

Press release

Bridge-builder – LR 1800-1.0 links previously divided Berlin neighbourhoods of Moabit and Mitte

- First job for MaxiKraft's Liebherr LR 1800-1.0 crawler crane
- · Constricted conditions require sophisticated set-up concept
- V-frame delivers high level of flexibility

"What belongs together will grow together" was how Willy Brandt, the former German Chancellor, described the fall of the Berlin Wall on 9 November 1989. Over 30 years later, another example of how the country is still growing together was played out in Berlin. By completing its very first job, the new Liebherr LR 1800-1.0 crawler crane owned by crane and heavy haulage contractor MaxiKraft played a major role in this process.

Ehingen / Donau (Germany), 19 November 2020 – The new 800 tonne crawler crane hoisted a new pedestrian and cycle bridge over the Berlin-Spandau Ship Canal to connect the previously divided neighbourhoods of Moabit and Mitte. The Golda-Meir-Steg, as the 78 metre bridge is called, was named after the former Israeli Prime Minister.

The steel bridge was built in Deggendorf and had to be transported 1600 km by barge using inland waterways to get it from Bavaria to Berlin. The enormous LR 1800-1.0 crawler crane hoisted the new bridge off the barge right on schedule on 22 October. It was then turned into position using rope and man power before being lowered carefully by the crane.

The challenge for the MaxiKraft team was that there was very little space for the crane and its equipment at the site. That meant that the various components had to be delivered in precisely the correct order that they were required to set up the crane.

Another difficulty was the fact that the crawler crane had to be moved ten metres back from the originally planned site so as not to damage or displace the pile foundations used to secure the bank of the canal and to build the abutment for the bridge. That meant it had to operate with an additional ten metre radius to install the 195 tonne bridge – 48 metres rather than the 38 metres, which had been calculated originally. Equipped with a 66 metre main

boom, derrick system and suspended ballast with the V-frame, 70 tonnes of central ballast, 170 tonnes of slewing platform ballast and 380 tonnes of derrick ballast, the LR 1800-1.0 overcame this challenge with flying colours.

The V frame, a hydraulically adjustable ballast system which enables enormous adjustment distances with a ballast radius of between 14 and 23 metres, was once again worth its weight in gold for this job. It delivers maximum flexibility compared to the standard rigid system for large ballast radii. The derrick ballast had to be extended to the maximum radius of 23 metres to install the bridge.

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.

Photographs



liebherr-maxikraft-lr1800-1-0-ship.jpg

The new bridge was transported from Bavaria to Berlin over 1600 km by barge on inland waterways.



liebherr-maxikraft-lr1800-1-0-bridge.jpg

The LR 1800-1.0 hoisted the 196 tonne range with a radius of 48 metres.



liebherr-maxikraft-lr1800-1-0-v-frame.jpg

The V-frame adjusts the ballast radius quickly and flexibly between 14 and 23 metres.

Contact person

Wolfgang Beringer Marketing and Communication Phone: +0049 7391 / 502 - 3663

Email: wolfgang.beringer@liebherr.com

Published by

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