

Automatic Turbine Blade Inspection

XC01-1100-450

Doc: Product Info Sheet XC01-1100-450 Rev00



THE X-RAY SOLUTION



by Christoph Grohmann

Automatic Turbine Blade Inspection

The **XC01-1100-450** is especially designed for the inspection of aircraft engine parts like turbine blades. Therefore, the system is equipped with a 450 kV X-ray source and a digital flat panel with pixel size of 100 micron.

The carrier concept with a diameter of 1100 mm allows single part loading as well as multiple loading at the time - **THIS XC01-1100-450 HANDLES ALL.**

Parts Parameters

- ✓ Casting part size up to 1000 mm
- ✓ Part height max. 350 mm
- ✓ Part weight max. 120 kg
- ✓ Max. material thickness 120 mm depending on type of material

XC01-1100-450 is designed for fully automated and inline processed inspection of aircraft engine parts. The system reaches its high level of functionality while being compact with a small footprint. The combined features make **XC01-1100-450** a unique inspection system.



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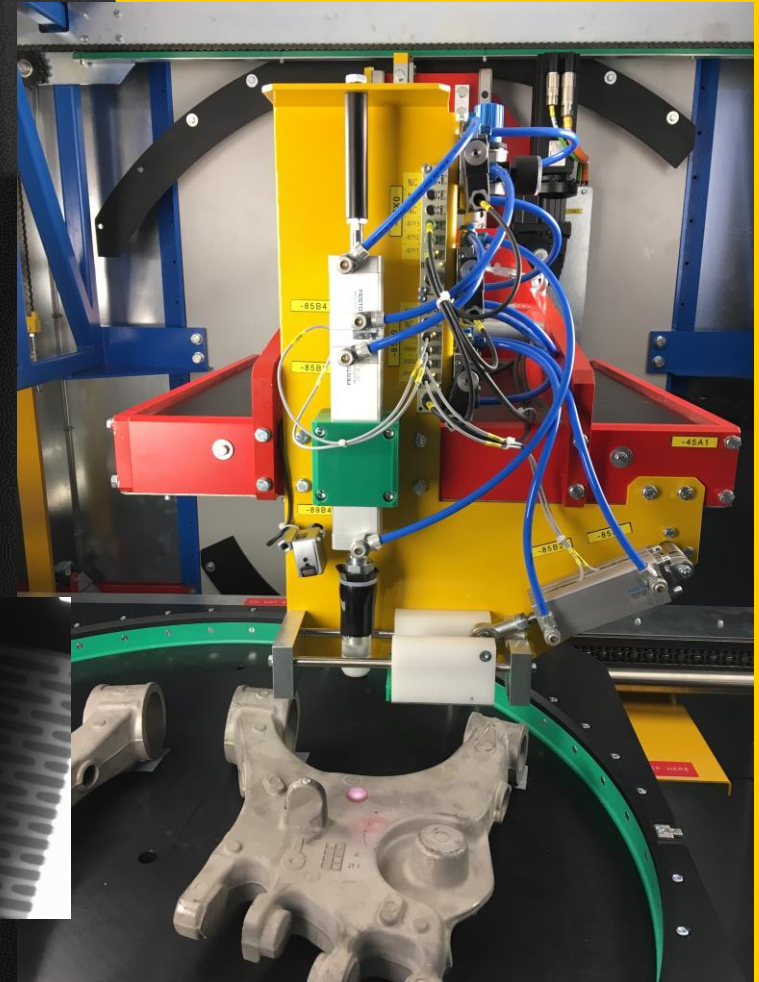
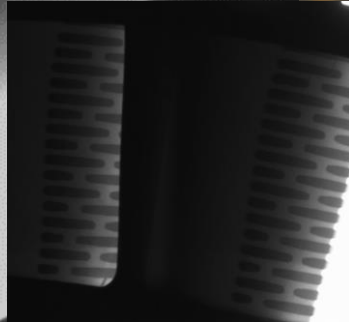
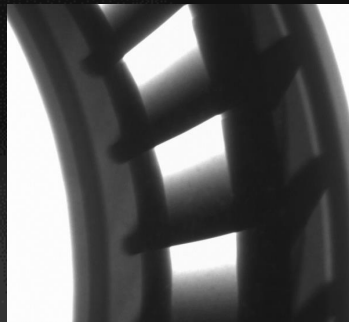
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Thanks to its C-Frame technology, **XC01-1100-450** reaches all necessary inspection areas without any dead-zones.

High performed fully controlled servo axes makes it one of the fastest inline casting inspection systems.

Based on integrated automatic type recognition, **XC01-1100-450** can be used for different casting parts without any delays.

When production changes to a different product, the product specific inlet plate can be replaced within extremely short time.



