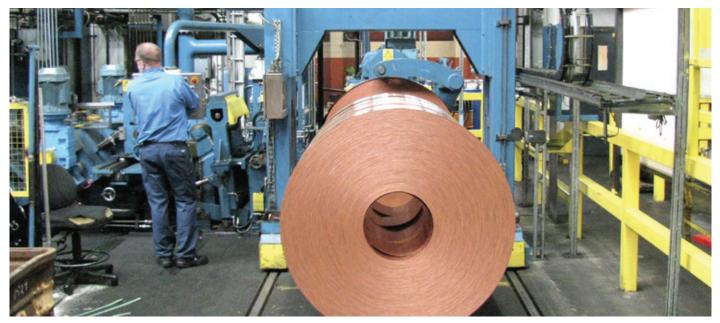
Reference story

Modernization of copper mill More energy savings for Luvata, Sweden



The entry of the copper mill.

"We are satisfied with the good level of cooperation between Luvata and ABB. The advanced technical solution provided by ABB will secure the quality and productivity of the mill after the modernization," says Mats Häglund, Project Manager at Luvata Sweden AB in Finspång, Sweden.

Customer needs

In January 2010, ABB received an order from Luvata Sweden AB in Finspång to upgrade its copper mill with new control and drive systems. The reason for the upgrade was to achieve more energy savings by improving the power factor. After the modernization, the mill is expected to roll copper sheets between 0.8 and 0.08 mm more efficiently with less scrap and downtime but with better quality.

ABB's solutions

ABB's new control system has replaced the functions in the old PLC, IUC computer and analog circuits. With a new operator interface, the new control system has greatly improved the operator's working environment. It is the first time ABB has delivered an ISU (IGBT SUPPLY UNIT) rectifier in an AC multi drive configuration that both compensates for reactive power and delivers active power to the frequency inverter drives.

With this solution, the total power from the network will be greatly reduced, and energy savings will be achieved as a result of active power compensation and common power for the drives, which work in regenerative and motoring mode. The new engineering tools for control and drive systems make it easy for the customer to fine-tune the mill in the most efficient way.

Customer benefits

- Downtime for installation and commissioning is as short as three weeks
- Compensation for reactive power through the functionality of the multi drive
- Cost-effective, energy-efficient and maintenance-free solution
- Higher productivity with less scrap and less downtime
- Better product quality
- After sales services from the same supplier



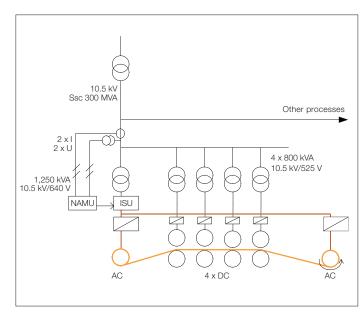
ABB's scope of supply

- DC converter with new power electronics and digital control
- Transformer and AC-multi drive line up for active reactive power compensation and AC drives
- Motors
- New ABB control system, 800 x A
- New operator interface
- New system for edging control
- Engineering tools for the control and drive
- Service agreement

Cooperation

ABB successfully modernized the mill during very limited downtime thanks to good cooperation between ABB and Luvata. Before downtime started, ABB's people made a detailed time schedule for the entire mill stoppage together with the customer. For the customer, it was important that the mill not be down any longer than necessary, simply because it was highly occupied for production.

"It was a very compact and short start-up. Luvata's project people were very helpful during the start-up and had operators on the spot in good time so that we could get started with commissioning and later production as early as possible," says Lars Henriksson, Project Manager at ABB.



Single line of the process and drives.

Facts about Luvata Sweden AB in Finspång

Luvata Sweden AB in Finspång, which is about 180 km southwest of Stockholm, mainly manufactures coolers for heavy vehicles. The copper mill was founded during the 17th century. Its customers are mainly active in the automobile industry.

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