



XRH *Gantry* Roof mounted inspection system



VisiConsult
X-ray Systems & Solutions

Designed for inspection of complex parts

Seven CNC programmable axes

Customizable design and layout

Available with up to 450kV for big parts

Installed into cabinet or X-ray bunker

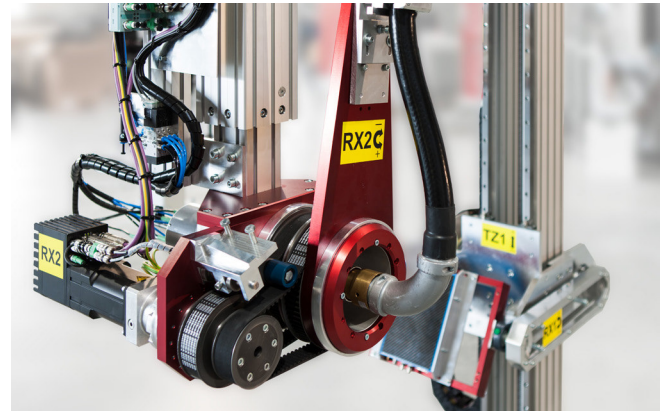


VisiConsult X-ray Systems & Solutions GmbH – Innovative solutions for X-ray technology

XRHGantry – High inspection flexibility

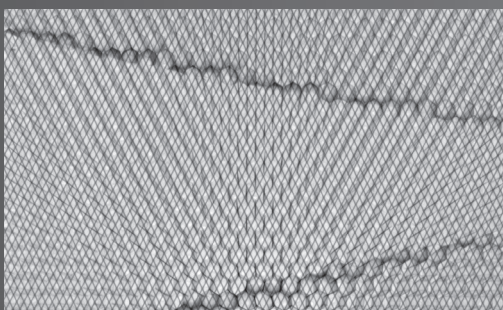
The inspection of heavy, big or oddly shaped parts demands for a versatile and scalable system. The XRHGantry is a roof-mounted turnkey solution with seven programmable axes. Energies up to 450kV and a broad detector choice make this system the answer to many different inspection problems. Seven independently controlled axes let the XRHGantry fulfill even the most advanced requirements. A highlight is the tilting feature, that achieves an elliptical view of double wall welds, and the controllable magnification, that allows to dynamically zoom into a region of interest.

The ultra-precise CNC motors allow to automate common inspection procedures can be automated into sequences. The coupled movement ensures that the detector and tube are always perpendicular to avoid distortion. Heavy parts can be moved into the inspection room on rails, lifting carts or even fork lifters. The dimensions of the XRHGantry can be modified to fit the existing inspection room. If there is no inspection room, VisiConsult can also deliver the system inside a foldable X-ray cabinet for increased mobility.



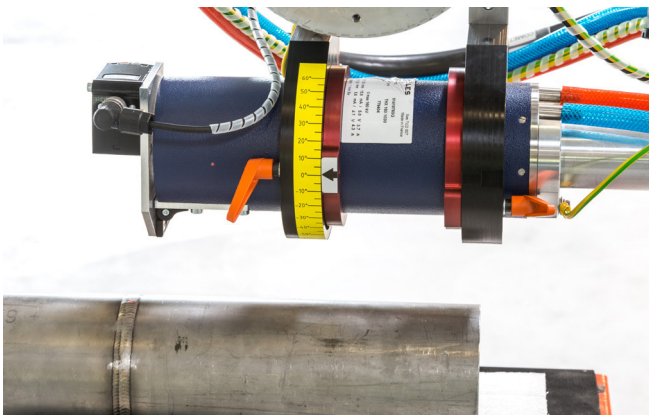
Modular design and high quality

To provide the best inspection results VisiConsult supplies a broad variety of X-ray components. Tube and detector can be freely combined depending on customer preferences or application requirements, which are determined through complex case studies. For a maximum safety the cabinet is certified by the German TÜV and CE to ensure no X-ray leakage and fulfillment of all related standards. The robust industrial design, developed and produced in Germany, guarantees a long lifetime and low downtimes even in demanding conditions. The comprehensive control panel allows ergonomic and intuitive operation for maximum efficiency.



To find even the tiniest failures in test-parts our renowned image enhancement system *Xplus* has a broad portfolio of enhancement features to deliver sharp and noise-reduced images.

A combination of real-time noise reduction (*MotionDetect*) and image enhancement (*LiveFilters*) highlights defects that were not visible for the human eye before. This results in brilliant images during live inspection, while the high dynamic range allows to look into different material thickness at the same time.



