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## Rautaruukki, Raahе Steel Works, Finland **220/60t CHARGING CRANE**



### The Challenge

Rautaruukki is a metal component and system provider for steel construction and engineering businesses. With almost 12.000 employees in 27 countries and a turnover of 2.4 billion euros, Rautaruukki is a significant operator in the Nordic countries, Eastern Europe, and Russia.

The Raahе steel works produces 2.8 mmt of hot rolled steel and special steel products per year. The reason for the new investment was to replace the existing crane which was purchased in 1975.

The cranes handling the molten metal play an important role in steel production because all production goes through them.



Crane performing charging task.

Therefore, the availability requirement for the equipment is high. Safety, maintenance, and operator friendly usage of the equipment are important criteria for the equipment as well. Naturally, the crane should be able to fulfil the requirements from the increased production rates.

### The Solution

The crane design was done in close cooperation between the parties. During the design process maintenance and user-friendly operator interface were emphasized. To meet these requirements the crane is equipped with Konecranes' crane monitoring system to guarantee efficient maintenance operations and smart control features such as sway control and semi-automatic positioning to guarantee user-friendliness.



A view from the operator's room.

To meet the high availability requirement the crane was equipped with several redundant features and technical solutions such as redundant variable frequency drive and network braking units.

At the end of the design process, the drawings were accepted by Rautaruukki and the crane manufacturing was started. During the manufacturing phase, Rautaruukki conducted factory visits in Konecranes' factories to check the progress of the project.

### The Results

With the new Konecranes crane, Rautaruukki is able to meet demands from the production. The crane capacity requirements were met with state-of-the-art motion control technology allowing higher speeds and safe operation. Also the reliability and maintainability of the crane has been noted in Rautaruukki, as **Mr. Esa Prokkola, Project Manager at Rautaruukki states:**

"I am satisfied. I have spoken to our Service guys and heard only good things from them."

The successful end result is achieved with industry specific know-how which is underlined by Mr. Prokkola:

"I would say that Konecranes has people who have done such work before and they know the steel mill environment well. They knew where the crane was going to be installed and under which circumstances".

And with seamless cooperation with the customer as Mr. Prokkola continues:

"Collaboration with the supplier has been, and continues to be, effortless".

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