BIOMASS

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



# Biomass power plant NEW HEAT, KAUNAS, LITHUANIA



## Biomass power plant NEW HEAT, KAUNAS, LITHUANIA

New Heat, a recognized EPC provider of boiler houses and combined heat and power (CHP) plants, constructed, for Lorizon Energy, a new biomass power plant located in Kaunas, Lithuania. The plant is equipped with a 10 MW boiler house, where heat is produced. The plant is capable of using three different types of biomass – straw pellets, wood chips, and peat. Each fuel type can be used separately or mixed together for maximizing efficiency.

## The Challenge

The biomass power plant is designed to be operated 24/7 by only one person. This sets high demands on the automation level, safety, and usability. The biomass hall has three tipping bunkers, three storage areas and a double hopper due to different fuel types. Environmental conditions, like dust and humidity,



set special requirements for the protection of the crane equipment. The crane is part of the process, which makes the reliability rate extremely important.

### **The Solution**

The end customer required that a fully automated crane be used in the biomass hall instead of a front loader and conveyers to save labor and maintenance costs. The crane is an environmentally friendly solution compared to front loaders and their exhaust gases.

Konecranes has developed a fully automated CXT<sup>®</sup> biomass crane application, which fulfilled customer requirements. Cycle times were calculated to make sure that the duty class M7 (FEM 4m) hoist, with the required four-ton capacity, was suitable. A clamshell 2,5 m<sup>3</sup> hydraulic grab was used and equipped with Smart Features like Sway Control and Slack Rope Prevention.



The CXT<sup>®</sup> hoist series is a standardized product platform and manufactured in a series, which ensures proven technical solutions and high reliability. Its compact dimensions make it perfect for biomass plants, where space is limited and needs to be used efficiently.

### The Results

The crane was delivered and erected in time. The erection was completed in one week, which **Jonas Pugzlys**, Project Manager of New Heat, considered very fast. The crane is equipped with the TRUCONNECT<sup>®</sup> remote service system, which enables Konecranes Service to monitor its performance. Konecranes has been able to conduct fine tuning of automation functions remotely, saving time and money.

New Heat Mr Jonas Pugzlys Savanoriu av. 159 A, Vilnius Tel.:+370 5 231 1472 Fax: +370 5 236 1937 Email: nh@newheat.lt The end customer has made a service contract with Konecranes. Maintenance intervals are defined according to actual use, based on the information collected from the crane monitoring system and Konecranes' experience with similar applications.

The crane handles the expected volume of biomass daily using automation controls and takes care that there is always enough fuel to burn.

Mr. Pugzlys summarizes: "It was very nice to work with Konecranes' people as they are professionals, and in the future, I will be happy to work with them again!"

Contact information: Konecranes Lithuania, Egidijus Paskevicius egidijus.paskevicius@konecranes.com

www.konecranes.com

