

INNOVATIVE TECHNOLOGY DESIGNED FOR MODERN TERMINALS

LIEBHERR MARITIME CRANES

REACH-STACKER MARKET DEVELOPMENT

Liebherr Maritime Cranes estimates that the reach-stacker market will increase slightly in the future. The prediction is that European rail- and inland waterway traffic will further develop especially. This trend shall cause an increase of the intermodal sector once more and on the basis of these predicted market developments, Liebherr has developed a new reach-stacker series.

New and innovative products emerge more often as a result of a cross-sectoral combination of technologies and design. The new reach-stacker series is the latest cargo handling solution from Liebherr Maritime Cranes and as such benefits not only from the involved companies' collective maritime experience, but also from its expertise in the fields of engine architecture and system control software. The result is a reach-stacker which exceeds all the demands of a modern container terminal puts on operators.

THE BEGINNING OF A NEW SERIES



In June 2015, Liebherr Maritime Cranes introduced the new reach-stacker for the first time to the public. The new reach-stacker was launched during the biggest European container handling exhibition, TOC Europe which was being held in the Dutch city Rotterdam. The first model out of the new reach-stacker series was covered behind a huge red curtain. Flashing lights, fog and an entertaining show attracted the attention of most exhibition visitors. After the curtain fall the audience had the opportunity to have a detailed look, touching, feeling, sitting inside the machine and talking to the responsible design department.

There was a highly positive feedback on the new machine. It was visible that the whole design of the LRS 545 is orientated on the extensive customer feedback Liebherr Maritime Cranes collected before and during development phase.

Driver comfort has been high in rank during the development of the new design.

The general design of the cabin is based on two decisive factors. "First of all we gathered several opinions and advises from our long-time customers that already operated the predecessor model LRS 645. We analysed their valuable feedback and utilized it in our design process. The second key factor was the well-tested cabin of the Liebherr wheel loader, which served as an important inspiration for the LRS 545 cabin. The development of the cabin took place in close cooperation with the design departments of other Liebherr product division," sums up Sabine Kopf, Product Manager for Liebherr Reachstacker.

The final result is a newly designed cabin that essentially contributes to driver comfort and allows high performance in a relaxed manner. Up to 5.9m² of tinted anti-glare toughened safety glass provide an excellent view. Due to the curved window design there is no metal frame that blocks the driver's look-out. The outstanding panorama view will be completed by the wedge shape design of the chassis. The optimal placed side mirrors plus the wide angle mirrors in

combination with the special shaped design of the counterweight and the rear view camera ensure a fulsome view on the visual field in the back.

"The Reachstacker LRS 545 is the new cargo handling partner for ports and terminals. Its wedge-shaped design provides the desired agility for smooth container operation. With the latest technology on board plus the ergonomic driver's cabin, the new machine truly quickens the pulse of every terminal," says Gianluigi Marocchi, Sales Director for Liebherr Reachstacker.

PERFORMANCE

With regard to performance figures, the new machine stacks five containers high in the first row. Moreover, it is capable of handling 45 tonnes in the first and 31 tonnes in the second row. The LRS 545 comes with a total weight of 69 tonnes, for an optimal balance between stability and quickness. It is equipped with a powerful but economical 4-cylinder 230 kW diesel engine. The in-house developed motor is in compliance with the latest EU Stage IV / EPA Tier 4 final emission standards.

An optional hybrid drive allows for even more power. Liebherr Maritime Cranes' unique Pactronic® is available for the LRS 545. The well-proven hybrid power booster has already been used worldwide in mobile harbour cranes for five years. Installed in the new reach-stacker, the maintenance-free Pactronic® allows for an additional 110 kW without fuel consumption or emission.

FIRST UNIT ORDERED BY PORT OF RAVENNA

The first unit was recently delivered to the Italian Port of Ravenna. The port is one of the most frequented Eastern Mediterranean hubs and plays an important role in handling solid bulk commodities, in particular raw materials for the ceramic, grain, fertilizer and flour industries. Furthermore, it is one of the biggest Italian ports when it comes to container throughput.

During the last few years Liebherr has already delivered quite a number of mobile



harbour cranes to various terminals located in the Port of Ravenna (Sapir, Bunge, Marcegaglia, Nadep Ovest and Setramar). All cranes are high performing machines and are characterised by utmost reliability. This is where the new Liebherr LRS 545 steps in. Synergies with regards to service and maintenance are further benefits.

“WHEN TECHNOLOGY MEETS DESIGN, MAGIC HAPPENS. AT LEAST FOR ME, AND THAT IS EXACTLY THE CASE WHEN I START THE ENGINE OF THE NEW LIEBHERR REACH-STACKER AND BEGIN MY SHIFT”

Mr Leoni, Reach-stacker Operator,
Port of Ravenna

The new strong link in the logistic chain of ports and terminals perfectly complements Liebherr Maritime Cranes' comprehensive portfolio. The Liebherr reach-stacker range will be further expanded in the long run. For 2016 and beyond Liebherr is very confident and enthusiastic to enter the market with a modern machine that maximises driver comfort, performance and eco-friendliness.

HIGH IMMERSIVE CRANE OPERATOR TRAINING

Finding efficient ways of up-skilling machine operators at the highest safety level while keeping time and costs at a minimum are central demands in the maritime cargo handling business nowadays. Liebherr simulations offer sophisticated solutions that tick all the boxes, allowing trainees to significantly improve their skills in a virtual but realistic environment.

The use of simulators became to an essential part of Liebherr's crane operator training for its customers. In the past 12 months Liebherr Maritime Cranes installed five LiSIM simulators in total. To ensure highly efficient crane operator training, Liebherr's maritime subsidiaries in Hong Kong (China), Rostock (Germany) and Nenzing (Austria) are now equipped with brand new simulators, called LiSIM.

Two simulators were delivered to long time Liebherr customers. OCHA, located in Antwerp is a training institute for dockworkers in Belgium's largest port and further afield. OCHA opted for a cabin solution equipped with LHM and Board Offshore Crane (BOS) simulation software. Antwerp Euroterminal N.V. operates two LHM 550 and trains their crane operators in the OCHA training center.

The second customer is Sogester S.A. at the port of Luanda (Angola). Sogester operates several Liebherr mobile harbour cranes at the port and opted for a LiSIM cab-enclosed solution equipped with the Liebherr mobile harbour crane simulation software. The LiSIM simulator cab solution is a space-saving version that offers real conditions at the same time. In a real Liebherr cab, crane operators become familiar with the use of original operating elements in a real environment.



ENQUIRIES

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