

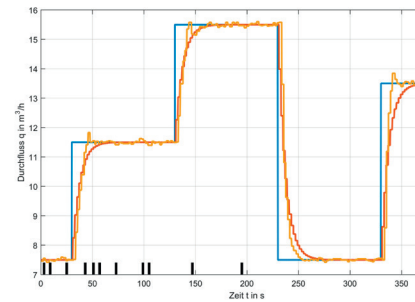
PRESS RELEASE

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SAMSON Exhibits *WirelessHART* as Transmission Protocol in Control Loops

SAMSON used the Automation trade show held in Baden-Baden, Germany to present the results of a study conducted in cooperation with Darmstadt Technical University: the study showed that *WirelessHART*[®] is a suitable transmission protocol for control applications. Currently, *WirelessHART* is mainly used for monitoring and configuration tasks in industrial processes.

A PID controller was designed and installed at a decentral location in a stable, non-linear flow control loop with fast dynamics. Communication between the flow rate and pressure sensors and the control valve was implemented using *WirelessHART*. Simulations as well as a real-life test setup proved the suitability of *WirelessHART* for data transmission in control loops. This also applies to control loops where the time constant is considerably shorter than the intervals for wireless transmission between sensor and control valve. Since *WirelessHART* currently impedes direct communication between neighboring field units, all sensor data must be transmitted to the control valve through a gateway. This opens up potential for future optimization.

Distributed control systems reduce the bandwidth required for wireless transmission since the only values transmitted from the control station to the controllers in the plant are set points. As a result, it would be ideal to extend the *WirelessHART* specification to include direct data exchange between field units without a gateway.

WirelessHART[®] is a registered trademark of the HART Communication Foundation.

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