**Case Study** 

## ABB limits downtime for German Steelmaker Automation upgrade reduces maintenance costs, improves reliability

When components of the control and drives systems became obsolete at a major steel manufacturer in Germany, the company knew it was time for an upgrade. Their top priority: finding a supplier that could provide the expertise needed for a smooth transition with minimal production loss.

The steelmaker chose ABB, a company they had worked with previously. They knew from experience that the ABB service team had the skills needed for a trouble-free changeover.

ABB completed work in October 2008, providing the steelmaker with new, highly reliable automation that operates with minimal maintenance.

Importantly, during the upgrade ABB kept shutdown to just one week. The company was able to meet their major goal: a successful conversion with little production interruption.

"Over the years ABB has offered us excellent service," says the customer. "In all cases, experienced people with process know-how have been made available for us. In this case, ABB presented a proven solution with minimum downtime for production."

## **Expert installation**

The plant manufactures tinplate, which is mainly used for packaging steel, the material used in food, paint and aerosol cans.

ABB expertly installed an Operate IT B control system based on AC800F Controllers, with the existing Controlle PI/O including:

- New control and drives system hardware
- New application and ERP software
- Integration of the instrumentation via Profibus
- New interface to the ERP system
- Control system and drive system hardware engineering
- Aapplication software engineering
- Training
- Startup assistance
- Project management
- Life-cycle extension

Before installation, ABB performed a thorough analysis of the application software to ensure that it would meet all specifications and be highly reliable.



To ensure that downtime would be minimal, ABB specialists performed their tasks in steps. Importantly, they used the interfacing station to operate the Operate IT and Contronic P simultaneously. This significantly reduced risks.

## Saving costs down the line

Throughout the transition, the ABB service team drew on their expertise to save money for the steel plant. For example, ABB was able to retain the plant's existing I/O modules, and avoid the need for I/O checking and loop check. By making the most of both the old and new equipment, and lowering risk, ABB kept the upgrade cost-effective.

To keep costs low in the future, the company opted for a life cycle extension contract that will keep the I/O in operation until 2012.

During the upgrade, the company worked with ABB specialists they had worked with previously, giving them an extra measure of confidence.

"We have known the people that are involved in our projects for years and we rely on them," says a management team member at the steel plant. "Today the line runs smoothly, producing the desired quality of steel."