

Laster & Bagger

Lastwagen, Baumaschinen und Krane im Modell

Mit Wettbewerb

WSI 1:50
Volvo EC950E
Eigenbau 1:50
Sisu M162



Diecast Masters 1:50
Cat 745

English text



25.25 m Lastenzüge
Geschichte der Giga-Liner

Sammlerporträt mit
Pfarrer Erwin Bauer

NZG 1:50
Liebherr LTM 1250-5.1



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Editorial

Leaving the church in the village

When some puzzled people ask me who reads my magazine and who is engaged in such an outlandish hobby I usually reply, with a little smirk, "From construction workers to truck drivers and up to Catholic priests!"


But two years ago an announcement not to renew his subscription from Father Erwin Bauer crossed my desk. And for me this was not a good day. It really wasn't a good day! I just could not leave it at that and picked up the phone and called him. I explained that he was not just a 'normal' subscriber but that he was something special. The conversation was very convivial and the collector explained to me that even though he just did not have any more room for more models he would still order the new ones when they were so expertly described in the new issues of Trucks & Construction. With his cancellation he wanted to castigate himself and observe more restraint and there the conversation remained. However, at least I was consoled that it had nothing to do with the quality of magazine.

During the conversation, Father Bauer called himself a 'hardcore' collector and said that he was agreeable to be a candidate for a collector's report in the magazine. The report of my visit can be read starting on page 6.

On the recommendation of his housekeeper, Ms. Elisabeth Vogl, he did renew his subscription a half year later. Apparently, he had purchased the missing issues at the local news stand instead. Since then, 'the church is back in the village,' as an old proverb goes.

And now an important piece of advice for all readers: Please tell us early enough if you are moving domiciles. Even if you have paid for a forwarding request, the Post Office is not required to forward magazines and now this is the case for pretty well every country.

I wish you a lot of fun reading the current issue of Trucks & Construction


Daniel Wietlisbach



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".

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Father Erwin Bauer collects passionately

Bauer builds

by Daniel Wietlisbach

Erwin Bauer grew up, together with his 12 year older sister in Schönthan, located in the Bavarian Upper Palatinate, not far from the Czech border. His father was employed by the border police, where he, among other things, maintained the vehicle fleet. Because of his interest of everything technical, there was always a reasonable amount of good tools in the house, as the collector remembers. On top of his job with the border guards, the father later took over the farm of his parent and that included some forestry as well. The mother looked after the house and home and passed her religious beliefs to the children. Forest, tools and faith are still important for Erwin Bauer today, adding to that his hobby that has made him famous far outside his homeland.

The beginning of the story is like many other collectors: The building boom of the after war time was in full swing. Erwin Bauer preferred to visit construction sites over soccer pitches. On top of that, there was a small toy store on the way to the church. In the window were two excavator models displayed, but these were out of reach for him.

At the age of 12 the boy had to have adenoids removed from his nose, as they hindered his breathing. His mother asked him after

A priest that collects models and knows something about construction machines is not a common sight. A visit with Erwin Bauer is therefore a special experience ...

the operation what he would like to help him forgetting the pain and he told her about the Liebherr 961 with back-hoe attachment (Gescha) that he had seen in the toy store. It became the first piece in his collection, which over the last 50 years has grown to 2400 pieces.

Even as a youngster the collector helped out on construction sites of the Utz-Bau (Utz-Construction). That company employed around 400 people in their heydays and owned the largest construction machines at the time. Among them a D8G and one of the huge Faun dumpers that were still allowed on public roads. Utz-Bau also bought the first scraper set in the area and Erwin Bauer was able to see it work from his home. He still remembers the cloud of black smoke rising, when the engine was started. He absolutely wanted to see the new machine close up and often went to the construction site to watch the Cat 613A regularly.

The second excavator from the toy store, a Poclain 160 (Gescha) arrived also at Erwin, but a little later. Both models were guarded like treasures, not played with and

today still look like they have just been bought.

The course is set

The collection grew unremarkably up to the age of 20, and the young man was setting his sights on becoming a construction engineer. He attended the College and during the holidays he continued to work on construction sites.

With the diploma in his pocket, his village priest asked what he was going to study in university. He was a very charismatic personality and his influence was great: "You will study to become a priest! There are plenty of construction engineers around already". He knew his protégée already very well from serving as altar boy and knew about his religious upbringing. He achieved that Erwin Bauer took time to think deeply about his calling and finally decided on studying theology.

This took six years and during the semester breaks he 'took a break' and worked on construction sites. Erwin Bauer paved roads, set curbstones, built concrete forms, worked with Re-Bars and steered

bull dozers and road rollers. “The whole program” as he remembers smilingly. Of course with Utz-Bau and fully paid this time. Nine German Marks an hour was a good wage then and with his first pay check he bought himself a TV set.

His love for construction never left him and sometimes even cast doubts on his studies. For example, on the flight back from Israel. In the plane he got to know some construction workers and engineers that at the time, in the 70s, were working on mega projects in Saudi Arabia. Despite these temptations, Erwin Bauer, the priest, calls himself today “a passionate pastoral care taker”, a statement that is very easy to believe.

After being inducted into the priesthood he first served twice three years as a chaplain (today called curate), as the right hand of the priest in charge. Because even in a church there is always some construction or renovations going on, his experience in construction was always very sought after.

At the age of 32 Erwin Bauer was appointed to his first church as the sole rector. He stayed for 16 years in Döfering and Schönthal and among the population he soon got the sobriquet the “Bau-Pfarrer (the construction father)” or “Bauer baut

(Bauer builds)” During his tenure the manse and the youth house was renovated, a double garage was built, the church was partially demolished and expanded, a former monastery building renovated, the church land rehabilitated and the rectory renovated. He could often be found on the construction sites and so never had any problems mobilizing his parishioners to help out.

His Collection

During his studies Erwin Bauer discovered Fritze’s Modelbörse, who became his favorite supplier. Time after time, however, he was given models “that surely had something to do with my position”, as he confesses. Even today, he still regularly visits construction companies, construction machine producers and construction sites and never hides his profession. This has often opened doors for him. “To give a present to a priest is even today something special” says the pastor. Erwin Bauer goes regularly on holidays, always in company of his house keeper. She knows, after 30 years, that somewhere during the trip a visit to a construction site is on the itinerary.

Of course the Father Bauer always puts his profession first, but

because of the Bauma, that he can only visit on Monday, his day off, once or twice a funeral has been postponed. His rather earth bound hobby is an ideal counter balance to his pastoral work. Father Bauer’s immediate superior found it great that he has a hobby that he enjoys, because many of his fellow colleagues do not and he found that regrettable.

To have a priest as a member is a bonus for any association and so Bauer is now a member of the VD-BUM (Association of construction engineers and masters), the Volvo driver’s club and Excavator Club Moosbach. And from construction company owners he is often asked to bless new construction machinery.

He still orders and buys his models from dealers, his passion is especially for German Construction machines and of course Caterpillar. He likes to display whole series of the same machine, because that way the development of the machine can be shown. When he moved to Eslarn, 14 years ago, he had to pack up 1700 models, also called lovingly “my children” and since then a further 700 were added. He concentrates his collection on 1:50 models and his focus is on earth moving machinery, but even so, cranes can also be found in his collection.

Erwin Bauer has never sold a model, perhaps a few were swapped or given away. Most of them stand, well protected in lockable cupboards. Except for the kitchen, there are models in every room of the two story rectory building.

When he is going to be pensioned, he will donate the whole collection to his home town of

The collector

Erwin Bauer (62) is a catholic priest in Eslarn in the Upper Palatinate near the Czech border. Besides collecting models he likes to travel “and not only to holy places” as he says but “where there is something to see and interesting people live”.

He likes to show off his collection to likeminded people but they must prepared to have time, he likes to pass on the back ground for each model as well. Please call first for an appointment +49 3653 929 99 18.

Oberviechtach. The major of the town was already over for a visit for this purpose and was very surprised, he had thought 'toys' but found models instead. The whole collection will be housed in an

extension of the local museum and the move has already started. Whenever Pastor Erwin Bauer has some time, then he is packing models into their original boxes and drives them to the fire hall where

they have made space for it. He would like to operate the museum himself in his retirement and tell construction machine stories to interested visitors.

Translation of page 11

Tinplate

Combination crane

by Robert Bretscher

When the well-known tinplate model producer of Tipp & Co. decided to create the very versatile off-road vehicle as a toy for children, the prototype had already been in use in the agricultural sector and as tractor truck on road for a few years. The 'Universal-Motor-Gerät (Universal tool-carrier), better known under the abbreviation of Unimog, had been designed in 1945 as an agricultural all-round vehicle and went into serial production in 1948 at the Maschinenfabrik Gebrüder Boehringer in Göppingen, Germany. In 1951, Mercedes-Benz which was the supplier for the engines, took over the production of the all-round vehicle and built a special factory for it in Gaggenheim.

With this roughly 1:20 tinplate toy, Tipp managed to create a super playable vehicle that had an authentic shape. The off-road vehicle was powered by a strong

This Unimog, model series 411, made by Tipp & Co. in 1960 was a real 'universal motorized tool carrier,' even in model form ...

clockwork engine. Its four large tires for off-roading were like the original and the whole vehicle was controlled from the cab, again just like the original. For this operation the plastic roof simulating folded canvas had to be taken off making visible the two operating levers for driving forward and for the dumping motion. The swiveling steering wheel made it possible to steer both of the two front wheels. They had an oscillating suspension system. The rest of the cabin is very pleasing to look at with its foldable front window screen, foot pedals and a variety of gauges on the dashboard. It had two trailer hitches, one each front and rear and an impressive variety of goods could be trans-

ported that way. Tipp & Co. had a few interesting matching trailers in its offerings. In addition to the transporting of goods, the producer also made several additional attachments and tools which gave the toy almost unlimited play appeal.

The history of the great tinplate maker began in 1912 when the company was founded by Fräulein Tipp und Herrn Carstens (Mrs. Tipp and Mr. Carstens.) After a relatively short time, Philipp Ullmann took over the company as a partner and guided the company that produced and sold high-quality toys for decades. Like many other European tinplate manufacturers, Tipp & Co. had to stop production in 1971.

Sisu M 162 CZT 8x2/4

Johu's big day

by René Tanner

The lanky man in his mid-50s packs up his papers and downs the last sip of coffee. Then he dons his Russian fur coat, quietly closes the house door and walks through the crunching snow down the driveway of his small holding near the town of Kuhmo in Finland. 'It is freezing cold,' he thinks to himself. His wife and the kids are still asleep but will anxiously await his return. Johu Koppola, an independent truck driver/owner, has been driving trucks for the construction trade since he was 18 years old. He has finally fulfilled a long-time dream.

