

X-Ray Applications for International Security

THE X-RAY SOLUTION



by Christoph Grohmann

History

Since 1996, the name Christoph Grohmann has been synonymous with first-class X-ray systems and customized solutions that are used in a wide variety of industries to ensure safety worldwide.

With the highest quality standards and technical perfection from Germany, we develop systems that are characterized by sophisticated technology and exceptional reliability.

Thanks to our many years of expertise in industrial X-ray technology and automation processes, we are now one of the leading technology providers in this segment.

The X-ray inspection systems from THE X-RAY SOLUTION are successfully used by well-known companies such as Porsche, VW, Daimler, Chrysler, Ford, Tesla, Audi, BMW, Fiat, Stihl, Toyota, Nissan, Honda, PSA, Renault, Kia, Hyundai and many more – especially for the inspection of safety-relevant components using ADR (Automatic Defect Detection).

Our portfolio includes solutions from manual to fully automatic systems as well as applications in the micro to giga range, especially for the automotive, aerospace, and electronics industries.

With this presentation, we present solutions for international security.

THE X-RAY SOLUTION



by Christoph Grohmann

Production



Non-destructive testing with machines from Germany

- In-house software development
- No programming abroad
- Controlled supply chains
- Made in Germany
- Solid workmanship and seamless Quality Inspection
- 24-hour service



THE X-RAY SOLUTION

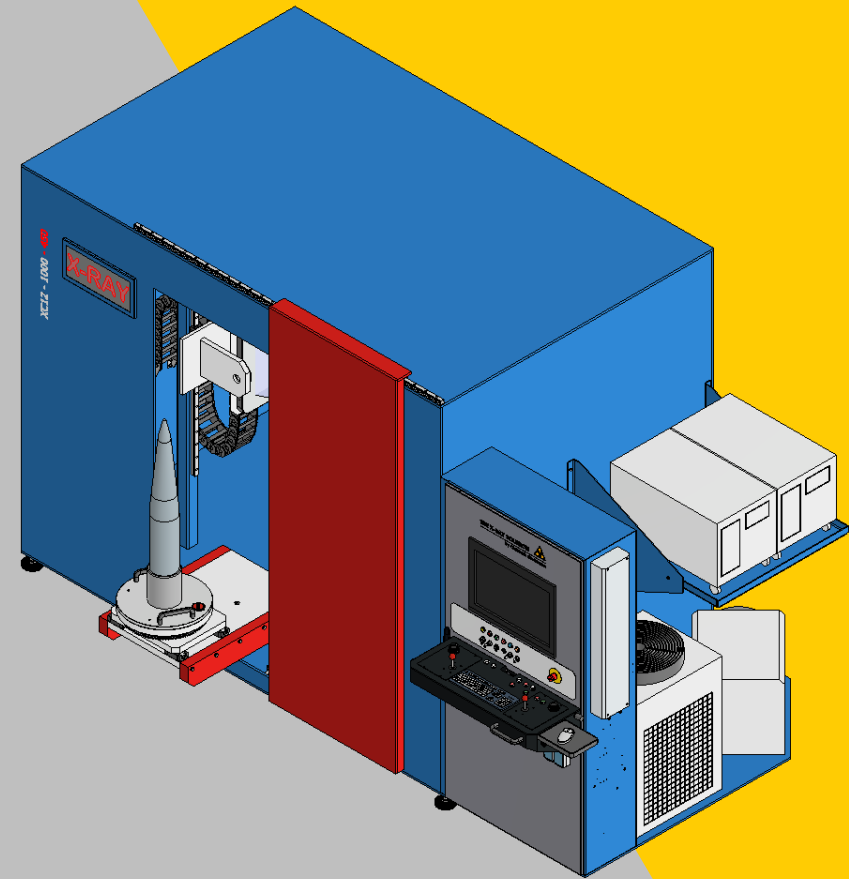


by Christoph Grohmann

Application: Ammunition-Control

XC12-1000-450-A for ammunition offers the following features:

- Non-destructive X-ray testing
- Wide range of ammunition sizes
- Single and multiple loading
- 2D and 3D CT
- Manual inspection as well as semi- and fully automatic
- Inspection of the housings as well as all internal mechanical and electronic assemblies
- Ideal for inventory verification and serial production
- X-ray energies from 160 kV to 450 kV
- Spatial resolution up to 0.1 mm



XC12-1000-450-A for ammunition is designed for fully automatic and manual inspection of ammunition. The system achieves its very high level of functionality with simultaneous compactness and small space requirements. The combination of its features makes **XC12-1000-450-A for ammunition** a unique inspection system that is characterized by robustness and reliability.

