifications. Finland. Johu had never done look at the market since a year ago at the "Kajmies" the Finnish trans-

portation exhibition in Jyväskylä. He then sat down and signed a sales contract for the upcoming shipping track and trailer war.

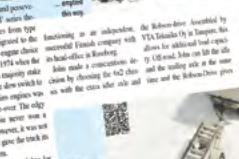
The decision of one day about out of the new factory will become reality in two hours' time. Then, he will be working hard over the next few years to pay off his new acquisition. The joyful anticipation is hard to see on the quiet Finn face.

Since Auto OY, founded in 1971 by Tap Penttilä, created a real "volk" truck in 1970 with its M series. This series was seen for 14 years, mainly in Scandinavia and Baltic states, a few even went far as Greece and some even to Switzerland. Being equipped with robust technology, now with a Fuller gear set and coupled to a Volvo Leyland 6-cylinder engine, the M series helped the square jawed "volk" truck to stand for power, endurance and presence.

By the late '70s, when the M series was still in production, the M series had changed from type 1. The headlight arrangement in the bumper bars and the engine cover on offer replaced in 1974 when the Finnish state took a company order in the company. The new version is the reliable "Cummins" engine was a result of the take-over. The only change of the take-over was a heavy counter-balance, it was not an attractive and gave the truck its own special charm.

Since he became a candidate for a possible take-over by a variety of interest groups. In 1971, a co-operative agreement with Renault was reached and Volvo components from Mercedes-Benz America and Volvo are used in construction. However, the company is still functioning as an independent, successful Finnish company with its head-office in Kuusinka.

Johu made a construction decision by choosing the M2 chassis with the cross-axle axle and



Trucks & Construction 1-2018

# Concrete pump from Conrad in 1:50

## Liebherr 36 XXT

by Daniel Wietlisbach

The truck-mounted concrete pump 36 XXT is being promoted by Liebherr as especially ‘compact and versatile’. Two features make this statement possible: the XXT support systems can be quickly deployed very close to the vehicle on one side, or even on both sides in extreme conditions; also, the five-segment distribution boom is very compact in transportation mode which means that it can fit on a three-axle chassis. Because of its superb manoeuvrability, it can reach high work sites and pour in halls or even interior rooms on upper floors. The maximum working height is a remarkable 35.8 m. Built ‘in house’, the hydraulic ‘Powerbloc’ pump motor allows it to move 144 m<sup>3</sup>/h (THP 140) or alternatively 167 m<sup>3</sup>/h (THP 170) of liquid concrete.

The heavy, metal model from Conrad comes delivered in the familiar package, protected very well with foam material. Separate parts, included in a small plastic bag, are the rear-view mirror, antenna and a beam with the back-up lights, all for the collector to attach at the rear. Made true to scale, the concrete pump has been mounted on a three-axle Mercedes-Benz Arocs chassis with an M driver’s cabin. The renowned Conrad functionality means that the model is exactly to scale in transport mode and

**Concrete pumps make it possible to pump concrete easily into sometimes difficult-to-reach sites. This is very convincingly demonstrated with Conrad’s new 1:50 model ...**

can reach the maximum working heights, which is really impressive! The maximum working height is only under-reached by 10 mm and the maximum horizontal reach by 5 mm; the lowest working reach is actually fully achieved.

The four supports keep the model stable; the feet have visible threads. No support mats come with the model.

The feed hopper at the rear is nicely done; free-standing handhold and steps with anti-skid surface are details observed there. The lid opens and, prototypically, the funnel is covered, here with a fine mesh made from plastic. Because the rear area around the pump is accessible, it is secured with a metal safety railing. In front of the platform is a simulation of the Powerbloc and between the power unit and the hopper is the housing for the pump cylinder.

Let us follow the path of the concrete: the concrete goes from the hopper through a grey pipe up to the foot of the distribution boom (which swivels 360°) and then continues through the yellow pipes over all the five moveable boom segments. All the metal segments have been correctly replicated, according to the original. The hydraulic cylinder keeps them secure in any desired position. At the joints, the moveable parts of the kinematic are made from stress-resistant plastic and so guarantee continuous enjoyment of the boom. Correctly, the end of the pipe has a flexible hose, made here from black rubber material. The many hollow rivets at the moveable joints are all bronzed so do not distract from the overall impression.

The paint applied has no enclosed dust particles and is faultless, as is the printed-on lettering. Paint separation lines were avoided by the clever selection of single parts. The model of the Liebherr 36 XXT concrete pump lorry complies with all the preferences of the Conrad-Fans.

### At a glance

- + Metal content
- + True to scale
- + Functionality



# Mobilbagger from AT in 1:32

## Liebherr A 916

by Daniel Wietlisbach

The Liebherr A 916 in the current version has a working weight of 16.4 to 18.9 tons and so is a medium-heavy mobile excavator in the production program. It is designed for buckets with volumes from 0.17 to 1.05 m<sup>3</sup>. The 4.5 litre Liebherr diesel engine with turbo charger can produce 115 kW (156 hp) of power and complies with exhaust controls according to the EU step V regulations.

About once a year, AT Collections releases a new excavator model in the larger scale. Following Volvo and Atlas, the most recent release is the Liebherr A 916. Mobile excavators are something of a core strength for this Dutch company which otherwise produces mainly agricultural machinery. Mobile excavators have the advantage that even in 1:32 they are of a manageable size and so do not overpower display cases. The A 916 has a high metal content and is accordingly heavy. It was made to scale and has pleasant proportions.

As we are used from this maker, the A 916 is offered in two versions: one has single Nokia brand tires and, more common here in Europe, one with twin tires from Mitas. The tires replicate the originals correctly and have raised logos. The front tires are steerable; the axle housings and the propulsion shaft, including the gear box, have been replica-

**AT Collections' newest release uses the possibilities provided by the large 1:32 scale to the fullest in giving us a model with a very high degree of detailing ...**

ted in great detail; the blade rear is functional.