His career started by driving a military-looking Vanaja. Later followed used Jyri and Kontio Sisuus. His latest Sisu was the predecessor of the M type, introduced two years ago. The KB 117, the first truck with a tilting cab as standard feature, was built only in a small series; the roundish form was not visually attractive but it was a solid performer. But today, spring 1973, the wait is over. The old KB has been parked beside the barn.

His friend is waiting for him in his Saab. The warm engine exhaust blows white clouds into the frigid morning air, and they can start out.

The trip goes past many lakes to the main factory in Kari. Waiting for him is a brand new Sisu M 162 CZT and the RKP trailer, custom-

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

made for Johu to his specifications, with the cassette system typical for Finland. Johu had a very close look at the model series a year ago at the, 'Kuljetus,' the Finnish transportation exhibition in Jyväskylä. He then sat down and signed a sales contract for the impressive dumping truck and trailer set.

His dream of one day driving out of the Sisu 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 Fins' face.

Sisu Auto OY, founded in 1931 by Tor Nessling, created a real 'cult' truck in 1970 with its 'M' series. This series was seen for 14 years, mainly on Scandinavian and Baltic streets; a few even went as far as Greece and some even to Switzerland. Being equipped with robust technology, most with a Fuller gear set and coupled to either Leyland or Rolls-Royce engines and the almost indestructible Sisu axles, helped the square looking Finn gain respect. It is not for nothing that the word 'Sisu' stands for power, endurance and perseverance. In the later 'M' series there were small changes from type

1. The headlights migrated to the bumper bars and the engine choice on offer widened in 1974 when the Finnish state took a majority stake in the company. The slow switch to the reliable Cummins engines was a result of the take-over. The edgy shape of the cabin never won a beauty contest however, it was not un-attractive and gave the truck its own special charm.

Sisu too became a candidate for a possible take-over by a variety of investor groups. In 1997, a co-operative agreement with Renault was reached and today components from Mercedes-Benz Arocs and Actros are used in construction. However, the company is still functioning as an independent, successful Finnish company with its head-office in Raseborg.

Johu made a conscientious decision by choosing the 6x2 chassis with the extra idler axle and the Robson-drive. Assembled by VTA Tekniika Oy in Tampere, this allows for additional load capacity. Off-road, Johu can lift the idle and the trailing axle at the same time and the Robson-Drive gives a boost to maintain traction in difficult terrain. The trailer with the Wide-Spread Boogie as well as the

cassette system was built by RKP Konepajat OY in Rovanjemi. RKP belongs to the JYKI group of companies today and specializes in the construction of trailers and semi-trailers as well as dumping containers and transport solutions for the lumber industry.

A whole year passed by until Johu, finally with a smile on his face, was able to open the driver's door and climb up. Everything has the 'new truck' smell. The seats are still covered by the plastic wrappings. He turns the key, the 320 hp Rolls-Royce Eagle engine turns over and the high up exhaust stack starts into life with a low rumbling

sound that is a happy sound for him.

Johu descends from the cab one more time. A short conversation and handshake with the salesman before he climbs up to his new 'home away from home.' He carefully engages the first of the Fuller gears and releases the spring store brake. A short clicking sound, a loud hissing and the heavy 19 m long truck and trailer train begins its inaugural trip.

Johu gears up, black smoke comes out of the stack and accompanies the ever-faster-running unit and the generally not very emotional Finn can no longer suppress his happy laughter. Holding the

Bakelite wheel firmly in his hands he notices the pleasant warmth in the cabin that has just begun to spread.

The morning sun, hesitantly shining thru the red sun visor, the gears shifting as smooth as butter, the Pantograph-type window wiper wipes the slush of the window. A short look into the rearview mirror, again changing gears upward and the trailer, slightly obscured by the fog on the wet streets, follows the truck in its tracks. Johu is over the moon and very happy. He has made the best decision ever. And forward, into a new age.

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Berna 5VM «Eberhard» from GMTS in 1:50 A Swiss Legend

by Daniel Wietlisbach

No other trucks had a greater presence in Switzerland than the Saurer 5DM and the Berna 5VM that were a common sight on Swiss roads from the 60s to the 80s.

A buyer could choose if he wanted to have a Berna truck, made in Olten, or an identical one but made in Arbon. Berna was taken over by Saurer in 1929 but their independent production in Olten, Canton of Solothurn, stopped building trucks in 1974.

The resin cast model was built by GMTS in a small series and can be bought together with the low deck

Martin Eberhard had GMTS build a model of the Eberhard Berna 5VM ...

trailer in the Excavator Museum 'Ebianum'. There you can also see a similar original truck.

We did our litmus test by putting a scaled-down half-transparent picture of the original cabin over a same size picture of the model and compared them. The test showed a very high degree of accurateness and also that the cabin shape has been copied into model form very well. The truck is equipped with warning signs, additional extended

mirrors and warning beacons for the transport of construction machines. The radiator grille has the unmistakable, painted, Zürich Cantonal emblem on it.

The low deck trailer is an 'unicum,' a former US Army 45 t 'Winter Weiss' low deck trailer that was bought in a surplus sale. In the Eberhard shops he was given hydraulic ramps and the model was accordingly and exactly replicated. (See also page 58)

Scania LS110 from Tekno in 1:50

Tanker for candle wax

by Hans Witte

First of all, an overview of the Scania-Vabis with L long hood cabin from which Tekno can deliver all types: L/LS 75-76 with short or long BeGe cabin, L/LS 110/111 with short or long Scania factory cabin. For the different cabins, Tekno has developed a nifty assembly system. On the factory cabin version, the cabin is attached directly to the hood and for the BeGe cabin, a filler piece is added. The BeGe cabins come in a variety of lengths: 1080 (mm) and 1020 as day cabins and 1035, 1045 and 1060 as sleeper cabins. On top of that, there was also a 1080 version designed as crew cab for fire fighting vehicles and others. Accessories that are typical for the times: different sun visors, mirrors, side markers, roof racks with the matching ladders, fuel tanks and much more. BeGe, Floby and Nyström were Swedish cabin builders. At that time, Scania did not have its own cabin construction department and so the customer could choose the favored cabin builder for his new truck. In practice, the BeGe cabin construction was the most frequently used.

Very noticeable but small details are the two different turning indicators on the front fenders: a low one for the L75 and L76 types (when combined with the BeGe cabins) and higher-sitting indicator lights for the 110 and 111 series. These

To serve the newly ignited interest of collectors for classical models, Tekno has recently re-designed the most desirable ones ...

are minute details with a difference of only 0.5 mm, but with this adherence to detail, the maker shows that it is serious when designing details. Unfortunately, the last black dashboard as well as the two-spoke steering wheel of 111 was not modeled; it would have appeared on the model shown here. Behind the license plate HB-74-76 hides the construction year. The 110 is from 1974 and has the short Scania factory cabin. The 110 was modernized step-by-step in the same year. That is why there was an 'in-between series' for about six months that already included the dashboard mentioned and electrical system of the 111 but was still powered by the 296 hp engine with the old gear system. The 111 was finally powered with a 305 hp engine.

The history of Stubbe as a transport company began in 1936 with gravel and sand transports. Commencing in 1950, the company looked for new avenues of income and started hauling liquids with their own tankers. One such load was Stearin (candle wax) for a candle factory in Gouda. Of course, liquid grease and oil was also transported in Germany, France and all over the Benelux states. Since 1995 the Stubbe transport

company has specialized in tanker transports and the cleaning of tanks. Today its fleet contains 10 Scania and DAF tractor trucks. Additionally, Stubbe maintains a small fleet of Old-timers including a Scania L50, a T113 and a DAF FT3300 SpaceCab and, of course, this Scania LS110.

The trailer was built by Burg and the tanks came from Hobur. The way the tanks are attached still shows the old construction method whereby they were held in place with tension belts on the saddle. Both tank chambers have identical volume capacity and so the truck and the trailer each contain 14,000 liters. This makes the whole train very stable and allows for safe driving conditions. The trailer has safety aprons on the front and along the sides. The truck has a pump on the right side (PTO powered) and a tool chest. On the left one can be seen the 325 liter fuel tank as well as the battery box. The exhaust is kept very short due to the safety regulations and on the model, is an especially cast part. The rears have been detailed with position lights, the classic Hella three-chamber lights and red fog lights.

Anything to critique? As already described on the Astran Scania, the

Stubbe also runs on tires that are too narrow. The trailer chassis is too wide at 24 mm; 20 mm would have

been the correct width. Because of the actual width, the narrower tires fit best. Despite this, the Scania from

Stubbe that sold out very quickly was and remains a high class, collectable model.

Volvo EC950E from WSI in 1:50

Big bang

by Daniel Wietlisbach

The excavator has been modeled correctly to scale size. It sits very solidly on the hefty lower carriage and the high overall weight gives the model a valuable look. The drive units are made up from several parts and the nine running and three support wheels have been correctly duplicated. The drive wheels have been nicely engraved and the guide wheels are softly sprung making the tracks turn very easily. Unfortunately, even with this the third excavator model, WSI has not managed to calculate the track segment widths in such a way that they close tightly without any gaps showing when running around guide and drive wheels. The tracks used are, when calculated against the prototype, 650 mm wide and are the narrowest possible tracks that would fit for an excavator working in a quarry.

The massive upper carriage part is made up from several precision-engraved white metal castings, which show service doors with key holes, screw heads, air intakes

With only one model released per year, construction machines from WSI are something exclusive and they have an excellent reputation, therefore the expectations for the Volvo EC950E where high ...

and further details. Separately applied parts are lifting rings on the counterweight, exhaust, air intake funnel and anti-skid gratings from very fine photo-etched parts. One hatch can be opened and a mock-up of a Volvo engine made up from several parts and multi-colored, is hidden underneath it. This detail shows how proud the Swedes are of their domestic engine products. Especially noticeable are the bril-

liantly orange, glowing handrails and safety railings, all made from robust wire stock.

The cabin is made up from a single casting and the very flush-fitting glass encloses it front and side. Its gaskets are raised and matt black in color. Window wiper, handrails, rear view mirror and rotating light have been separately applied. The cabin protection grilles on the front and on the cabin roof are optional for the original however they are very suitable and consequently look right on a quarry excavator.

