

## Case Study

# ABB evolution services reduce cost and downtime Local service support gives steelmaker peace of mind

Before upgrading their plant, management at a German steel factory were concerned about production loss during the transition. So they turned to ABB to modernize their automation equipment because, having worked with ABB previously, they knew that ABB had the expertise to keep shutdown time to a minimum.

“ABB offered the commercial benefits of a large company combined with the advantage of having process specialists just around the corner,” says the plant’s manager for the continuous casting shop.

The steelmaker’s confidence was well-placed -- when the last step of the installation took place, ABB limited plant shutdown to just one week. The other work was done during normal maintenance times.

ABB upgraded the plant’s control system, drives system, application software and integrated the new equipment with the existing ERP system. ABB’s strong process knowledge smoothed the transition and made further support easier.

Importantly, ABB supplies steelmakers with the fast response time that is critical during the liquid metal process. When the customer calls for support, ABB experts are on-site within one hour.

### Maintaining production

With multiple production sites in Germany, the steelmaker offers products that include engineering steels, tool steels and stainless steels. These are used in the automotive, aerospace, power generation, oil and gas, and tool industries.

At this location, the two casting lines were equipped with ABB controllers and drives, some of which were classic or had limited elements and a few were obsolete. These varying lifecycle products presented obstacles for the steel manufacturer if they did not want to jeopardize production.

It was critical that production would be disrupted as little as possible and so converting software and adapting to ABB’s 800xA system became a top priority. This conversion had to be performed flawlessly for the plant to avoid later downtime and problems. ABB was able to meet all of the requirements. For the customer, accurate process control is essential to the quality of the slabs cast and, as a result, the rolled product. The upgraded automation provided by ABB helps the steelmaker achieve reliable performance and consistent product quality.



© ABB Inc. 2009 2PAA105522D0004 USCS 1721

### Long-term partnership

Since they had a long history of working with ABB, the customer knew the ABB team has the skills and experience to upgrade the plant’s automation safely and reliably. They understood that ABB delivered service in a timely way and would be able to meet their tough time schedule.

### ABB provided:

- Installation of a control system based on AC 450 RMC controllers with S100I/O
- Modification of application software
- Interfacing 800xA to ERP system
- Replacement of old drives by 18 new DC drives
- Project management
- Start- up assistance
- Training

### Saving costs

The German steelmaker made a cost-effective decision when they chose to modernize their plant: By upgrading their existing automation instead of buying all new products, the customer was able to save on its capital equipment investment.

“When placing the order, we saw the competitive pricing and the advantage of having the people that were able to convert our old control system into the state of the art process control system 800xA in a short period of time,” says the manager of the plant’s continuous casting shop. “The ABB team combines drives knowledge and control technology knowledge. They know what is required for our industrial process.”