The upper chassis is made up mainly from two large metal castings on which gaps, locks and handholds are correctly modeled engravings. The production philosophy of AT is that generally they do not make any non-visible parts such as the engine but they do invest a lot of time and labour into producing all visible parts and here, there are quite a lot of them. The manufacturer cleverly uses the advantage of the large scale. All ancillary power supplies behind the cabin are very detailed and are painted in different colours. At the rear is a very nice fine, filigree-like pierced cover over the catalytic converter which is visible, and therefore, has been modeled. Cameras, front and rear lights have all been separately

inserted; all of them, plus the warning beacon have glass lenses.

The shape of the cabin has been well copied; it is nice that the door opens 180°. Here too, there is no shortage of details although the handholds, antenna, rear view mirror and window wiper are constructed from plastic. The multi-coloured interior checks all boxes on the wish list and even has the Liebherr logo on the driver's seat.

The mobile excavator is equipped with the 5.05 m long adjustable boom and the 2.45 m jib. Both are exactly engraved even in the place where the joints sit. Each replicates the original exactly. The especially nice hydraulic lines are complete and elaborate. Absolutely everything here is complete and correct, from the shape and colours to the way the lines are attached! Even the size of the hoses varies and all hook-ups are shown correctly. Here the advantage of the large scale really shines and they can be forgiven that the screw-on connections at the hydraulic cylinders are missing. Naturally, there is a quick coupler but the backhoe bucket that comes with the model is rather plain. We

### At a glance

- + Metal content
- + Detailing
- + Functionality
- Plastic handrails



should mention the extensive accessory program of the producer which is unrivaled. One can find finely-detailed quick couplers as well as

countless attachments, buckets and other tools galore which we introduce elsewhere in this issue.

Colour on the model has been applied faultlessly and the sometimes very tiny decals underline the high degree of detailing on the model.

## The new Dutchman from Tekno in 1:50

# DAF XG+

by Daniel Wietlisbach

After the originals and the first 'official' models from WSI appeared at the same time, Tekno announced that they too are going to make the DAF of the new generation in 1:50. During an event in the Spanish town of Malaga at the beginning of September, the first models of the XG+ were given to the invited press. Our author Eric Urweider was there. He was allowed to test drive the original and was given the newest Tekno model which he kindly lent us for this report.

As we were able to show the WSI model in our last issue, it logically follows that we should now compare both models side by side. It is certain that both producers received the CAD data from DAF for their production models and both fulfilled the tasks given them. Therefore, in this contest there is no 'winner' or 'loser'. The small differences are in the details. To simplify it a bit, the Tekno model has more finely engraved chassis while WSI's modelling of the joints at the cabin is 'sharper'. The most obvious way to

**Tekno can now show off their new DAF XG+. With it, collectors now have to agonize over their choice ...**

spot the differences is to look from above. We see that the joints and rain guttering appear to be sharp and distinct, while on the Tekno they seem to be merely hinted at. Nevertheless, the Tekno cabin is a good scale copy. Its shape is absolutely great as is easy to see from the pictures. The opposite is true on the chassis: while, for example the tank brackets on the WSI model are only slightly raised grey strips, on the Tekno they are clearly more pronounced and sculptural.

### The model from Tekno

The following remarks concentrate on the XG+ from Tekno: as we already mentioned, the chassis is very nicely made and the two large tanks make the new DAF flagship a real long-distance freight lorry. The exhaust cleaning plant with the widely recessed exhaust pipe has

been exactly modeled and the gear housing is finely engraved. The model has a good turning radius and both axles are detailed with springs and axle suspensions. At the rear are compressed air tank, battery box as well as two wheel chokes painted in a different colour of yellow. The rear lights are made from transparent red plastic with reflectors and the mud flaps have the original's DAF logo on them. The side panel cladding has all its details included.

The design of the cabin's shape was well copied. It replicates the impressive look of the original very nicely. The elegance of the design is easy to recognize and the measurements are exact.

The nicely engraved radiator grille is made from a single casting, the silver pin stripes are sharply printed on and the DAF logo is raised. Headlights and position lights are made with chromed re-

flectors and have glass lenses. The windows are very flush-fitting and the chromed border of the side window on the original (a recognizable feature of the premium XG+ model) is printed on in silver. Window wipers, three cameras and the antenna are separately-attached parts. There are three screens inside the cabin for the three outside cameras. Its interior is a good copy

of the original and has been finished in black, however, the ladder to the upper bunk is missing.

#### At a glance

- + Shape design
- + Detailing
- + Metal content



Under the prototypically correct tilting cabin is a model of the Pac-car six-cylinder engine and one can spot the AdBlue tank. Of all the supply lines, only two have been modelled.

As usual, the paint has been very cleanly applied as was the lettering. It will be exciting to see how the new DAF will look when painted in company liveries.

## 2nd generation Japanese model by WSI

# Isuzu Giga

by Daniel Wietlisbach

When a year ago in issue 5-2020 we introduced the Isuzu EXR (Giga, in Japan), WSI surprised us by announcing the second generation of the Isuzu Giga at the same time. For those who are interested in the history of this Japanese maker, we recommend reading the article in the issue mentioned above.

Isuzu lorries are not only offered in Japan, but are also popular in Australia and New Zealand. They are known as robust, no-frills work horses with a minimum of technological bells and whistles. For example, the dashboard with switches and buttons reminds us of Western Europe lorries of the 90s. The second-generation Giga which is powered by diesel or gas engines was introduced during the 2015 Tokyo Motor Show and has been available since 2016. Its strongest version is

### With this second-generation model of the Isuzu Giga, WSI begins a limited-release series of Asian models ...

available with 510 hp to pull overall weights of up to 60 tons. The model is a two-axle tractor with the Isuzu 9.8 liter, six-cylinder turbo diesel engine which produces 380 hp and conforms to the European exhaust controls of Euro 5. As a tractor-trailer combination, the whole unit has a total weight of 45 tons.