A 7.25 m outrigger boom paired with a 2.95 m arm give the machine the hunkered down, powerful look. Boom and arm are precision metal castings and are not hollow, but closed. As we are used to from

At a glance

- + Detailing
- + Functionality
- + True to scale
- Decals instead of paint job



WSI, the hydraulic lines are especially exactly modeled. They are free-standing all the way and, according to the original, are made either from wire or flexible black hose stock. A special treat to see are the hydraulic cylinders with all the fittings and hook-ups to the distribution valves.

The shovel is made from a single casting and has the five teeth and wearing plates of the heavy duty version. It is attached with two little screws and so it is easy to swap it for an alternate tool attachment. It is sad though that the model was not given the additional hydraulic circuit for this.

The equipment is not only a visual treat but it is also very func-

tional. The maximum working reach is not quite achieved but the reaching distance, digging depth and transport stance are all exactly correct.

The satin finish supports the positive look of the Volvo EC950E. Unfortunately, and we hope this is not a trend, the yellow surfaces on the sides are made up from water slide transfer decals. These are applied with a great deal of precision and cannot be spotted right away however, when looked at close-up, the discrepancies around joints and door locks are noticeable. Other than that, the lettering is printed on without any faults and is very extensive.

The original

The Volvo EC950E was one of the highlights of the 2016 Bauma exposition. It is always something special when a producer advances into the next highest weight class with its machine products. With its 90 to 92 t overall weight, it brings 15 t more to the scale than the previous leader in the program, the EC750E. With its short boom and arm, the Volvo EC950E has been designed for the big jobs in moving soil material. This can also be seen by its huge shovel with a capacity of up to 5.6 m³. The Volvo six cylinder D16E engine produces 450 kW (611 hp) and complies with the exhaust protocols of Step II / Tier 2.

Caterpillar 745 from Diecast Masters in 1:50 Fully loaded

by Daniel Wietlisbach

The model of the Caterpillar 745 was one of the main new Diecast Masters items of 2017 and was awaited with great suspense. The new policy of adding Bob the Driver separately has been adhered to with the 745. Also included separately is a sand-colored load which is much more realistic looking than the one included with the AD60 underground ADT.

The model feels pleasantly hefty in the hand and has been reprodu-

Articulated dumpers do not often appear in model form. That was why we were very interested in the brand new Caterpillar 745 ...

ced true to scale. The model collector of this genre notices right away that the articulated joint is very stable with no buckling of the joint which was a weak point in other earlier model constructions. Finally, the tires have a serious looking width. They are the standard version that make the machi-

ne look even heftier. Sometimes in Europe even wider ones are used.

The front part of the vehicle with its characteristic look has been well transposed and the hand-soldered safety railings are again very effective on this model. The rear-view mirror is a plastic one but is fine and dainty.

Access to the cabin on both sides is guaranteed by separately attached stairs with anti-skid steps. The air intake grilles behind the cabin and below the front light are only printed on but are very finely done. The engine hood opens allowing a peek at the detailed engine room. Also, the cabin can be tilted slightly sideways showing the hinted at but otherwise hidden wiring harnesses. The cabin with the top-mounted all-round spotlight and exhaust can be lifted off for the placement of Bob and to better admire the well-executed interior. For the driver of the loading machine, there are red /green weight displays on each corner of the cabin, as on the original. The window wipers are hinted at and integrated into the casting.

The well detailed area around the articulated joint has convincing looking supply lines but less convincing is the turning degree of only 25° instead of the 45° of the prototype.

At a glance

- + True to scale
- + Metal railings
- Only printed-on air intake grilles



However, the rear of the vehicle is well done. I recommend that you also have a look below. The whole drive train is modeled in its full length and both rear axles are softly sprung, true to the original, at the main frame. Watching the play of the axles is a view one should not miss. At the rear are brake lights, hazard flashers and back-up lights and these have been colored in. The very long dumping cylinders are plain, just as on the original, and make it possible to achieve a prototypical dumping degree of 70°! The dumping bin, including the front mud flaps is made up from a single white metal casting. The paint has been applied very cleanly and

not too thickly. The printed-on lettering is kept to logos, type lettering and air intake grilles however, it is sharp and has great separations.

The original

The Cat 745 is the first machine of the maker without an exact series nominator. The articulated dumper replaces the 745C and logically would be a 'D'. Because lettering began with all the bulldozers, they have nearly arrived at the end of the alphabet; a new solution had to be found. The models are now defined according to the year they were built. The 745 only looks like its predecessor at first glance but the design of the cabin had to be adapted. The largest dumper of the yellow giant has a capacity of 41 t (US 45 t) and when fully loaded reaches almost 75 t. It is powered by the Cat C18 Acert with 381 kW (511 PS) that complies with the exhaust values according to step IV / tier 4 final.

Liebherr R 920 Compact from Conrad in 1:50

Round & good

by Daniel Wietlisbach

Shown for a long time on the website of the Liebherr shop as a ‘sample’, it led to many wild speculations because it was very imaginatively photo-shopped. But now the finished model from Conrad with its usual robust construction is standing in front of us. The model has a pleasing heft to it and has been made true to scale. The only deviations are the slightly over-dimensioned metal track segments that were taken from the standard Conrad program.

The drive units of the LC chassis are made up from a single casting with integrated running and support wheels of the correct number, as well as the steps. The guide wheel is nicely modeled and sprung and the drive wheel has the Liebherr logo on it. The blade is a good copy; it is made from a white metal casting with two hydraulic cylinders that make it moveable. The proportions of the upper carriage have been really very well transposed to model form. It is made up from two exactly fitting metal parts that show hatches, hand grips, bolt heads, rear lights and a raised Liebherr logo. The honeycomb-shaped air intake grille on the right side fits very well as a prototypically correct plastic part. Other fine details on the upper carriage include the engine cover, including an air intake manifold, engine hood with exhaust, rear camera and the hydraulic valve block. The cabin

The model of the new compact excavator from Liebherr is the third with the same quick-change capability that increases the play value of this very nicely executed new model ...

is made from a single metal casting with a flush fitting glass plastic part. The glass shows the window partitions which are raised and printed flat black that looks very authentic. The two handrails are made of a thin plastic material and the rear view mirror is included in the package but has to be applied by the collector. While the printed-on window wipers look a bit flat, the antenna that can turn prototypically is a new thing. The uni-colored interior is a fitting replica of the original.

Equipment

While the 5.0 m Monoblock outrigger arm is cast from new masters, it was possible for the 2.45 m jib to use the existing casting from the A 920. Both are well made parts and the model reaches all maximum positions satisfactorily. The especially

well made hydraulic lines which run all the way from the valve block to the cylinders are made up from separately-applied parts. Even the additional hydraulic circuit that runs to the quick-changer has not been forgotten and on the model supplies the swiveling digging and clearing bucket. The quick-changer is identical to the ones already used on the A 920, R 922 and R 926 models. This means that their tools are interchangeable with all the other models. Consequently, in addition to the new digging-clearing bucket, the backhoe and grapples are available as attachment tools. The typical Conrad hollow bolts work really well because they come very close to how the original ones work.

As we are used to from Conrad, the paint job is faultless. The printed-on lettering is a little pixilated but acceptable.

The original

The Liebherr R 920 Compact with a working weight of between 18.75 and 21.90 t, depending on equipment attached, is in the middle field of the tight slewing

At a glance

- + Shape design
- + Functionality
- + Quick-changer



radius excavators from Liebherr. It is available with the standard LC or the narrower NLC chassis and the capacity of the shovel is between 0.30 to 0.95 m³. Even though it is designed for use in

space-restricted sites, the LC version can often be seen on regular earth construction sites. With or without blade, with a variety of arms, jib lengths and tools, the 20 t excavator is a real all-rounder.

The built-in four in-line cylinder engine of the Liebherr D924 A7-04 type produces 110 kW (150hp) and is compliant with the current exhaust protocols step IV/Tier 4f.

Caterpillar 416F2 from CCM in 1:24

A new series

by Daniel Wietlisbach

The new series has been given the name of ‘Contractor Collection Series.’ To the reader in the US, unaccustomed with the meaning of ‘contractor,’ it refers to smaller construction companies. This explains the choice of smaller prototypes to model and also the choice of the 1:24 scale.

Which kind of models will finally be produced is still not sure but CCM published a list of ‘possible genres’ in their blog from June 10th, 2016. In it 14 machines are shown and the offerings go from a small dozer to tracked loaders, compact and mobile excavators and graders up to a dumper and even a scraper; as previously mentioned, all are small models. We will see and look forward to what is to come in the future. The first two models produced are the 287D compact loader on tracks and the 416F2 backhoe loader shown here.

CCM is starting a new series of diecast models in 1:24. As a first model, the Caterpillar 416F2 Backhoe Loader made its debut ...

The model arrives well protected in the familiar CCM package and exudes high value because of its heavy weight and detailing. It has been produced true to scale and with the complex construction of a backhoe loader, price-wise it comes close to the D7E in the same scale. The whole series is made up of 500 units.

Looking at it from below, the highly detailed construction of the model can be seen. The engine, gear shaft and drive shaft, further auxiliary machinery and feeder

lines can be made out clearly. The rear axle has suspension, the front axle oscillates and the front wheels can be steered. With these features it is possible to drive the model over uneven surfaces and see how the exactly copied wheels hug the ground. The engine has been replicated true to the original and is painted in several colors. It also can be seen close up from above because the engine hood opens. The radiator grille as well as the side air vents are made from photo-etched sheet metal.

The roomy, multi-colored cabin is especially precise and has extensive printed-on lettering. In addition to the opening doors, the rear window opens by 180° as on the original. While the interior rear-view mirror was modeled, the

At a glance

- + Detailing
- + Functionality
- Lamps are not transparent



large window wiper on the front window is missing. All hand railings are made from a solid wire material and the exhaust has been augmented by a photo-etched heat protection shield. Work spotlights, indicator lights and back-up lights are made of painted plastic parts. Transparent detail parts would have been a better option here.

The two functional tools for each model have been modeled very exactly and are highly detailed. On the excavator, the telescoping jib makes it possible to reach the impressive digging depth of the original; this also explains the

rather long hydraulic lines. The maximum range for reach, the side swing radius and the transport mode of the original can be duplicated in scale correctly with the model. The same goes with the front end loader; coming with a 3-in-1 shovel it is even capable of some bulldozer jobs. Unfortunately, three cross-head screws were used to attach the shovel. Despite being painted, they look more obvious than comparable bolts.

Paint job and lettering have been cleanly applied from CCM without any faults.

