X-ray inspection for liquid and pasty products

- Detects high density materials like metal, ceramic, stone or plastic
- Easy operation with autocalibration and clearly arranged functions on 17" touchscreen
- XIA software for instant analysis and detection with high accuracy and reliability
- Easy to integrate into common pipeline systems from 1" – 6"

- Real time detection with coloured contamination analysis
- Masking functions
- Auto-storing of inspection data with time and date stamp
- User-friendly menus for easy operation
- USB and Ethernet
- Three different rejection valves for optimal adaptation to the product
- Easy maintenance and cleaning
- Built-in remote maintenance
- 24 hours non-stop operation
- TÜV-approved: reliable german safety standard (optional TÜV certificate)
**FUNCTION:**

The XD08-H1-PIPE is designed for x-ray inspection of liquid and pasty products in pressure delivery pipelines. Undesirable contaminants such as metal, stone, ceramic, glass or plastic with high density can be detected in the product.

The hygienic design allows easy cleaning and maintenance without any additional tools. Thus, the XD08-H1-PIPE is especially suitable for all industries that have to ensure effective hygienic standard.

**SCOPE OF DELIVERY:**

- Xray Scanner with image processing software XIA
- Complete protection against radiation and PILZ safety circuit
- Certified test cards with soda lime glass, ceramics, steel spheres in various diameters

**ACCESSORIES & EXTRAS:**

- Separate conveyor with automatic reject
- Radiation counter
- 21 CFR Part 11 compliance
- BRC compliance kit

**APPLICATION:**

X-ray inspection of pastes and liquids in pressurized pipelines, lines
- soup, sauces, ketchup,
- toothpaste or fluids,
- etc.

**INDUSTRIES:**

- Food
- Pharma
- Cosmetics
- etc.
Specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td>XD08-H1-PIPE (former XIN80)</td>
</tr>
<tr>
<td><strong>X-ray source</strong></td>
<td>Single beam x-ray generator with max. 80kV (480W), variable in voltage + current</td>
</tr>
<tr>
<td><strong>Radiation leakage</strong></td>
<td>3 µSv/h or less at 10 cm outside cabinet surfaces and using all safety devices</td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td>Special pipe for products, quickly detachable, magnetic safety switches at cabinet doors and tunnel hatches, emergency stop push button, emergency stop in/out interfaces to safety circuits of production line, X-ray off key switch, PILZ safety circuit</td>
</tr>
<tr>
<td><strong>X-ray detector</strong></td>
<td>Low noise 408 mm line scan CCD, diode pitch 0.8 mm or 0.4mm (optional)</td>
</tr>
<tr>
<td><strong>X-ray view</strong></td>
<td>1x top down</td>
</tr>
<tr>
<td><strong>Cooling</strong></td>
<td>Highly efficient, silent DC filter fans</td>
</tr>
<tr>
<td><strong>Housing finish</strong></td>
<td>Stainless steel grade AISI 304 / DIN EN 1.4301 (X5CrNi18-10)</td>
</tr>
<tr>
<td><strong>Enclosure rating</strong></td>
<td>IP54 (according to IEC 60529), incl. touch panel and fans</td>
</tr>
<tr>
<td><strong>Available reject method</strong></td>
<td>Butterfly/shim valve, arc valve or piston valve</td>
</tr>
<tr>
<td><strong>Product memory</strong></td>
<td>255 different product set-ups</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>17&quot; Color-TFT capacitive touchscreen</td>
</tr>
<tr>
<td><strong>Inspection features</strong></td>
<td>Autocalibration, auto adaption to density distribution, density, hard contrast, soft contrast, masking technology, SuperContrast, SizeFilter, AutoEdge masking, images AutoSave/Load, multi segment inspection, metal can and foil inspection, fill quantity, generator energy by product, password protection</td>
</tr>
<tr>
<td><strong>In-/Outputs</strong></td>
<td>Programmable outputs (contamination, ready, Emergency OFF)</td>
</tr>
<tr>
<td></td>
<td>Programmable inputs (Emergency OFF, wake up, optional control signals)</td>
</tr>
<tr>
<td><strong>Data transfer</strong></td>
<td>Ethernet for remote support via internet, USB for external keyboard/ mouse/ memory stick</td>
</tr>
<tr>
<td><strong>Max. weight</strong></td>
<td>0.5 t</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>1ph, 230 V AC +/- 10%, 50/60 Hz, full operation max. 0.5 kW</td>
</tr>
<tr>
<td><strong>Compressed air supply</strong></td>
<td>Without rejection system 0 MPa (0 bar/0 psi)</td>
</tr>
<tr>
<td></td>
<td>With rejection system 0.4 MPa (4 bar/58 psi)</td>
</tr>
<tr>
<td><strong>Environmental conditions</strong></td>
<td>0°C to +30°C / 32°F to 86°F, with relative humidity max 90%, non-condensing Option: additional external cooling devices to extend the temperature range</td>
</tr>
<tr>
<td><strong>Compliance</strong></td>
<td>CE, compliant to German x-ray regulations, specific adaptation for other countries</td>
</tr>
</tbody>
</table>

All information is based on standard devices. There possibly will be differences depending on the application. Changes to be excepted.
Rejects:

Three different valve types, optimally matched to the respective product, guarantee reliable discharge of metallic contaminants. All valves can be CIP cleaned.

- for liquids and slightly pasty products
- very stable
- pre-opening on ejection side prevents recoil into pipeline
- low cost version
- for pressure up to 16 bar

- for viscous, pasty products
- for liquids with solids in it
- for pressure up to 40 bar
- CIP-cleanable and free from dead spaces
- suitable for cleaning with a pig
- for pressure up to 25 bar

- for tough pastes like sausage meat
- internal piston lowers into the product flow and "punches" contaminated product parts out of the product flow
- for pressure up to 25 bar

The CASSEL quality promise:

As a premier manufacturer, CASSEL is committed to the highest quality standards. For more than 25 years, our goal has been to ensure the uncompromising quality of your products. We supply customers worldwide in various industries, including food, plastics, pharmaceuticals, textiles, lumber and mining.

Contact us:

CASSEL Messtechnik GmbH
In der Dehne 10
37127 Dransfeld
phone.: +49 (0)5502 911 50
fax: +49 (0)5502 911 532
info@cassel-inspection.com
XRAY SHARK® XD08-H1-PIPE
X-ray inspection für for liquid and pasty products