When WSI introduced the Isuzu Giga in 1:50, it announced a whole series of Asiatic models at the same time; all will be produced in limited number series. And indeed, inside the package of the reviewed model is a certificate with the model number of 218 out of 248 units produced. At first glance, the model with its standard plain white cabin and has a great deal of chrome. Well, for wes-

tern eyes anyway. Also remarkable is the high metal content. The model has a pleasant heaviness in the hand.

The shape of the cabin has been nicely replicated when compared with the test drive video of the original (see QR code). It is made up from several tightly-fitted parts and flush-fitted windows. No assembly nubs disturb the visual appeal. The chrome parts are faultless and the finely engraved radiator grille has several components. The headlights and side indicator lights are glassed and look true to the original. Window wipers and handholds are separately applied parts. The very noticeable larger rear view mirrors are correct for Japanese regulations. The rear of



the cabin is also exactly made, and in addition to the air intake channel are the typical expansion tank for the cooling liquid as well as four supply lines for the semi-trailer. The model is right-hand drive and the cabin interior is very detailed. Door handles and gear stick are easy recognizable and there is even an Isuzu logo printed on the steering wheel. Below the cabin is an exact mock-up of the motor, painted silver.

The chassis is well done and while the wheels are not new they are prototypically correct; the turning radius is pleasantly large. Behind

the full-length underrun bar on the left side are battery box, fuel and AdBlue tank as well as a compressed air container, all well detailed. On the right side are further air tanks, the spare wheels as well as the exhaust scrubber plant. The prop shaft as well as the axle suspensions are exactly engraved, detailed

components. The same goes for the mudguards and the very fine anti-skid surface. Correctly, the rear lights have glass lenses.

The paint and printed-on lettering are very cleanly applied and are correct for a factory-fresh vehicle; at the moment, it is unclear whether some company-specific liveries will come as well.

All round, the Isuzu Giga is an well-made model and we look forward to seeing what will come later. Those who desire to bring exotic an Asian collection to their display cases now have the opportunity to do so.

**At a glance**

- + Shape
- + Detailing
- + Metal content



## Rough Terrain crane from NZG in 1:50

# Link-Belt 100 RT

by Carsten Bengs

The 100RT with its 90-t lifting capacity is a typical off-road crane. The sample model reviewed was faultless, its dimensions well replicated. Some very nicely made filigree-like details were particularly nice to see.

The two-axle chassis rolls very easily on its wheels and has sufficient turning radius. The drive system with the cardan shaft is very nicely done. The little steering cylinders on the axles were greatly appreciated. The rims replicate the prototype. There are some small ladders on both of the support boxes linking to steps.

**NZG presents the 100RT, the second new crane model from this US producer which has no representation in Europe. Our author tested the model ...**

The railings are modeled in zinc and there are also ladders located in the middle of the vehicle's sides. Tanks for fuel and AdBlue are easy recognizable. The little locker on the side is an outstanding detail. Its door opens providing a view of some nicely modeled control elements for running out the support legs.

The lower chassis is nicely engraved at the top and in the middle

has a few handholds. Just above the engine it is easy to view the simulated brackets used to store and hold the counterweights securely. From here, the crane can take up the counterweights and load them on to a low-deck trailer. On the original, a Cummins engine produces 173 kW of power. The solid metal support legs allow for perfect stability; the threads are hardly visible to the eye and do not distract.

On the upper chassis the first thing of note is the roomy cabin which tilts. A small hydraulic cylinder stabilizes the cabin in place. The interior has been very convincingly modelled with steering wheel, levers and control instrumentation. There is a safety railing and a small mirror. NZG created very fine window wipers, small antenna, work spotlight and the handle on the cabin door. Behind the cabin are some small steps with handrails. The railings on the side, which can be folded down to reduce their height during transportation, are also very nice.

Both lifting winches have enough twist-free cable in their drums. The ballast which on the prototype would weigh 13.2 t, is attached with two small bolts. Even the small rear camera is visible.

The boom has four telescoping segments and extends to a length of 98 cm or 47.2 m at top sheave height where it is held securely in place with a cylinder that has a screw on

the side. The last telescope segment would be extended mechanically on the original and that is nicely simulated on the model with the imitation sheaves.

Except for the sheaves on the cargo hook and on the front sheave head, all cable sheaves are made as single units and move very easily. The five-sheave hook descends very smoothly; on the prototype it would be capable of lifting 80 t. A nice detail here is the Link-Belt sign with the sling chain.

The additional double folding flying jib tip can be mounted quite easily using the supplied M1 screws. It can be attached prototypically in a 0° angle. During transportation in drive mode, the tip rests secure-

ly at the side. Here NZG has used the proven storage solution with a retaining frame bracket. Including the flying jib tip, the model reaches a sheave height of 133 cm which corresponds with the original.

Using the second winch, the model can also be displayed in double hook mode. The included Headache Ball hook would have a carrying capacity of 9.1 t.

NZG has made very detailed, extensive lettering. Small warning and operation labels are on several places all over the model. Even the very tiny load capacity plates are printed and located at the middle of the vehicle. Mud flaps complete the details here.

Further lettered signs are on the upper chassis, even on the ballast and on the boom on which there is even a simulated angle decoder.

The 100 RT has been absolutely convincingly replicated. Details and functionality are of the usual high standard and leave no wishes unfulfilled.

#### At a glance

- + Functionality
- + Detailing
- + Lettering



# Tom's truck log

by Tom Blase

At many early biker parties, we rewrote the text of Bette Midler's famous 'Beast of Bourbon' song.

These days I think back to the 80s with a smile; it was a time when Mum's kitchen reeked like a distillery. During the 80s we transported many 20' tank containers to the Racke Company in Bingen. The contents: Jim Beam, the cult bourbon from Kentucky. Only very few of the vehicles from our terminal were able to undertake this job. Air cushioning for better unloading was a prerequisite and most tractor lorries didn't have this feature at the time.