The original

Backhoe Loaders are in common use in Great Britain, the US, in emerging markets and Third World countries. They are the ideal 'Jack-of-all-trades' solution and are very easy to re-locate from one construction site to another. The Cat 416 has been in production for about 30 years. The newest of the series, the 416F2, has a working weight, depending on equipment, of maximum 11 t. It is powered by the 87 hp (65 kW) strong C4.4 Acert engine which complies with the EPA Tier 4 final exhaust protocols.

History and development of the 25.25 m long truck and trailer train

Giga-Liner

by René Tanner
and Hans Witte

Because of the missing length restriction in the Swedish road regulations, overlong truck and trailer units travelled there in the 50s and 60s. They were generally composed of a three-axle tractor truck with a 12 m semi-trailer and hitched to that was a standard trailer of two or three axles and a length of 10 to 12 m.

They look huge and the 1:50 models are always sold out in a short time. The 'Sweden-Kombi' (Swedish-Combo) or 'Giga-Liner' as these European Road-Trains are called leave nobody cold and reserved ...

The long transport distances, the bad infrastructure and the boom after the Second World War were the

reasons for these overlong vehicle combinations. On top of these reasons the rail network was in tatters

after a long period of neglect and lack of investment. All these factors contributed to the use of these ‘Swedish Road Trains.’ There were almost no limits to the imagination and use of them. Truck owners and freight companies combined their vehicles very cleverly and thus were able to further increase their transport efficiency. Units of a truck with trailers of a length to up 32 m were not unusual however, at that length they had to have a so called ‘Dispens,’ an exception permit.

The maximum weight was limited to 52 t and the top speed allowed was downgraded to 40 km/h. In 1967, because of the harsh Swedish winter conditions, the sometimes massively overloaded truck trains and also because of the tight space conditions in towns and smaller settlements, the Swedish Law Makers legislated the total length to a ‘free’ 24 m. This, however, left a lot of wiggle room for interpretation. In 1972, the law was finally changed to definitive total length of 24 m. The total weight for these 24 m long trains was set at a proud 60 t. In 1997, Sweden, under pressure from the lumber industry, extended the length to 25.25 m. This was done in order to implement a modular concept. The goal was to increase transportation efficiencies and make the forest industry competitive again. This system has a standardized loading length for the truck of 7.82 m and for the trailer or semi-trailer by using a two-axle dolly, of 13.6 m. This makes it possible to transport in a modular way and is especially cost efficient. Standardized load units, like containers and bin systems can so be used optimally. At

the same time, the standardization massively simplifies the loading and hauling of log bundles. Only Sweden and Finland have the legislated 25.25 m total length and 60 t weight limit. In Norway, there has been no change and the limits are 19.5 m and 50 t, with the exception of log trains that may have a length of 22.5 m. Since 2016, Sweden has allowed 64t trucks and Finland even increased the total weight to 74 t in 2013.

The Swedish forest industry, the driving force behind all changes to weight and lengths, is currently testing the HCT Fordon concept of high capacity transport vehicles that weigh up to 74 t and are 34 m long. Tests are being conducted at the moment with weights to over 90 t; some field tests in Finland even went to 110 t.

With these initiatives it is hoped to achieve optimized transport efficiency because with higher loads the vehicles have to make fewer loaded and empty trips and it is also said that the exhaust emissions would be considerably reduced. Another factor that has been calculated is that with higher vehicle weights and accordingly the lessening of heavy transport trips, it should lead to a reduction in damage to the roads. Tests have proven that the EU standardized trucks of 18.75 m in length and with shorter wheel bases cause more damage to bridges and roads than these ‘Giga-Liners,’ as they are laconically called nowadays.

Other countries

In Denmark until 2014, the EU lengths and weights up to 48 t were the standard. Since 2014, the total weight was raised from 48 t

to 54 t and then to 56 t, dispersed over seven axles with the appropriate axle loads and the vehicle lengths remaining the same.

In 2000, Holland began intensive testing with so-called LZV’s «langere en zwaardere vrachtautocombinaties» (longer and heavier truck combinations.) Four of the major freight haulers used these LVZs inside the huge and far-flung Rotterdam harbor precinct. Today, over 300 LVZ’s are rolling on Dutch roads because since 2006 all restrictions for this have been removed.

However, the restrictions for freight haulers and drivers are great. Strictly designated routes including on and off ramp locations on the highways, specific drive tests for drivers as well as very complex technical requirements for the vehicles ensure that this option is not for everyone.

Even in Germany, since 1987, between the harbors of Hamburg and Lübeck such 24 m long truck-trains have run. Because of the huge increase in capacities, shippers are calling to increase the area in which these units are allowed to operate to Bremerhaven.

The development of such LZV or Giga-Liners as well as HCT today is being further advanced, driven by the results of climate change and the call for exhaust reductions according to the Kyoto Protocol. The industrialized countries are facing ever-increasing vehicle traffic and are demanding a reduction of the heavy freight traffic.

Construction drawing Pegaso 'Mazo'

Spanish 'Flyer'

by Hans Witte

The starting model already had the Pegaso demo color scheme and lettering applied on the cabin even though, for the times, it was rather plain; the shape was reasonable accurately done. Martin wanted to make it into a real Spanish 'Flyer' and decided that it would have to be painted in the color scheme of the well-known Spanish freight hauler, Mazo, from Valencia.

A Troner cabin and front bumper were mounted on a Lion Toys DAF 95 chassis. The first job then was to swap the fuel tank (mounted on the left side) and the exhaust around. On the right of the chassis are the battery box, air filter housing and a spare tire. Unfortunately, the tractor truck has the wrong wheel base of 3,100 mm (62 mm on the model); the correct distance should have been 3,500 mm (70 mm). We did not change that but, in hindsight, the model would have been even better with the longer wheel base.

The cabin was up-graded with a Spoiler-Set, a sun visor and mirror set from Zon Model. Other parts like air horns, TIR stickers, Pegaso mud flaps, trailer coupling and the support legs for the semi-trailer were ordered from a Dutch parts supplier.

The 12 m long semi is of the DAF type that was also sold in Spain at

This Pegaso Troner was relatively easy to convert from a Lyon Toys model. It was built in 1989 as a team effort between Martin Huizinga and Hans Witte ...

that time. The maximum combined length then was still restricted to 15.5 m. The trailer matches the Pegaso perfectly, not only because of its style of construction but also because of the three heavy-duty axles with twin tires. To make the model more prototypically correct, the tarp was increased by 3 mm using filling pieces. The covering tarp was newly made from paper and then the trailer was covered with it. For this the paper was first scrunched up and then smoothed out again. On the drawing you can see how it has to be folded and glued on. The tarp finishes just above the customs' seal so that it can remain as is.

After we assembled and painted the model, we asked my brother, who is very good at writing and decorating, to make the logo for the tarp and the flying horse of the Pegaso logo for the roof spoiler. Even after so many years, the model is still an eye-catcher.

The Pegaso Troner made its debut in 1987 at the Motorshow in Barcelona. The completely new Cabtech cabin was developed in co-operation with DAF which

used it for its construction series 95 that was also introduced in 1987. The Troner was powered by Pegaso's own 12 liter in-line six cylinder engine and ZF gear box with 16 gears. At first it produced 360 hp; later on the power was increased to 370 and 400 hp. Pegaso was part of the state-owned conglomerate of Enasa. Since Seddon-Atkinson became part of Enasa in 1984, the cabin was also used later on the Strato. The production of Troner and Strato came to an end in July 1993 after both had been taken over by the Iveco group of companies.

Urs Bühler Transporte Wolhusen

Day and night

by Erich Urweider

Urs Bühler Transporte also runs a gas station with car wash, a commercial vehicle wash that is open to the public and produces electricity that it sells to the public grid using a Photovoltaics solar installation.

The beginning of this freight hauler goes back to the year 1986. However there are probably some genetic reasons too since the father of Urs Bühler was working as a small regional transport company for the local farms. Then he used a farm tractor and trailer that was quite common at the time, but he had to overcome quite a few challenges especially in the winter time when he was also in charge of keeping roads open in his area and the work load was almost double. Later on the TV series 'Auf Achse' (On the road) awoke the driving fever for Urs Bühler; this was not well received by the parents. That meant that Urs had first to complete a car mechanic apprenticeship, since apprentice placements as truck drivers were thin on the ground.

After completion of the apprenticeship and his compulsory military service, Urs Bühler issued an ultimatum: either the family business evolved and changed to a truck operation or he would buy a truck himself and become an independent operator. The matter took its course

The Urs Bühler Company located in Wolhusen in the Swiss canton of Lucerne transports animal feed products, flour, grain as well as petrol and heating oil ...

and it came to pass that Urs Bühler purchased his first truck with his savings. It was of the Berna brand of trucks, had 230 hp and was already 15 years old. It had a truck body for bulk goods for the Krampf Company. His first customers were the regional animal feed suppliers so that was why the truck was specialized in the hauling of bulk loads. The old Berna did not always run satisfactorily and according to Urs Bühler's wishes. The Berna had been driven before very carefully by a sixty year old driver. Urs, as a young and impatient driver was frustrated by the lack of speed and that everything took too long. Looking back however, the experiences gathered with the old truck were optimal because they enabled him to evaluate the replacement requirements for a new truck perfectly. The Berna was replaced after three years by a Mercedes. This truck left the factory as the two-axle truck, NG1625. However, it was taken over by Urs Bühler as a 1928 with a trailing axle that had been built in by Geser Fahrzeugbau Littau later on. Both trucks could be parked on the neighbor's property.

Until 1995 Urs Bühler remained a one-man outfit and his hard work attitude soon gave him the nickname 'the day and night Bühler'.

Then in 1995 the transportation capacity was increased by the purchase of a new Mercedes-Benz SK2538 and with the hiring of his first full-time driver. Because the company had only positive experiences with the Mercedes-Benz brand, the older NG1998 was soon replaced by an Actros 2553 and Urs even splurged on the more powerful V8 engine.

The millennium brings new technologies

In the year 2000, the first tractor-semi trailer with a blower unit to discharge bulk freight was acquired; it was a Mercedes Actros 1843. Planning ahead to the future, Urs Bühler also bought a three-axle semi-trailer matching the truck. Since the 28 t weight limitation was only lifted in 2001 and a third axle meant more dead weight, the trailer was delivered in the two-axle version only. The original third axle was

delivered to the purchaser on the trailer and the semi-trailer was then upgraded to the three-axle version in December of 2000. That allowed the company to be ready for future requirements right from the start. At the end of 2000 the first Scania 124L was added to the fleet. At the time, Bühler got one of the first 53m³, tilting silo semi-trailers made by Spitzer. A further Scania 124 was bought in 2001; the semi-trailer of this one had a slide-out floor.

