

Press Release

## **Electrifying: LR 1300.2 SX unplugged**

---

**Crawler crane LR 1300 celebrates its 18th anniversary this year. At Bauma, Liebherr is presenting the 300-tonne model for the first time as a battery-powered unplugged version with the advantages of zero emission. Thanks to the derrick counterweight, the spectrum of applications for the new crane system is significantly extended. A wide range of digital assistance systems and ground pressure reduction plates ensure maximum safety during operation.**

Munich (Germany), 18 February 2025 – The LR 1300.2 SX unplugged is powered by a 438 kW electric motor and, depending on the application, can be operated for up to 13 hours without a mains connection, i.e. unplugged, thanks to a 392 kWh battery. Subject to the available infrastructure on the jobsite, the complete battery-charging process lasts between 4.5 and 8.5 hours. Operation can continue as normal in the meantime. Whether attached to the electric supply or not, the performance and range of applications remains unchanged. One exceptional feature of the unplugged version is zero emission. They do not produce any exhaust fumes and are extremely quiet. This strikes the right note especially in noise-sensitive or urban regions and finds favour with both jobsite personnel and residents.

For particularly heavy lifting applications and long boom combinations, the lifting capacities of the LR 1300.2 SX unplugged can be improved and the range of applications extended by using the derrick equipment. Fine adjustment of the suspended counterweight is possible without an auxiliary crane. The new crawler crane can be equipped with seven different boom configurations up to a maximum boom length of 169 metres. The LR 1300.2 SX unplugged will be presented at Bauma with a 20-metre main boom and an adjustable 20-metre jib. The Crane Planner 2.0 lift planning software can be used to determine and simulate the perfect boom combination for the respective construction site requirements in advance.

### **Safety concept for challenging applications on floating units or ramps**

Liebherr has developed its own operating mode for lifting operations on floating units. The operating mode contains load curves for different inclinations (0°, 1°, 2°, 3°) with corresponding protection via the load moment limitation. The inclination of the floating unit is monitored during the entire operation and displayed to the crane driver. If the permissible limit value is exceeded, a warning is issued. The load curves are adjusted according to the respective inclination. Additionally, it prevents the maximum boom angle from being exceeded when the load is set down. The proven assistance system vertical line finder is part of the new safety concept. This system enables the crane driver to avoid diagonal pull at the touch of a button – especially those caused by changes in the inclination of the floating unit as a result of the shift in the centre of gravity when lifting and setting down the load.

Liebherr paid particular attention to the safety concept while designing the crane. One highlight is the gradient travel aid for the safe negotiation of slopes. The crane's control system automatically calculates the centre of gravity and warns the operator before the crane leaves the safe area. While travelling, the operator receives real-time information about the permissible and actual gradient, and the crane's overall centre of gravity at all times. If necessary, the main boom angle can be altered so that the machine remains in the safe area.

## **Reduction of ground pressure and safety concept for erecting or laying down the boom**

The crawler crane's ground pressure display shows the calculated ground pressure in real time. This means the operator is continuously aware of whether the machine is situated in, or is approaching, a critical area. The ground pressure of the LR 1300.2 SX unplugged can be reduced by up to 56 % using the additional ground pressure reduction plates that are mounted at the front and rear of the crane. During lifting work, the operator can lower these plates to significantly increase the crane's ground contact area. This safety feature is also particularly useful when lifting long booms from the ground.

The boom up-and-down assistant is also part of the safety concept. When erecting or lowering the boom, this assistance system indicates the approach to the tipping border and automatically stops operation before the operator unintentionally enters an unsafe zone. The operator no longer has to move the winches of the main boom and jib separately. Controlled folding of the jib begins at the press of a button. The speed of the laying down procedure is controlled with a single joystick. The boom-up-and-down assistant chooses the safest method for laying down the boom.

## **Films and animations:**

Floating unit operation:

<https://youtu.be/HJRhSTzgjRw?si=aZJF6FZLU30KgYxM>

Boom up-and-down assistant:

[https://youtu.be/w18Pk\\_Vi4qI?si=e5-jkXUMkZyA2ttG](https://youtu.be/w18Pk_Vi4qI?si=e5-jkXUMkZyA2ttG)

Gradient travel aid:

<https://youtu.be/Vnx0MAKfTzU?si=BHOTJMIoFRX2xr69>

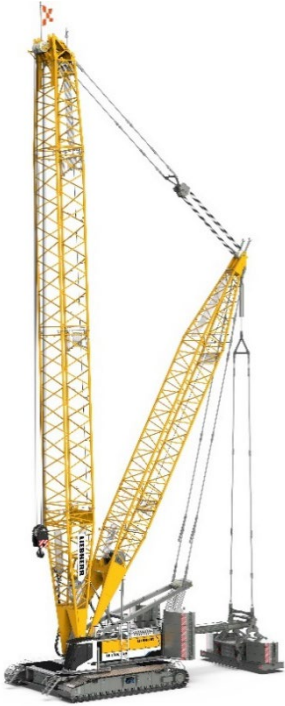
Ground pressure visualization:

<https://youtu.be/rNCrKHymVDk?si=szBaLiu3IG45RoCq>

## **About the Liebherr Group**

The Liebherr Group is a family-run technology company with a highly diversified product portfolio. The company is one of the largest construction equipment manufacturers in the world. It also provides high-quality and user-oriented products and services in a wide range of other areas. The Liebherr Group includes over 150 companies across all continents. In 2023, it employed more than 50,000 staff and achieved combined revenues of over 14 billion euros. Liebherr was founded by Hans Liebherr in 1949 in the southern German town of Kirchdorf an der Iller. Since then, the employees have been pursuing the goal of achieving continuous technological innovation and bringing industry-leading solutions to its customers.

## Images



liebherr-lr1300.2sx-unplugged\_1.jpg

The latest model of the LR 1300 SX is now available as battery-powered unplugged version.

## Contact

Gregor Griesser  
Marketing Construction Machines  
Email: [gregor.griesser@liebherr.com](mailto:gregor.griesser@liebherr.com)

Ralf Meier  
Head of Marketing Construction Machines  
Tel.: +43 690 500 44704  
Email: [ralf.meier@liebherr.com](mailto:ralf.meier@liebherr.com)

## Published by

Liebherr-Werk Nenzing GmbH  
Nenzing/Austria  
[www.liebherr.com](http://www.liebherr.com)