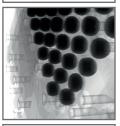
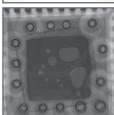
X-NEWS











New target cooling for microfocus transmission tubes THE PLUS

The microfocus X-ray tubes of the product line *THE PLUS* now feature a innovative internal cooling for the *High Energy* transmission target.



Microfocus transmission tube THE PLUS with internal target cooling of High Energy target

The related target power of 50 Watt makes them a perfect solution for high resolution computed tomography (CT) and laminography.

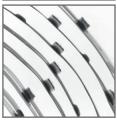
Featuring 50 watt target power, microfocus transmission tubes of the product line THE PLUS currently provide the highest target power in the market. So far, the minimum focus-object-distance (FOD) for these tubes has been approximately 2.0 mm. Applying the new High Energy transmission target with internal cooling, the FOD could be reduced to 0.3 mm. Consequently, a magnification of more than 3000 can be achieved (given a distance between tube and detector of more than 90 cm). This results in the highest resolution of minute details, which is required particularly for computed tomography and laminography applications.

Additionally maintenance of the transmission target has been simplified significantly. Rotation and replacement of the target does not require removal of the cooling element, which reduces maintenance effort. The current position of the target is clearly visible on a circular scale and well reproducible by a mechanical guidance. Furthermore additional apertures and filters may be easily mounted directly in front of the target.

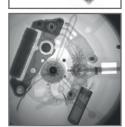


Scale for identification of the target position

The new advancements apply to all microfocus transmission tubes of the product line *THE PLUS*, which are available with 160 kV, 190 kV, 225 kV, and 240 kV.







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Global presence of X-RAY WorX

Also in 2013, X-RAY WorX has regularly taken the opportunity to intensify the cooperation with its representatives in various countries worldwide. Beside the professional exchange, a strong emphasis has been laid on microfocus rod anode tubes.

X-RAY WorX provides three different product lines of microfocus rod anode tubes, *RA* and *RAC* as well as *RAC Superfocus*. They have been presented together with our partners at different NDT trade shows, conferences and exhibitions.

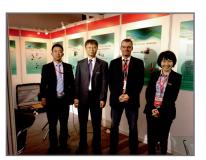


At **NDE Tokyo 2013 trade show in Japan**, one of the leading Asian exhibitions for non-destructive testing,

measurement and control technology, X-RAY WorX presented rod anode X-ray tubes for the automotive, aerospace and energy industry together with its new Japanese partner Pony Industry.



Also at NDT 2013 conference in Telford (UK) rod anode X-ray tubes have been in the focus of many visitors from aerospace and energy industries. In Telford, X-RAY WorX joined the booth of its partner Euroteck Systems. During the conference, X-RAY WorX also presented new results of focal spot measurement of rod anodes in a technical orientated lecture.



At **18th China International Exhibition on Quality Control and Testing Equipment (Shanghai)** X-RAY WorX supported its Chinese partner Dalian Lind. "Together with our partner Lind, we had interesting discussions on new projects in electronics and aerospace industry", said Holger Behnsen, managing director of X-RAY WorX. "Especially these industries depend on reliable high quality inspection technology like rod anode tubes, which makes a significant contribution to quality assurance and prototyping."

X-NEWS



X-RAY WorX - "Microfocus Training Week" 2014

After a successful initiation of "Microfocus Training Week" in 2013, X-RAY WorX GmbH will again organize "Microfocus Training Weeks" in 2014 for its OEM-customers and representatives.

Within five days our experienced service technicians transfer comprehensive technical knowledge and practical skills about microfocus X-ray technology to the participants of "Microfocus Training Week". After giving a detailed introduction into the theory of X-ray technology and microfocus X-ray tubes, we will demonstrate the accurate repair and maintenance of microfocus X-ray systems in practical lessons.

Afterwards the participants will practice the analysis of erratic behavior and perform structured diagnostics in several real-life situations. Finally they are well prepared for the majority of typical service and maintenance cases.

The training week is suitable for beginners as well as for specialists, who are interested in increasing and updating their knowledge of handling high resolution X-ray technology. Every participant receives a personal certificate, documenting the knowledge and practical experience gained.

New JIMA resolution test chart RT RC-04 available

As of now, customers can order the new JIMA resolution test chart RT RC-04 of Japan Inspection Instruments Manufacturers' Association from X-RAY WorX. The new test chart is recommended for validating the maximum resolution of microfocus and nano resolution X-ray systems.

The JIMA resolution test chart RT RC-04 provides 23 test areas with typical T-shape arrangement of black lines and white spaces. Using RT RC-04, resolutions between 0.1 microns (μ m) and 10 microns (μ m) can be verified, which approximately correspond to focal spot sizes between 0.2 μ m und 20 μ m.

The new test chart particularly considers latest requirements of semiconductor industry. It is suited for validating and calibrating nano resolution and microfocus X-ray inspection systems, which are typically applied in this industrial sector.

To guarantee optimal hands-on experience for

every attendee, seats are limited to six per-

sons per training. Therefore we recommend to

reserve a seat for the training week in fall as

17. until 21. March 2014 (fully booked)

• 24. until 28. March 2014 (fully booked)

If you are interested in the detailed agenda or

you like to apply, please contact our service

Send an e-mail to: service@x-ray-worx.com.

We are looking forward to welcome you to our

"Microfocus Training Weeks" in Garbsen!

• 15. until 19. September 2014

soon as possible.

Dates 2014

department.

JIMA resolution test chart RT RC-04

If you are interested in the new JIMA resolution test chart RT RC-04, send an e-mail to our service department: service@x-ray-worx. com. We are pleased to submit a quote to you as soon as possible.

Of course you can still order the JIMA-resolution test charts RT RC-05 and RT RC-02B.

Technical product data sheets

New technical product data sheets provide a good overview of the technical features and characteristics of X-ray tubes from X-RAY WorX. Currently, data sheets for the following product lines are available:

- Transmission tubes: *T*, *THE*, *THE* PLUS, *TC*, and *TCHR*
- Reflection tubes: SE and CT
- Rod anode tubes: RA, RAC, RAC Superfocus
- Dual head tubes: XC

The technical product data sheets are available on request from our sales department.

New partnerships

Cooperating with **AREVA NDE-Solutions France - Intercontrôle**, X-RAY WorX found a very qualified partner for supporting customers in the French market. Intercontrôle has many years of experience in industrial non-destructive X-ray inspection and is familiar with the regulations and conditions of the French market.
Intercontrôle

System integrator **Pony Industry Co.,** Ltd. is a new experienced partner alongside X-RAY WorX. Together both companies will market and support their microfocus X-ray solutions for NDT applications in the Japanese market. Pony Industry

 You can find further information regarding new and existing partnerships on our website:
 Partnerships.

Experience Hanover!

If you are a fancier of exotic plants, but not only then, you should visit the "Berggarten" with its more than 12,000 species in "Hanover Herrenhausen". Several glass houses (Orchid House, Tropical House, Cactus House and Canary Islands House) as well as an extensive outdoor area are presenting impressive plants and parks, inviting visitors to take a walk and to relax. The "Berggarten" also owns an orchid collection of world class, with the largest permanent orchid exhibition in Europe.

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