The unloading process was relatively simple: hook up a hose at the rear outlet valve, adjust the air suspension to the highest position and empty the container. A few liters always remained in the container, which could not be avoided with this kind of discharging process.

## **'Beast of Bourbon,' or Clermont, Kentucky is located in the middle of Rhenish Hesse ...**

My old man figured this out pretty quickly and drove back to the home terminal to a slightly inclined spot where he set the air suspension to the highest position and opened the valve from which the high-alcohol liquid gold gushed out filling the water bottle quickly with the remaining bourbon.

Back home in our kitchen the contents of the bottle were inspected to reveal nothing more than a few tiny bits of floating material. Mother said, "Run that through a coffee filter!" Father immediately smelled a nice addition to his pocket money. My grandparents used to be vintners and still had a number of large wicker bottles from that time. In the evenings, my father filled these with Jim Beam and later handed them to my mother to filter in our apartment. My youthful nose did not like the aroma at all, however, word spread

like wildfire and during the ensuing days several acquaintances asked if they could have some of the high percentage freight.

This game went along very well until another colleague got the same job. At the terminal he too realized that there was still a remainder in the container. Thus, he had the crane operator attach his tackle to the front lifting lugs to lift the box and let it drain.

My father happened to chance upon this activity and what he saw was less than appetizing. Together with the whiskey, a dozen dead rodents washed out of the container; they certainly started their trip to eternity well pickled.

What else can I say? From that day forward, our apartment smelled normal again because nobody desired bourbon from overseas any longer.

### Kahl Schwertransporte

Stefan Jung, published by Podszun Verlag, size 28 x 21 cm, 180 pages each and 600 pictures, hardcover, 978-3-7516-1014-8 (vol. 1) 978-3-7516-1015-5 (vol. 2)

The books are designed in such a way that volume 1 has a few historic pictures as well as the story of the company up to the developments in 2004. In volume 2, the history continues from 2005 onwards until the present. The copious number of pictures from two- to five-axle tractor lorries are interspersed with stories such as the construction of the very first four-axle tractor lorry, or enriched by reports about transports. They are colour-coded so that the reader knows which stories and pictures go together. The books are ideally suited as an inspiration for model builders; historians more interested in historical background could find them disappointing. (eu)

### Die Geschichte der Baggerlader, volume 2

by Rudi Heppe, published by Podszun Verlag, size 28 x 21 cm, 174 pages, about 480 illustrations, hardcover, ISBN 978-386133-992-2

Excavator loaders made internationally are found in the second volume. Among them are well-known brands like Case, Caterpillar, Hydrema, JCB, Komatsu, Mecalac or Volvo. A few pages are dedicated to each manufacturer. Shown in words and pictures on those pages are the machines from their beginnings up to the most recent models of 2021. A few of the makers no longer produce the machines. In September of 1985, Caterpillar built its first excavator loader, model 416. Volvo released its first excavator loader, the GM 611 around 20 years earlier. Case is very up-to-date with its electric-powered model 580 EV which they introduced at the 2020 Conexpo in Las Vegas. (up)

### Schwertransporte '22

Weekly calendar, diverse authors, published by Podszun Verlag, Size 25 x 21 cm, 53 pages, 53 pictures, spiral-bound ISBN 978-3-7516-1004-9

For every week of the coming year there is a new heavy-duty transport picture and even though the same tractor lorry appears twice on some of the pages, the transports shown are different. The calendar is designed to stand on the desk or hang from the wall. It is very impressive and with its almost square format does justice to the mostly excellent pictures. As well as photos of heavy-duty transports, some pictures of interesting crane work are also shown. Many well-known actors in heavy-duty transport and crane work are represented. A short description is included with every picture. Below each day of the week there is room for some notes. The calendar comes without a plastic cover page because it would only make sense were it required to protect the calendar before hanging on the wall. (eu)

### 2022 calendar

by Erich Urweider, self-published, 14 pages each 300 g / m<sup>2</sup>, size 42 x 30 cm, available from erich@urweider.com Tel +41 (0)62 897 17 19

Much-published author and photographer of heavy-duty transports, Eric Urweider, presents his personal best pictures from 2021 in calendar form. The brilliant photos are optimally displayed on high-quality paper. The "LKW-Veteranen" (Lorry veterans) in the calendar show how carefully Urweider choose the settings and backgrounds for his pictures which is not always possible with heavy-duty transports. Nevertheless, all vehicles are shown from their best side. It is remarkable that no company is represented in more than one photograph and even international transports were taken into consideration. This also goes for the photos of the veterans which are shown in a great variety of settings. (dw)

# History and building a DD9G kit, part II

## Peterson's tractor

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by Thomas Wilk

The six-cylinder, in-line Cat D353 engine was made up from more than 30 individual parts and demanded a high degree of accuracy during the assembly. The torque reduction support bracket and converter at the rear had to align correctly so that the engine could be built in and be completely level in the chassis. Also, care had to be taken that the other parts like starter, alternator, turbo charger and the two huge oil pan air filters did not touch the tractor frame. This led to having to remove the engine and re-install it a few times in order to check that everything fit correctly. The driver's platform required a few corrections too: I removed the console of both steering coupling levers, made and installed a gas lever for the two-cylinder starter engine and positioned the decompression lever underneath the dashboard (on both tractor models). Finally, I drilled a hole into the dashboard and basis plate for later on when would I would pull the compressed air steering lines through, because the rear unit steering was controlled by the driver of the front unit. The base for the newly cast large resin fuel tank with a 757-liter capacity was made from plastic profiles and 0.8 mm brass sheet stock. This allowed for the tank to be mounted lengthwise just as on the first prototype from Peterson.