THE X-RAY SOLUTION

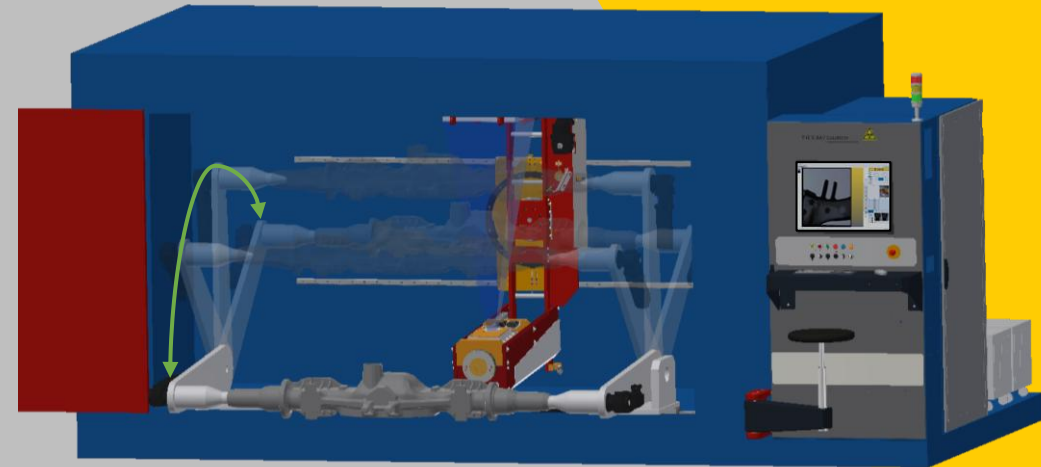


by Christoph Grohmann

Application: Axle Control

XC-AXLE-450 XC-AXLE-450 for axles offers the following features:

- Non-destructive X-ray testing
- 2D and 3D-CT
- Manual, semi-automatic and fully automatic inspection
- Inspection of axles and distributor housings
- Other large-format components can also be tested
- Flexibility thanks to quick-change adapters
- Possible use for blanks and machined components
- Ideal for single-piece inspection of components as well as series testing in production
- X-ray energies from 160 kV to 450 kV
- Spatial resolution up to 0.1 mm

