

Press release

New alternative – using SPMTs as ballast trailers for Liebherr LR 11000 crawler crane

- Pioneering concept developed on the basis of requests by Sarens
- Benefits in terms of logistics and the economy
- Developed working closely with Sarens and KAMAG Transporttechnik

Liebherr has developed an interesting alternative for the derrick ballast of crawler cranes, working closely with global crane and heavy haulage contractor Sarens and heavy haulage vehicle manufacturer KAMAG – SPMTs from KAMAG are used as ballast trailers.

Ehingen / Donau (Germany), 9 December 2020 – When it bought an LR 11000, Sarens came to Liebherr with the idea of investigating whether SPMTs (self-propelled modular transporters) could be used as ballast trailers. The benefit for the global heavy haulage contractor is obvious – it has KAMAG K24 SPMTs at almost all of its outlets.

The idea

The idea was not completely new, as Liebherr had already tried similar solutions with other crane models. However, to date the SPMTs had never been controlled direct from the crane. Separate personnel had to communicate with the crane operator and enabled the SPMTs to track the crane's movements.

Everybody involved in the project agreed that a solution now had to be developed to allow the SPMTs to be controlled by the crane's control system, just like a standard ballast trailer.

The development

Sarens provided Liebherr with two K24 SPMTs from KAMAG for the development and testing work. And it soon became clear that it worked! Not only did the developers from KAMAG and Liebherr get on very well indeed, but so did the crane and the alternative ballast trailers.

Technical Director Carl Sarens and Project Engineer Hendrik Sanders saw the whole thing in action in October at the test site. And they were extremely impressed by the progress made in the project. Carl Sarens explains: We are very satisfied with the results and the

collaboration with Liebherr and KAMAG. All our requirements have been met and we are confident that this will deliver significant added value for future projects as a result of the operative benefits and flexibility.”

KAMAG developed a special control box to ensure good communication between the crane and SPMT, enabling the crawler crane to control the movements of the heavy haulage vehicles. One helpful aspect of this was the fact that the Liebherr LICCON control system and the KAMAG control system have similar basic structures.

The solution

Jens Könneker from Liebherr Lattice Boom Cranes Product Management was able to demonstrate a fully functional solution in November at an internal presentation – circling, moving in parallel, towing – everything works in exactly the same way as on a standard ballast trailer. “Everybody involved here is delighted with the good collaboration with KAMAG and Sarens and the result is sensational”, says Könneker.

To ensure that the tests could be started quickly at Liebherr, trials were conducted with a “standard ballast trailer without wheelsets” and a specially designed test adapter. Sarens’ LR 11000 is supplied to the customer as planned with a suspended ballast pallet. This is then placed on the SPMTs for jobs which require a “ballast trailer”, using a special adapter. If the “ballast trailer” is not required, the crane operates using suspended ballast. In this case the SPMTs can be used for other purposes – an economical solution.

About Sarens

Sarens is the global leader and reference in crane rental services, heavy lifting, and engineered transport. With state of the art equipment, value engineering, one of the world’s largest inventories of cranes, transporters, and specialty rigging equipment, Sarens offers creative and intelligent solutions to today’s heavy lifting and engineered transport challenges. With more than 100 entities in 65 countries operating without borders, Sarens is ideal partner for small-scale to mega scale projects. Sarens currently employs over 4500 highly skilled professionals who are prepared to support the clients’ requirements around the globe and across every market sector.

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-sarens-lr11000-spmt.jpg

The SPMTs provide all the driving modes of a ballast trailer for the Liebherr LR 11000 crawler crane.



liebherr-sarens-lr11000-spmt-guide.jpg

The guide and lattice extensions are standard even with the alternative ballast trailer.

Contact person

Wolfgang Beringer

Marketing and Communication

Phone: +49 7391 / 502-3663

E-Mail: wolfgang.beringer@liebherr.com

Published by

Liebherr-Werk Ehingen GmbH

Ehingen (Donau) / Germany

www.liebherr.com