**Now that the front tractor of the Caterpillar Quad Trac D9G has been built, the construction and conversion of the rear Cat D9 unit can begin. Complete track carriers with sprocket and sprung guide wheels, mount and adapt a heavy rear weight to the rear tractor ...**

The built-in compressed air tank white metal castings were available as accessories; connecting lines were bent from 0.5 mm wire. The two air compressors were fabricated from brass tubing and ASB plastic. The control panel at the side of the radiator frame is made from ASB, like the bracket for the double cylinders. It was attached with two pins and glued on with two-component glue.

Very early on, Peterson developed the first sprung pushing blades for cable-operated dozers. This concept was then used to develop the familiar Cat 9C pushing blades. At the underside of the tractor frame, beside the floor armor are L-shaped brackets on each side. The cushioned C blade with its U frame was bolted to the brackets. In the case of the Quad Trac, this was an adapted frame shape with the addition of two cylinders to distribute the weight and the sockets for the ball heads.

A little more effort was required for the conversion of the connec-

tion frame which was included in the kit. Originally, it was only designed to have one weight dispersion cylinder and its shape looked too slim. The necessary wearing and armor plates were missing on the part from the kit. I have used a variety of brass sheet stock pieces to replicate these so that their shapes are like those developed by Buster Peterson in 1964. The first Peterson Quad Tracs had two cylinders built in. Therefore, I had to construct brackets and holders for the two new cylinders, including supply lines, which my concept demanded. I also had to take into consideration the very tight space available. It took a lot of thinking and fiddling to get close to a correct 1:50 scale copy of the original. The whole D9 tractor measures just 135 mm in length and 57 mm in width which made it very tight to get four base plates with drilled-out holes for the two parallel cylinders installed on the bent connecting frame. Distance and mounting degree of the cylinders needed to be correct!

Nothing stopped the almost 13 m long, 770 hp strong Super Dozer twin unit when it was in use loading the Scrapers. The operator could engage an additional control lever to steer the two weight distribution cylinders so as to put more or less pressure on the front or rear tractor, or, ideally, to lock the cylinder so that during the loading process

both were united as a rigid unit. However, it was always important to return to the ‘floating’ position. If driven in second or even third gear over an accumulation of material in front of it in order to load the next waiting scraper quickly, extreme torsion and stress loads on the steel construction of the connecting members as well to the ball

joint would be exerted. This could lead to long-lasting damage, cracks or even to a total breakdown of the Pusher. Between 1963 and 1967 Peterson Tractor & Co built a total of 10 units of the Caterpillar D9 Quad Trac Dozers. Following the takeover of Caterpillar’s patents, the Caterpillar DD9G was launched in 1968, but with only one cylinder.

## A space for lorry models, but not those alone

# An industrial yard

by Tom Blase

I was disgruntled looking at the pictures I just had taken of my newly acquired model. “Manure! The diorama yard I used looks like a floor layer installed a boring grey tile floor!” I needed to create a new hard standing surface to give the diorama a real industrial yard vibe with a lot of charm.

Since I did not want to spend any money or wait for the mail carrier to bring some ordered merchandise, it had to be something found around the house. In his book, ‘Perfekt bis ins Detail’ (Perfect in every detail), which I highly recommend, Emmanuel Nouaillier demonstrates a variety of excellent techniques on how to create all kinds of ground surfaces. But at that very moment I was impatient and the methods using plaster would take too long. There had to

**Tom Blase has created many photogenic dioramas using his great creativity. This time he wanted a large industrial yard with a fence covered in posters as a visual break at the end ...**

be a way to get a quick result without a lot of outlay.

So, I took a piece of 10 mm plywood from double stack of left-over palettes on my lorry. 800 x 600 mm is a sufficient size to make a scene and have room to take photographs.

Early on yards like the one I planned to model were made from concrete slabs, each of them measuring 5 x 5 m. Over time, some of them cracked in two, the edges and surfaces crumbled, potholes and puddles formed. In the past when I drove into such a yard, I often

thought that with the addition of a handful of flamingos one could make believe that was the Florida everglades. Today, such ‘industrial pearls’ are becoming rare. ISO certification and the image the company wants to project to their customers sounded their death knell. That is why I have found it a bit more difficult to photograph suitable prototypes during my trips. But in my photo albums I found some originals from the good old times.

With a small router and the matching V shaped bit I fabricated the grid pattern, distance of 60 mm

apart. The joints should not be too deep. I found that a 3 mm depth was sufficient. Using a sharp chisel, I managed to cut off one or another corner. Care had to be taken that this looked quite irregular, as if ‘by accident’. Employing the same method, I also gouged out using a few potholes.

### Weathering and painting

An old spoon lost its form and function in my vise. With a few hammer blows an irregular serrated edge was formed; the old spoon is a perfect tool to make cracks and breaks on the wooden surface.

Then I painted the whole surface with a grey acrylic paint. Using a heavily diluted dark grey and a fine brush, I highlighted the cracks and breaks but not in a way that they jumped out because, in reality every gap that is filled with bitumen loses its intensity over time. I kept a cotton cloth beside me to wipe up any excess paint. It was also very handy for drying the paint brush so that I could dry-brush highlights

on to the concrete slabs. Using this method, it was wonderfully easy to highlight cracks, tears, holes and uneven spots on the surface.

Michael Gruber from MG is the creator of the two manhole covers. He makes figures, tools and all kinds of useful parts on his 3D printer; a true master of his art. Using a power drill with a 20 mm Forstner bit, I drilled out the holes for the manhole covers. Since my manhole installers have some large motor skill problems, I used a box cutter knife to cut out a hole to simulate a space in the hard standing. Then I pushed down the edges a bit with the blade of a large flat screwdriver. Painted dark grey and dusted with some fine sand, this demonstrates ‘how not to install a manhole’! Some light brown or beige paint rubbed on to the surface with the cloth illustrates that the sweeping of the yard is done in a rather casual manner.