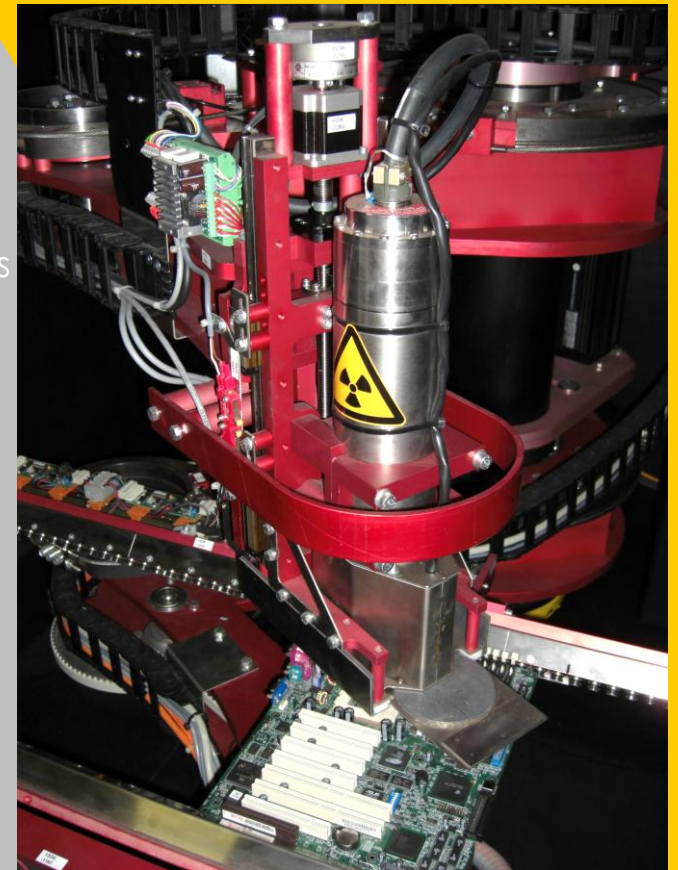
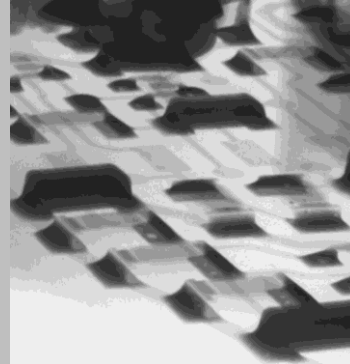
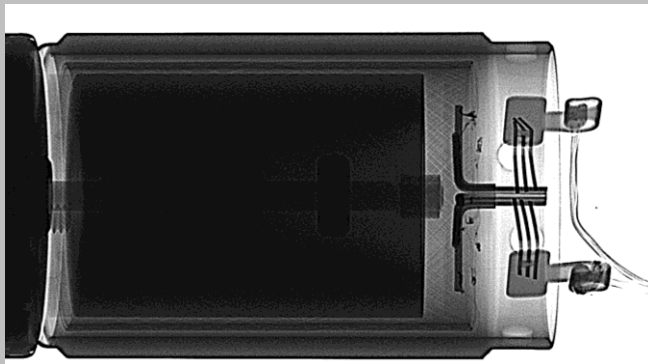
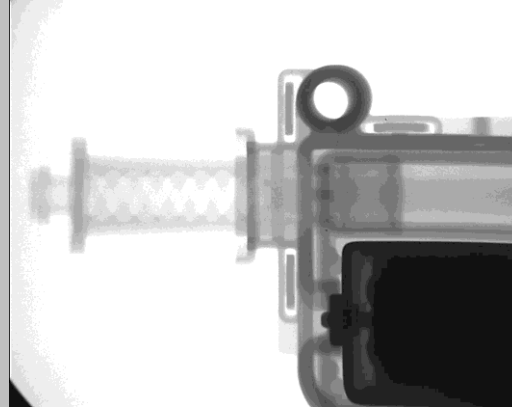
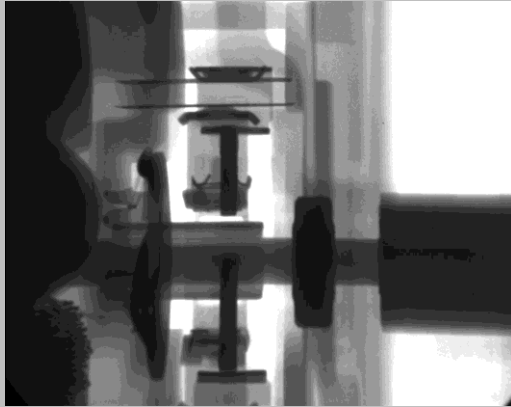


XC-AXLE-450 for axles is designed for fully automatic and manual inspection of axles. The system achieves its very high level of functionality with simultaneous compactness and small space requirements. The combination of its features makes **XC-AXLE-450 for axles** a unique inspection system that is characterized by robustness and reliability.

Application: Component-Control

Detailed component inspection is indispensable for the functional reliability of complex assemblies.

Several X-ray systems are available for this purpose, from micro-focus to mini-focus with X-ray energies from 130 kV to 450 kV.