In order not to further strain neighbourly tolerance with the parking of four trucks, Urs Bühler looked for new place to park the fleet. He found it in the industrial sub-division of the municipality of Wolhusen. He got the purchased lot partially graded and then added a gravel surface. The planning and construction of a fleet hall was only achieved in 2005. Since 2003 the company has been augmented by a dispatcher.

As of 2006, the company has been compliant with the GHP requirements (Good Health Practice) which controls the hygiene in the handling of food and animal feed products. The dynamics of the freight hauling company were mirrored in the various new and replacement equipment purchases. We cannot go into detail due to a lack of space in the article.

Fuel transports augment the freight options on offer

As of 2008, heating oil and other fuels were being transported. The first tanker was a Renault Premium that arrived as a second hand truck to the fleet. ‘The name Premium on the truck was only lettering, and on top of that neither I nor my specially hired driver for this new venture had any experience in the transport of fu-

els,’ so Urs Bühler tells us about the somewhat chaotic start in the heating and fuel oil business. Another Scania, a R560, was added to the fleet in 2009. The unloved Renault Premium had already been replaced in November of the same year with a Scania R480 tank truck and trailer. The advantage of this vehicle was that it could comply with the Euro5 exhaust protocols without the Ad-Blue fuel injection systems help.

In January of 2010, the Volvo tractor truck was replaced by a further Scania R500. The certification of the company was extended to include the IFS (International Food Standard) qualifications the certificate for which arrived on the 25th of May, 2010. In the fall of the same year, the offices were renovated and extended.

The first five-axle truck

2014 brought further fleet acquisitions: in February a Mercedes-Benz Actros four-axle truck with a tanker body arrived and later on the first five-axle truck, a Scania R490 Streamline, with a bulk goods dumping body arrived. After a series of repairs, the first Scania R Topline had

to be replaced by a Renault T520 tractor trailer unit. This unit arrived new from the maker and up until today has kept all the promises made by the seller.

For the company jubilee in December of 2016, Urs Bühler splurged on a brand new Scania S730 V8 without even seeing it beforehand. 2017 turned out to be the year of purchasing replacements for some of the aging fleet. A few of the older trucks were replaced by two new Scania S500s, a new R500 as well with a new Scania R580 V8. The company at the moment has five office jobs and owns 14 vehicles of the Scania, Renault and Mercedes-Benz brands. Scania as dominate the fleet. Because the V8 engine is much heavier than the six-cylinder in-line it is no longer the first choice as already by the year 2000 a kilo won when empty was a kilo gained for freight.

Models

Of course there are models in the very attractive green livery of the freight hauling company. In 2011, Tekno released a model of the Scania R560 with the bottom discharge semi-trailer, sold out long ago. Brand new, however, is the jubilee model, the Scania S730 that also comes with a bottom discharge semi-trailer. The Scania R500 with the tilting silo semi-trailer from WSI is currently available. Our friends of the smaller scales can be happy with a somewhat larger offering of Herpa models even though some of them are only available thru the Internet or at swap meets.

The Freight hauler

Founded	1986
Company structure	chartered company with shares held by family members.
Seated in	Wolhusen
Employees	23
Vehicles	14
Website	buehler-transporte.ch

Liebherr LTM 1250-5.1 in 1:50 from NZG

200t for the third time

by Carsten Bengs

The dimensions, like the width of the supports and of the vehicle, have been correctly translated into model form and a detailed instruction sheet guides you through the simple building up process.

The five-axle chassis rolls freely on a level surface and the drive train, including the prop shaft, is correctly copied. Additionally, at the rear are some small pressure tanks. All axles are steerable and have a sufficient radius. We were happy to see the well-functioning suspension for the axles; the small springs are easy visible. Very nicely done is the mud apron that is as long as the chassis and is made from soft rubber.

The lower carriage has an anti-skid surface however, the ladders are fixed and so do not move. Integrated at the rear are steps with non-slip surfaces and the small hand rails on the lower chassis have been included.

The crane is powered by a 400 kW producing Liebherr engine mounted in the lower chassis. The crane follows the single engine concept: an engine mounted in the lower chassis powers all functions. NZG has taken care to duplicate this at the area around the engine. Exhaust, air filters and tank are easy to make out.

The massive supports hold the crane steady and, of course, they are made with invisible, internal

With the Liebherr LTM 1250-5.1, NZG has delivered the third model of the 200 t class this year. It convinces with its many details and high functionality ...

threads. Very nice to see are the support discs because they remain constantly on the model and small bolts are used to fix them in work or transport setting. Unfortunately, no crane mats are included. The roomy cabin looks impressive with its mirrors, warning beacons and detailed interior and of course, it also has external window wipers.

The cabin on the upper chassis is equally detailed. To avoid a 'stiff neck' it can be tilted. The interior shows off joy sticks and control instruments that are very recognizable. Mirrors and window wipers complete the details.

Behind the cabin are some steps to ascend to the upper carriage. These are attached at an angle to increase safety. All safety railings are made from white metal. Very nice on this model is the moveable upper railing, a first on a model and depending on how the crane is used, it can be folded down or up.

We were also excited about how the ballast on the model was done; on the prototype it weighs 88 t. As on the original, it is curved and it can be mounted inside the cranes

two turning radiuses of 4.8 and 5.6 m. The taking on board of the ballast has been designed to be completely functional. As soon as the ballast plates are piled on to the lower chassis deck, the upper part with the crane swings backwards. Then the two ballast attachment screws are turned until they come out and mate with the openings of the ballast. The ballast can then be secured using a small hex key either at the maximum radius for a heavy load or with the smaller radius for regular loads. For the display in a diorama, the small lift eyes have been included and all ballast blocks can be realistically lifted into place.

The outrigger arm comes without any extensions to the realistic 1.20 m height at the pulley on the top; with the tip it reaches even 1.60 m at the pulley height. The arm was made from a zinc casting and looks and feels right in its dimensions. It is held in place with a plastic cylinder and a grub screw. On top of that, it has several small depressions to hold it securely on long extension reaches. We were very happy to see on the model some oil hoses simu-

lated there, complete with a black hose. The outrigger extension is securely stored on the side in three mountings that clip into the extensions' side guides. When used, it can be mounted in the three angles: 0°, 22.5° and 45°. To attach it, the trusted and proven M1 screws are used. The crane has not been designed to be used only with the erection tip or without the top segment.

The maker has splurged on the hook for the LTM 1250-5.1; it is a

At a glance

- + Ballast loading
- + Railings
- Outrigger arm cylinder made from plastic



5-wheel hook for loads up to 107 t. The double hook has been designed to swivel and all the single pulleys run smoothly. Also included in the

set is the small hook with a single cable and a 10.5 t capacity. It is needed when the crane is working with the additional tip. The lettering fully satisfies the high expectations for the model. Warning decals can be found all over the model and even the supports have been numbered from 1 to 4.

The LTM 12560-5.1 is an absolutely convincing model. No wishes regarding functionality and detailing have been left unfulfilled.

Berliet, original and model – part V

Vroom!

by Robert Bretscher

To end our history-making series about the early miniatures from Berliet we are going to show three more models from Dinky-Toys France. The attractive front wheel drive cabin of the Berliet GAK was a common sight on the roads of France for many years. While the Stradair was ahead of its time, it was not so readily accepted on the market and so it heralded the end of this legendary truck brand. Nevertheless, collectors can still enjoy all of them in model form.

Berliet GAK

Dumper 1:43 (# 585, produced from 1961 – 1964)

For over a year now in this space we have enjoyed the old models from Berliet. Today we conclude the series with three more jewels from the Bretscher collection ...

The Berliet GAK with its so-called 'comfort cab' was produced with a cabin interior, plastic windows and working suspension on all four wheels. To dump the bin, Dinky-Toys used for the first time ever, a realistic looking lifting cylinder that worked without the commonly used levers which normally kept the dumping bin in the desired spot.

New also was the moveable rear flap on the bin which had a nif-

ty latch arrangement to prevent the dumping of the load when the truck was moved around. In addition to the dumping truck version, the GAK model was also produced as animal transporter, a tow truck and a flatbed truck. Other makers produced models of the GAK as garbage trucks or semi-trailer trucks for a variety of loads. The prototype GAK 5 was powered by a four cylinder, five liter diesel engine by Berliet.

Berliet GAK

Flat deck truck 1:43 (#584, 1961 – 1965) and the matching two-axle trailer (#810, 1959 – 1962)

This yellow Berliet GAK flat-bed truck was released at almost the same time as the dump truck (#585) introduced above. For this, Dinky-Toys used the same chassis as for the GAK dumper. If you look very closely, you may see the place where the lifting cylinder was attached plus the axle for the dumper, just left by the maker where they were. The realistically functioning four wheel suspension and the detailed interior were also unchanged. The green cover, made from plastic, has a very cleverly produced surface texture, similar to a fabric cover. Also worth mentioning is the nicely detailed

chassis with the addition of a trailer hitch. The double tires at the rear and the spare tire give the miniature model vehicle a hint of the 60s look.

The matching yellow, two-axle trailer with a tinplate cover was actually from an earlier released Panhart truck and semi-trailer set. It is obvious that for reasons of economy in the 50s and 60s toy production, the same chassis was used for many different models in order to save on high tooling costs as, indeed, is still done today.

Berliet Stradair

Side dumper, 1:43 (#569, 1967 – 1971)

This was a complicated model that with its delicate side dumping mechanism was prone to repairs. The four individually openab-

le side flaps (two on each side) which could be latched closed on the flat dumping bin were exceptional for their time. On top of that, the model was capable of dumping on either side achieved by moving two sliding levers.

Despite the all-wheel suspension, a fantastic interior and an openable engine hood, the model was not a sales success because the whole lot was far too complicated. The prototype for this model, the real Stradair, suffered a similar fate, even though it had air-cushioned suspension as standard equipment. The truck was powered by a 120 hp four cylinder Berliet Diesel engine. After being made for only four or five years, production ceased in 1970.

Historical construction site

Road construction

by Wilfried Schreiber

At the same place and time the main road in the little town was widened and re-aligned near the church. It was necessary to replace the sewer lines and electrical supply conduits concurrently.

To renew the road bed, first the gravel bed was leveled using a frost-resistant gravel mixture. The machine used for this was an American

Once the construction of the church reached the lock-up stage, the photographer then focused on a road construction site of the 60s ...

