

Liebherr to Present its LTM 1300-6.2 Six-Axle Mobile Crane in Bern

- Most powerful 300-tonner available on the mobile crane market
- Outstanding load capacity and long boom system
- Can be readied for use quickly with user-friendly setup functions
- Innovative single-engine concept with mechanical shaft
- Convenient Liebherr controller with ECO mode for operation with low fuel consumption

March 2014 – At the 2014 construction machinery exhibition in Bern (Switzerland), Liebherr presents its 300 tonne mobile crane on a six-axle chassis, which has been revealed at the 2013 Bauma. The LTM 1300-6.2 features a 78 m telescopic boom, which means an additional 6 m in length over its predecessor, the 250-tonne LTM 1250-6.1. In addition, its load capacity has been increased considerably. The new LTM 1300-6.2 from Liebherr is the most powerful 300-tonner available on the mobile crane market.

Outstanding load capacity and a long boom system

Its particular high load capacity with its telescopic boom extended means that the LTM 1300-6.2 is ideal for erecting tower cranes. In addition to its 78 m telescopic boom a whole range of lattice jib systems is available which can equip the new crane for a wide range of applications.

The 12.5 m - 21.5 m double folding jib can be extended by two additional 7 m sections to a total of 35.5 m. The folding jib can be erected at an angle of 0°, 20° or 40° or as an option can be adjusted hydraulically between 0° and 40° whilst fully loaded. The 5.5 m foot section of the folding jib can be used as a heavyweight erection jib and provides a considerable load capacity of 58 t.

Can be readied for use quickly with user-friendly setup functions

Liebherr has designed the new 6-axle mobile crane on the one hand as a classic folding jib crane so that it can be used with the same speed and flexibility as a 5-axle model by crane operators.

On the other hand, the LTM 1300-6.2 is the only 300-tonner on the market and is therefore the smallest crane on the market with a luffing lattice jib. For crane companies that want to extend their range of offerings with a luffing jib crane, the new 6-axle model from Liebherr is ideal for taking a first step into the luffing jib class. The luffing lattice jib can be erected in steps of 3.5 m up to a height of 70 m. The 14 m - 42 m fixed jib also has modules of 3.5 m which helps to improve its load capacity.

All the setup functions such as ballasting and lattice jib erection are designed to be particularly user-friendly. The fixed jib can also be erected on its own, in other words without an auxiliary crane.

Innovative single-engine concept

A completely new concept for the superstructure drive unit has been used on the LTM 1300-6.2. Instead of the twin-engine concept normally used on cranes in this class, the 300-tonner is powered by a single engine with a mechanical shaft. Gear shafts are routed from the distributor gear in the substructure via two mitre gears through the centre of the slewing ring to the pump distributor gear in the superstructure.

A mechanical shaft ensures a particularly high efficiency level and low engine speeds in the chassis engine provide sufficient power for crane work. This ensures the economy of the new concept in terms of fuel consumption. The simplified engine concept puts Liebherr in an ideal position for modifying its diesel engines to meet the statutory emissions regulations. Other benefits over the use of a separate superstructure engine include a reduction in the amount of maintenance work and a reduction in weight. The lower weight can be used for load-bearing components, thus increasing the crane's load capacity.

Time-tested, powerful drive train

An eight-cylinder Liebherr diesel engine which develops 450 kW / 612 bhp at 1,900 rpm and torque of 2,856 Nm at 1,500 rpm provides the LTM 1300-6.2 with all the power it needs. The power is transferred to the crane axles via the 12-speed ZF-TC-Tronic gearbox. A torque converter has been installed for starting and accurate manoeuvring. The interarder, a zero wear hydrodynamic brake integrated in the gearbox acts as a retarder. In addition a Telma eddy current brake is available as an option. Like almost all LTM mobile crane models, the LTM 1300-6.2 is fitted with pneumatic disc brakes which Liebherr was the first manufacturer to introduce for mobile cranes some years ago. Compared to drum brakes, not only do disc brakes provide better braking performance but are also more economical since the brake pads can be replaced more quickly and easily and they also offer a longer service life.

The four rear axles on the six-axle chassis of the new 300-tonner have active electro-hydraulic steering depending on the vehicle speed. This increases the manoeuvrability of the vehicle and drastically reduces tyre wear. At crab steering speed all six axles are steered which means that there is no need to raise any axles. Five steering programmes can be selected conveniently at the touch of a button.

Convenient Liebherr controller with ECO mode

The LTM 1300-6.2 features the Liebherr LICCON2 crane control which has now become established in a number of Liebherr mobile cranes. An add-on program has been developed for the new crane drive concept with just one engine and a mechanical shaft to allow the machine to be run with low fuel consumption. Using this so-called ECO mode the complete pump drive can be automatically disconnected when the engine is idling and then reconnected by the intelligent controller in a matter of seconds when it is required.

A mobile, multifunctional control and display unit, the "BTT" Bluetooth terminal - is provided for setup functions. Using this the crane can be jacked easily and safely. The crane driver also has the option of attaching and removing the hook block on the crane bumper with visual contact by controlling the hoist winch and the luffing cylinder of the telescopic boom remotely via the Bluetooth connection. The BTT is also used for other

setup functions such as ballast assembly and for mounting the folding jib and the second hoist winch on the new LTM 1300-6.2.

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