THE X-RAY SOLUTION

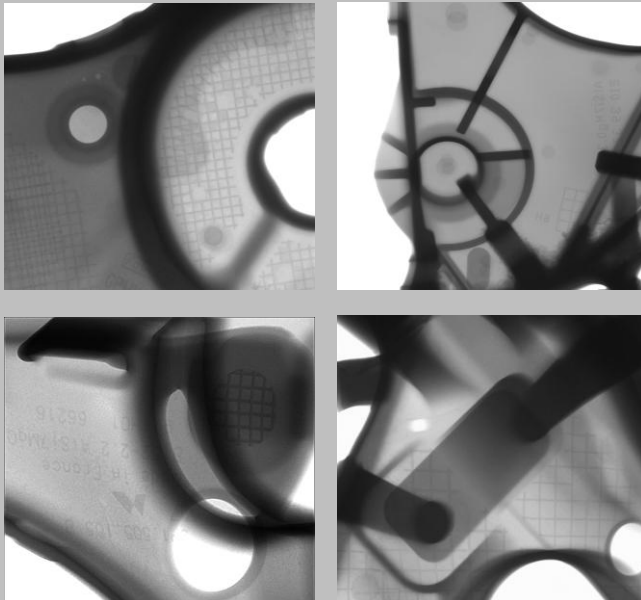


by Christoph Grohmann

Application: Casting-Control

Thanks to its new C-frame technology, the XC10-1100-VL covers all necessary inspection areas without restrictions. Powerful servo axes make it one of the fastest in-line casting inspection systems.

The integrated automatic type recognition guarantees the X-ray of a wide variety of components without delay. This system can be used to inspect cast blanks as well as components that have already been machined.



THE X-RAY SOLUTION



by Christoph Grohmann

Automatic Component Inspection

ADR Software

The user interface of the ADR software is very simple and clearly structured. Many visual tools help users to create a specific inspection program intuitively and in a short time, while easily learning how to use the system.

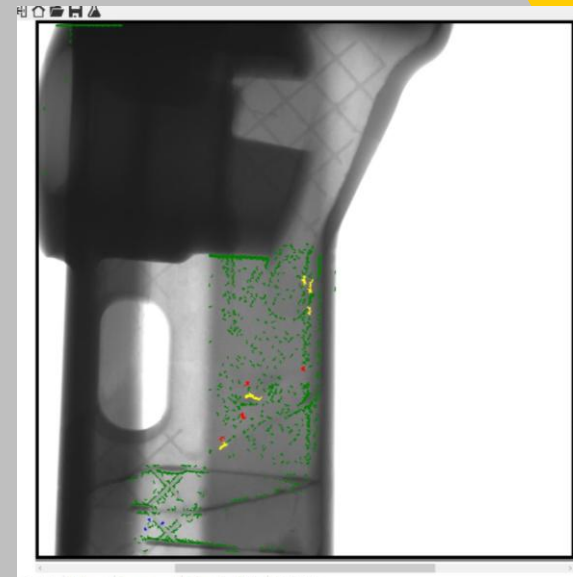
The user interface is designed according to the rules of ergonomic workplaces.

It is used for both regular operations and the teach-in process.

Especially during the teach-in, the operator needs a good view of the machine and the parts in order to be able to observe their movement in the specific positions.

Special Features

- ✓ Manual, semi-automatic and automatic mode
- ✓ Automatic image quality control
- ✓ Automatic position control
- ✓ Zoom



THE X-RAY SOLUTION

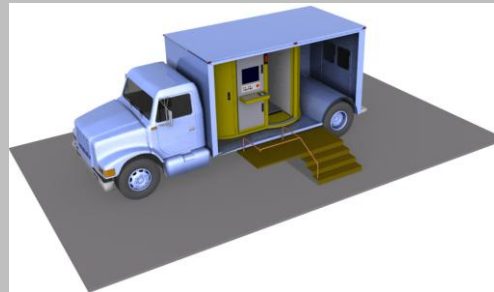
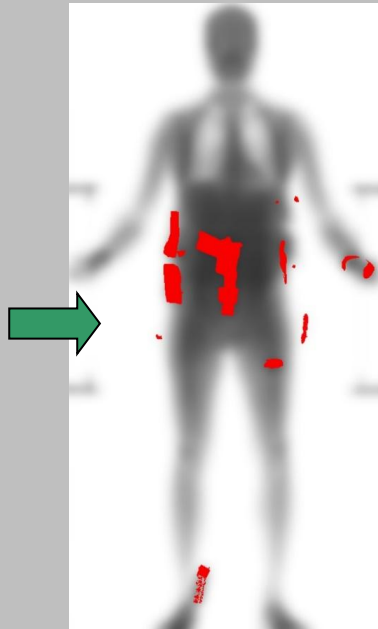


by Christoph Grohmann

Application: Personal Access Control

Multiple applications are possible with the ArcScan BC:

