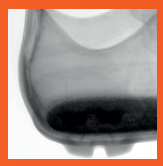
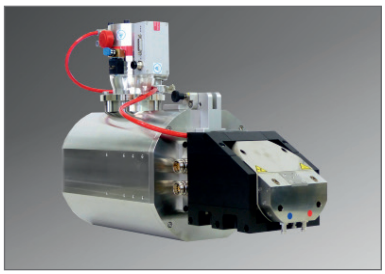


X-NEWS

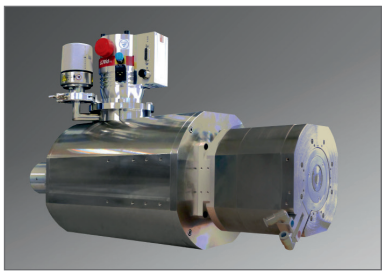
X-RAY WorX
Superior Microfocus Technology

Application studies for 300 kV microfocus tubes

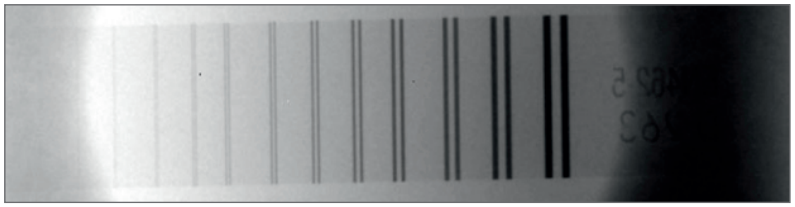
The increasing interest of industrial customers in high resolution X-ray testing of dense and complex parts led to the development and introduction of the innovative 300 kV microfocus X-ray tubes XWT-300-CT and XWT-300-THE Plus in 2014 and 2015.



Microfocus X-ray tube XWT-300-CT



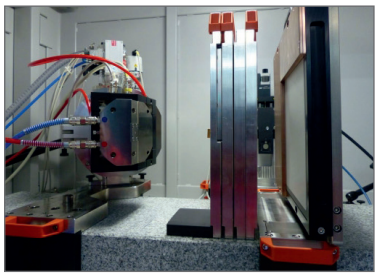
Microfocus X-ray tube XWT-300-THE Plus



300 kV, 35 Watt target power, 40 mm steel, D9 wires resolved, D12 visible

To assess and demonstrate the wide range of applications, an application study was performed by X-RAY WorX specialists in Garbsen. The study evaluates the penetration of steel plates with thickness up to 80 mm together with the achievable resolution, measured using a double wire IQI according to EN 462-5 resp. ISO 19232-5. Results from acceleration voltages of 200 kV and 300 kV at different power levels are compared.

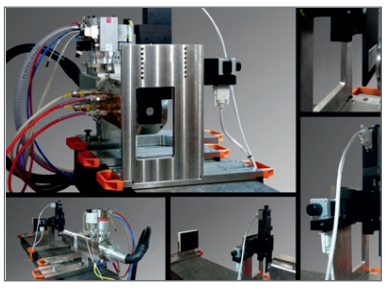
The application reports for both tubes, XWT-300-THE Plus with high energy transmission target, and for XWT-300-CT with reflection target, are available on request from our partners or directly from X-RAY WorX. They contain the detailed setup and conditions of the tests performed, several resolution images, and a summary of the complete set of experiments.



Setup of XWT-300-CT with 80 mm steel plates

Whitepaper focal spot measurement

One of the most important characteristics of a microfocus X-ray source is its focal spot size and the resolution that can be achieved using a particular setup.



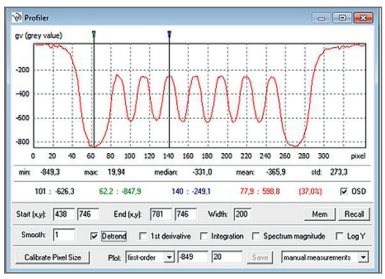
Setup of the tube, detector, and JIMA test chart

X-RAY WorX introduces a whitepaper that summarizes all aspects of the procedure and gives a valuable guideline to perform accurate and repeatable focal spot measurements.

