

ROAD PAVING & REPAIR

In the first of a new six-part series looking at models of construction industry equipment, **Steven Downes** digs deep for a detailed look at road paving and repair.



**Wirtgen WR240
Soil Stabiliser /
Recycler.**

PART ONE

There are a number of manufacturers specialising in the development and production of road surfacing and repair equipment, one of the most notable names in this field is the Wirtgen Group who have a complete offering including compaction, repair, stabilisation and paving products in their portfolio. Other companies include the Atlas Copco group, Bomag, Caterpillar and Volvo. This month, I take a look

at the models available from these companies while detailing the latest releases.

Wirtgen Group

The Wirtgen group have a very aggressive model program with a number of recent releases targeted at the Bauma trade show. In the soil stabilisation field, the WR240 is the latest addition from NZG with high levels of detail and realism. When it comes to

road repairs, two releases cover the broad spectrum, from the diminutive W35DC cold milling machine, which is ideal for small repairs and working in confined spaces, to the massive W250i cold milling machine which makes light work of rehabilitating entire roadways with a cutting width of 2.2 metres to a depth of 350mm.

The W250i model from NZG features a large opening engine cover which tilts up



Opening engine cover.



Wirtgen W250i Cold Milling Machine.



Excellent detailing of the operator's station.

to reveal the modelled interior, complete with silencer boxes, exhaust lines and a pair of engine blocks with side doors opening to show the main drive belt to the milling cutter drum, highlighting the new dual engine design concept for greater fuel efficiency. The four track frames are fitted with very nicely engineered individually linked metal track pads with yellow highlighted surfaces which look very realistic. The supports allow for the track units to be steered while there is also the ability to raise and lower the entire chassis which is another excellent piece of engineering on a 1:50th scale model. The operator's platform is fitted with seats on both sides with duplicate controls and central display console, nicely decorated and realistically capturing the layout of the full sized machine. Metal

safety railings are added on both sides with a folding canopy which works well, reducing the height of the machine for transport. The main discharge conveyor can traverse to both sides of the chassis with a flexible rubber belt, complete with raised cleats on the surface for material transfer and a replicated vacuum dust suppressant system which looks good. The conveyor frame can be authentically folded using a pair of hydraulic cylinders to allow the model to be posed in a transport configuration while the height adjustment of the conveyor uses authentically modelled wire cables and offers a good range of movement. Beneath the machine, the milling drum is adorned with raised picks with highlighted tips for added realism with a functioning



Folding Conveyor.



**Wirtgen W250i Cold
Milling Machine.**

rear scraper and adjustable side plates mimicking the authentic movement of the full sized machine very well.

Hamm

The 13 tonne Hamm H13i from NZG has been produced in two different versions which share the same main articulating frame chassis, engine and cabin castings with the differences limited to the roller drum design



Opening engine cover and side doors.



Fully modelled platform.

**Wirtgen W35DC
Cold Milling
Machine.**



H13i hard at work.



Above and right: Hamm H13i pad foot drum.



Hamm H13i smooth drum.



and tyre tread pattern. Both models feature an opening engine cover which raises up to reveal the completely modelled Tier 4i Deutz TCD 4.1 L4 4-cylinder engine block and cooling systems with angled radiator block, piping and fine detailing all looking very authentic. The all metal drum of the pad foot version has a hefty weight with excellent definition of the patterned drum surface with tractor treaded style tyres for added traction while the delicate tread pattern is found on the smooth drum version. The cabin interior has been replicated convincingly with the steering wheel, central control housing, driver controls and safety fire extinguisher clearly visible through the glazed windows which have printed window seals and a front windscreen wiper arm. Metal bars extend from the frame to house the front facing light housings while rear view mirrors and an amber warning beacon add to the realism. The front frame has bolt detailing cast into the surfaces with a good range of movement of the articulating, hydraulically operated joint with access steps fitted to both sides, complete with textured anti-slip surfaces and integrated metal grab handles.

Vögele

Joseph Vögele AG manufactures a range of paving and material transfer machines with a number already released in 1:50th scale. The

latest release is the updated Super 2100-3i highway class tracked paver which is the most powerful of the new "Dash 3" generation. The 1:50th scale model from NZG is an update to the previously released 2100-2 with new tooling, more opening compartments and added features like the individually linked track pads with a full width SB250 screed. The operator's platform has dual seating with an adjustable sliding control system complete with decorated controls which look realistic, as do the control modules fitted to both sides of the screed. The seats are fitted to pivoting frames allowing the operator to swing out beyond the edge of the chassis for a clear view of the area and this is functional and includes nicely engineered glazed lower panels



H13i detailed fully enclosed cabin.

and metal safety railings. The rear screed casting looks to be the same as that fitted to the previous version with extending outer sections depicting a full 13 metre paving width with auger detailing and textured anti-slip surfaces all included. One very noticeable difference to the previous version are the opening engine covers, one across the top of the engine bay which lifts up and two opening side panels which allow for a clear view of the authentically replicated and decorated Cummins 6-cylinder diesel engine and cooling system within. For transportation, the new shaped canopy with extending sun screens and connected exhaust stack can be folded down to reduce the height for transport although the rear screed is fixed, so the model cannot be shown in an authentic transport situation. The paint finish is top notch with clear Vögele graphics and the model comes with a reproduction specification booklet packed with information. Announced at the Bauma trade show, but not yet available to the collector market are a pair of Vögele pavers from WSI Models. Both the 1800-3i tracked paver and the 1803-3i wheeled paver have been produced to WSI's usual high standards and levels of detail.

