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Reference

ALSTOM POWER SYSTEMS GMBH



Konecranes has undertaken the special transportation of a heat exchanger on behalf of Alstom Power Systems GmbH.

Alstom Power Systems

Alstom Power Systems GmbH, Mannheim, plans, builds and sells world-wide fossil-fuelled power plants and turbines. There are about 2000 employees in Mannheim's highly modern production facilities. Power plant modernization, gas and combined cycle power plants, as well as engineering and control systems are also included in its competences.

Starting point

Alstom is significantly involved in the construction of the new Rheinhafen steam power station 8 of EnBW in Karlsruhe. The new coal-fired power station is part of a highly efficient environmentally friendly energy supply. At this plant the heat exchanger is to be dismantled for the purpose of a special technical examination.

Requirements

The heat exchanger, weighing 196 tons and extending 12.5 meters high and 4.2 meters wide, must be lifted and moved safely. The special transportation must be executed very promptly, without affecting the construction works of the power station. This requires a crane expert with extensive know-how of special transportation, who can act quickly and reliably.

Concept

Konecranes is planning to execute the special transportation of the heat exchanger within a few days. The turbine hall crane will be used, which has a load lifting capacity of 250 tons and which has already been installed by Konecranes in the power station for inspection purposes. In order for the crane to lift the heat exchanger safely, Konecranes is building a lifting beam according to exact dimensions of the tank. It is made of steel, weighs about 10 tons and has two lifting lugs.



Solution

The heat exchanger is linked to the turbine hall crane via the lifting beam. Remote-controlled and with high accuracy, the heat exchanger will be lifted by the crane – free-floating – 36 meters high and transported along the crane runway for about 100 meters, before being turned 90 degrees in the air with the lifting beam and mobile crane and then placed, by using both cranes in tandem, flat on its side in the support close to the ground.

Customer benefits

Thanks to the special transportation, the heat exchanger can now be technically inspected without disturbing the works going on in the power station. Konecranes required merely three and a half weeks from assignment including planning and the special design of the cross beam to the execution of the transport. The smooth transport of the heat exchanger in only eight hours was a great performance.

What Alstom Power Systems says

“Based on our extensive experience, it became clear quite early that only Konecranes can execute this kind of transportation. What convinced us in particular were the planning and the implementation performance. The short-term nature of the project and the quick manufacturing of the special lifting beam were a challenge for all those involved. This proves that Konecranes is able to complete any assignment, even the most difficult ones, quickly, flexibly and very reliably.”

Gary Schwarz

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Want to know more about Konecranes' offering for the power industry?

ALSTOM

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