

CRAWLER CRANES



Liebherr LR 1400/1 crawler installs a wind powered generator

With incredibly fast assembly and increasing ease of transport, some new crawlers are offering a cost effective alternative to mobiles. Could the lifting industry be ready for a new approach?

Crawlers

That rumbling is getting closer. New technologies indicate that now could be the time to take a fresh look at crawlers.

Edmund Nuttall has just purchased two new IHI CCH700 crawler cranes and a heavy duty DCH1000 – the first of its type in the UK market. This 100 tonne crawler features a 650 horse power Caterpillar engine, 30 tonnes of line pull on both winches and a hydraulic retractable undercarriage to aid transportation.

Nuttall went on to purchase its second DCH900 after its first successfully worked 24 hours a day, 7 days a week for a year, “with absolutely no downtime whatsoever”, according to Robert Law of UK distributor AGD Equipment.

One of the biggest customers for hiring IHI crawlers this year has been Amec, says Law. “Amec has had up to 35 crawlers from us engaged on large piling projects in the south east of England. Models range from 35 to 100 tonnes, including heavy duty cranes like the DCH700 and DCH800.”

However, the most popular models in the UK are the CCH500-311 and



Two IHI DCH900s were supplied to Edmund Nuttall

CCH700, with 50 and 70 tonne capacity. These are used daily in civil engineering, construction, dismantling, tunnelling and piling.

The twists and turns of the crane industry are getting very involved. The latest snippet *Cranes & Access* has heard from Terex is that recently bought-out Demag will be selling IHI crawlers in Germany. This will provide a comprehensive range – the IHI machines are between 40-250 tonne capacity, whilst Demag starts at about 300. On the mother ship Terex, US dealerships are already selling IHI cranes as ‘Terex-American’.

Last year Demag launched its CC8800. It has been manufactured with no component wider than 3.5 metres or heavier than 40 tonnes. This assembles in two days, so can offer a real alternative to the largest mobile cranes.

Terex only manufactures one crawler for the European market, the three year old A600-C, a telescopic boom crawler with 60 tonne capacity, a 32.4 metre main boom and 20 metre lattice fly jib. None are at work in the UK as yet; according to Norman Purves of Terex UK, the British buyer can be rather conservative about telescopic crawlers. However, talks are happening between the UK and US ►

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The new Liebherr LR1100 can be assembled within an hour

◀ offices about getting the American range CE marked.

Back on more familiar ground is Liebherr. Its crawler crane offering is split into two – the HS (heavy duty) and LR (lift lattice) ranges.

There are six models in the HS range, from 35 right through to 200 tonnes. Weldex is Liebherr's main customer in the UK for these heavy duty machines. It will be using them when it starts work on Heathrow's Terminal 5.

Transportability

In the LR range there are eight models, including the popular, revamped 1350-1, with 250 tonne capacity and a six metre radius. The remarkable thing about the most popular model, the LR1100, which was launched last December, is that it can be assembled in one hour. It is not long since two days would have been considered fast. "This machine is popular because the tracks are kept on the machine, rather than having to use separate transport", adds Mark West, who deals with crawler sales. "This is a new innovation in the 100 tonne class. It offers ease of transport and erection and excellent lifting duties. Both Weldex and PCE of Warwickshire have bought LR1100's this year."

Andrew Brown of Kobelco echoes the comment about transport. "The new breed of crawler, which you will find at Liebherr, Demag and Kobelco, is designed for easy transport. Add this to the fact that it is getting increasingly difficult to shift huge mobiles, so although crawlers were previously brought in only for long jobs of a couple of months or more, they are now considered for much shorter periods on site. I've known a

250-300 tonne crawler to go to a site for two or three days. They are also easy to assemble and, with the new rules about ground conditions, they may be at an advantage because they spread the load more than a mobile. Crawlers are coming back into favour."

Liebherr has sold 15 cranes from the LR range to UK clients this year, and 12 from the HS range. Watch out for further interest from the German manufacturer in the guise of the LR1130, a 130 tonner to be launched at the end of the year. It is likely to be available to UK customers in February 2003.

EH Hassell has represented Sennebogen in the UK for just under four years, previously having run a business to rebuild cranes – much of which involved the refurbishment of mechanical crawlers. "This year we have so far sold six or seven crawlers, from 40 to 80 tonnes", says Phillip Hodges. "There are about 14 models in the range and we largely sell to civil engineering firms. Mowlem is our best customer, and we have also sold to Byzac, a medium sized company specialising in building water treatment plants. The biggest contract our machines are being used on at the moment is the Port Tunnel in Dublin – a £400 million contract for Mowlem. They have cranes from us, as well as Sennebogens on hire via Mammoet. These include the 5500, a 160 tonner, the 136 tonne 4400 and the 670, an 80 tonne machine.