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ADR Software

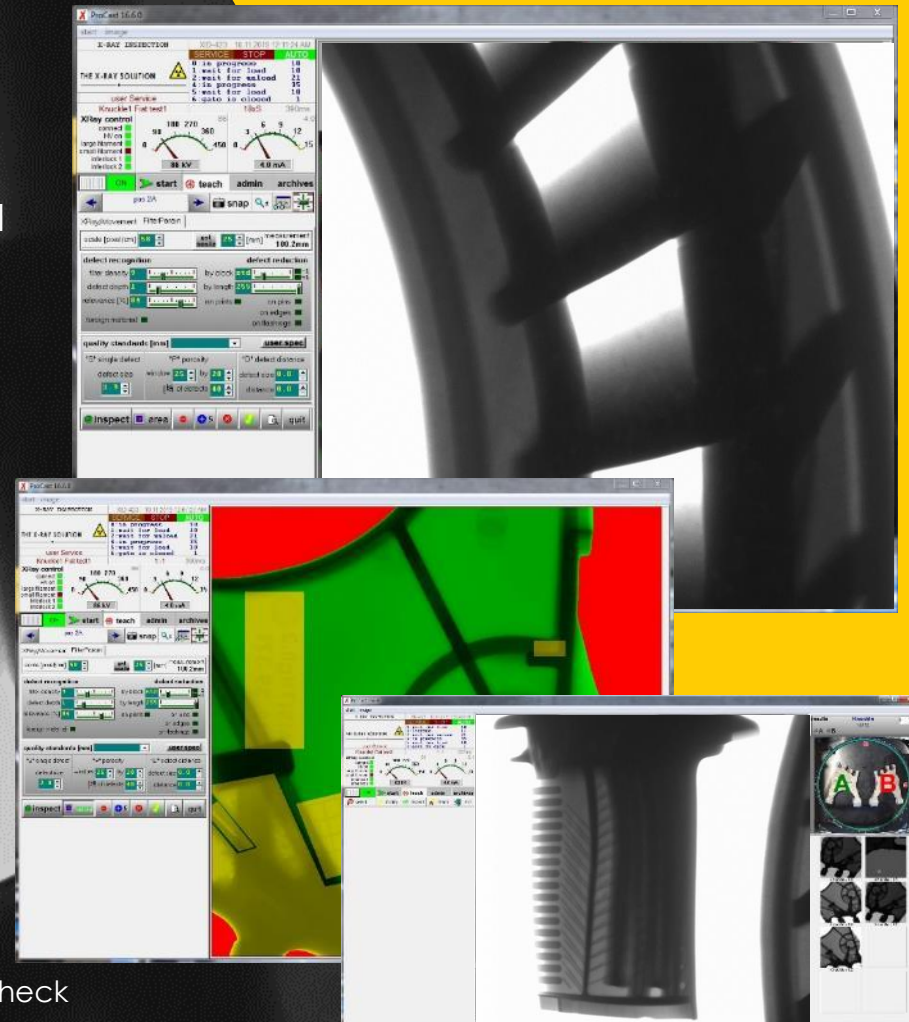
The user interface of the ADR software is structured very straightforward, and a lot of visual tools support the user setting of a specific inspection program within short time and in an intuitive and easy to learn fashion.

The human machine interface is designed according to the rules of ergonomic workplaces and is to be used for regular operation as well as teach-in process.

The system is equipped with 4 cabin cams to give excellent views during teach-in process and regular operation.

Special Features

- ✓ Manual, Semi-Auto and Automatic Mode
- ✓ Automatic Image Quality Check
- ✓ Automatic Positioning Correction
- ✓ Zooming
- ✓ ASTM Reference



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General Features

- ✓ Fully automated Inline System
- ✓ Brilliant Image Quality
- ✓ 450 kV X-ray System
- ✓ Digital Flat Panel, 400x400 mm, 100μ
- ✓ C-frame with tilting +/- 45°
- ✓ Automatic Type Recognition
- ✓ Automatic Defect Recognition - ADR
- ✓ Throughput of up to 4000 parts/day

Special Features included

- ✓ Surveillance Cams and Tele-maintenance
- ✓ Re-check and Sampling
- ✓ Auto Image Quality Check for Sensitivity, Resolution and Step-Wedge
- ✓ Automatic Shutter System
- ✓ Statistical Database
- ✓ Ergonomic Operator Seat
- ✓ Vacuum Cleaner

Technical Data

- ✓ Dimension: 5475 x 3809 x 2413 mm (LWH)
- ✓ Weight: 20.7 metrical tons
- ✓ 3P~/N/PE, 400V, 50/60Hz, 20A

Options

- Automatic Mold Recognition
- Casting Deck Alarming System
- NOK Ink Marking
- Needle Printing Unit
- DMC Reader
- Robot Handling
- OK / NOK Separation



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Automatic Turbine Blade Inspection

Our Commitment

- ✓ Highest Level of German Machine Design and Quality
- ✓ World-class Components like Siemens PLC and PC, SEW
- ✓ System Concept: immediate ready to use
- ✓ Industry 4.0
- ✓ TUV Approval Certificate
- ✓ 2 Years Guaranty
- ✓ Service Contract with 24/7 Support
- ✓ Sustainability



ASK FOR DETAILED PERFORMANCE LIST
XC01-1100-450 AND QUOTE

FOR MORE INFORMATION, PLEASE CONTACT
contact@thexraysolution.de



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Contact Addresses



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