

Pressinformation

## Four Giants go for Windpower: BMS Heavy Cranes assembles offshore wind turbines in Esbjerg

---

- LR 11350 assembles 106 towers over 100 metres high for wind turbines in Denmark
- Sensitive LICCON crane control eases precise lifting of tower segments

Everything is relative. While the popular Liebherr LR 1750/2 crawler crane is often the all-rounder on wind power construction land-based sites, Lars Thomsen, Onsite Project Manager at BMS Heavy Cranes uses it for smaller jobs at the site in Esbjerg, Denmark. The 35-strong BMS Heavy Cranes team in Esbjerg is currently performing a major order: The assembly of 106 wind turbine towers for a gigantic new offshore wind power park near Borkum. Work began in December 2023 and will be completed by the end of 2024. Thomsen's preferred hoists in Esbjerg are three Liebherr LR 11350 high performance crawler cranes in SDB configuration with 132 Meter main boom and 42 Meter Derrick.

Ehingen (Donau) (Germany), 22 November 2024 – Whereas in 1980 a wind turbine only had an output of 50 kW and a rotor diameter of 15 metres, current offshore wind turbines have reached 11 MW and a rotor diameter of 200 metres – and the trend is rising.

Esbjerg (70,000 inhabitants) is the centre of Danish offshore wind power activities in the North Sea. Liebherr lattice boom cranes from the successful LR-series therefore play a major role in Esbjerg. Their task is to assemble the tower elements into a tower reaching 110 metre high. The fully wired tower is erected on a special platform by the LR 11350 and is being lifted on board by the erection vessel's on-board crane. Four wind power plants i.e. 12 rotor blades, four turbines and four towers are taken on each trip.

“We are safe up to a wind speed of 13.5 m/s,” states Thomsen. In addition to the LICCON system, which constantly monitors the wind, BMS also uses its own app, which allows those responsible to access the wind data at any time. “This is very important,” says Crane Supervisor Michael Leonard, who normally coordinates installations for BMS in Scotland. “I keep a close eye on the wind and weather and also coordinate with the installation company Fairwind and the wind turbine manufacturer - we only do the lift when we say together that it will be pulled. A tower element weighing 100 tonnes must under all circumstances not be allowed to start swinging.”

The Liebherr crawler cranes in the 1,400-tonne-class used by BMS are permanently upgraded and ballasted with 400 tonnes on the superstructure. For heavy lifts, an additional 260 tonnes of suspended ballast is added. The lifts are complicated and often have to be carried out on special crane tracks with. These are very precisely levelled so that the LR's centre of gravity is always perfectly positioned, which is digitally displayed to the driver in real time by the LICCON.

Michael Leonard remarks: “I know all of our Liebherr cranes because I operated them. I interpret every sound during operation and am in constant radio contact with our operators. BMS drivers check the four large LR crawler cranes daily before commissioning - fixed teams of drivers are assigned to the machines - work is carried out in two shifts of 12 hours each. Even fog, rain or darkness do not hinder

the work. Cameras on the hook and at the tip of the boom give the driver a perfect view of the hook, ropes and load. Other cameras monitor the winding and unwinding of the ropes, as is usual with large LR cranes.

The fact is that the LR 11350s will reach the end of its performance in the not-too-distant future. BMS and other rental companies with a focus on the offshore wind industry are on constant dialog with Liebherr in Ehingen, because the turbines are becoming heavier, the towers higher and there is no end in sight - a spiral that, according to BMS, is closely coordinated between wind turbine manufacturers and the crane manufacturer.

One thing is certain for BMS, which operates a fleet of over 100 lattice boom crawler cranes worldwide from Taiwan to Australia, America and Arabia: "The Liebherr products are top-class machines - especially the erection and the fast dismantling and the excellent LICCON control system make our work easy" states Thomsen. Operators of the super-heavy giants work their way up at BMS from the two-axle LTM 1040-2.1 to large telescopic cranes and crawler cranes.

From February to December, the 106 wind turbines are assembled and loaded in Esbjerg - the next orders in Denmark's only North Sea port are already lined up. A power station and a large transshipment site for building materials are disappearing on the neighbouring port area - all for wind power all for BMS.

## **About BMS**

BMS (Byggerits Maskin Stationer A/S) was founded in 1953 in Copenhagen as a state-owned company and in 1955 it got its first crane with 7 tonnes load capacity. In 1993 it was privatized and developed to one of the largest crane and heavy equipment rental companies – operating worldwide with subsidiaries in all five continents. Today 600 people are working for the company. BMS operates a worldwide fleet of heavy and super heavy telescopic and lattice boom cranes ranging up to 1350 tonnes capacity. BMS has a huge footprint in worldwide wind turbine erection since the 1980ies. Primere supplier of telescopic and lattice boom cranes is Liebherr Werk Ehingen (LWE) since many years.

## **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 travel gear deliver lifting capacities of up to 3000 tonnes. With universal boom systems and extensive auxiliary equipment, they can be seen in action on construction sites throughout the world. The Ehingen site has a workforce of 5,000. An extensive, global service network guarantees the high availability of Liebherr mobile and crawler cranes. In 2023, the Liebherr plant in Ehingen recorded a turnover of 2.81 billion euros.

## **About the Liebherr Group – 75 years of moving forward**

The Liebherr Group is a family-run technology company with a highly diversified product programme. The company is one of the largest construction equipment manufacturers in the world. It also provides high-quality, 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. Under the slogan '75 years of moving forward', the Group celebrates its 75th anniversary in 2024.



liebherr-lr11350-bms-01.jpg

A Liebherr LR 11350 in SDB-configuration with 132 m main boom is lifting a tower piece on the assembly platform. The cranes task is to assemble the tower – then it's lifted on board the erection vessel.



liebherr-lr11350-bms-02.jpg

BMS-Crane Supervisor Michael Leonard is checking the windspeed with BMS Mobil-App.



liebherr-lr11350-bms-03.jpg

Additional Ballast is being carried with an SMTP-transporter to speed rigging the crane for heavy lifts.



liebherr-lr11350-bms-04.jpg

The LR 11350 is the perfect choice for handling today's offshore wind turbines.



liebherr-lr11350-bms-05.jpg

Colin Lehmann operates the LR 11350 and likes smooth operation and perfect overview of all data and components via the LICCON crane control.

## Contact

Wolfgang Beringer  
Marketing and Communication  
Telefon: +49 7391/502 - 3663  
E-Mail: [wolfgang.beringer@liebherr.com](mailto:wolfgang.beringer@liebherr.com)

## Published by:

Liebherr-Werk Eching GmbH  
Eching (Donau) /Germany  
[www.liebherr.com](http://www.liebherr.com)