

New mobile harbour crane range

Liebherr-Werk Nenzing, Austria

Liebherr-Werk Nenzing recently announced their latest improvements and upgrades to its range of mobile harbour cranes. According to Liebherr this is driven by their in-house ‘constant improvement programme,’ a unique facet of the Liebherr philosophy which involves improving on their products to suit customer needs.

In the latest changes, the main components are maintained – the undercarriage system still retains its place in creating a highly manoeuvrable mobile harbour crane; the simple hydrostatic drives remain standard, allowing the same components to be used on all machines and ensure good spares availability and a single system for engineering support; the low wheel loads protect the customers quay from higher point loads of competitor machines; and Liebherr’s in-house control system means no possibility of the system becoming obsolete during the lifetime of the crane.

The new changes alter the whole balance of the range of machines, giving a better lifting coverage for the customer. The range now comprises:

LHM-Lightweight: max. lifting capacity max. outreach		
LHM 100 (upgraded)	45 tonnes (upgraded)	30 metres
LHM 180 (new)	64 tonnes	35 metres
LHM 250 (upgraded)	84 tonnes (upgraded)	40 metres (upgraded)

LHM-Heavyweight:		
LHM 320	104 tonnes	43 metres
LHM 400	104 tonnes	48 metres
LHM 500	140 tonnes	51 metres
LHM 600	208 tonnes	58 metres

In recent years the focus on improvements has been towards the large end of the crane market as this is where market pressures demanded. Yet the smaller end of the market cannot be ignored, with up to 30 per cent of annual sales falling in to this region. Like their big brothers, the smaller cranes now all feature technical upgrades that will save the customer money and make the crane a more environmentally friendly machine. These include:

- GRP machinery house on all units, leading to a corrosion-free, lighter structure, with better noise insulation and avoiding steel prices that are still on the increase.
- Internally mounted winches, keeping the components in a better controlled environment and giving longer life and reduced noise levels.

- Oil coolers mounted externally to avoid product contamination of the machinery.
- Electric or diesel prime mover – or both – on all machines.
- Real A8 classification on grab application.
- The ability to work with a fully automatic spreader all the way down to the LHM 180 machine (five containers across).
- Higher luffing, slewing and hoisting speeds on the new machines (e.g. the new LHM 180 impresses with a ~12 per cent increased performance of hoisting gear, ~50 per cent increased performance of slewing gear and 100 per cent increased performance of luffing gear compared to a LHM 250 of the old series).

With all of the hydraulics being designed to the same level as Liebherr makes its aircraft industry components, the lifetimes of the systems are longer. With all circuits being separately monitored by the Liebherr Lictronic® control and all being closed circuits, the engineers use spectrographic oils analysis techniques and keep the individual components – pumps and motors – in the crane for ever longer times. These methods also allow the service department to predict when components should be changed, avoiding breakdowns in service and allowing for ‘service-exchange’ of items to keep costs to a minimum.

The new machines can all now be used with the Liebherr Cycprotronic®, with both the anti-sway and point teach-in modes. They are all capable of man-riding as approved by the country’s local regulatory authorities, and feature as an option the eco-drive software, proven in customer tests to save up to 30 per cent on diesel costs.

All machines are also considered during design from an environmental angle. All now have the ability to be operated with bio-degradable oils, and require less oil on board than its competitors due to the closed circuits. Add to this the reduced noise signature, reduced fuel requirements, reduced maintenance requirements by using the Lictronic® to structure frequency, and it can be seen this really is a greener range of cranes.

With the wide-spaced jib head and the closed hydraulic systems giving instantaneous response to the operator, customers are reporting more often higher turnover rates, with many achieving 40 container moves per hour. In peak periods this figure has been pushed to 52 containers in an hour using a LHM 500.

ABOUT THE COMPANY

Liebherr-Werk Nenzing GmbH is part of the Liebherr group presently comprising more than 140 companies throughout the world. Liebherr-Werk Nenzing GmbH was founded in 1976 and concentrates today on the design and manufacture of mobile harbour cranes, reachstackers, ship and offshore cranes as well as duty cycle crawler cranes, lift cranes and foundation equipment.

ENQUIRIES

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