

INDUSTRIAL CRANES
NUCLEAR CRANES
PORT CRANES
HEAVY-DUTY LIFT TRUCKS
SERVICE
MACHINE TOOL SERVICE

BIOMASS POWER GENERATION PLANT

KONECRANES[®]
Lifting Businesses[™]

Scaldis in Beinheim, France

LIFTING SOLUTION FOR BIOMASS POWER GENERATION PLANT



The end client's factory wanted to diversify its steam production, traditionally based on gas. The solution – a new biomass boiler – has emerged with an additional environmental benefit.

Scaldis, recognized provider in the field of biomass handling, contacted Konecranes France to design a solution together, with a crane equipped with a



EOKCRSCB09EN15A / 2012

skip, for a project located in Beinheim (67). From the site constraints, the technical teams worked together to develop a project that meets the needs of the end client, by providing a fully automatic operation.

The Challenge

An initial Scaldis request was to design a device with sufficient capacity to provide the boiler's consumption flow. The crane was then required to enter easily into the building, within the constraints of the passage and headroom sizes. And finally, the device should guarantee an extremely important reliability rate, as the plan was to install only one device in order to feed the boiler 24/7.

The Solution

Konecranes' solution revolved around the new concept "CXT Biomass". This is an M6 or M7 classification hoist according to the FEM, with capacities ranging from 3.2 t to 10 t. By choosing the speeds available in the range, the Scaldis and the Konecranes teams have sized the unit as needed. A calculation sheet of cycle times has validated all the choices.

One advantage of the CXT hoist also lies in its very compact dimensions. The draft plan of the crane and skip set has allowed for verification that the device was part of the available space in the building.

The availability and reliability aspects were covered by the use of a hoist manufactured in series, at several thousand units per year, in our factories in Finland. This is the opposite of a prototype; the technical solutions used are largely proven and guarantee maximum reliability.

The Results

The client's new boiler was started on the planned date, and the client is completely satisfied with the Scaldis service and their partner Konecranes for the lifting part.

Indeed, the crane feeds the plant daily in the expected volume, and the automation controls the process without interruption.

SCALDIS has since won other contracts and asked Konecranes France to continue the collaboration, with the same project management team, but with different lifting capacities, for which the CXT range will not fail to respond.

What made us decide to work with Konecranes France is, above all, the technical competence and the thorough knowledge of cranes and their automation. The Beinheim project also allowed us to assess the availability and responsiveness of Konecranes France, especially in commissioning phases.

Mr. Fabien Gautier, Head of the Bioenergy department at Scaldis

The delivered solution

- > Girder type crane with a lifting capacity of 7.5 tons and a reach of 22 m, equipped with a hydraulic skip with a volume of 5000 l
- > The material is made of chips and crushed wood with an average density of 0.25
- > The grapple is capable of powering the boiler feed hopper between 25 and 35 t of wood per hour
- > The whole is managed by a Siemens PLC System that communicates in real time with the plant's central PLC



ZAE Blanc Misseron

59 920 Quievrechain, France
Phone: +33 327 456 240
www.scaldis.com.fr

Contact information

Konecranes France office

Jean-Jacques Moleon
jean-jacques.moleon@konecranes.com
www.konecranes.com