XRH Gantry
Roof mounted inspection system

- 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.

**XRHGantry – 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 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-digizer 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 allows 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.

**XRPlus – 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!
XRH Gantry – High inspection flexibility

The inspection of heavy, big or oddly shaped parts demands for a versatile and scalable system. The XRH Gantry 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 XRH Gantry 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.

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XRH Gantry has dozens of reference installations in the aerospace industry. Complying to NADCAP and Boeing 7042/44 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**

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

- 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 turnkey 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.

**VisiConsult Sales Team!**

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