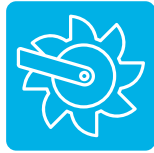


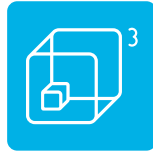
Case Study

Crane Trolley Transportation





Industry
Mining and Metal



Volume
920 cbm and
custom-made
lifting equipment



Cargo Highlight
1 crane trolley,
14.47 x 7.34 x
8.66 m



Max. Heavy Lift
117 MT

Case Study: Crane Trolley Transportation

deugro was awarded this project from a major engineering, procurement and construction (EPC) company that specializes in manufacturing industrial cranes. The custom-built crane trolley transported by deugro will be utilized in the aluminum industry.

deugro's scope of work

- Feasibility study defining suitable routing and required transportation equipment
- Management of permit application process prior to transportation
- Transit customs clearance based on T2L requirements (applicable for cargo being transported internationally within the EU, while temporarily leaving the EU en route)
- Loading survey at origin
- Welding works on vessel
- Part charter from French port of origin to public container terminal in Hamburg, Germany
- Transfer of crane trolley by floating crane from Hamburg's public berth to consignee's jetty
- Planned and managed civil and facilitation works at destination jetty to provide sufficient ground conditions in keeping with requirements for self-propelled modular transporter (SPMT) movements
- Placement of load onto SPMTs positioned on jetty
- Road preparation works
- Road transportation from jetty to final job site
- Continuous status reporting during entire operation



» Several updates of the trolley design— affecting dimensions and transport weight— required flexible planning. «

Project execution

deugro was involved in the project from the very early stages. The first investigations regarding the routing of the last transport leg to the site started two years in advance of the actual project execution. At this time, the design of the crane trolley was still in progress.

In cooperation with dteq Transport Engineering Solutions (dteq), deugro initially identified a suitable routing via the yard of a container

stuffing center with water access, which is in the same district as the installation site. Although the unit weight was close to 100 metric tons, the crane trolley was still able to be transported on a low-bed trailer.

Several updates of the trolley design— affecting dimensions and transport weight— required flexible planning and amendment of suitable transport routing as well as of trailer configuration during the production process.



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The Challenges

- Limited space available at client's jetty
- Flexible route planning requirement due to cargo design changes
- Removal and reinstallation of street furniture along the route



Tight move of the crane trolley under a lamp pole in Hamburg, Germany

Due to an increase in weight, the transport could no longer be arranged on low-bed trailer as previously planned. SPMTs were required instead. Furthermore, final dimensions necessitated alternative routing due to height restrictions. In close cooperation with the client, dteq and the trucking companies, deugro identified two alternative routes.

The finalized route was considered the safest and most economic option for the client. This route led through the client's private jetty and had its peculiarity: The jetty is usually utilized to dispatch bulk only and is geared accordingly. Thus, the discharging operation was based on a floating crane, and not only the final gross weight but also the limited space at the jetty made the use of SPMTs mandatory.

In order to ensure smooth road transportation, preparations had to be made in advance, such as the rotation of lamp poles and traffic lights by 90 degrees. A surface drainpipe was temporarily dismantled to allow transport from the jetty to the public road. During the movement, the crane trolley

negotiated several tight turns en route and through the congested urban area of Hamburg, which required the full attention, clear communication and professionalism of all team members.

» The transportation in Hamburg was executed safely and to the client's full satisfaction within a single workday. «

Thanks to the thorough planning of all parties involved, the transportation in Hamburg was executed safely and to the client's full satisfaction within a single workday. Starting with the loading from the temporary storage area at the public terminal by floating crane, then to the shipping to the private jetty where the crane trolley was discharged onto SPMTs and the heavy lift unit transportation to the site before, finally, the self-offloading onto pre-set steel beams.