

## the models

# Craneology

**Ian Webb** cites the case for building a collection of construction models and looks at how crane model manufacturers are really raising their game

**M**any collectors will be happy with their cars and buses parked neatly in a display cabinet, but if you want the real deal then having models of construction equipment is the way to go. If you want models that can be posed in different ways, or that have working functions, or if you simply want to blow away every other model collection with huge complex pieces, then welcome to the world of construction collectables

There's a long history of the big original equipment manufacturers (OEMs) commissioning promotional models of their machines. In recent years there's been an explosion in the range and quality of models available, and times are exciting for the collector. New model manufacturers have emerged offering more detail, and in some cases a degree of model engineering which pays homage to the real machines.

### A bit of background

The standard scale for construction and mining models has historically been 1:50, and the majority of models are released in this scale. Even at this size some modern models are huge, with the largest model cranes ranging up to ten feet high and beyond. Some smaller machines, typically telehandlers and access platform models, are made in the larger 1:32 scale, and a number of models, particularly tower cranes, have been made in the smaller 1:87 to limit the sheer size of the models, so as not to get unwieldy.

Some OEMs even have a long history of commissioning scale models. The Caterpillar company has a large range covering its earthmoving machinery, and Komatsu of Japan has followed suit. Liebherr of Germany has perhaps the widest range covering cranes, earthmoving, mining and other machines.

Many OEMs are now represented in the modeling sector and it's usual to see new model releases timed to coincide with major equipment exhibitions. The buoyant equipment market of the last few years has meant there's been money for promotional models but it remains to be seen how the release of collector models will be affected by the downturn in the global economy. Many OEMs now have

their own webshops where models of their machines can be purchased directly, which is just as well because construction collectables have hardly penetrated most dealers' shelves.

Up until a few years ago the premier makers of die-cast construction models in Europe were German, with the two best known companies being Conrad and NZG. Both companies have a reputation for solid engineering and reasonable detail, with Conrad in particular having a focus on the larger and more complicated models. The only other producer of construction collectables of significance in Europe is the Spanish company Joal, whose offerings are generally at the cheaper end of the market. In the US, Norscot

**above** Big on detail: Conrad's 1:50 scale CC8800 crawler crane.

has provided models for Caterpillar and others, which have also been of moderate quality.

### New techniques and manufacturers

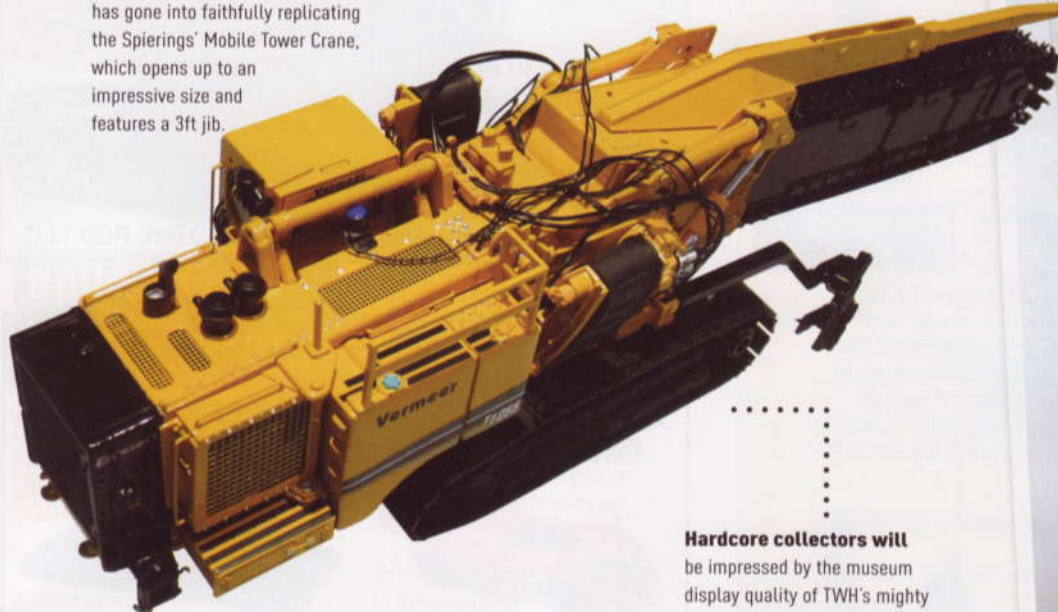
Since the millennium two forces for change have influenced the market in construction models. The first is the improved technique for die-casting, which have allowed bigger and more complex models to be attempted. This manifested itself at the BAUMA construction exhibition in 2002, where two prototype models from Conrad pointed the way in 1:50 scale crane models. One was a model of the Sennebogen Starlifter, the first large







**Some complex engineering** by Dutch model manufacturer WSI has gone into faithfully replicating the Spierings' Mobile Tower Crane, which opens up to an impressive size and features a 3ft jib.



