

A GANTRY CRANE UNDER CLOSE OBSERVATION: SAFE CONTAINER HANDLING AT CONTARGO

Contargo AG operates two gantry cranes at the Port of Switzerland in Basel on the border with France and Germany. One of them creaks under loads of up to 41 tons every day. Cracks keep appearing, but the container logistics company has the risk under control.

Gantry cranes are unmistakable landmarks at the junctions and interfaces of international transport routes and have become icons of global cargo traffic. On the site

below them, countless transport containers wait close together to be taken to their destination. From a distance, they look like colourful Lego bricks stacked up next to and on top of each other.



The precision sensor from Leine Linde (top right) has a grip on the Basler gantry crane (top).



Contargo AG, Basel

Contargo is one of the leading hinterland container logistics networks in Europe. The company integrates container transport between the western ports, the German North Sea ports and the European hinterland, transporting more than two million TEUs* every year. Contargo has its own terminals as well as its own barge, rail and truck transport lines. At the Basel terminal, two gantry cranes are used for loading and unloading containers as well as for maintenance and repairs.

* Twenty-foot equivalent unit = standard shipping container.

An efficient logistics network along the main transport routes

Contargo operates a total of 24 terminals in Germany, the Netherlands, Belgium, France and Switzerland, most of them equipped with gantry cranes acting as hubs between river, rail and road transport. With their own means of transport, fixed routes and frequent turnover, the Contargo terminals form an integrated network in Northern and Central Europe for efficient and seamless container transport from the seaport to the end customer destination. This concept gives Contargo a unique position in the container logistics market.

A gantry crane bending beyond the tolerance range

At the Basel terminal, depending on your perspective the end point

or the starting point for shipping on the Rhine, Contargo uses two powerful gantry cranes for handling both empty and full containers. For some time now, the crane used for heavy loads has shown signs that even steel giants can start to get old. The supporting gantry bends under the strain to beyond its permitted tolerance range. The causes cracks to appear, each of which has to be painstakingly welded. «Because the crane still has to operate for another two to three years, it's essential to keep the bending under control,» explains Tim Breuer, Head of Maintenance & Repair. He started looking for a suitable sensor solution and found it – via Google of all things – at Bachofen.

«Cranes aren't something that Bachofen specialises in. This means we were all the more positively surprised at how quickly Bachofen's sensor technology experts understood our concerns. The on-site support was also outstanding.»

Tim Breuer (Picture right), Maintenance & Repair Officer

Automatic strain measurement from Leine Linde and Bachofen

The automation specialists at Bachofen looked hard at this specific application and using the ESR strain sensor from Leine Linde came up with a tailor-made solution that very quickly impressed the customer. Tim Breuer: «Bachofen hit the spot with its advice on different types of technology. We were able to connect the sensors to our PLC via the EnDat interface – quickly and easily. The exceptionally low signal noise of this

precision sensor saves us the complication of filtering, and the visualisation of the measured values immediately provides a clear picture of the current situation.»

Contargo needs the heavy-duty gantry crane to be available at all times, and could not afford standstills. Automated monitoring of the bending ensures safe, uninterrupted operation until the crane can retire in a few years. ■

Foundation of Contargo by Rhenus Logistics
2004

Foundation of Contargo AG, Basel
2011

Number of employees at Basel location
50

Number of other terminal locations
24

CEOs of Contargo AG, Basel
Holger Bochow
Daniel Kaufmann
Nico Longhi

Motto
Take the better route

Bachofen customer since 2020

Website
www.contargo.net