

Case Study

ABB upgrade improves quality at aluminum plant in Germany Process expertise key to successful upgrade



An aluminum plant in Germany faced a dilemma: company managers wanted to improve product quality by adding a new stretch leveller. But since the stretching process is complex and all of the equipment involved must operate together smoothly, the company had to find a supplier that could integrate the new automation expertly with the rest of the line.

Having worked closely with ABB for more than a decade, company management knew the ABB service team had the expertise needed to make this tricky project a success. They turned to ABB to provide the control and drives systems as well as the system and application software – and to integrate the new automation into the existing process line for optimal, reliable performance.

“ABB offered the benefits of a large company combined with the advantage of having the process specialists just around the corner,” said a source at the aluminum plant. “When placing the order we saw the competitive pricing and the advantage of having a state-of-the-art process control system.”

Smooth transition, limited shutdown

A Fortune Global 500 aluminum metal and aluminum product supplier, the company is one of the largest integrated aluminum suppliers in the world.

The rolled products operations in Germany produces up to 440,000 tons per year of foil and litho products, coil coating for can lids and building industry products.

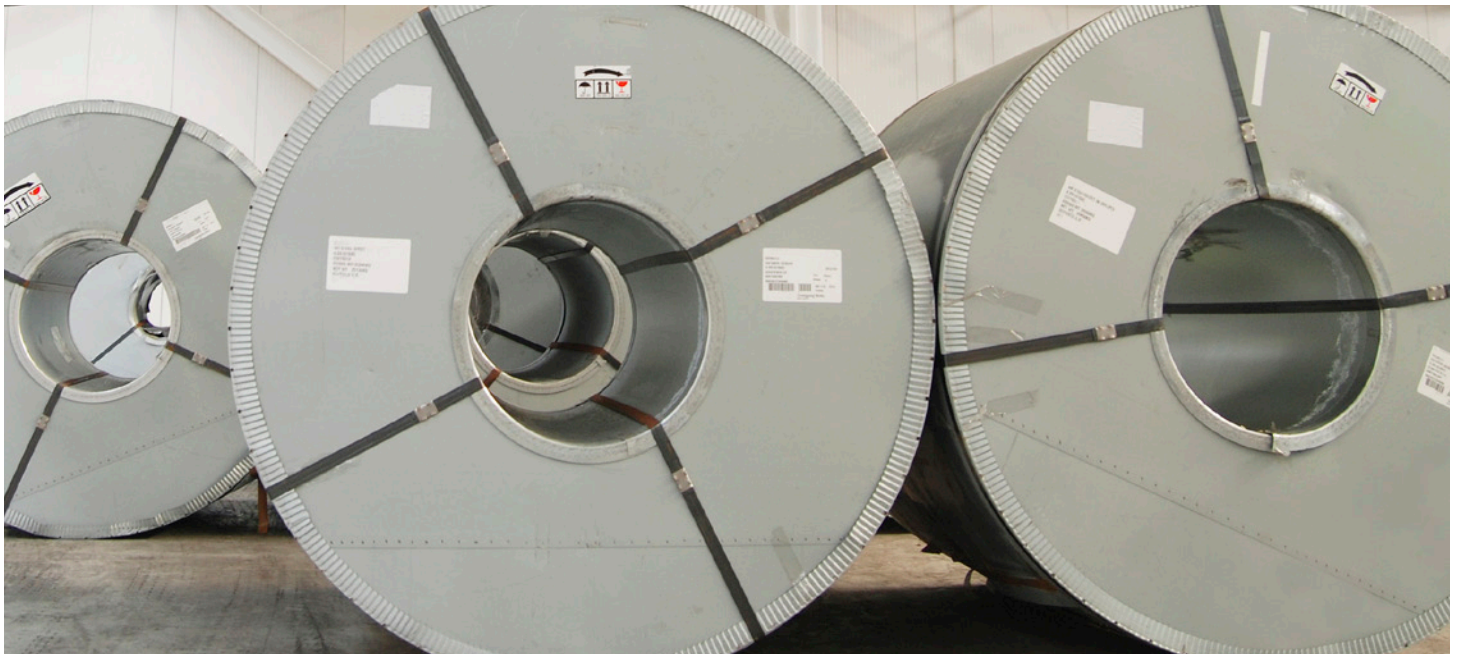


ABB completed work on the company's automation integration in December 2008, meeting a tight time schedule and providing the following:

- Installation of a control system based on AC 450 RMC Controllers with S 800 and S100I/O
- Application software using the proven ABB Metals library
- Drives system with 9 AC drives
- Integration into existing control of the processing line
- Hardware engineering
- Software engineering
- Start-Up services
- Project management
- Plant surveillance
- Training

After the initial installation, ABB completed minor modifications, retrofits and updates. ABB met the company's expectations for a limited shutdown time during the transition.

Lower maintenance costs

Lower maintenance costs are one of the many benefits of upgrading that the aluminum plant experienced. ABB's highly-efficient control and drives systems have been designed for reduced maintenance over the equipment's lifetime.

ABB worked closely with the plant personnel to make the system integration trouble-free. The plant's service and project engineers entered the project confident that ABB could deliver reliably. They already had close working relationships with the ABB service team and through the years, they had often observed ABB's project expertise.

"The system has run in a very stable and reliable way over the years. ABB has done numerous extensions, which fit very well into the system," says a member of the plant's management team. **"The controls show a seamless dataflow that is unique in the industrial environment."**