

PLANT: SCALE MODELS QUATE AWARDS



Crowd pleaser: The familiar UK name of Ainscough on a crane and ballast carrier

MINIATURE MOVERS

If you can't quite decide what you want Santa to bring you for Christmas, how about your very own piece of construction equipment – in miniature. Scale models of excavators and cranes are highly collectable, as **Ian Webb** explains.

A popular promotional technique among plant manufacturers is to commission scale models of their equipment and either give them away as corporate gifts or sell them externally as corporate merchandise. At every major plant show you will see "gift shops" on the stands of the best known firms, with loyal fans queuing to get their hands on the latest new release.

The majority of plant miniatures are made in the standard scale of 1:50, which allows a good balance of size, detail and cost. However, smaller plant items are often made in the larger scales of 1:32 or 1:25, while some of the largest machines – such as tower cranes – are modelled in the smaller 1:87 scale to produce a practical size.

Plant models are not sold as toys, but are intended for adult

collectors. They are generally made of diecast metal, with some use of plastic.

Diecast metal produces satisfyingly heavy and robust models but, as it requires special moulds to be made, it is expensive, and usually the plant manufacturer has to pay towards having the moulds made, which means that it is usually only economic if at least 2,000 models are produced. Even so, in a global sense the numbers are not large, and many of the models become quite collectable, especially if they are produced in unusual colours as special limited editions.

Most models were originally made in the toy manufacturing heartland of Germany, and some are still manufactured there. As with many things, however, much of the production is now done in China, where lower labour costs have resulted in a



Vintage kit: The detailed cab of the historic 22RB

High point:
NZG's giant
Liebherr
LTM11200-9.1
mobile crane lifts



Easy does it: A pair of Terex models posed together

significant increase in the detail and quality of modern models.

A particular feature of construction plant models is that they tend to have good functionality, with many moving parts to demonstrate the features of the real machine.

Earthmoving equipment has always been well represented in the scale model world, with the full range available in model form, including excavators, scrapers, graders and dump trucks. Among the bigger producers is Caterpillar, which has a very significant model production programme run by US company Norscot, with machines available in a variety of different scales. These models tend to be of reasonable quality and are relatively affordable.

JCB also has an extensive range, with many miniatures of its famous backhoes available, as well as other types of equipment. Models of the firm's flagship 3CX can be obtained in the large 1:25 scale, and are impressive for the £55 price tag.

German company Liebherr has commissioned models for many years, mainly from its compatriot model makers Conrad and NZG, and they are generally of a high standard. The range includes the only road/rail excavator model currently available.

Typically, modern excavator and dozer models have working metal tracks, and can be posed in various ways to simulate both digging and loading. The better

WSI's Mammoet PTC ring crane model is suitably massive and, with an extension kit, is nearly 4m tall. However, it has a price tag to match of around £1,500

quality miniatures will also have fine detail – such as hydraulic pipes and warning notices – reproduced authentically.

At the larger end are the models of big mining machines, such as the Bucyrus 495HR mining shovel, modelled by TWH of America, which weighs in at a hefty 10kg. It is highly detailed and costs around £500.

Among the most popular construction models are the cranes. All types of construction cranes are available as scale models, with the most common being mobile cranes.

The real machines have between two and nine axles, and range from 30t to 1,200t in capacity. Models are available to cover this entire range, starting at around £50.

As they usually have metal extending telescopic booms and solid counterweight slabs the models are relatively heavy. On most models the outriggers can be set down, and the main

crane functions work – including slewing, raising and extending the boom, and hoisting the hook.

The largest mobile crane model available is the 1,200t-capacity Liebherr LTM11200-9.1, which has been modelled in 1:50 scale by NZG. It is an exceptional model that will impress anyone who sees it, and costs around £350. A luffing jib attachment is expected to appear in 2011, making the model over 3m tall.

Model cranes are also produced in limited numbers in the colours of individual crane hire companies, making them much rarer and more sought after as a result. Crawler crane models are particularly interesting, as the latticework booms look good and generally need to be assembled from sections – just like the real machine. Even in 1:50 scale it is possible to build up crawler cranes to 3m or more in height.

Tower cranes are generally modelled in 1:87 scale because of their size, and are available from around £70. Even at this scale they look impressive, but there are also a couple of models now available in the standard 1:50 scale and these are huge, standing around 2m tall.

For anyone wanting a really extraordinary model, WSI of Holland has produced a model of the giant Mammoet PTC ring crane, a 1,600t-capacity machine often found on power station and refinery projects. The model is suitably massive and, with an extension kit, is nearly 4m tall.

However, it has a price tag to match of around £1,500. Next year, however, this monster is set to be overtaken, when an even bigger model of a Sarens ring crane hits the market.

In recent years there has been an expansion in the range and type of machines produced as models, and there is now something available in most sectors. Demolition machines have become increasingly popular, including hammers and shears mounted on excavators, some with extended booms.

Readers with longer memories may be interested in models of historic plant, which are often of high quality, as they are intended to reflect the legacy of the plant manufacturer concerned.

The market in construction plant scale models has grown significantly in recent years and the number of collectors is increasing all the time. The models make impressive display pieces for presentation to staff and customers, and the better quality ones hold their value, with rarer examples even appreciating a little over time.

Although they are not generally available in high street hobby shops, corporate web shops and internet dealers can supply most models.

■ Ian Webb is a chartered civil engineer who runs the website *Cranes Etc*, which reviews scale models of construction equipment. For more information on models visit www.CranesEtc.co.uk.