

3DX-RAY



MDXi

- X-ray inspection
- Image analysis
- Quality control

Industrial cabinet x-ray system

MDXi is a high resolution turnkey x-ray inspection system suitable for stand-alone use or production line integration.

High quality data for quality assurance and process control.

- Automated analysis to provide real-time pass / fail decisions
- High quality data for export to QC/ SCADA/SPC systems
- Integration with factory systems

The MDXi is available as a stand-alone unit suitable for batch or pilot plant processing and laboratory testing.

It can also be integrated into a production line for 100% inspection at full production speeds.

The MDXi offers multiple view capability and is configured to provide optimum resolution for your application.

MDXi systems are suitable for products up to 400mm x 430mm (diameter x height).

MDXi offers the capability to detect, measure and analyse features hidden from view to confirm the quality, integrity and safety of your product.

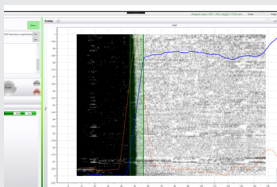
Ideal for use in batch or pilot plant processing, laboratory testing and production lines.

Detect, Measure, Analyse

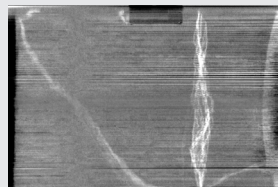
- Correct alignment
- Correct size
- Defects
- Contamination
- Coatings
- Presence / absence

Features

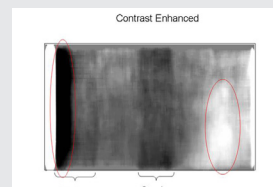
- Automated analysis to provide real-time pass / fail decisions
- High quality data for export to QC/ SCADA/SPC systems
- Integration with factory systems
- 24/7 support available



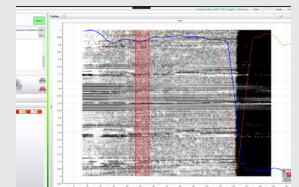
Part profile with limits



Showing cracks in component

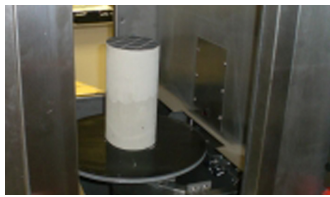


Highlighting coating overlap and void

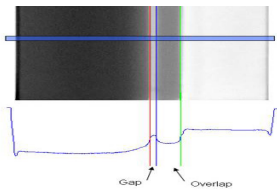


A failed part with automatic notification

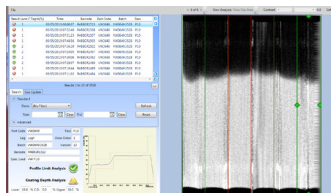
MDXi



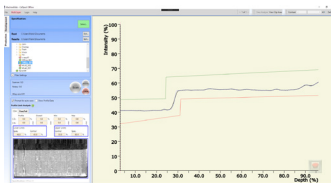
Sample for x-ray



Analysis of x-ray image



High quality data output for process control



Part profile with boundary conditions



MDXi

Technical Specification

MDXi systems are configured to the specific customer application and requirements. The specification given below is for a typical configuration.

X-Ray Detector Panel

| | |
|---------------|-----------------------------|
| Type | Linear PIN photodiode array |
| Pixel options | 800µm, 400µm or 200µm |
| Dynamic range | 4096 (12 bit) |

X-Ray Generator

| | |
|-------|------------------------|
| Type | Typically 150kV, 1.2mA |
| Power | 180 to 640 Watt |

System

| | |
|----------------------|--|
| Power | 110/220V AC, 50/60 Hz |
| Metalwork | Powder coated mild steel as standard (stainless steel option) |
| Dimensions (typical) | 960mm x 395mm x 1753mm (W x D x H) - dependant on configuration required |
| Weight | 300kg - 899kg (dependant on configuration required) |

Sample Handling

| | |
|-----------------------|-----------------------------------|
| Sample size (maximum) | 400mm x 420mm (diameter x height) |
| Stage motion | Vertical and rotational |
| Handling options | Manual / robot / pick and place |

System Control

| | |
|---------------------|--|
| PC | 19" rack mounted |
| PC operating system | Windows |
| System control | PLC or PC |
| Network interface | Ethernet IP-PLC-PLC Ethernet control link Ethernet - SQL link via LAN |
| Operator interface | LCD screen / keyboard (HMI panel option) |
| Sample door | Manual (standard) / automatic with PLC control (option) |

Data Storage

| | |
|----------|--------------------------------|
| Hardware | Factory network or external PC |
| Software | Customer defined SQL database |

Environmental

| | |
|-----------------------|--------------------------|
| Operating temperature | 0°C to +40°C |
| Survival temperature | -40°C to +80°C |
| Relative humidity | 5% to 95% non-condensing |
| WEEE regulation | WEE/AH0116XU |

Safety & Standards

| |
|---|
| CE marked |
| Designed to meet Ionising Radiation Regulations, 1999, UK |
| FCC PT 15 107/109 |

www.3dx-ray.com

T. +44 (0) 1509 817400 F. +44 (0) 1509 817401 E. sales@3dx-ray.com

3DX-RAY Ltd, 16 & 18 Hayhill Industrial Estate,
Barrow upon Soar, Leicestershire, LE12 8LD, UK

An **IMAGE SCAN** company

Registered address: 16 & 18, Hayhill Industrial Estate,
Barrow upon Soar, Leicestershire, LE12 8LD, UK.
Registered in England No. 3237543.

