In the fourth phase of the industrial revolution the real and virtual worlds come together: intelligently networked, self-controlled production systems emerge. With its communication-enabled signal converters Weidmüller supports this trend and as a partner in Industrial Connectivity takes a decisive step towards Industry 4.0.

In the “Smart Factories” of the future, machines and goods will not only communicate autonomously with each other but with people too. The aim of this kind of networking is to greatly optimise production processes through increased flexibility and fewer resources. For this vision to become reality, requirements need to be met by all the components involved. An example of how Weidmüller is steering its products into the future is the integration of Ethernet interfaces with autonomous intelligence.

Comprehensive and transparent process information

Product manager Georg Hilsch explains the new possibilities of process transparency: “Simply open the cabinet, enter the QR code printed on the module using a mobile device and communicate directly on site via the IP address – the idea of a connection between man and module becomes a reality with communication-enabled components.” At the Hannover Messe, Weidmüller is presenting the ACT20C signal converter, which uses an Ethernet interface to rapidly transfer precise diagnostic information. Ethernet-based communication makes it possible to transfer a complete set of diagnostics from the signal converter directly to the control station or the engineering system. This opens up the possibility of not only using information locally but making it available throughout the system. It will allow decisions to be made and activities to be triggered in near real time.

“The functionality of our communication-enabled signal converters enable them to far exceed the traditional diagnosis of the control cabinet,” says Hilsch. “Whereas a controller can only indicate whether a signal is ‘good’ or ‘bad’, direct communication with the signal converter allows more detailed information to be extracted. Armed with this knowledge, plant operators and maintenance personnel can take proactive, targeted action: equipment failures can be successfully minimized or even prevented thanks to rapid fault identification and localization.”

Visit our ACT20C Live Application until 31 December 2013
▶ http://act20c.weidmueller.com/

Let’s connect.