I used a thinned wash mixture of red and brown to paint the manhole covers making them look rusty. After the paint had dried, I used 600

grit sandpaper to remove most of the rust; in real life, lorry wheels take care of that. To simulate moss and grass in the gaps of the concrete slabs I used Coarse Turf and Medium Green from Woodland Scenics. I applied a little bit of white glue with a toothpick and then dusted on the greenery and patted it down.

Clearly, it does not require much work or a lot of time to create one’s own ‘down-at-the-heels and bashed about’ yard in 1:50. I made the construction site fence with ice cream sticks such as those available from craft stores.

Searching the Internet, I found the concert posters then I reduced them to the appropriate size and printed them out.

A small tip: always take care that all the events happened at the same time and in the same region. For me it is the area around Cologne and the Ruhr Region, 1986): Genesis in Hamburg, AC-DC in Frankfurt and James Last in Munich. This is not the way a reputable poster hanger would decorate his construction site fence!




Do you know  
this machine?  
Recognize it and win a model!

by Remo Stoll

This dozer-loader was used once in a while in a small quarry operation, but most of the time it seemed to sit idle. When the quarry pit was filled in, the machine was able to show what it could still do. During my visit, the dozer which was built at the end of the 80s or the beginning of the 90s, looked well-maintained and still had its original paint job.

Recognize it? Please send us the exact name and type designations. The contest deadline is December 15th, 2021. We will hold a draw to select winners if there are more correct answers than prizes. Please note that only entries with complete mailing address information can be considered.

This time the winners will receive a prize chosen from these models: the MB Arocs with dumping semi-trailer from NZG, the Sennebogen 818E from Conrad, or a set with a Kramer 411 'HKL Baumaschinen' from Siku. 



### Solution from Trucks & Construction 6-2021



The lorry that was marked by hard use was a Renault R 365. The winners this time are: Thomas

Buchser from Moutier (CH) who won the Klemm KR 806-3GS Anchor drilling rig from NZG, Nadine Lücke from Seevetal (D) who won the Iveco S-Way 'Rüssel Truck-Show' from Tekno and Moritz Wackerbauer from Brackel (D) who won the Kobelco SK 140SRLC from Conrad. Heartly congratulations to all winners!



## Tunnel construction in 1:50 – part IV

# Mühlbergtunnel

by Markus Lindner

Once the work on the drilled pole wall had proceeded to a point where all poles in the vicinity of the tunnel mouth were completed and cured, excavation work at that location could begin. Initially, a Liebherr R 936 (NZG) with crawler tracks was used for the work. It was joined by a Hitachi Zaxis 470 LCH (TMC) as work progressed. The transportation of the removed spoil to a centrally located dumping site near the construction camp was taken care of by a respectable fleet of 25-t class articulated dumpers from a variety of brands. Seen on the construction site were dumpers from Volvo (Motorart), Doosan (NZG) and Komatsu (Universal Hobbies).

During the application of Spraycrete to stabilize the rock face near the future tunnel portal, the rock face was excavated down to the level of the future tunnel floor so that the spraying work could continue from the top to the bottom of the rock face in succession. To achieve this, the concrete spraying machinery with silo, pump and compressor had to be shifted several times.

Further away from the tunnel mouth, southwards and along the drilled pole wall, the excavation proceeded step-by-step so that the uppermost anchor placements to secure the drilled pole wall could be done with the help of a Hütte HBR 605 drill rig (Ros).

**In our last installment, we showed you the beginning of the extensive setup for the construction camp which has been completed in the meantime. Work at the tunnel approach continued concurrently ...**

Because of its great depth and the nearby buildings, the eastern approach of the construction pit had to be secured quite extensively with the aforementioned drilled pole wall, however, the border on the west side of the tunnel approach required much less effort because the ground sloped gently westwards. In places further along, a simple embankment sufficed. To keep the embankments secure during the construction work they were interspaced with a few sheet pile walls. An RTG RG 21T telescoping pile driver (Bymo) was used to install the sheet piles.

Suitable modeling material for the sheet piles came in the form of aluminum profiles made by Alfer under the name Spundwand-Profil (sheet pile profile). These can be sourced in well-stocked construction supply or DIY stores. The pieces have only to be cut to size then some holes drilled at the top for insertion of the safety bolt on the pile driving head. The pieces then require painting. The base coat used here was a rust brown colour which was followed with a treat-

ment of an oxidizing solution from Modern Options for the 'original rust look.' Once these sheet piling walls were finished, further earth work to complete the approach was commenced.

With the construction of a canopy pipe system, the first advance work for the actual tunnel drilling began.

A so-called pipe umbrella was driven into the surrounding rock face material in a half-circle arch a little above the actual tunnel opening to protect the work face from cave-ins and rock falls as well as to stabilize pockets of loose material to prevent them from crashing down. These pockets had been found to exist when the preliminary geological survey was done for the tunnel mouth location.

The pipe umbrella is made up from single steel pipe elements inserted into pre-drilled holes. Usually, the distance between the inserted pipes is 35 to 60 cm. The pipes have individual openings that are used to inject fluids into the ground around them. The drilling of the holes for the pole um-

brella was also done with the Hütte HBR 605 drill rig.

In addition, the ends of the pipes that remain outside the ground may be used to anchor the sprayed-on concrete that secures the ground outside the tunnel portal.

A further unmistakable sign that the actual tunnel drilling work is about to begin is that the first specialized tunnel construction machines have arrived, for example, a Liebherr R944C Tunnel (NZG) special tunnel excavator while in

the shop a Putzmeister Sika PM 500 concrete sprayer is readied for use in the Mühlbergtunnel.

In the next issue will see the source of the huge amount of concrete required.

## Translation of page 53

# Our partner page

### Privacy wall made from Jura Limestone

Early this summer we were contracted to build a large privacy wall out of Jura Limestone. The stone material was sent ready to use from the quarry company to the construction site. Our challen-

ge was to move the blocks because the work space was very limited. We ended up making a custom boom extension for our O&K mini excavator and so that we could handle all stone blocks. Using the

boom extension made it possible to complete the work at the construction site. We used almost 100 tons of stone blocks on the project.