Forty-Five Grader, made by the US maker Allis Chalmers. Then a three-wheeled road roller like the DL 10 from Hamm compacted the sub-road bed. Hamm was founded in Tirschenreuth by the brothers Franz

and Anton in 1878 as the 'Maschinenfabrik Gebr. Hamm.' In the beginning, they produced agricultural machinery but already by 1911 the first engine-driven road roller came on the market displacing the thereto-

fore usually seen steam road rollers. During the next decades, following the first three-wheeled road rollers, came tandem and rubber-tired rollers combined with new vibration technology. Between 1932 and 1970 Hamm owned the patent for all-wheel drive and all-wheel steered tandem road rollers. In 1999, Hamm became part of the Wirtgen Group and then they were able to widen their offerings in their road building machinery program.

To apply the asphalt to the road on this construction site, two surface finishers from the Mannheim maker Josef Vögele were used. One was the Super 100 H on tracks from about 1962 and the other one the successor model, the Super 204 on wheels. The decision about which surface finisher to use was made according to the substrate. The choice was between the wheeled one that was also licensed to drive on public road at a speed of maximum 45 km/h and so was distinctly more mobile, and the tracked finisher that made more sense if the road base was more difficult or rough. The technology used for surface finishers is very interesting because, for example, the feeding of the asphalt material to the bunker of the machine is done from the front and the finisher actually gently pushes the truck forward whilst it is unloading. The material to be used (be it asphalt or concrete) is transported to the rear via an auger and

then deposited evenly steered by a drag and glide beam attachment. At the same time, using an adjustable vibration control, the surface material to be used is further compacted. The application depth, usually around 12 cm when using Bitumen, is already pre-compacted by 95% therefore the smoothing out of the surface by the road rollers following the applicators has no influence on the 'plane' profile of the road. The side walls of the material bunker for the surface applicators can be tilted upwards hydraulically allowing for complete emptying of the bunker. Hydraulics are also used to reduce the width of the machine thus making transportation much easier. The Joseph Vögele Mannheim Company was founded in 1838 as a foundry to supply railroad building materials. In 1925 began the fabrication of mortar floor applicators, concrete paving road trains and asphalt surface finishers.

On our construction site the Vögele Super 204 mentioned above is being fed by a three-axle Krupp F 360 K dumper with Trillex rims. This truck weighed 22 t and had a 210 hp strong Cummins engine and was built in the mid-60s. Since water is always needed in road construction, a Fendt tool transporter was quickly reconfigured as a 'water carrier' by adding a small water tank to its deck. The Büssing LS-11-16 two-axle dump truck was also a

truck typical in the 60s, however without the long hood. The radiator at the front was adorned with the company logo, the Brunswick bear. The LS-11-16 was also called the 'Comodore' and had 200 hp with a 11,413 cm³ displacement and was capable of transporting 8 t with a total working weight of 16 t. Büssing was founded in 1906 by Heinrich Büssing in Brunswick as a factory specializing in the production of trucks, buses and engines and quickly advanced to the largest company producing trucks and buses, especially for front drive and under floor engine models. They were a common sight on the inner city roads of Germany in the 30s. MAN took over Büssing in 1971.

Road construction models

The 1:50 scale model trucks introduced here are resin cast models from GMTS. The Vögele Super 100 H is from NZG and is a jubilee model that was only available directly from Vögele. The Super 204 was the very first model from Vögele and was made by Gescha. The Hamm DL 10 three-wheeled road roller is also an NZG model.

The Allis Chalmers Grader is from First Gear and the Fendt Tool Carrier is from Cursor and is the only one in the 1:43 scale seen on the site.

Conversion for a Multidocker CH70D

Material handler giant

by Urs Peyer

In 1981 the Multidocker Company in Norrköping, Sweden, built its first hydraulically-operated Material handler for the loading and unloading of ships. Three years afterwards, a very close partnership with Caterpillar Multidocker produced the Multidocker 2000 using the Caterpillar 358B as a platform; it was the first Material handler of the CH series. At the moment, the production line-up includes five models, the working weights vary between 45 and 135 t.

The Material handler CH70D is based on the upper chassis of the Caterpillar 374D tracked excavator. For this mobile excavator, three outrigger arm versions are available: 18, 21 and 24 m. The top load capacity is around 17.7 t. Depending on tool attachment options, a total working weight is between 68 and 75 t. All told, the CH70D is definitively the biggest mobile excavator on Caterpillar base. The massive lower chassis ensures good stability with its 3.6 m wheelbase and the supports, when fully extended, give the base measurements of 7.5 x 6.9 m.

For the 'kit-bash' described here, parts of the following models were used: lower chassis of a Liebherr LH80, upper chassis and cabin from a Caterpillar MH3049, tires and rims from a Liebherr L 586 wheeled loader, a couple of small parts from

The conversion specialist Urs Peyer likes it a little bit bigger and to get the results he wants he doesn't shy away from any efforts required ...

a Hitachi ZX470KC-5 hydraulic excavator and a set of log tongs available as a part from NZG.

The lower chassis

When considering the measurements, the lower carriage from the Liebherr LH80 is a relatively good match for the Multidocker CH70D. However, the fully rubber tires are not acceptable for a lumber Material handler. The very nicely-detailed Goodyear tires and metal rims are donated from the NZG's Liebherr L586 wheeled loader.

The bottom plate of the lower chassis is easy to remove as it is screwed on. With the pushing out of 16 bolts in total, the supports can be taken off. The full rubber tires of the rigid axle can be taken off by rotating and pulling simultaneously. The two bolts that hold the steering are removed using a bolt driver, then the rims can be removed by unscrewing them. It is not necessary to take off the wishbone suspension arms and the hydraulic cylinders.

The silver-colored running boards and the ascent supports are the only parts that are bolted on. Drill out the bolts to remove them. The two mounting ladders at the front and

rear can be carefully lifted with a screw driver blade and taken off.

Taking off the rims and tires from the Liebherr L 586 wheeled loader is difficult because the axle diameter is only 2 mm. To avoid breaking the axle where it meets the rim, great care has to be taken when pulling and rotating the tires. Should the axle break anyway, despite all precautions taken, the rim can be milled off a couple of mm where it meets the axle and then the stump of the broken axle can be pulled out easily with a pair of pliers.

The tire and rim combination chosen is just a bit too big so that the tire of the steering axle snags at the chassis. Due to this, the wheelbase has to be increased from 72 to 80 mm. To achieve this there are two possibilities. The first is to cut the chassis we have in front of and behind the wheel well and then to insert the missing 4 x 2 mm using ABS plastic material.

Secondly, if there is a spare second chassis in your parts box, there is another possibility. The two upper parts where the supports are, are cut cleanly once before and once after the axle suspension parts. From this operation three clean parts emerge

(picture 1) with a total combined length of 146 mm that can be glued together using two-component epoxy glue. The two bottom parts that we have taken off by removing the attachment screws are separated, as shown in picture 2, and at each of the two ends, a piece of 2.5 mm thick ABS sheet stock is glued on. The three parts now have a total length of 124 mm and are glued together, again using two-part epoxy glue. Since the screw holes no longer line up, the other parts can be glued on after the running boards have been fitted and glued.

Because the upper carriage of the 374D is wider than the LH80, the two silver running boards of the Liebherr lower carriage have to be increased in width to become 80 mm wide. The running boards and the railings on the side are made of one casting that now has to be cut at two convenient spots and made wider with 6 mm ABS profile strips.

Two of the white rims from the wheeled loader are now drilled to receive a 3 mm axle. So that the gauge for both axles is identical, two 2.5 mm thick discs with a 5 mm diameter have to be added. The rims of the steerable front axle need to have 2 mm removed where the axle is by milling the excess material off. The hole in the rims is drilled out to half a millimeter less than the diameter of the screw used thus making it possible to remount the rims (after they have been airbrushed) with the steering knuckles, and to screw them on. The two yellow chocks are from a Caterpillar 775G dumper (picture 3).

In order not to have many extra parts left over from the conversion, further kit-bashes can be made. The full-rubber tires of the LH80, for

example could be used on a scrap loader like the Liebherr L586, Caterpillar 972M or 980K and the upper chassis of the LH80 could be combined with the tracked lower chassis of the LTR1100 to make a tracked telescoping crane.

The upper chassis

The upper chassis of the CH70D used comes, except for the height adjustable cabin from the Caterpillar 374D. Added additionally are about 5 t more counterweights. After taking off all screws on the 374D all that remains are the bottom plate, the chassis of the upper part including the cabin with FOPS and the outrigger base plate with the lifting cylinders these then are used for the kit-bash. On the bottom plate both running boards are cut off and then sanded smooth. The edging rim near the cabin has to be milled off. The area that was delineated by the edging has to be milled out to a depth of 2 mm so that a matching ABS sheet stock piece fits right into it (picture 4). On the upper chassis all the black railings, ascending ladders, side mirrors and the black engine hood and exhaust have to be taken off. The parts that are plugged in to the upper chassis are removed by cutting off the lugs and filing them smooth. Then, using a centre punch are carefully pushed out.

Base plate and upper chassis are screwed back together. The counterweight is then cut off as cleanly and squarely as possible along the hinted-at separating line using the finest possible saw blade in a jeweler's saw.

The three bolts at the outrigger arm base and the two hydraulic cy-

linders are now drilled out. Then the plastic part with the slewing engines and the valve chests can be taken off by applying pressure from below. At the front of the base part, the innermost mounting brackets as well as the implied openings for the hydraulic lines of the lifting cylinders are cut out using a saw (picture 5). Attention! Leave the screw brackets on!

At the cabin, the screw retainers at the rear and side are cleanly cut off and the remaining surfaces are filed smooth (picture 6). The FOPS structure can be taken off by using a bolt driver on the inside.

The total height adjustment part, including the base, is easily taken off because on the Caterpillar MH3049 it is only screwed on. The cabin itself and the interior decoration can also be unscrewed. At the interior, where the cabin is seated, the protruding ribs have to be milled down by 2 mm (picture 7). During the work on the project, all hollow core bolts at the height adjustment location should be drilled out and replaced with 1.6 mm bolts. Attention! It is absolutely advisable to take a few pictures here otherwise, the head-scratching over which part goes where will be very frustrating (picture 8)!

To be continued ...

Remo's old iron



Here you can challenge your expertise. Recognize the truck and win a model ...

by Remo Stoll

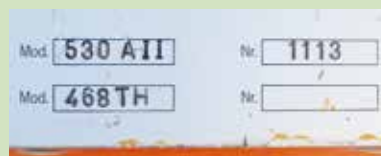
Until about five years ago it was still at work but then this beautiful truck disappeared from its usual parking place. It is a typical removal truck with a light chassis and a small engine. It would be nice if it found a permanent home with a collector. A small hint, one number is triplicated in the type designation.

