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**Optimized for 12 bit x-ray imaging**

- Image processing functions like grey level variation (linear and non-linear), contrast and edge enhancement, emboss, noise reduction
- Suitable geometrical measurements in millimeters, inches or pixels
- Grey level profiles
- For Windows

**TECHNICAL DATA**

- **Type**
  - NTB SEZ 15-320
  - NTB SEZ 15-480
  - NTB SEZ 15-640

- **Image size**
  - 480mm x 313mm
  - 480mm x 470mm
  - 480mm x 627mm

- **Resolution**
  - 10 pixels/mm (313µm)

- **Dynamic range**
  - 12 bit A/D conversion

- **Other camera lengths on request**

**Standard X-ray Sources**

- **Type**
  - Bosello Monoblock
  - MCD 100-H3
  - Comet MXR-160/21

- **X-ray voltage**
  - 30kV – 120kV
  - 30kV – 100kV
  - 20kV – 100kV
  - 20kV – 100kV
  - 30kV - 160kV

- **X-ray power**
  - 500W
  - 1000W
  - 1600W

- **X-ray current**
  - 7mA
  - 10mA
  - 30mA

- **Cabinet power input**
  - 2300VA (10A)
  - 3700VA (16A)
  - 4600VA (20A)

- **Focal spot size**
  - EN 12543

- **Inherent filter**
  - 1.5mm glass + 7mm oil + 3mm plastic
  - 1.0mm Be
  - 1.0mm Be

- **Cabinet radiation leakage**
  - 1µSv/h
  - 2µSv/h

**Scope of supply:**

- Cabinet for digital x-ray inspection, fully equipped and ready to use
- Completely closed and shielded x-ray cabinet
- Manipulation system for object movement
- Digital x-ray camera system (resolution camera with equipment)
- X-ray inspection software
- X-ray system (x-ray source, generator and equipment)
- Workstation (PC with monitor)

**Options**

- Stereoscopic 3D
- Expandable object table for up to 30kg object weight

**Design and quality:**

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**CONTACT DESIGN**

- NTB XRAY GmbH
  - Schneemannstrasse 2
  - D-49356 Diepholz
  - Germany

- Phone: +49 5441 99 26 11
- Fax: +49 5441 99 26 16
- e-mail: ntb@ntbxray.eu
- Internet: www.ntbxray.eu

**5 years guarantee against radiation damages**

**THE TURNKEY SOLUTION**

... for highest demands at minimum costs

**LOW OPERATING COSTS**

- Direct digital image acquisition
- No film, no chemicals

**SAFE**

- Radiation leakage lower than the strictest safety standards

**EASY TO OPERATE**

- Intuitive software fully controls the system

**EXCELLENT IMAGE QUALITY**

- Up to 42 Megapixel
- 12 pixels/mm, 12 bit A/D conversion
The DXC 3000 has been designed with a strong emphasis on safety:

**Radiation Safety**

The x-ray cabinet in sandwich-design (steel-lead-steel) prevents a leakage of radiation. The local dose rate directly on the cabinet surface is far below 1 µS/h. For comparison: The typical dose rate for passengers in an airplane at an altitude of 33,000 feet is about 5 µS/h.

**Door Interlocks**

The DXC 3000 is equipped with two redundant door interlocks. The interlocks prohibit turning on the x-ray radiation while the door is open. Also, they immediately shut off the radiation when the door is opened during x-ray inspection.

**Radiation Lamps**

Two clearly visible “x-ray on” warning lights are embedded in the columns of the DXC 3000. The warning lights are made with LEDs, which have a much higher failure safety than usual incandescent light bulbs. In addition, the functionality of the warning lights is monitored by optical sensors.

**Key Switch**

The key switch on the control panel prevents the DXC 3000 from being used by unauthorized people.

The DXC 3000 is highly customizable in regards to the customer’s requirements. For instance, the following options are available:

- Various x-ray sources
- Linear x-ray cameras in various lengths
- A second x-ray camera for stereoscopic 3D images
- Object table with drawer for easier loading of the cabinet

If requested, the entire construction design of the cabinet can be changed.

With stereoscopic 3D imaging, the operator sees the test item as a transparent, three-dimensional object with spatial depth.

The 3D images are taken in full resolution without expenditure of time, and they considerably simplify the evaluation:

- Defects become more prominent, or are even only perceptible in 3D.
- 3D images of complex structures are significantly easier to understand.
- Shape and position of shrinkages, courses of cracks, position of internal components, etc. become evident.

The 3D images shown here, viewable with red-cyan glasses, can only provide a first impression. Real systems are equipped with modern 3D monitors, whose image and quality are by far higher.

3D X-ray image of a lamp

Simply close one eye to see the difference between 2D and 3D.
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DIGITAL X-RAY CABINET DXC 3000 WITH CMOS DETECTOR FOR ULTIMATE IMAGE QUALITY

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