### Eberhard opens the EbiMIK

After a construction time of only 18 months and with great ceremony, Eberhard Unternehmungen opened the EBiMIK on the 24th of September 2021; it is the largest recycling center for construction waste in Switzerland. This sustainable plant sets an innovative milestone for the recycling industry. After the plant-raising party on Thursday, the

official opening followed on Friday with invited guests and more ceremony. On Saturday, 2,000 people visited the center. An interesting program entertained both young and old.

Among the attractions for the opening was a display of the newest construction machinery and lorries, for example, Futuricum made

an electric-powered tractor lorry available for us. The electric lorries, a 3-axle tractor lorry and a five-axle cement mixer, will arrive towards the end of the year. In addition to the first new Menzi Muck M545x, the environmentally-friendly EC300E hybrid and the third Volvo L350H wheel loader from Volvo were present.

# New on the market

## Diecast Masters 1:50

The dark-grey/black paint scheme is not a fake but one D6XE is actually painted in in this configuration. The original is a jubilee model cele-

brating the 175,000th dozer of the middle class with Delta drive. Included in the count are the types D4 to D7. The numbers were reached

after 35 years of production. The model is true to the original and the lettering is authentic.

## Siku 1:50 / Blister

The folks from Lüdenscheid have released several models for the

## Collector's guide

Here is a list in short form of all the new construction and heavy haulage models announced since our last issue. For truck transport models we recommend that you consult the newsletters of the manufacturers.

Type	Scale	Maker	Available from	Infos
Scania 730S V8 4x2 fictionblue or white	1:18	NZG	Dealers	www.nzg.de
MB Actros 4x2 green or black with logo, black only	1:18	NZG	Dealers	www.nzg.de
Liebherr LTM 1110-5.1 «Bok Seng»	1:50	Conrad	Dealers	www.conrad-modelle.de
MB Arocs 8x6 SLT «SAT»	1:50	Conrad	Dealers	www.conrad-modelle.de
MB LAS 2624 semi tipping truck green / silver	1:50	Conrad	Dealers	www.conrad-modelle.de
Liebherr A 920 «Pontiggia»	1:50	Conrad	exklusive	—
Liebherr TA 230 «B.I.V.»	1:50	Conrad	Thommy's	www.baggermodelle.com
Liebherr R 938 with 5 tools «Korz»	1:50	Conrad	Fritze's	fmb-shop.de
Kobelco SK210LC-11 four different versions	1:50	Conrad	exklusive	www.kobelcofanshop.com
Sandvik DD422iE Bohrjumbo	1:50	Conrad	exklusive	brandstore.sandvik
Epiroc PV-271 drill rig	1:50	China	exklusive	epiroc.profilestore.com
Kenworth K100 Aerodyne / Nicolas low loader «Friderici»	1:50	—	exklusive	www.toprun.ch/shop
Caterpillar 395	1:50	Diecast Masters	Dealers	DM-Facebook-Seite
Demag AC250-5 «WestKran»	1:50	IMC	Dealers	www.imcmodels.eu
Erkin crane on Volvo FM500 «Van Dam», resine	1:50	IMC	Dealers	www.imcmodels.eu
Load tram part	1:50	IMC	Dealers	www.imcmodels.eu
MB Arocs 8x4 / ballast box / Fassi crane «Mammoet»	1:50	IMC	Mammoet	store.mammoet.com
MB Arocs 6x4 / low loader / Fassi crane «Mammoet»	1:50	IMC	Mammoet	store.mammoet.com
Car for crane drivers «Mammoet», resin	1:50	IMC	Mammoet	store.mammoet.com
Fassi F50 «Mammoet»	1:50	IMC	Mammoet	store.mammoet.com
Liebherr LTM 11200-9.1 «Aguilar»	1:50	NZG	Dealers	www.nzg.de
Liebherr LTM 1250-5.1 «Fujimoto»	1:50	NZG	Dealers	www.nzg.de
Scania R Next 8x4 / HMF crane «Nielsen»	1:50	Tekno	Dealers	www.tekno.nl
Scania G Next 6x2 «Schneider»	1:50	Tekno	Dealers	www.tekno.nl
DAF XF 6x4 / stone trailer «Edwin Salari»	1:50	Tekno	Dealers	www.tekno.nl
Renault T 6x2 / flat bed semi trailer «Friderici»	1:50	Tekno	Dealers	www.tekno.nl
Hitachi ZX890LC-7	1:50	TMC	Dealers	—
Komatsu 12CM27	1:50	Weiss Brothers	Dealers	www.weissbrothers.us
Komatsu 18 HD LHD loader	1:50	Weiss Brothers	Dealers	www.weissbrothers.us
Komatsu ZR122 (P&H 77XR) drill rig	1:50	Weiss Brothers	Dealers	www.weissbrothers.us
Liebherr LTM 1750-9.1 «Moh Seng»	1:50	WSI	Dealers	www.wsi-collectors.com
Liebherr LTM 1500-8.1 «Jinen»	1:50	WSI	Dealers	www.wsi-collectors.com
Liebherr LTM 1050-3.1 «Mc Govern»	1:50	WSI	Dealers	www.wsi-collectors.com
Tadano ATF 60G-3 «Foselev»	1:50	WSI	Dealers	www.wsi-collectors.com
Scania S 6x4 / semi low loader «Nicotrans»	1:50	WSI	Dealers	www.wsi-collectors.com
Scania S 6x2 / semi low loader «Sabesa»	1:50	WSI	Dealers	www.wsi-collectors.com
Scania LB 141 6x4 / stone semi trailer «Holtropp Assen»	1:50	WSI	Dealers	www.wsi-collectors.com
Scania L 110 6x4 / Nootboom ODU «Bolk»	1:50	WSI	Dealers	www.wsi-collectors.com
Volvo FH4 6x4 / semi low loader «Colonia»	1:50	WSI	Dealers	www.wsi-collectors.com
Volvo FH4 6x4 / Nootboom MCO-PX «Autaa»	1:50	WSI	Dealers	www.wsi-collectors.com
MB Actros MP4 8x4 / Nootboom MWT «Vlastuin»	1:50	WSI	Dealers	www.wsi-collectors.com
MB Arocs 6x4 / semi low loader «BMS»	1:50	WSI	Dealers	www.wsi-collectors.com
MB NG and SK 6x6 or 8x6 «Schütz», «Pieper», «Lastra», «Cepelludu», «Lommerts», «A. Hak», «Kübler»	1:50	WSI	Dealers	www.wsi-collectors.com
DAF 3600 6x4 / Nootboom Euro low loader «Capelle»	1:50	WSI	Dealers	www.wsi-collectors.com

