LIEBHERR

Press information

New 8-axle crane from Liebherr: LTM 1450-8.1 with 85 m telescopic boom on the road

- Great mobility – designed for economical use around the world
- Long and powerful – the LTM 1450-8.1 can hoist 20 tonnes at fully extended 85 m telescopic boom
- The new LTM 1450-8.1 can perform crane jobs normally reserved for the 500-tonne class in many cases
- Liebherr unveils a prototype at the Bauma 2016

Munich (Germany), 11 April 2016 – Liebherr presents the new LTM 1450-8.1 with its maximum load capacity of 450 tonnes at the Bauma. The new crane features a very long yet powerful 85 m telescopic boom. The new LTM 1450-8.1 can even perform crane jobs normally reserved for the 500-tonne class in many cases.

In the design of the LTM 1450-8.1, Liebherr focused on high economy and simple set-up on site. This has resulted in the new 8-axle crane being capable of travelling on public roads with a 12-tonne axle load including its complete telescopic boom and all supports. This means that it can be quickly prepared for use once it reaches the site.

To support worldwide economic mobility, a wide variety of transport weights and axle load versions were included in the design of the LTM 1450-8.1. The new 450-tonne crane from Liebherr also features easy handling and the very latest mobile crane technology.

The new crane has a facility to work with a variable ballast radius. The VarioBallast® enables the ballast radius to be reduced with infinite adjustment from 7 m to 5 m using a simple hydraulic system, a feature which is very practical on constricted sites.

Powerful, variable boom system

The Liebherr LTM 1450-8.1 has a very long, powerful telescopic boom. When it is fully extended to 85 m, the boom can hoist a massive 20 tonnes. That makes it ideal for erecting large tower cranes. The long telescopic boom is also ideal for work in refineries and chemical plants. The new 450-tonne crane from Liebherr delivers

outstanding load capacities both with large radii and also for heavyweight hoists with a small radius which enables it to carry out 500-tonne class work in many cases.

A range of lattice jibs enables it to work efficiently in a wide range of applications. With a folding jib from 7 m to 35 m in length, the telescopic boom can be extended particularly easily and quickly. The folding jib is attached below a 0°, 10°, 20° or 40° angle. In this configuration the new Liebherr 450-tonne crane is ideal for wind turbine maintenance work.

Even greater hoist heights and load capacities can be achieved using the fixed lattice jib. It can be erected from 7 m to 56 m and can also be attached at an angle of 0°, 10°, 20° or 40°. The luffing lattice jib with a length of 14 m to 84 m delivers maximum height, radius and performance.

Economical 8-axle crane with simple set-up technology

The new Liebherr 8-axle crane features, at 85 m, the longest telescopic boom in the world that can be carried on public roads with a 12-tonne axle load. All four supports, the 16 size tyres, the hoist winch, 16x8 drive, retarder and Telma eddy current brake are included in this. To support worldwide mobility, a wide variety of transport weights and axle load versions were included in the design of the LTM 1450-8.1. Liebherr has developed practical solutions both for countries with reduced axle loads and gross weights as well as for regions where more than 12 tonnes per axle are permitted.

The new Liebherr mobile crane has been designed to deliver high economy and simple set-up on site. The crane cab is to the side of the boom and does not have to be swung from the driving position at the rear to the working position at the side as is common practice in this crane class. Liebherr has deliberately not used telescopic boom guying so as to reduce set-up times and purchasing costs. The new LTM 1450-8.1 has been designed to complete hoisting work flexibly and quickly so that two different jobs per day are easily possible. For a wide range of work, the crane can operate with just one additional transport vehicle to carry attachment equipment, support plates and adequate ballast.

VarioBallast® variable ballast radius

Liebherr launched its VarioBallast® on its new developments in the 5-axle class to change between two different ballast radii quickly and easily. Liebherr has gone one step further on the new LTM 1450-8.1. The ballast radius can be reduced with infinite adjustment from 7 m to 5 m using a simple hydraulic swivel mechanism. The VarioBallast® ballast adjustment is of great benefit on constricted sites. For example, a ballast radius of 5 m corresponds to the value of mobile cranes in the 200-tonne class.

The new 8-axle crane operates with a maximum ballast of 135 tonnes. To enhance economy, the ballast plates are compatible with the plates from the LTM 1350-6.1, the LTM 1400-7.1 and Liebherr 9-axle mobile cranes. Winch 2 with its pulley block for luffing jib operation can be installed quickly since it is secured direct to the ballast frame.

Time-tested chassis technology

An eight-cylinder Liebherr diesel engine in the undercarriage which develops 505 kW / 687 hp and torque of 3,160 Nm provides the LTM 1450-8.1 with all the power it needs. The engine meets the emissions regulations for Stage IV / Tier 4f and is also available in a Stage III version for threshold countries.

The power is transferred to the crane axles via the 12-speed ZF-TC Tronic gearbox. A torque converter ensures perfect manoeuvring. The intarder, a zero wear hydrodynamic brake integrated in the gearbox, acts as a retarder. In addition a Telma eddy current brake is available. All the rear axles on the new 450-tonne crane have active electro-hydraulic steering depending on the vehicle speed. This increases the manoeuvrability of the vehicle and drastically reduces tyre wear. Five steering programmes can be selected conveniently at the touch of a button. There is no need to raise the centre axles in crab speed.

Innovative single-engine concept with ECOmode

The LTM 1450-8.1 is the fourth mobile crane to feature the new Liebherr single-engine concept. The superstructure is powered by 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 benefits of not having a separate superstructure engine include reduced maintenance work and lower weight. The lower weight can be used for load-bearing components, thus increasing the crane's load capacity.

An add-on program is available for the crane drive concept with just one engine and a mechanical shaft to allow the machine to be run with particularly low fuel consumption. In ECOmode the complete pump drive can be disconnected automatically when the engine is idling and then reconnected by the intelligent controller in a matter of seconds when it is required.

Caption

liebherr-ltm1450-8-1-mobile-crane.jpg
The Liebherr LTM 1450-8.1 mobile crane is designed for high flexibility and economy.

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