**Hardcore collectors will** be impressed by the museum display quality of TWH's mighty 1:50 scale Vermeer trencher.

mass-produced crawler crane, and stands around four feet high when fully built up. Even more impressive was the luffing fly jib attachment for the Demag AC500 lorry mounted crane. This crane was over nine feet tall equating to a scaled height of 450ft. Both these models showed what was possible in die-cast, and larger models have flourished since.

The second major force was the move to have models produced in China. As a country with low labour costs it is relatively economic to produce models with a high man hour content compared to manufacturing in Germany. Although traditionally a base for mass produced cheaper models, construction collectibles made in China now also occupy the top end of the market. NZG decided to base its production in China around

five years ago and a number of new model making companies have appeared which utilise Chinese factories, and the most notable of these are TWH of America and WSI based in Holland.

Models from these upcoming companies have set new and very

## “One new manufacturer that has pushed the boundaries is WSI”

high standards in terms of model detail. In Europe, Conrad still produces models made in Germany and although they are well engineered they cannot compete in terms of detail with the best Chinese models.

It remains to see whether the European makers can survive long-term with their cost base.

**Bigger and better** The last few years have seen a significant increase in the size and complexity of models being attempted, and the addition of much more detail. One new manufacturer that has pushed the boundaries is WSI of Holland. It's

fast building a reputation for its range of high quality truck models, however two crane models illustrate what is now possible. The first is the Mammoet PTC Crane, which as a model weighs 27kg in the box, and stands over 6ft tall when built up. This is a massive, highly detailed model and will certainly



above WSI's 27kg Mammoet stands 6ft high.

challenge collectors short of display space. Coming in much smaller is the Spierings SK599 Mobile Tower Crane. This is a folding tower crane on a lorry, which in real life is mechanically very complex. The piece is a faithful representation of the real thing and the excellent model engineering allows this scale replica to open up to an impressive size, with the jib over 3ft long.





# the models



left Three from Conrad; two heavy haulage trucks, with the one at the rear carrying the crawler crane.



## Build on your knowledge...

TO READ MORE about construction collectables (including model reviews) visit the author's website at: [www.CranesEtc.co.uk](http://www.CranesEtc.co.uk)

### Universal Hobbies' Komatsu

demolition excavator blurs the boundary between plastic and die-cast, and lowers both the cost and the weight in doing so.



above TWH's big Bucyrus 495HR mining shovel looks awesome.

TWH of America has its models made in Hong Kong by the Wan Ho company and in just a few years has built a range which it describes accurately as 'museum quality'. It has agreements to produce models for some large US OEMs and one of these is Bucyrus International, a manufacturer of mining equipment. A number of models have so far resulted and they've all been at the leading edge. One is the 495HR Mining Shovel, a large rope shovel that can be operated by using special keys; it's the kind of model which will even impress the non-collector. Promised in 2009 is the Bucyrus 8750 dragline, which will set some new standards in 1:50 scale, with an overall length of nine feet and incorporating working LED lighting. However few collectors can afford such a large model costing \$6000, so fortunately TWH has other more normal models in the range, including cranes from the Manitowoc Group, concrete mixers from Oshkosh and excavation machines from

Vermeer. The common feature of all these models is very high detail, and the functionality of recent TWH models has also improved compared to earlier offerings.

Back in Europe, Conrad has responded by slowly increasing the detail in its models, although in my opinion its work still falls short of Chinese standards.

## "It's the kind of model that will impress even the non-collector"

Conrad has excelled at model engineering though, and its version of the Terex Demag CC8800 Crawler Crane was a step forward for die-cast modelling, winning an Innovation Award at the 2004 Nuremberg Toy Fair. This has recently been followed with its huge 1:50 scale Liebherr Tower Crane, that measures seven feet end to end. The stresses in models of this size are significant and require

top quality manufacturing methods. Conrad also continue to reliably produce a range of smaller models, predominantly for German OEMs, and these include concrete pumps, cranes, excavators and various types of heavy haulage. In fact Conrad's focus is heavily on the equipment companies as its customer and perhaps more direct attention on the collector

components that are highly detailed. In fact it's difficult to tell which parts of the model are plastic and which are metal and only when you pick them up do you realise there's significant plastic because of the light weight. This approach will not appeal to many collectors but it does result in inexpensive but good-looking models.

### Get hooked!

For anyone interested in collecting scale models, construction collectables offer incredible variety and some seriously impressive models. They look great and their moving parts allow for different display options. The models, many in OEM colours, are mass-produced in relatively small numbers and just as in any other walk of collecting, some of these can become highly sought-after because of their rarity. But most of all, they're loads of fun! **MC**