Focal spot sizes down to five microns can be analyzed using the common standard EN 12543-5 that was released in 1999. The recent ASTM 2903-13 is a derivative of the EN standard and may be chosen, too.

To evaluate focal spot sizes below five microns, an indirect approach – the analysis of JIMA resolution - is chosen, since the accuracy of EN 12543-5 is very low in this range of spot sizes.

The well known and widely accepted JIMA resolution patterns allow the validation of the MTF (modulation transfer function) of several predefined line patterns to obtain a repeatable and realistic estimation of the focal spot size of a microfocus X-ray source.



Line profile across JIMA line pattern

The measurement of focal spot sizes requires reasonable experience with standards and X-ray technology like optimized operation of the source, calibration of the detector, the selection of the required magnification, and the use of advanced image processing software. The whitepaper on focal spot measurement may be obtained on request from your X-RAY WorX representative.

X-NEWS

X-RAY WorX
Superior Microfocus Technology

New sales and service partners in India, Italy, Poland, and Romania

X-RAY WorX proudly announces that the global network for sales and service has been significantly extended in the last 12 months. New experienced partners in India, Italy, Poland, and Romania are offering local support and consultancy for a wide range of X-RAY WorX products in various industries.

The company Medequip in Hyderabad has a long track record in X-ray technology and will support X-RAY WorX on the Indian subcontinent.

Semat Equipment is closely working with the Italian aerospace industry and offers a wide range of NDT equipment and services to its customers.

The companies PCB Service from Gdansk as well as Test Trading from Bucharest have been supplying X-ray equipment for industrial NDT since decades and offer maintenance services and spare parts as well as consultancy for new projects in the fields of computed radiography and digital radiography.

The philosophy of close cooperation with local experts is the foundation to support end customers in efficiently operating X-RAY WorX microfocus X-ray sources in the production environment. X-RAY WorX supports its partners with technical trainings, a detailed documentation, immediate supply of spare parts, and on-site visits if desired by the customer.

MEDEQUIP PCB service SEMAT Equipment S.r.l. TEST Trading

X-RAY WorX exhibits solution for aerospace testing

The 7th International Symposium on NDT in Aerospace was held from 16. – 18. November 2015 in Bremen.

Booth at International Symposium on NDT in Aerospace

In an inspiring atmosphere experts and equipment suppliers discussed about new challenges and procedures of NDT in aerospace industry.

In cooperation with DÜRR NDT, X-RAY WorX presented the microfocus rod anode tube XWT-160-RAC and the CR scanner HD-CR 35 NDT as a joint solution for computed radiography (CR) of aircraft engine and spacecraft parts.

X-RAY WorX contributed to the conference program by giving a presentation on the implementation of microfocus X-ray technology in digital testing procedures (DR).

Furthermore, an exciting factory tour at Airbus Defense & Space gave an impression of the complex processes of production and quality management in aerospace industry.

Technical documentation

In January 2016 a new version of X-RAY WorX product documentation was released. It contains updated versions of the operation manual, the technical data, and all manuals for the X-COM operation software.

The updated documentation is available on our FTP server and will be shipped on the documentation CD with every X-ray tube.

Support for LED warning lights

X-RAY WorX adapted its warning light controller for microfocus X-ray tubes to support LEDs with minimum current consumption of down to 15 mA. Up to three sets of LEDs may be connected to separate channels.

The new controller is downwards compatible to the previous version and will be introduced in standard production by the end of 2016. LED support is available immediately on request. Please inform you X-RAY WorX representative.

Microfocus Training Week 2016

We are looking forward to welcome you at "Microfocus Training Week" in Garbsen! If you are interested in the detailed agenda or you like to apply, please contact our service department: service@x-ray-worx.com.

Next Training: 12. - 16. September 2016

Experience Hanover!

In 2016, both the birthday and the day of death of Gottfried Wilhelm Leibniz have their anniversaries.

On the 1st of July 2016, Gottfried Wilhelm Leibniz would have celebrated his 370th birthday.

The city of Hannover dedicates the whole year to the universal genius with different cultural events.

-> Further information on cultural events.

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