

Press Release

Future-Oriented Investment in High-Quality X-ray Tubes

Hanover, Germany, July 2019 – **Viscom has invested in the development and production of microfocus X-ray tubes. The primary focus of this investment comprises three new X-ray laboratories with certified radiation safety up to 300 kV and 1500 W. This expansion facilitates the further development of global business in the direct radiation and transmission tube segments.**

Microfocus X-ray tubes are distinguished by their especially small focal spot size, which enables them to generate extremely sharp images. To meet even the most exacting technological standards of performance, resolution and stability in the future, Viscom has established a state-of-the-art competence center for X-ray tubes in a 250 m² section of hall 5 on its Hanover campus. As of June 2019, numerous closely related processes have been brought together here under one roof, including development, production, final inspection and customer-specific adaptation of the tubes.

Extremely sophisticated superstructures and testing are now implemented in the new competence center for X-ray tubes. Optimal safety is offered by walls and ceilings of radiation-shielding concrete with a density of 3.2 t/m³ as well as leaded gates and cable conduits, safety switches and camera surveillance.

Two of the three areas shielded from radiation are used primarily for putting the products into service shortly before delivery. The continuous tests and stress tests can be conducted simultaneously on two separate data processors and controllers. The third X-ray laboratory is used mainly for ongoing development of the complete tubes and the corresponding individual components. All product functions are tested.

Microfocus X-ray tubes from Viscom are used in Viscom's high-quality inspection systems, which are deployed primarily for quality control in

electronics manufacturing around the globe. They also are used in X-ray laboratories and installed as components in premium machinery. Thus, a wide range of objects in many different industries, from small workpieces to entire car bodies, can be reliably inspected and measured, also in combination with X-ray computer tomography.

Viscom offers both direct radiation and transmission tubes with voltages of up to 250 kV. Extensive approvals and permits are available for operation worldwide, including in North America and France. "The right product selection is based on the desired performance range, the required resolution and the intended application," explained Christian Wolff, who is responsible for global sales of X-ray solutions at Viscom.

The wide range of microfocus X-ray tubes offered by Viscom extends up to a maximum of 500 W for particularly fast inspections or, as an option, especially high inspection quality for large and solid objects. According to Wolff, "The outstanding versatility of Viscom's X-ray tubes is currently a unique selling point in the market. For example, our XT9250D-500W offers impressively high resolutions as well as inspection optimized in terms of time, which is exceedingly important when used in production lines. These features make it an outstanding choice for industrial use in particular."

In addition to product adaptations such as special drill holes for fasteners, Viscom develops special, customized tubes. Among other things, they can be equipped with special cooling systems or a radiation shield. Viscom's proprietary VXC operating software is always included as standard, and is used to control the entire X-ray process. Other software applications then take over further steps via interfaces, up to and including image analysis and 3D reconstruction – like the high-performance XMC software, which is available for Viscom's manual inspection systems.

Captions:

1_The new X-ray laboratories enable Viscom's staff to conduct final inspections of finished X-ray tubes, among other things

2_Inspection of the interface to the X-ray controller on a new microfocus transmission tube

About Viscom

Viscom AG develops, manufactures and sells high-quality inspection systems. Our range encompasses the full spectrum of optical and X-ray inspection systems. Viscom is one of the world's leading providers of assembly inspection systems for the electronics manufacturing industry. The company's systems can be networked and customized to meet specific customer needs. Viscom's headquarters and production site are located in Hanover, Germany. Viscom has a large international network of subsidiaries, applications centers, service centers and representatives. Founded in 1984, Viscom has been listed on the Frankfurt Stock Exchange (ISIN: DE0007846867) since 2006. For further information, visit www.viscom.com.