Lurgi Metallurgie Constructs a Solution

Johann Student builds plants-large plants that, among other things turn iron into useful steel. It's part of his job as manager of electrical engineering and control systems and deputy director of project execution of Frankfurt, Germany based Lurgi Metallurgie GmbH.

For the most part Lurgi Metallurgie builds plants for others. But the company also directs ongoing research and development into the direct reduction of iron ore. This could potentially eliminate a number of manufacturing steps. For its own test and demonstration plant for direct ore reduction, Lurgi Metallurgie selected a FOUNDATION fieldbus solution from Fisher-Rosemount.

Reduced Installation and Maintenance Costs

With experience at Lurgi Metallurgie's own facility, Student has seen for himself what PlantWeb field-based architecture with FOUNDATION fieldbus can do. He reports, for instance, that there are significant cost savings. Since this is a pilot plant, an exact number is hard to extract. Ongoing plant maintenance costs, however, have been substantially reduced.

"I think 30 to 40 percent savings in maintenance is a good figure," remarks Student. One advantage FOUNDATION fieldbus offers over competing solutions is plug and play technology. With plug and play, wiring polarity isn't a problem. Plug and play also enables the online addition of field devices, as well as interoperability with other vendors' FOUNDATION fieldbus-compliant products.

For Student, a key advantage of FOUNDATION fieldbus is distributed control across an entire plant. He says this allows closed loop control in the field, a key requirement for a number of benefits.

Improved Process Control

"This gives us better process control due to synchronized scheduling between measurement, control algorithm and action-and, therefore, reduced process variability and improved maintenance strategies for a much better process availability," Student says.

As a constructor of plants, Lurgi Metallurgie doesn't have the final say in which control systems are installed. That's something the company's clients specify. But that doesn't mean that Lurgi Metallurgie refuses to offer suggestions based on its own experience.

On that subject, Student says, "We would recommend the Fisher-Rosemount system to our client."