

750 kV microfocus X-ray source



Ultimate power with unprecedented accuracy

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WORLD'S FIRST 750 KV MICROFOCUS X-RAY SOURCE

for NDT inspection and measurement of high density parts

Nikon Metrology X-ray sources are at the heart of our technology and have been designed and manufactured in-house. The 25 years of expertise allows Nikon Metrology to develop complete and innovative solutions to the market and application demand. To non-destructively inspect or measure large or dense objects such as engine castings, turbine blades, large composite parts with unprecedented accuracy, Nikon Metrology today offers a 750kV X-ray source with micron level spot size.

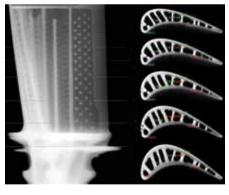
The samples can be positioned close to the X-ray source, making maximum use of high magnification to reveal the finest details. A high speed rotating target allows the source to be operated at maximum power and fine spot size without target damage. By integrating the high voltage generator into the vacuum chamber, high voltage cables and their associated problems are eliminated.

Specifications	
Source type	750 kV microfocus with integrated generator
Operating voltage	150 to 750 kV
Operating power	0 to 750 W
Operating current	0 to 1.5 mA
Duty cycle	Continuous
Spot size	30 μm at 750 kV, 70 W 190 μm at 750 kV and 750 W
Focal spot to subject distance	minimum 38 mm
Dimensions (WxLxH)	800 mm x 1600 mm x 800 mm
Material penetration examples	Approx. 160 mm aluminum (AL) Approx. 60 mm steel (FE)

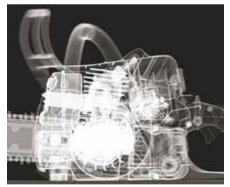
APPLICATIONS

NDT and dimensional inspection of:

- Small and large turbine blades
- Cast iron and steel components used in high-temperature and/or high-pressure applications (e.g. turbo chargers, compressors, etc)
- Carbon Fibre Reinforced Polymer (CFRP) components such as helicopter or jet engine fan blades
- Automotive and aluminum castings
- High density materials (Gold, Tungsten, etc)









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