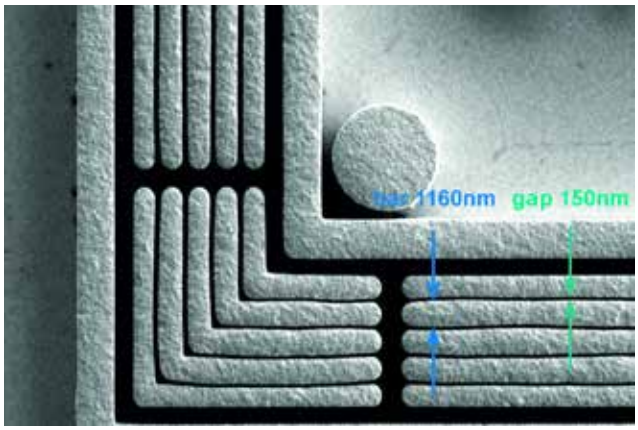
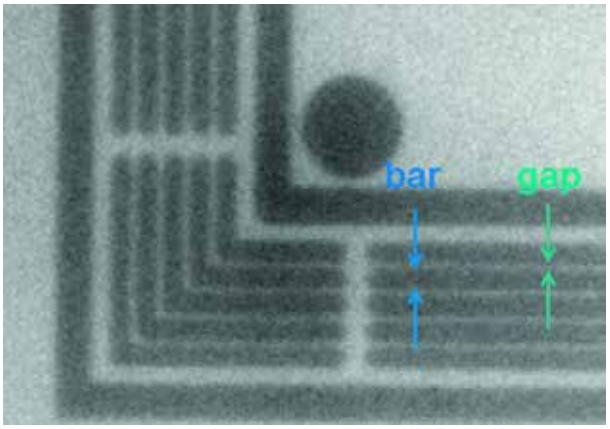
YXLON CT Systems – Unprecedented detail visibility ≤ 150 nm for precise results during inspection and metrology tasks

Hamburg, 16.02.2016. With the new release of the FF20 CT und FF35 CT systems for computed tomography and thanks to a brand-new 190 kV nanofocus tube, YXLON now achieves in the case of 2D applications an as yet unparalleled detail visibility ≤ 150 nm even at high energies. New CT algorithms provide optimum spacial resolution and care for highest precision and time efficiency at a large range of CT applications. With this new release, the systems consequently deliver the best inspection results during the non-destructive testing of materials and furthermore fulfill the most important prerequisites for demanding metrology applications.



SEM (Scanning Electron Microscope) image shows the exact dimensions of the test pattern.



150 nm gap clearly visible in the X-ray image

This unprecedented 150 nm detail visibility, even in the presence of high levels of energy, is made possible for the first time due to an extremely small focal spot displayed by the water-cooled, 190 kV nanofocus tube that has been newly developed by YXLON in Hamburg. In addition, new CT algorithms provide optimum image resolution in the event of a larger field of view (FOV). The new ScanExtend feature offers a horizontal FOV extension and is ideally suited for larger inspection items or enables smaller inspection items to be magnified to an even greater degree. The scan is implemented during a complete rotation of the inspection item, then reconstructed free of artifacts. This, in turn, leads to a time savings, unlike the case with conventional algorithms that utilize so-called ‘stitching’, which makes them more time-consuming. What’s more, new developments such as the virtual rotation axis and the HeliExtend feature (Helical CT) increase the breadth of application, the quality of inspections and the time efficiency for the application user to an even greater extent. For example, this is

YXLON
Technology with Passion

YXLON International GmbH, a company of the COMET Group
Hauptsitz / Headquarters: Essener Bogen 15, D-22419 Hamburg
T +49 40 52729-0, **F** +49 40 52729-170, yxlon@hbg.yxlon.com, www.yxlon.com

of particular benefit in the case of small, vertically elongated parts such as 3D printed nozzles.

YXLON has set off on completely new paths with the FF20/35 CT systems and the Geminy system platform: Intuitive smart-touch operation, remote monitoring, push messages and different user profiles make it possible for the systems to be operated without special prior knowledge and skills. The large inspection envelope in conjunction with the tube and detector assemblies provides for a large range of applications and a great deal of flexibility. “This new release proves that we are complying with our customers’ wishes. The highest image quality, simple, intuitive operation, maximum flexibility and efficient workflows are the prime decision-making criteria when purchasing an inspection system. Our FF20/35 CT systems supply all these factors, combined with lots of features that enable any user to achieve what are simply the best results,” explains Peter Kramm, Senior Product Manager at YXLON.

In the meantime YXLON has fully equipped its application centers with the new YXLON FF20/35 CT systems on a worldwide scale. Interested parties can now have the systems demonstrated to them not only in Hamburg and Heilbronn/Germany but in Hudson in the USA, in Shanghai/China, Yokohama/Japan and Taipei/Taiwan. There they can convince themselves of the advantages these systems have to offer.

Contact:
Peter Kramm
Senior Product Manager Labs/R&D
T.: +49 40 52729-406
peter.kramm@hbg.yxlon.com

Media relations:
Gina Naujokat
Marketing Communications
T.: +49 40/52729-404
gina.naujokat@hbg.yxlon.com

About YXLON

YXLON International designs and produces radioscopic and CT inspection systems for the widest variety of applications and fields. Whether situated in the aviation & aerospace, automotive or electronics industry, our customers are among the largest producers, major enterprises that place their confidence in our quality worldwide.

The name YXLON stands for assurance and quality for all types of cast parts, tires, electrical and electronic components, turbine blades, welded joints and a lot more. Our product portfolio includes X-ray systems for installation in radiological inspection envelopes, universal X-ray inspection systems on the basis of fully shielded devices, as well as solutions specific to a customer. Whether in manual, semi or fully automated operation, our inspection systems are ideal for deployment in research & development and can be integrated into any production process.

CT systems have been an integral part of our product portfolio since as far back as 2003. Computed tomography provides a three-dimensional insight into inspection items, thus enabling the analysis of inner structures, dimensional measurement tasks in metrology applications or actual-to-nominal comparisons to CAD data, to name only a few examples. Besides delivering a more precise inspection evaluation when compared with radiography, computed tomography also provides valuable information about the production process. Above and beyond such advantages, our microfocus systems permit highly detailed looks into the most intricate structures and tiniest components.

With our headquarters in Hamburg, sales and service locations in Tokyo, Osaka, Hudson (Ohio), San Jose (California), Beijing, Shanghai, Hattingen and Heilbronn, as well as a network of representatives in over 50 countries, as YXLON we’re local for our customers all over the world.