PRESS RELEASE

Cast off for the journey into the future of industrial communication
From the field level to IoT communication - one open standard

Real-time wireless communication, full connectivity and interoperability from the field level to the cloud: these are all prerequisites for realizing the factory of the future. In order to actually make use of what is technically possible, all automation providers have to agree on an open standard from the field level to IoT communication. There has been great progress here: The Field Level Communication (FLC) initiative of the OPC Foundation for full interoperability of field devices is gaining momentum.

The factory of the future will be fully connected. An essential requirement for this is the simple integration of all machines and devices into a network that guarantees company-wide access to all relevant information at all times. Bosch Rexroth demonstrated at the Hanover Fair that this is already possible wirelessly with a 5G demonstrator integrated into a 3D printer. In conjunction with OPC UA and the real-time extension TSN, this fulfils essential requirements for connectivity. To enable the still heterogeneous field level to merge with the Internet of Things in the future, Bosch Rexroth is now working with other leading automation providers to advance the development of manufacturer-independent device profiles in the Field Level Communication (FLC) initiative.

We rely on OPC UA with TSN right down to the field level because our customers urgently need open standards for their connectivity," emphasizes Dr. Heiner Lang, Head of the Automation and Electrification Solutions Division at Bosch Rexroth AG. "Only a harmonized, standardized and unified TSN technology with full interoperability of the field devices fulfils this requirement. In short: one TSN for all".

Bosch Rexroth has always been a leader in the implementation of OPC UA technology in its products and is one of TSN's pioneers in the testbed of the Industrial Internet Consortium. The automation provider is also committed to standardization at the field level and, with Dr. Thomas Brandl, is Chairman of the Steering Committee of the FLC initiative in the OPC Foundation.
Bosch Rexroth appreciates that the FLC initiative has succeeded in bringing Peter Lutz on board to strengthen its management position in the future. His successor at Sercos International is Klaus Weyer. "Peter Lutz has energetically implemented the definition of Sercos profiles and thus interoperability as the most important customer benefit," says Dr. Heiner Lang. "With his knowledge and experience, he will accelerate cross-manufacturer standardization at the field level.

Despite the high speed, the current real-time Ethernet protocols will continue to be maintained and used for a longer transition period. Bosch Rexroth will continue to support the Sercos automation bus with its interoperable device profiles as well as other common Ethernet real-time systems with a multi-ethernet interface.

As one of the world's leading suppliers of drive and control technologies, Bosch Rexroth ensures efficient, powerful and safe movement in machines and systems of any size. The company bundles global application experience in the market segments of Mobile Applications, Machinery Applications and Engineering, and Factory Automation. With its intelligent components, customized system solutions and services, Bosch Rexroth is creating the necessary environment for fully connected applications. Bosch Rexroth offers its customers hydraulics, electric drive and control technology, gear technology and linear motion and assembly technology, including software and interfaces to the Internet of Things. With locations in over 80 countries, more than 30,500 associates generated sales revenue of 5.5 billion euros in 2017.

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