Recognize the truck in question? Please send us the exact name and type. The contest deadline is the 15th of February, 2018. (For addresses please see page 58.) We will hold a draw to select winners if there are more correct answers than prizes. Please note that only entries with complete address information can be considered so that we can mail the prizes out correctly.

This time the winners will receive one of the following prizes: a Cat 335F L short swing excavator from Diecast Masters; a MAN TGS M 6x2 roll-off bin truck 'Colas' from Conrad; and a Mercedes-Benz Arocs 8x4 dumper from NZG. 🇨🇭



Solution from Trucks & Construction 6-2017



The wheeled loader in question is a Dresser/International 530A II, as several readers have correctly identified. The winners are: Friedrich Ströbele from Konstanz (D),

who won the Wirtgen W 100 CFI from NZG; Roman Dolny from Thun (CH) who won the Wacker Neuson EW100 mobile excavator from Cyber Wear; and Markus Oberholzer from Kaltbrunn (CH) who won the brand new Bomag BW206 AD tandem road roller from Kaster, all in 1:50. Congratulations to all the winners!

A processing plant in 1:50 part II

Gravel fresh from the plant

by Markus Lindner

The silos were made from plastic plumbing pipes with an exterior diameter of 90 mm which makes them just wide enough to allow a truck to pass beneath. The silo bottoms are matching funnels shortened to fit. The steel construction is easy to create from Polystyrol strip stock with which the necessary double-T girders can be quickly and cheaply made.

And now a small digression to the techniques for painting Polypropylene and other hard plastic parts that always seems to be a challenge for builders. For example, a solid gluing of the silos with their side supports is very important because they stabilize the whole of the construction; they hold it all together. Proven assembly solvents from the construction sector are used as well as glues based on hardening epoxies (two-component glues). To successfully apply paint later on, it is absolutely necessary to paint on a primer coat first to give the color coat something to grip.

For the corrugated cladding on the gravel processing plant and the roof covering, we use corrugated cardboard from a hobby shop. To prevent the bending and then breaking apart of the corru-

After the first instalment explaining the work flow of such a gravel processing plant, we now start the instructions on how to build it with very detailed instructions of the author ...

gated cardboard a carcass made from 6 mm thick MDF board. On it the corrugated cardboard could be glued to keep it nice and flat. Open edges and corners are covered with steel profiles made from folded over cardboard strips.

Detailing is done with CNC milled plastic parts for stairs, ladders, handrails, doors and the many conveyor belts. For this we first need to produce the appropriate drawings and transfer them to the CNC-compatible data to produce them. Instead, we could also fall back to the ready-to-use stairs, ladders and railing parts used in model ship building, produced for us by Krick (www.krick-modell.de). Conveyor belts can be found in the accessory assortments of a few model railroad producers.

Dust collector

Another important part of the sorting plant is the dust collector. This was built in the form of a silo

attachment, after I found some pictures of them on the Internet. They are, in the main, housing some filters in an enclosure to which hoses from the single silos lead, a clean air intake and a venting chimney. All of this sits on a single silo under which a truck can be driven and is augmented by walkways and ladders. This silo collects the dust from all other silos.

The single components for this were made from plastic parts and a piece of electric conduit pipe for the exhaust chimney. The silo itself was again made from a DN90 HT- plastic plumbing pipe and a plastic funnel for grey water. The sucking hose attachment to the gravel grading plant will be made later on as we want to be able to be free to move the completed plant around on the diorama for the optimum placement.

Weathering

Since our plant has been in service for a few decades, time has

left its traces. The first basic step in weathering is application of a light coat of black patina color bought ready-to-use or heavily diluted by ourselves. This remains naturally on roofs and settles into cracks and is the basis for further weathering with color pigments.

Here we need rust and dust from stones first; both can be made easily by ourselves. Fine rust particles can be made by immersing

iron dust, or shavings or untreated steel wool in a glass container with vinegar or a similar acid. After some time all the metal oxidizes form into rust.

Stone dust can be made by using an electric drill to drill into stone material of the same kind as the one used in the gravel works. Stone dust coats the whole plant but especially so near the silo exits. Rust appears everywhere

water runs or is stagnant for longer time. We can find it on the silo-stiffening support rings and also where, as a result of stones sliding or hitting the silo side, paint is scraped off and so rust marks appear. We can bind the pigments to the respective surfaces by spraying on a strong but dull hairspray.

In the next issue we will add further components to the processing plant.

NEW

Trucks & Construction



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Vorwärts nimmer

by Ralf Weinreich, published by Verlag Kraftakt, 112 pages, about 100 pictures, format 29 x 23 cm, hardcover, ISBN 978-3-938426-20-3

After two black and white pictorial volumes about trucks from the former GDR (DDR) the third volume has been published totally in color. The author took pictures of commercial vehicles during the existence of the GDR using the Orwo UT 18, a color slide film, one of the films then available in the Eastern European Block, without thinking that a picture book could be made from them in the not-too-distant future. Therefore, they are even more valuable when seen from today's point of view because they show the colorful commercial trucks of East Germany to us who remember only black and white pictures. Starting in the mid-80s, the state invested only into the hard-currency-producing truck fleet of Deutrans. On the other hand, there were still vehicles on the road, some dating as far back as the last war. (dw)

Jahrbuch Lastwagen 2018

several authors, published by Podszun Verlag, size 17 x 24 cm, 144 pages, 280 pictures, soft cover, ISBN 978-3-86133-862-8

The team around Bernd Regenbergh has assembled a very diverse book of historical themes, for example, the 'Der Autobetrieb der Chemischen Werke Hüls' (vehicle traffic of the Hüls Chemical Factory) from 1938 to their closure in the mid-70s. It is highlighted and richly illustrated with many pictures. No less interesting is the history of 'Karosseriewerke Schreiner Saarbrücken' (vehicle body factory Schreiner Saarbrücken). It shows their creations that are traditionally, documented with first class picture materials. Those who are interested in the cube-shaped cabins for Mercedes-Benz trucks will get their fill with a driver's report about the transport of plywood from the Saarland. (dw)

Jahrbuch Schwertransporte 2018

several authors, published by Podszun Verlag, size 17 x 24 cm, 144 pages, 280 pictures, softcover, ISBN 978-3-86133-867-3

In this, the 14th edition, all reports are about recent transports, lifts and companies. Colonia, Bohnet Kübler and other heavy-duty transport enterprises are depicted in interesting work situations. For those that have not yet seen enough of the transportation of the new cables for the Zugspitzbahn cable car, a 'final' report can be read here. The article about five and six-axle crane vehicles from Denmark shows the kind of huge potential that can be found in truck-mounted cranes. From really far away is a report about the Brazilian Megatranz Company. There, the mix of American and European heavy-duty tractor trucks is eye-popping. (dw)

Jahrbuch Baumaschinen 2018

several authors, published by Podszun Verlag, size 17 x 24 cm, 144 page, 280 pictures, softcover, ISBN 978-3-86133-865-9

A third of this issue is dedicated to current themes, and highlights for the most part the historical development of construction machines. Very current, for example, is the article about the demolition firms of 'Ruppert,' that prefers Liebherr excavators with Longfront equipment and 'Schotter Teufel' (Gravel Devils) that swears by the use of Hitachis for their de-construction work. In the historical segment, the first 25 pages are devoted to the quarry excavators from Menck & Hambrock. Then follows a report about a fleet of Haulpack dumpers in Columbia. There, at the beginning of the 70s, 44 Wabco US-built dumpers were in use on a hydro dam construction project. (dw)

New on the market

Truckstop Tekno 1:50

Tekno presented the DAF 2800 series as a completely new design. Not only was there the model from 1973, but also the 3300, 3600. In response to customer demands they re-issued the 2900 and 3200 series that ran concurrently with the

DAF95. All variations will have specific detailing such as spoilers and battery boxes. The first release will be the 3300 tractor truck from 'Zijderlaan' (NL) at the beginning of 2018. From the many newly released models we are showing two

of the current ones. Matching the article on page 26 is the somewhat older 'Sweden Train' with a Scania 143 belonging to 'Jan Fasth Åkeri AB,' at home in Lamnhull, Sweden. Also from the Netherlands, the Volvo F12 Globetrotter truck and trailer set in the paint scheme for 'Jaco van t'Kruis.' The latter sets a new high standard for model finishing with its richly decorated cab. Just beautiful!