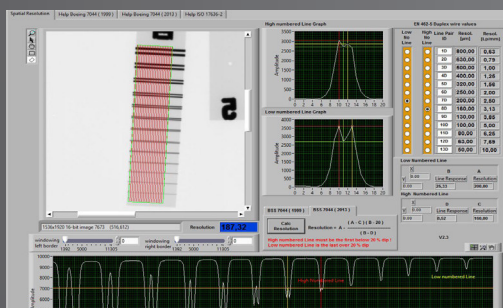
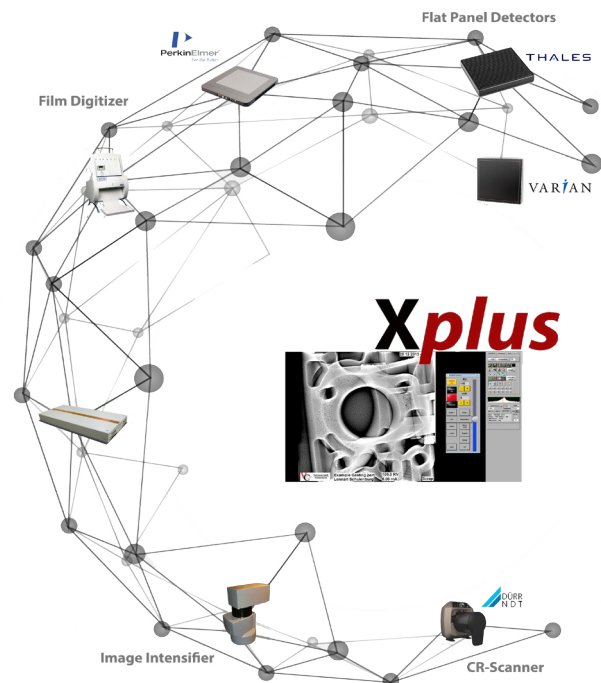
XRHGantry^{CR} – Inspection with IP-plates or film

Some applications, especially in the aerospace sector, still demand for inspection with CR or conventional film. Typical reasons are standard compliance, company policies or insufficient space for a Flat Panel Detector at the objects. The XRHGantry^{CR} is a variation of the normal Gantry system that increases the inspection efficiency with film or IP-plates by a big amount. As the CR-scanner or film-digitizer is directly embedded to the *Xplus* image enhancement system the results can be easily imported and analyzed in the known environment. A highlight of the system is the manipulator with an exceptionally long vertical axis that can be easily controlled through a handheld remote. For an easy positioning the system offers a laser centering device, a measurement scale and optional part holders.

Xplus – Discover the Invisible

The core of the system is our in-house developed image enhancement system *Xplus* that sets new industry standards. Constant development and 25 years of experience combined with a maximum flexibility towards special process requirements help our customers to be a step ahead! Advanced features like overlay tools, macro generators, filter builders, live image enhancement, report toolkits, DICONDE integration, measurement tools and many more make the *Xplus* the most sophisticated software on the market.

It fulfills all major international industry standards like ASTM, EN17636-2, Boeing 7042/44, NADCAP and many more. VisiConsult is a highly agile and flexible solution provider. Therefore, special software or even hardware requirements can be easily implemented on customer demand!



The XRHGantry has dozens of reference installation in the aerospace industry. Complying to NADCAP and Boeing 7044/42 the *Xplus* offers advanced features like automatic Bad-Pixel correction, self-calibration, system performance tests according to ASTM 2337 and many more.

The NADCAP wizard assists during and before the audit according to AC 7114/6. All checklist and performance tests are embedded and results are exported ready for submission. Certification of digital equipment was never easier!

The XRHGantry is a highly versatile system flexible for inspection of big or complex parts.

XRHGantry - technical specification

	XRHGantry	XRHGantry ^{CR}
Max. part size (mm - Ø x height)	4000 x 1500	3800 x 1900
System size (mm L x W x H)	5420 x 4605 x 3500	5900 x 3605 x 3500
System weight (kg)	5200	4800
Console weight (kg)	175	175
Console size (mm L x W x H)	1200 x 950 x 1600	1200 x 950 x 1600
Energy (kV)	Up to 450 kV	Up to 450 kV
Horizontal motion TX (mm)	4000	3800
Magnification TY (mm)	2500	2300
Focus Detector Distance FDD (mm)	500 - 3000	100 - 2000
Focus Object Distance FOD (mm)	150 - 2800	100 - 2000
Vertical motion TZ (mm)	1600	2000
Tilt RX (deg.)	+ / - 30°	+ 60°/ - 90° manuell
Part rotation RZ (deg.)	+/- 10°	+/- 10°

Dimensions and electrical values can vary depending on X-ray equipment. Cabinet in compliance to German and international radiation law. Dimensions can be customized in case of special requirements, especially in terms of part size.



Your VisiConsult Sales Team!

Connection values: 3N PE, 400/230 V, 50/60 Hz, 16 kW
Ambient conditions: Ambient temperature +10° to +35°C

- Designed for the inspection of big or complex parts
- Automates inspection sequences and CNC axes
- Proven through dozens of reference systems
- Dimensions and layout can be customized on demand
- Brilliant images with high dynamic range
- Developed for the aerospace industry



VisiConsult is a family owned company located in Northern Germany and is a specialist for customized and standard X-ray systems. All our products are developed and produced locally and delivered as turn-key solutions. This leads to cutting edge performance and a high flexibility. Our goal is to solve our customers' problems with tailored systems and guarantee a premium post-sales service.

More than 25 years of expertise in Security and classic Non Destructive Testing (NDT) markets like aerospace, automotive and many more lead to an unmatched experience in X-ray technology and result in a superior global service network.