

Maximum lifting capacity on four axles – Liebherr unveils the new LTM 1120-4.1 at the Conexpo in Las Vegas

- The most powerful 4-axle mobile crane ever
- 217 ft (66 m) telescopic boom puts it on an equal footing with 240 US-ton (200 t) cranes
- ECOdrive and ECOmode reduce fuel consumption and noise emissions

Ehingen / Donau (Germany), 17 February 2020 – Liebherr will be unveiling its new LTM 1120-4.1 at the CONEXPO in Las Vegas using the slogan “There’s nothing more on 4!” It is the most powerful 4-axle all-terrain crane ever built. The new 135 US ton (120 t) machine breaks into a performance class which has previously been the sole preserve of 5-axle cranes. As far as boom length is concerned, it is on a par with 240 US-ton (200 t) class cranes as its 217 ft (66 m) telescopic boom is the longest ever to be installed on a 4-axle mobile crane. Liebherr will start deliveries of the new LTM 1120-4.1 in autumn 2020.

Maximum lifting capacity and boom length

Delivering maximum performance on a 4-axle mobile crane is a concept which has been traditional at Liebherr for decades. For example, when the current LTM 1100-4.2 was launched in 2009, it set new standards in the 4-axle class with a lifting capacity of 22,490 lb (10.2 t) on its 197 ft (60 m) telescopic boom. The new 135 US ton (120 t) crane has added 18 percent to this value at the same length. What is more, the LTM 1120-4.1 can extend its telescopic boom to up to 217 ft (66 m), an additional 10 percent. This means it reaches the same level of many 240 US ton (200 t) mobile cranes on the market.

The new LTM 1120-4.1 delivers outstanding lifting capacity values, particularly with the boom fully raised. Its lifting capacity of 19,800 lb (9 t) on the 217 ft (66 m) telescopic boom makes it ideal for erecting tower cranes and radio masts. Lattice extensions enables the new 135 US ton (120 t) crane to achieve hook heights of up to 308 ft (94 m) and radii of up to 210 ft (64 m). For this a 23 ft (7 m) lattice boom extension is installed as well as a 35 to 62 ft (10.8 to 19 m) double folding jib, which, as an option,

can also be hydraulically adjusted between 0° and 40°. A 6.6 ft (2 m) erection jib and a runner, which can be swung to the side, round off the equipment list.

Great economy and flexibility

The new LTM 1120-4.1 can tackle jobs which normally would require a 5-axle crane, eliminating all the logistics work needed for the larger model. Because a 4-axle crane delivers benefits in terms of licensing and route permits, it can tackle jobs faster and with greater flexibility. The design of a 4-axle crane also enables it to work where there is insufficient space for larger cranes. On constricted sites, in particular, Liebherr's VarioBallast® and VarioBase® innovations deliver enhanced performance, flexibility and safety for this new crane model.

VarioBallast® on the LTM 1120-4.1 enables the crane to operate with a ballast radius of 12.6 or 15,6 ft (3.83 or 4.77 m). The ballast radius can be reduced by 3 ft (940 mm) quickly and easily using standard, mechanically adjustable ballasting cylinders when site conditions get tight. The large ballast radius delivers higher performance and often also cost benefits by reducing ballast transport as many crane jobs can be completed using the system with fewer counterweights.

The maximum of 68,300 lb (31 t) of ballast is distributed so variably that in addition to the 26,400 lb (12 t) axle load version, uniform axle loads of 29,800, 33,000 or 36,400 lb (13.5, 14.5 and 16.5 t) can also be achieved. That means benefits driving on construction site and in countries where higher axle loads are permitted.

ECOdrive and ECOMode reduce fuel consumption and noise emissions

A six-cylinder Liebherr diesel engine in the undercarriage, which develops 330 kW / 449 bhp and torque of 2,335 Nm provides the LTM 1120-4.1 with all the power it needs. The engine satisfies the new stage V emissions directive and can also be built to comply with the regulations which apply in countries outside of Europe, for example Tier 4 for the USA or stage III for low regulated countries.

The ZF-TraXon gearbox is used to transmit the power to the crane's axles. The ECOdrive has proven its value over several years – it delivers enhanced drive

properties which both save fuel and reduce noise. Hillstart Aid makes starting on gradients easier.

ECOMode for crane the operations is now standard on Liebherr mobile cranes with a load-sensing control system – the crane controller calculates the perfect engine speed for the working speed selected using the control lever to avoid unnecessarily high engine speeds. That also saves fuel and makes the engine quieter.

Caption

liebherr-mobile-crane-ltm1120-4.1.jpg

Liebherr unveils the 4-axle LTM 1120-4.1 at the Conexpo in Las Vegas (USA).

Contact person

Wolfgang Beringer

Phone: +49 7391 502-3663

Email: wolfgang.beringer@liebherr.com

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Ebingen / Donau, Germany

www.liebherr.com