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
Claas Torion 1914 wheel loader	1:32	Wiking	Claas	collection.claas.com/fanshop
XCMG XE7000 mining excavator	1:50	China	Spiel + Modellkist'l	www.spiel-modellkistl.de
Doosan DX380LC-9C	1:50	China	Spiel + Modellkist'l	www.spiel-modellkistl.de
Liebherr R920 Compact / 2 buckets «Arbogast»	1:50	Conrad	Thommy's	www.baggermodelle.com
Delmag RH18/200 drilling rig	1:50	Conrad	ABI	info@abi-gmbh.de
ABI mobilram TM13/16 SL	1:50	Conrad	ABI	info@abi-gmbh.de
MAN TGS M Agrar 4x4 tractor	1:50	Conrad	MAN	www.man-shop.eu
MAN TGS M / silo placement truck «m-tec»	1:50	Conrad	m-tec	m-tec.gmbh
MB Arocs 6x4 «Atlas»	1:50	Conrad	Atlas	i-atlas.com
Liebherr T55-7s	1:50	Conrad	—	—
Liebherr RL66 pipelayer	1:50	IMC	Dealers	www.liebherr-shop.com
Demag AC220-5 «Scholpp»	1:50	IMC	Dealers	www.imcmodels.eu
MB Arocs 6x4 / Goldhofer low loader «Scholpp»	1:50	IMC	Dealers	www.imcmodels.eu
MB Arocs 8x4 SLT / Nooteboom MCO-PX «Laso»	1:50	IMC	Dealers	www.imcmodels.eu
MB Actros2 6x2 / Euroflex semi low loader «Havecon»	1:50	IMC	Dealers	www.imcmodels.eu
Nicolas semi low loader 3 axles white	1:50	IMC	Dealers	www.imcmodels.eu
Scania R620 8x4 / 3x6 K25 modules / load «Mammoet»	1:50	IMC	Exklusiv	www.mammoetstore.com
Pegaso 8x4 «Van Seumeren»	1:50	IMC	Exklusiv	www.mammoetstore.com
Kobelco SK140SRLC-5 blue or yellow	1:50	Motorart	Exklusiv	www.kobelcofanshop.com
Liebherr LTM 1250-5.1 «AKM»	1:50	NZG	Dealers	www.nzg.de
Liebherr LTM 1250-5.1 «Clausen»	1:50	NZG	Dealers	www.nzg.de
Liebherr LTM 1250-5.1 «Dornseiff»	1:50	NZG	Dealers	www.nzg.de
Vögele Super 2000-3i «Eurovia»	1:50	NZG	Exklusiv	www.webshop-vinci.com
MB Actros 8x4 SLT / Goldhofer XLE «Baetsen»	1:50	Tekno	Dealers	www.tekno.nl
DAF XF Euro 6 8x4 / semi low loader «Blokland»	1:50	Tekno	Dealers	www.tekno.nl
Goldhofer semi low loader 3 or 4 axles grey	1:50	Tekno	Dealers	www.tekno.nl
Liebherr R914 Compact update	1:50	WSI	Dealers	www.collector.wsi-models.com
Tadano ATF400G-4 «Havator»	1:50	WSI	Dealers	www.collector.wsi-models.com
Tadano Faun ATF220G-5 «Scholpp»	1:50	WSI	Dealers	www.collector.wsi-models.com
Tadano Faun ATF70G-4 «Bay Crane»	1:50	WSI	Dealers	www.collector.wsi-models.com
Scania S 6x2 / stone trailer «Henken»	1:50	WSI	Dealers	www.collector.wsi-models.com
Scania R 8x2 / Palfinger 150002 «BA Perssons Kranbilar»	1:50	WSI	Dealers	www.collector.wsi-models.com
Scania R 6x2 / Nooteboom Multi PX «Ainscough»	1:50	WSI	Dealers	www.collector.wsi-models.com
Volvo F16 6x4 «Multiwheels»	1:50	WSI	Dealers	www.collector.wsi-models.com
Volvo FH4 8x4 / Nooteboom MCO PX «Wagenborg»	1:50	WSI	Dealers	www.collector.wsi-models.com
Volvo FH4 8x4 / Nooteboom Euro PX «Van Grinsven»	1:50	WSI	Dealers	www.collector.wsi-models.com
MB Arocs MP4 SLT 6x4 / semi low loader «Scholpp»	1:50	WSI	Dealers	www.collector.wsi-models.com
FTF F series 8x4 «Van Schie»	1:50	WSI	Dealers	www.collector.wsi-models.com
Liebherr LTM 1400 «Riga Mainz»	1:50	YCC	Dealers	www.yccmodels.com

Resize 1:50

Behind this new supplier from Germany is Christian Schaetzle who from his time with WSI and IMC knows the ins and outs of the business very well. He is now offering several 1:50 detailing parts made from 3-D prints, for example, very fine track segments with triple segment base plates in 12, 15 and 18 mm widths in 100 pieces per bag. They clip together and functionality is a given. To complete mobile crane models a variety of details is available: a tool box with very fine anti-skid top, a wooden box with wheel chocks or ladders, as well as a rear drive-under protection fence. The surfaces are faultless, except for the wooden box where it could be improved a bit. Further interesting offerings can be found in the Internet shop (resize-shop.com).

Truckstop WSI 1:50

In co-operation with the society of 'Midden Oosten Chauffeurs Nederland' (Dutch Middle-East Drivers), the very colorful Scania 110 'Vlatrex' with reefer semi-trailer has been created. The Vol-

vo F4H Globetrotter of the 'Gebr. Blankespoor' from the Netherlands is coupled with the authentically modeled 36m³ tanker semi-trailer from D-Tech. The semi has steerable axles and a pump at the rear is used mainly for thick liquids transports. The wonderful looking Liebherr LTM 1050-3.1 'Jinert' is home in the Swedish town of Hässleholm (collector.wsi-models.com).

IMC 1:87

In a fine metal/plastic composition construction comes the model of the impressive Hyundai 250D-9. The forklift for heavy loads and containers has a lifting capacity of 25 t and 204 kW.

NZG 1:50

The model of the Komatsu HD785-7, introduced in detail in our 4-2014 issue, is now also available in the white mining color which looks great on the model. The Hamm H7i road roller set (issue 6-2016) looks great in the color scheme of the construction company of 'Leonhard Weiss' from Göppingen (D). In particular,

the very detailed lettering, even on the cabin windows, is especially eye catching.

Eberhard 1:50

The Man TGS Euro 6, painted in the 'Eberhard Bau AG' colors has been released as an exact copy of the original. The Tekno model has been given a Conrad cabin. It can be bought in the Ebianum museum shop.

PKC&CO***** 1:50

After the front drive cabin, the MAN short hood from the 60s is now available. The model is available as a tractor or truck with short or long wheelbase. The picture shows a test shot of the pre-series production. (p.kievit@upcmail.nl)

Diecast Masters 1:125

DM is starting the so-called 'Elite' series of larger machines with the Cat 390F D 1:125 scale. The models are offered in refined packing sitting on a mirrored floor. In our next issue we will introduce the 1:50 Caterpillar 980M wheeled loader, released at the same time.

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Our partner page

Winter time at the quarry

No quarrying is carried out in the months of December, January and February. Safety is compromised too much by snow and ice at the rock face. During this time, machi-

nery and tools are maintained and serviced. In the in-house repair shop our own machine mechanic is responsible for this work. For the construction machines from Ca-

terpillar, an Easy-Service contract was signed so that the work in the quarry can resume in March with a high degree of reliability.

Road repairs

Eberhard Bau AG submitted a cost-efficient bid to renew 1.3 km of road situated between Gerlisdorf and Nürensdorf in the Canton of Zurich. As a first step, a grader spread 1,100 m³ of gravel on the road as the interim new sub-roadbed. After this, a Wirtgen soil stabilizer mixed the applied gravel with the existing asphalt top and a

binding agent then re-applied it as a new sub-roadbed. The cold milling machine needed two parallel applications to mill the 50 cm thick material at a width of 4.8 m.

For every running meter, 240 kg of binding material was added and 96 liters of water was sprayed on. All applications were controlled by a computer program. Behind

the Wirtgen WR 2500 SK, a grader smoothed out the milled material and a road roller took care of compacting the surface optimally. After the final fine grading with gravel, the surfacing machine followed and applied the new road surface.

Diorama and model construction

by Daniel Wietlisbach



Dioramas and models built to order. Bring your ideas, drawings or pictures and I will build them for you. Specializing in scenery, engineering works, models etc. Complete or partial dioramas or single models. redaktion@baggermodelle.net

Other pictures:
www.facebook.com/DioramenbauDanielWietlisbach

News in brief

Liebherr T 236 dumper

Following the first official presentation of the T 236 dump truck at the Minexpo in September of 2016, the testing phase is now complete and first real work situation use has begun as for example at an open pit iron ore quarry in Austria. The rigid frame dumper with a loading capacity of 100 t is as big as the Liebherr T 264 and T 284 dumpers and is diesel-electrically powered with the Litronic-Plus-Generation2-System. To ensure sufficient power, a 12 cylinder Cummins engine with a power output of 895 kilo watts is used. The T 236, alone in its class, is equipped with four oil-cooled multiple disc brakes. (up)

Claas Torion wheeled loader

In co-operation with Liebherr, Claas has presented a series of wheeled loaders especially designed for the agricultural sector, for the first time. The Torion series comprises seven vehicles with a working weight of 5.2 t to 19.5 t. The two largest wheeled loaders with the designations of 1812 and 1914 are based on the Liebherr L 550 Xpower and L 556 Xpower respectively. The lifting mechanics are equipped with either Agrar or Z kinematics; the Agrar kinematic system is universally suited for use in farming applications. Special tractor-type tires with studs give added traction and reduce pressure on the ground. (up)

Volvo reduces CO₂ emissions

Volvo introduced the new up-to-date heavy trucks FH LNG and FM LNG according to Euro 6 emission controls. These vehicles, designed for long distance trucking, are available with either a 309 or a 338 kW (420 or 460 hp) engine. They are powered by Liquid Natural Gas or Biogas. According to Volvo, the new models give the same performance and have the same fuel consumption as diesel powered models, however, depending on the fuel source, the CO₂ emissions are 20 to 100% below diesel fuel emissions. Instead of the engines normally used for gas-powered vehicles based on the Otto engine principle, Volvo is using a gas-compatible engine based on the diesel concept. (dw)

Caterpillar 320 and 323

In October, Caterpillar introduced the new hydraulic excavators, the 320GC, 320 and 323. The 320GC weighs 21.9 t, has 90 kW of power and is a basically equipped excavator for light jobs. The 320 with a weight of 23.1 t and 121 kW of power is designed for heavy use and comes with many factory-installed, production-increasing features. The 323 with it 25 t and 121 kW of power is a high production excavator also with many factory-installed features. The 320 and 323 offer the best factory-installed standard equipment world-wide. The integrated Connect-Technology offers, among other things a 2D steering option, a real-time scaling system, and, with its E-Fence app, a save-work containment system in all six directions. (up)

Restored Magirus Deutz 256 D 22 FB

For the occasion of the 50 year jubilee of Liebherr, the 40-year-old Magirus Deutz 256 D 22 FB concrete mixer truck with a HTM 602 upper chassis was completely restored. The vehicle had been purchased by the 'Béton Baatz' Company in Ingeldorf, Luxemburg, in 1977 and up until a few years ago was in use almost continuously. When the truck was left on the shop parking lot beginning to collect rust the Liebherr Company purchased it back and embarked on a faultless restoration project. It was supported in this endeavor by the workshop of the 'Magirus Iveco Museum Ulm' which was able to contribute some parts from its museum stock. (dw)

Mercedes-Benz Arocs 3351 6x4 for Wipfli

Since the spectacular transports of cable for the Zugspitzbahn cable car wire cables (issue 4-2017) Wipfli has become a well-known entity. The company specializes in highly specialized transports of long and heavy wire cable using specially constructed lowboy trailers and bridge decks, trailing axles and tractor trucks. The most recent acquisition is a Mercedes-Benz Arocs 3351 6x4 with an in-line six cylinder OM 471 engine producing 375 kW (510 hp), a Turbo-Retarder-clutch and a PowerShift-3-Gear Automatic. How challenging the items to be transported can be is illustrated by this special transport of a 40 t wire cable drum from Romanshorn on Lake Constance over the Oberalp pass road to the mountain cable car terminal at Nätschen. (dw)