Hydraulics take over

A significant development for Sennebogen customers is the hydraulically elevating cab, as ordered by Hanson Aggregates for the 640HD 50 tonne lattice boom crawler it is using to discharge aggregates from ships on the Thames. The improved

operator comfort and visibility will make this feature more and more popular, predicts Hodges.

"The UK market has certainly become more active over the last three years", he believes. "We think that the improvement will continue for sometime yet, because people are having to replace their old machines. One reason is that the old mechanical crawlers are increasingly too expensive to maintain. Another is that customers are specifying that they want hydraulic cranes for health and safety reasons. Plus, these old machines are difficult to get parts for."

Kobelco boasts a similar range of 15 machines, nine of which are between 60-250 tonnes, predominantly selling into Europe, with the rest weighing in between 250-800 tonnes for very specialist heavy lifts.

Graham Booth of BPH Equipment reports that the most popular machines in his fleet are an 80 tonne Kobelco and 70 tonne Hitachi, both of which offer "ease of transportation, efficiency of operation and good lifting performance."

"The Kobelco 70-80 tonners are the most popular", says Brown. "I think they are replacing the old Atlas and Ajax mechanical cranes. The market for 40-50 tonners is saturated and hire rates are very bad as a reflection of this".

Kobelco and Sumitomo are in close competition. Sumitomo launched its new 70 tonne SC700-5 at SED. Rod Abbot of NRC Plant, the UK dealer, says it is one of Sumitomo's best ever offerings. It is part of the new 'PAX' series (to imply 'environmentally friendly') and conforms to Euro 2 emission regulations. It boasts a main boom of 55 metres, transportable width with crawler of 3.2 metres and tail radius of 3.9 metres and a string ▶



Q-Plant's cheque presentation for the Kobelco CKE800 at SED

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The new Sumitomo SC700-5 launched at SED
of safety/driver comfort features.

Survival of the fittest

Approximately 15-20 Kobelco crawlers are selling into the UK and Irish market yearly, mainly to civil engineers, and occasionally to plant hire, says Brown. "The trouble with plant hire is that it's own considerable problems have made it slow. The mobile crane market is bad; there's not enough work to go around and so rates have gone down. You can see the effects when you hear of Ainscough issuing warnings to customers about safety being compromised through the ratings war, and the fact that Baldwins shares have fluctuated so much."

Abbott agrees that the industry is having a difficult time. "CE marking, machinery and emissions directives, various British Safety standards, and so on, are all making it hard for end users to keep up with all the paperwork and the law. Big companies like Amec and Balfour Beatty are looking for preferred suppliers who can offer modern equipment and decent service agreements."

Langley Holding's RB Cranes has six crawlers in its range. Four CH40, 40 tonne, 48 metre boom models have just been sold to a UK company, for work overseas. Despite this great order, Christa Baxter, head of PR, says that times are slow. "Six or seven years ago, in its hey day, the production line was continuous. Now there is a lot of refurbishment going on. The market has slowed down."

Things are just as unsteady over the Atlantic, if not more so. But giant manufacturer Manitowoc is riding the wave.

Its Model 999 has proved a huge success. At 250 tonnes, builders and contractors are using it to help them do more work more efficiently. One hundred 100 Model 999s have been sold in just two years, making it the fastest selling crane of that size in the world. "The most popular size over here would be 60, 80 or 90 tonnes", says Steve Barnett, MD of Manitowoc Potain UK.

Look out for the launch of the 1015 foundation crane in August, which will be shipping from September. This duty cycle crane is the "next big thing for Manitowoc", according to head of marketing Tom Cioni. "It will be one of the first high-power cranes designed specifically for the heavy demands of foundation work", he explains. "It is expected

to have a strong international market." The 555, 2250 and 999 will apparently be shipped over to Europe soon for rental – the exchange rate is making European sales very hard for Manitowoc so they want potential customers to experience their workmanship through rental. This is the first time they have made such a move – but with the Grove plant in Germany and Potain's in France, will it soon be manufacturing in Europe?

So, to those many hire companies who do not include crawlers in their fleets: with increased mobility, assembly times down to an hour or two, and many users starting to consider crawlers for shorter contracts – can you afford to exclude these increasingly versatile cranes? ■

Alive and well

NCK, one of the grand old names of the British crane industry is "alive and well and making crawler cranes" says managing director Broniek Gnyla. The company now belongs to SPW Group which has a variety of interests ranging from engineering to the manufacture of temporary traffic lights.

"Looking out of my window now I can see an HPC 65 port crane with a high level boom that is just being completed for Sharpness Docks" says Gnyla in a telephone interview with Cranes & Access. Other recent deliveries have been to Ellesmere port and before that to Cork.

The 65 tonne capacity HPC 65 is NCK's most successful model and is "a well proven, very reliable product that is out on its own" says Gnyla.

The other important strand to the NCK business is spare parts for the thousands of older, mechanical cranes in operation throughout Europe, Africa and the Middle East.