Atlas Copco Dynapac

Atlas Copco has recently acquired the Dynapac Company, integrating it into their range of products. While the Dynapac name



Above and left: Vögele Super 2100-3i tracked paver.



Fully modelled operator's platform.



Opening top and side engine covers.

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still remains, the product range has undergone rebranding with a new colour scheme of grey and yellow along with the Atlas Copco markings. NZG have released updated versions of both the SD2500WS wheeled and SD2500CS tracked pavers which are finished in the new corporate colours and feature plenty of functionality, from the folding canopy which lowers for transport while the entire operator's platform can extend on both sides of the chassis to offer a better view of the work area. Seating is provided on both sides of the platform with a sliding control panel allowing left or right handed operation. The front hopper has folding sides with a statically modelled transfer conveyor through the chassis to the

rear auger and screed box which is height adjustable with extending side extensions which are fitted with intricately decorated small control panels. Joining the range is a 1:50th scale model of the CA6000 single drum compactor which has been manufactured by Joal and features a lifting engine cover revealing the engine mock-up within along with a fully enclosed cabin, authentically decorated in the new Dynapac company colours.

Bomag

The Bomag Company, part of the



Above and left: Dynapac SD2500WS wheeled paver (real) and 1:50th scale model from NZG.



SD2500CS tracked paver with lowered canopy.





Above left: Detailed operator platform.



Above right: Rear screed detailing.



Right: Replicated control panel.

Fayat Group have been producing road surfacing and repair equipment for a number of years and have an extensive product line. A number of models have been produced over the years, mainly from Kaster Werbung and while these models are representative of the machines they are modelling, the quality of the model has been below par when compared to other model manufacturers. This being said, a noticeable improvement in terms of quality and functionality has been seen with the release of the BM2000/60 cold milling machine which features a folding conveyor, linked metal track segments, a folding canopy, working steering and authentic detailing. The latest paver model, the BF800C tracked paver, has some stunning detailing and functionality and is certainly equal to releases by the well known model manufacturers, with pivoting hopper sides, linked tracks, telescopically extending screed and a fully replicated

operator's platform which can be extended to each side of the chassis. The paint finish is excellent with authentically applied markings throughout. The latest compactor releases include the single drum BW211 which is available in two versions, one with a smooth drum (BW211 D-40) and the other with a padfoot drum (BW211 PD-40). Both feature an open ROPs canopy with a seated driver which is a nice addition although the quality and

construction of the models is not to the same very high standard as the previously released tracked paver.

Caterpillar

Caterpillar has a diverse product range which includes a number of road surfacing machines, some of which have already

been modelled by Norscot in 1:50th scale. The latest range of pavers are covered with four models based on the D series AP6xx design including two on a tracked undercarriage (AP655D) and two featuring a wheeled undercarriage (AP600D). Detailing is good throughout with two different screed options available, a Vers-a-mat AS2252C fitted to the canopy version and the AS4251C screed assembly fitted



Bomag BF800C tracked paver.



Volvo DD25 Tandem Drum Roller.



to the open top version. All four versions feature tilting hopper sides with dual operator seating on the upper platform.

The PM200 milling machine is the latest release in the portfolio and features a hinged discharge conveyor allowing the model to be displayed in a transport configuration. The canopy is fixed with a central control panel complete with hinged cover, side access ladders and dual seating on the operator's platform. The model looks fairly accurate to the original although most of the functionality of the full sized machine is static on the model. The pick-up and main discharge belts are made from fabric and look fairly realistic with a sparsely detailed cutting drum at the heart of the chassis.

Volvo

Volvo are well known for their range of articulated haulers, wheel loaders and excavators so it is no surprise that they acquired the Ingersol Rand road development business in 2007 to add road surfacing equipment to their portfolio. At

the time, an existing model of the Ingersol Rand tracked paver was reproduced in the Volvo corporate dress and several small tandem drum rollers have been produced since. The latest release in the road surfacing range is the DD25 tandem drum roller which has been produced by Motorart in 1:50th scale. Following from the DD24, the new version features an opening front engine cover that reveals the modelled engine and cooling systems within while the open operator's station with ROPs frame has been authentically replicated with a decorated control console, steering wheel and hand controls. Cleaning bars are fitted to both sections of the articulating frame with good detailing of the drive motors, complete with hydraulic hosing. **DC**

i In part two of this fascinating series, Steven will be elevating our spirits with cranes and lifting equipment. The next instalment will appear in the December issue.



Great engine detailing.



BW211 PD-40 padfoot drum.



Above: Bomag BM2000/60 cold milling machine.

Right: BW211 D-40 smooth drum.



Cat road surfacing fleet.