

PRESS RELEASE

PRESS RELEASEMay 4, 2017 | Page 1

Control 2017: Fraunhofer HHI presents digital 3D endoscopy and Terahertz sensing

Fraunhofer Heinrich Hertz Institute HHI presents new processes for digital 3D measuring technology and for the inspection below the surface as well as in the material inward at Control in Stuttgart, Germany, at booth 6302 in hall 6.

3DInMed – Digital 3D endoscopy for inspection and metrology

Fraunhofer HHI presents results of the Federal Ministry of Economy and Energy funded project 3DInMed. Digital 3D endoscopes used for industrial applications open up completely new possibilities for extracting and visualizing additional information by using advanced stereo algorithms for depth estimation. In particular, the survey of cavities that are difficult to access and the inspection of wearing parts by such methods, allow a more precise statement about the surveyed items condition. A 3D endoscope system with an integrated real-time measurement of industrial components will be shown.

Terahertz sensing – Industrial grade THz-System for non-destructive testing (NDT)

Terahertz radiation has great potential as versatile tool for non-destructive testing. Up to now, the application of Terahertz (THz) technologies in industrial environments is severely impeded due to the complexity of today's THz sensor heads. Especially reflection measurements suffer from bulky and expensive devices. Fraunhofer HHI presents a novel, compact THz transceiver module, which enables measurements under normal incidence. This significantly facilitates the use of THz technologies for industrial applications.

Innovations for the digital society of the future are the focus of research and development work at the **Fraunhofer Heinrich Hertz Institute HHI**. In this area, Fraunhofer HHI is a world leader in the development for mobile and optical communication networks and systems as well as processing and coding of video signals. Together with international partners from research and industry, Fraunhofer HHI works in the whole spectrum of digital infrastructure – from fundamental research to the development of prototypes and solutions. www.hhi.fraunhofer.de