Heavy load transport with 700 tons

SSF Ingenieure

Heavy load specialist MAMMOET

Passage of the heavy load transporter over the bridge Abensbrücke in Bad Gögging

Schwertransport Firma MAMMOET	
Client	MAMMOET Holding
Principal	BAYERNOIL Raffineriegesellschaft mbH
Starting point	Kehlheim port
Destination	Neustadt refinery
Distance	approx. 25 km
Cargo	two reactors for the refinery in Neustadt
Dimensions	L / W / H 28.6 / 5.3 / 7.2 m
Total load	713 tons for each reactor
Load on the axle	40 tons
Vehicle	self-propelled SPMT vehicle (18 axles)
Service provided by SSF	calculation of 15 bridge structures

BAYERNOIL Raffineriegesellschaft is erecting a new production plant in Neustadt for manufacturing low-sulphur diesel (mild hydrocracker). Two reactors each weighing more than 500 tons were made by MAN DWE in Deggendorf. In January 2008, the reactors were brought by ship to Kehlheim and then transported to Neustadt with the heavy load specialist MAMMOET. Self-propelled SPMT axles were used as transport vehicles. These special transporters are capable of taking the high load of 40 tons on the axles. Given these extraordinary axle loads, it was necessary to place special structures over several bridges. The auxiliary system consisted of solid steel structures made of welded rolled profiles which were offered by MAMMOET in lengths between 10 and 20 m. The heavy steel structures were placed on the structural axes by motor crane to relieve the superstructure.

The scope of services provided by SSF Ingenieure entailed verification of the affected bridges in terms of external effects resulting from the high axle loads, as well as planning the special auxiliary structures.

Heavy load transport specialist FELBERMAYR

Loading of the components at the port Kehlheim

Schwertransport Fima FELBERMAYR	
Client	FELBERMAYR GmbH
Principal	SIEMENS AG
Starting point	Kehlheim port
Destination	Irsching power station
Distance	approx. 45 km
Cargo	Components for Irsching power station
Total load	200 – 490 to (altogether 15 transports)
Load on the axle	14 – 29 tons
Vehicle	Towing vehicle with Goldhofer low-loader truck
Service provided by SSF	calculation of 25 bridge structures

E.ON has two gas and steam turbine plants erected in Irsching. The power station components for the joint power station were supplied by Siemens Energy. The heavy load specialist FELBERMEYR were commissioned with transporting the components from Kehlheim port to Irsching as heavy loads since March 2008. The transport vehicles consisted of platform truck configurations (type Goldhofer THP ST) in 1.5 times coupled version together with 4x4 towing vehicles.

The total number of 15 individual transports took place in several convoys. SSF Ingenieure was responsible for providing the stability verification documents for the bridges and for planning the special auxiliary structures used in each case. Once again, it was necessary to place special structures over several bridges. The superstructure system used by FELBERMAYR consists of slid plate-shaped steel girder elements and is placed on the bridge using a special hydraulic system without needing cranes. The heavy load then drives over the superstructure system to prevent excessive load on the bridge itself.

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