WORK Microwave — Stand E27

At SCHÜTTGUT 2014, WORK Microwave will demonstrate a powerful range of sensor solutions designed to accurately measure moisture, mass, density, or foreign particles of bulk solids, including food, plastics, wood, glass, metal, and paper.

With more than 27 years of expertise in RF electronics, WORK Microwave offers sensor solutions with a superior quality, reliability, and performance optimized for a variety of applications.

Key Products and Technology Demonstrations

Resonator-Based Sensor Series
At SCHÜTTGUT 2014, WORK Microwave will showcase its extensive range of resonator-based sensor solutions. Leveraging sophisticated microwave technology that measures the influence of material on an electromagnetic field without the use of nuclear radiation, WORK Microwave sensors can uniquely handle microwave frequencies of up to 65 GHz at a rate of up to 10,000 measurements per second, making them ideal for demanding in-line applications.

Typical applications include measuring moisture, residual moisture, mass, or density as well as identifying foreign particles and substances in bulk solids. By measuring multiple parameters simultaneously from a single sensor device, WORK Microwave solutions dramatically streamline operational workflows.

All engineering and manufacturing of WORK Microwave sensors is performed under one roof, guaranteeing a shorter time to market and superior quality design. WORK Microwave sensors can be customized to meet a customer’s exact requirements, ensuring the highest possible accuracy and thereby optimizing the production process. Through a mechanical design that can be adapted to any application, the sensors allow easy implementation into an existing production line. A highly robust construction minimizes maintenance requirements, making them perfect for use in rugged environments. Via an extensive range of interfaces, including Ethernet, USB, and CAN, operators can easily support network connection requirements.
**Generic Resonator-Based Measurement Test Bench**

During a step-by-step demo at the stand, WORK Microwave will measure the moisture content of a range of granular and solid food substances. Attendees can watch as coffee beans, rice, wheat grain, nuts, and similar substances are passed through the resonator cavity of a WORK Microwave sensor solution, onto a non-contact probe, then the resonance frequency of the loaded resonator — and hence moisture readings — are output to a PC screen for analysis.

Using WORK Microwave’s resonator-based sensors, manufacturers can obtain real-time, accurate measurements of the weight, moisture, and residual moisture of a material, in addition to identifying foreign particles or substances that have come into contact with the substance. By ensuring that bulk solids materials are superior quality, the resonator-based sensors help manufacturers avoid economic losses.

**Company Overview:**

**About WORK Microwave (www.work-microwave.de)**

Headquartered in Holzkirchen (near Munich), Germany, and comprised of four operating divisions — Satellite Technologies, Navigation Simulators, Defence Electronics, and Sensors and Measurement — WORK Microwave leverages over 27 years of experience to anticipate market needs and apply an innovative and creative approach to the development of digital signal processing technologies while maintaining the highest standards for quality, reliability, and performance.

WORK Microwave’s Sensors division develops and manufactures high-precision sensor solutions for a wide range of measurements and applications used by the food, pharmaceutical, automotive, recycling, chemical, paper processing, and tobacco industries.

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