younger generation. We will introduce a few at a time. The wheeled loader, well-known as Claas Torion 1914 in 1:50, now comes as the Liebherr L556 in a robust version and has an openable engine hood and a good dumping-out height. Without a scale and in a blister pack comes the Scania-like lorry with tandem trailer from DHL. The box upper structures open at the rear and the hitch at the rear of the trailer allows for the addition of others.

### AT Collections 1:32

To match the excavators like the Liebherr A 916 we introduced on page 28, there is a separately availa-

ble set of attachment tools and a single sorter/grabber tool from Eurosteel. Since they are licensed models, they are exactly made and nicely detailed. They are made from metal and function like the originals. The prongs of the forklift are adjustable and in addition to a hydraulic cylinder, the sorting grappler has a kinematic which guarantees the parallel opening of the two grappler shells. The black satin finish is faultless and the lettering is raised.

### NZG 1:18

The Actros as car transporter is now also available in the wonderful colour scheme of 'Mosolf'.

Like all new Actros it has five light functions: daylight setting of the headlights, upper cabin lights, rear lights, interior and Mercedes star. The second series of the Scania 730S is available again in the same colour combination.

## Translation of pages 56 – 57

# News in brief

### Caterpillar D11 XE

At the Las Vegas Minexpo in mid-September, Caterpillar introduced the diesel-electric-powered D11XE, following more than ten years of experience with the D7E and the currently available D6XE. There is no need to shift gears on the new machine. Top engine performance is always available without any delays due to gear changes. This consistently available power promises to consume 25% less fuel per cubic meter of soil moved. The electric drive has 60% fewer moveable parts because gears and torque converters are not required. The dozer exhibited was a prototype; the next steps for its development involve extensive testing in the field for many uses and in many conditions. (up)

### Convoi 100% Électrique

In mid-October the four Swiss pioneers, Friderici Spécial, Avesco Rent, Galliker Transport and Futuricum showed off two fully electric tractor lorries that have unique double battery capabilities. Both lorries have over 900 kWh of battery capacity which allows for a range of 900 km when empty and about 500 km when loaded. The two E-Trucks took advantage of an exception to a rule which then allowed them to be 1.0 m longer and 2.0 tons heavier than the more conventional lorries. The tractor lorry from Friderici Spécial will be used mainly to transport rented machines from Avesco Rent. It charges in 9 hours when connected to a Supercharger installed directly

at the customer's site. With this, up to 50% of CO<sub>2</sub> can be saved in the construction trade.

### Autonomous Volvo in the US

In collaboration with Aurora, Volvo North America brings its flagship, the Volvo VNL, to US roads as an autonomous lorry. This will be a big step forward towards a completely driverless truck. At the same time, the Volvo Group indicated that the safety of humans and machines must be ensured at all times because no other vehicle brand is so connected with a safety image as is Volvo. It is not surprising then that the autonomous vehicle is equipped with

the Volvo Dynamic Steering and the automatic I-Shift gearing. The hardware comes from Volvo; as a partner, Aurora is responsible for the software, that is, the autonomous driving capability. The Aurora Driver software is also being used in other Class 8 Trucks in the US. (eu)

### Sennebogen 835 G Hybrid

After 10 years of the E-Series, Sennebogen is beginning a new series of machines, the G series, with the 835 G material handler. The completely newly designed 835 G is powered with the newest generation engine (EU step V, from Cummins with 168 kW) and the innovative Green Hybrid energy recovery system. The Hybrid-System is a combination of hydraulic lifting cylinder at the boom and a pressure gas cylinder at the rear which achieves fuel savings of around 30%. With the G-Series also comes the new Maxcab, a customized cab that is designed to fit the individual operator. This material handler excavator is of the 50-ton class and is available with equipment to reach distances of between 16 to 20 m. (up)

### Komatsu Mining

Komatsu used the Minexpo 2021 in Las Vegas to showcase further Joy Global products following the takeover of that company. Based on the LeTourneau L-1850 large articulated loader, Komatsu showed the WE1850-3 with bucket capacity of 54.4 t. With 72.5 t, the WE2350-2 is still currently the world's largest wheel loader.

Using a simulator, visitors to the show were able to operate a PC7000-11 front bucket excavator on a site in Arizona. The excavator with its semi-automatic features is still under development. Boring blasting holes with diameters of up to 349 mm can be done with the new ZR122 large bore drill rig which is based on the P&H 77XR. Also new is the Jumbo ZJ32Bi battery-operated hard rock drilling machine with a hoseless drill mast.

### Renault T Diamond Evolution

Renault Trucks introduced the new T Evolution Series virtually in the on-line game Euro Truck Simulator (ETS 2). At the same time, the chief designer called on the gamers to give the vehicle a suitable colour design. Among the countless so-called 'Modder' users was the 18-year-old Turkish student Enes Bolat.

He took his inspiration from rally vehicles and finished his design in red, grey and black tones which the jury found most convincing. The prize-giving, also virtual, was on the Twitch-Account from SCS-Software. Enes had never expected to win such a competition and was even able to watch as his 'Diamond Evolution' design was applied to a real lorry. (eu)

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