

# Press release

# Mobile and powerful – Liebherr unveils new 700-tonne LR 1700-1.0 crawler crane

- LR 1700-1.0 is the successor to the LR 1600/2 and in the medium term will also replace the LR 1750/2
- New Liebherr 700 tonne crawler crane sets new standards in the class between 600 and 750 tonnes
- LR 1700-1.0 delivers innovations from Liebherr's most recent crawler crane developments

After 12 years and over 200 units produced, Liebherr's successful LR 1600/2 crawler crane now has a successor – the design of the LR 1700-1.0 with a maximum lifting capacity of 700 tonnes is based on its 600 tonne predecessor and features similar dimensions. In many respects, the new crane even exceeds the performance of the LR 1750/2. The first models of the new crane will be delivered around mid-2021, around the same time as the final LR 1600/2 units will be delivered. As deliveries of the LR 1750/2 will also cease after almost 20 years of production, the powerful LR 1700-1.0 will also assume its position below the 800 tonne LR 1800-1.0.

Ehingen / Donau (German), 15 February 2021 – The new LR 1700-1.0 from Liebherr combines the benefits of economical transport of 600 tonne class crawler cranes with the performance of 750 tonne class lattice boom cranes and also features all the innovations of Liebherr's crawler crane developments from the last few years.

# **Great mobility and compact dimensions**

Liebherr has completely redesigned the base machine for the new LR 1700-1.0 based on the dimensions of the LR 1600/2. Its track width is slightly larger than its predecessor at 8.7 metres whilst the length of the crawler carriers has grown to 11.35 metres. The LR 1700-1.0 is available with Quick Connection as an option. This means that the transport weight of the slewing platform (without the SA frame and winches) can be reduced to around 42 tonnes, well below the limit of 45 tonnes to ensure low cost heavy haulage. The same applies to the crawler carriers which, with their 2 metre crawler pads and 4-fold drive, weigh in at just 43 tonnes. This guarantees that the new 700 tonne crane can be transported at low cost.

The width of the various components is another important criterion for economic mobility. Here too, the LR 1700-1.0 produces a top performance – all the transport units for the base machine, including the pivot section, are no more than three metres in width. Only the powerful H lattice sections on the main boom are wider than this at 3.5 metres. However, these can be used to transport the smaller sections to reduce the number of transport vehicles required. For customers in countries where transport widths of over three metres are not possible, Liebherr can also supply the boom for the LR 1700-1.0 exclusively with three metre wide lattice sections.

Another low cost feature for operators of the LR 1600/2 is that a large number of equipment components from the predecessor crane can also be used for the new LR 1700-1.0. These include the S sections for the main boom, the luffing jib, the 600 t head, several winches, hook blocks, ballast slabs and the runner.

#### High performance for industry and wind power jobs

The basis of the high performance of the new 700 tonne crane is the new base machine, which delivers between 10 and 15 percent more lifting capacity. Furthermore, the 3.5 metre H lattice sections at the bottom of the main boom significantly improve the lateral stability of the entire system.

This means that the new LR 1700-1.0 becomes the new benchmark in the 600 to 750 tonne class for lattice boom cranes both for classic industry work and also for wind power. The boom can be raised to a height of up to 198 metres, comprising the main boom at 102 metres and a luffing jib at 96 metres. These lattice sections enable the crane to be used in purely main boom mode with a length of up to 162 metres.

For erecting wind turbines, the LR 1700-1.0 can achieve a maximum main boom length of 165 metres using additional H sections. A fixed jib of up to 15 metres in length can be attached to this. The lifting capacities of the new crane in this area are on a par with the LR 1750/2 with SX system.

Minimal wear is becoming more and more important for moving the crawler travel gear, particularly during jobs at wind farms. The Liebherr engineers have therefore made the structural steelwork for the crawler carriers particularly robust and increased the size of the rollers. The 4-fold drive for the travel gear is standard.

A Liebherr six cylinder diesel engine which develops 400 kW / 544 bhp is used to power the LR 1700-1.0. The engine satisfies the new stage V emissions directive and can also be

configured to comply with the regulations which apply in countries outside of Europe, for example Tier 4 for the USA or stage IIIA for low regulated countries.

#### The very latest derrick system with modular ballast trailer

The V-frame and VarioTray have more than proven their worth on the LR 1800-1.0 and LR 11000 crawler cranes. These innovative systems have therefore also been used on the LR 1700-1.0. VarioTray is a small ballast pallet, which can be unbolted quickly and easily when necessary. This avoids the need for the tiresome stacking and unstacking of ballast slabs.

The V-frame ballast system is a hydraulically adjustable folding frame which enables the ballast radius of the LR 1700-1.0 to be infinitely adjusted between 13 and 21 metres. A rigid ballast guide system is therefore no longer required for large radii.

Liebherr has another innovation when it comes to ballast trailers – the new modular "M-Wagon" ballast trailer is not only suitable for use with the LR 1700-1.0, but also with the LR 1800-1.0 and LR 11000 crawler cranes. Since ballast trailers are generally used quite rarely, this paves the way for significant savings. The LICCON2 control system takes charge of the sensitive control for circling, towing and parallel movements. It also delivers extended set-up facilities and monitored erection for the LR 1700-1.0.

### About Liebherr-Werk Ehingen GmbH

Liebherr-Werk Ehingen GmbH is a leading manufacturer of mobile and crawler cranes. Its range of mobile cranes extends from 2-axle 35 tonne cranes to heavy duty cranes with a lifting capacity of 1200 tonnes and a 9-axle chassis. Its lattice boom cranes on mobile or crawler crane chassis deliver lifting capacities of up to 3000 tonnes. With universal boom systems and extensive additional equipment, they can be seen in action on construction sites throughout the world. The Ehingen site has a workforce of 3,500. Extensive, global service guarantees the high availability of Liebherr mobile and crawler cranes. In 2019, the Liebherr plant in Ehingen recorded a turnover of 2.1 billion euros.

#### **About the Liebherr Group**

The Liebherr Group is a family-run technology company with a widely diversified product range. The company is one of the largest manufacturers of construction machines in the world, but also supplies technically advanced, user-focused products and services in many other sectors. The group currently comprises more than 140 companies based in every continent of the world, has a workforce of over 48,000 and recorded a consolidated total turnover of more than 11.7 billion euros in 2019. Since it was founded in 1949 in Kirchdorf an der Iller in southern Germany, Liebherr's aim has been to win customers by supplying high quality solutions and to contribute to technological progress.

# **Photograph**



liebherr-crawler-crane-lr1700-1.0.jpg

The new LR 1700-1.0 sets new standards in the crawler crane class between 600 and 750 tonnes.

# **Contact person**

Wolfgang Beringer

Marketing and Communication Phone: +49 7391 / 502 - 3663

Email: wolfgang.beringer@liebherr.com

# Published by

Liebherr-Werk Ehingen GmbH Ehingen (Donau) / Germany www.liebherr.com