- Single device for person scan
- Usage as a security gate
- Mobile version installed in vehicle
- Optionally with integrated baggage scan
- Optionally with biometric identification



THE X-RAY SOLUTION

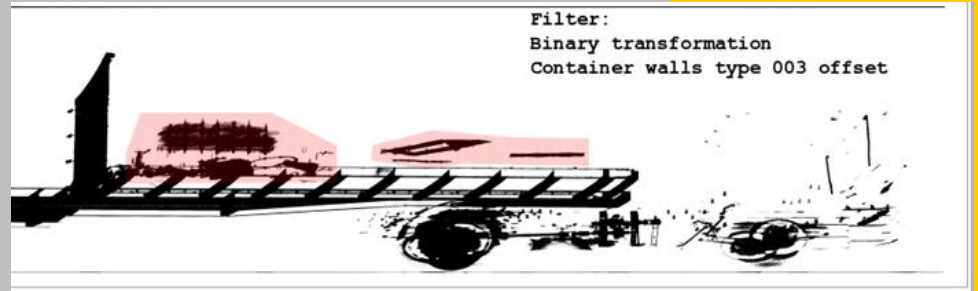
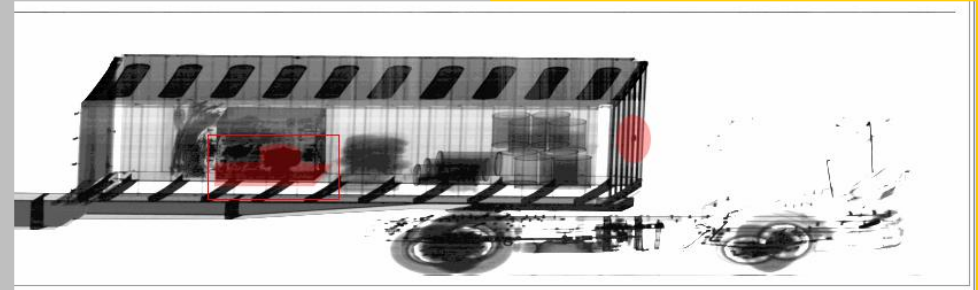


by Christoph Grohmann

Application: Vehicle-Inspection

Whether stationary or mobile, with the ArcScan TC any cargo contents can be recognized immediately.

- Penetration of up to 400 mm steel
- Spatial resolution of 1mm
- X-ray energies up to 12 MeV
- Optionally with explosive detection



THE X-RAY SOLUTION



by Christoph Grohmann

X-ray Applications

Our Promise

- ✓ Highest level of German engineering and quality
- ✓ World-class components such as Siemens PLC and PC, SEW
- ✓ System concept: Immediately usable
- ✓ Industry 4.0
- ✓ TÜV certified
- ✓ 2-year warranty
- ✓ Service contracts with 24/7 support
- ✓ Sustainability

**Ask for a detailed
Service catalogue and offer for your application**

For more information, please contact:
contact@thexraysolution.de



THE X-RAY SOLUTION



by Christoph Grohmann

Contact

THE X-RAY SOLUTION GmbH & Co. KG

Mr. Christoph Grohmann, CEO
contact@thexraysolution.de
+49 160 97300992

Mr. Thomas Nüsser, Executive Assistant
t.nuesser@thexraysolution.de
+49 155 66874470

Ms. Christiane Waller, Sales & Marketing
sales@thexraysolution.de
+49 176 46591888

Switchboard +49 2452 989 3311

Borsigstrasse 60
52525 Heinsberg
Deutschland

Visit our website



Disclaimer:

All names and logos in this presentation are trademarks of THE X-RAY SOLUTION GmbH & Co. KG, Germany.
All rights reserved © von THE X-RAY SOLUTION GmbH & Co. KG, Germany 2026