



XRAY SHARK® XBD10/XBD20+ **Bulk Flow X-Ray Inspection System**

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XRAY SHARK® XBD10/XBD20+ Bulk Flow X-Ray Inspection System

XRAY SHARK®



XRAY SHARK® - Features at a glance

- User-friendly operation
- Easy cleaning and maintenance
- Real time detection with colored contamination analysis
- Masking functions
- 24 hours non-stop operation
- Reliable German safety standard – TÜV-approved
- Quick release conveyor belt
- Ethernet and USB
- Auto storing of inspection data, with time/date stamp
- Built-in remote maintenance

Advanced Design - Optimal Inspection

Cassel X-ray inspection systems provide maximum sensitivity for detection of foreign bodies including detection of missing or defective products.

The bulk flow X-ray system is particularly suitable for food or non-food products in bulk, for example unpacked nuts, dried fruits or sweets. Undesirable contaminants such as metal, stone, ceramic, glass or plastic with high density can be detected in the products.

Made in Germany - High Standards

The superior high-performance software "XIA" makes possible instant analysis and detection with high accuracy and reliability, thus avoiding false rejects. The flawless design offers maximum safety and comfort for daily operations to quality conscious producers. In this way, Cassel X-ray inspection systems preserve your product quality and provide reliable protection of your brand.

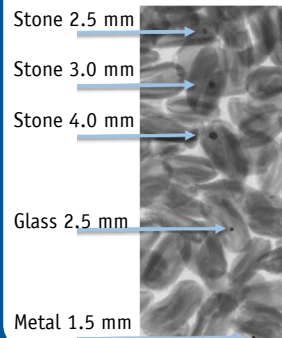
The process control system "SHARKNET®" is optionally available and allows automatic storage of collected operational data and thus complies with certification programs and HACCP requirements.

Easy Cleaning

The hygienic design allows easy cleaning and maintenance of the XBD10/20+, with all components quickly removable. Everything can be put back together just as easily. The device is thus quickly ready for operation again.

Bulk flow X-ray Inspection

Dried Apricot, two layers



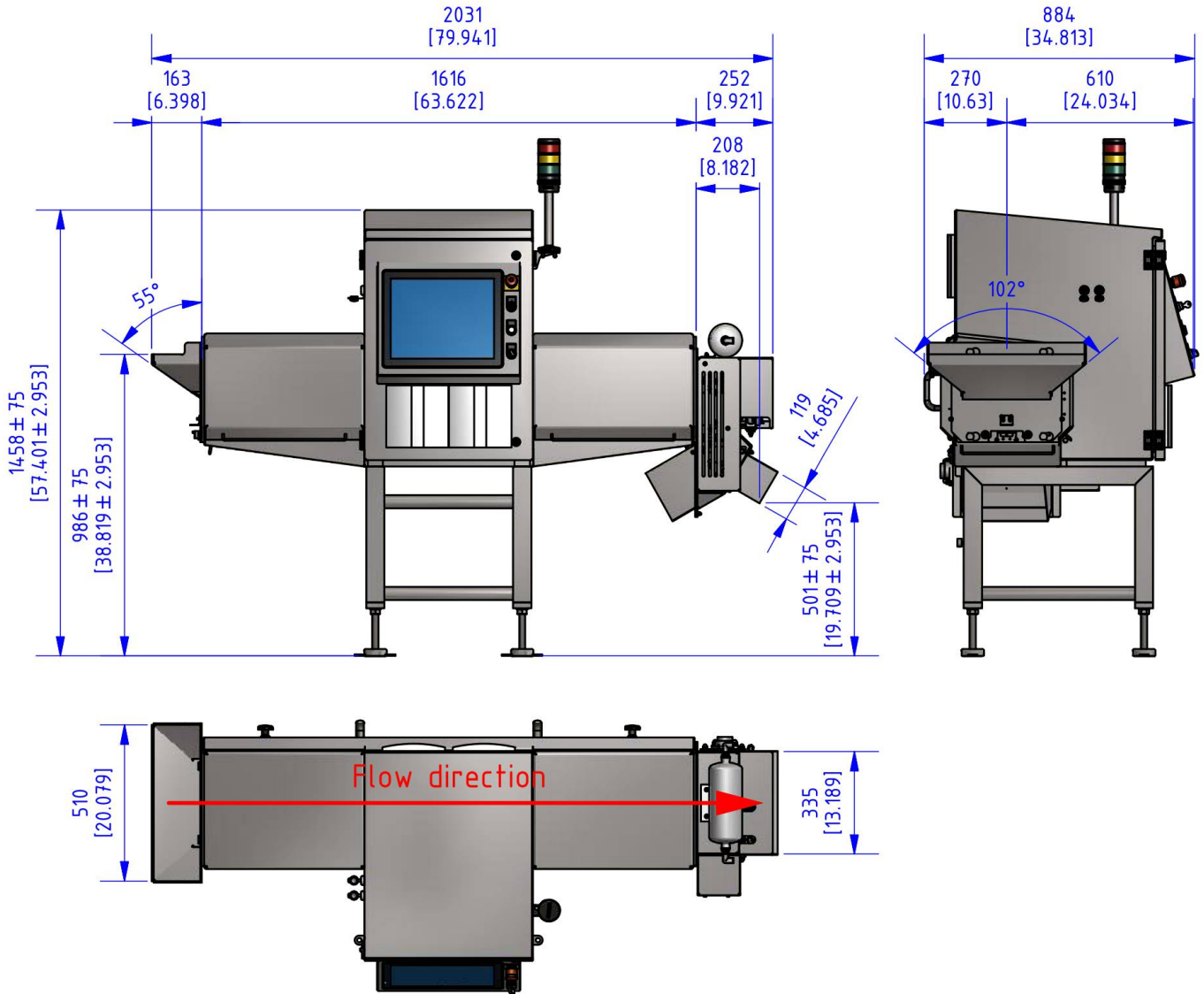
Bulk flow XBD10/XBD20+ Data Sheet

Model	XRAY SHARK® XBD10	XRAY SHARK® XBD20+
X-ray source	Single beam x-ray generator with max. 60kV (50W), variable in voltage + current	
Radiation leakage	1 µSv/h or less @ 10cm outside cabinet surfaces	
Safety	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	
X-ray detector	low noise 307 mm line scan CCD, diode pitch 0.8 mm, integrated x-ray beam stop	low noise 407 mm line scan CCD, diode pitch 0.8 mm, integrated x-ray beam stop
Cooling	Highly efficient, silent DC filter fans	
Housing finish	Stainless steel grade AISI 304 / ISO 1.4301 (CrNi 18/10)	
Degree of protection	IP54 (according to IEC 60529), including touch panel and fans	
Conveyor type	Polyurethane belt white (FDA) quick disassembly for cleaning Side guides	Polyurethane belt white (FDA) quick disassembly for cleaning Side guides
Conveyor speed	Conveyor speed by product, 30-60 m/min	Conveyor speed by product, 30-60 m/min
Flow rate	4 – 25 m³/h for best sensitivity: 1-layer product thickness	6 – 35 m³/h for best sensitivity: 1-layer product thickness
Estimated production sensitivity sphere Ø mm* *depending on application	Metal (except aluminum) 1.0 – 1.5 mm Glass (soda lime) 2.5 – 4.0 mm Ceramic (similar as many stonegrades) 3.0 – 5.0 mm	Metal (except aluminum) 1.0 – 1.5 mm Glass (soda lime) 2.5 – 4.0 mm Ceramic (similar as many stonegrades) 3.0 – 5.0mm
Scanning width	Net scanning width 246 mm	Net scanning width 346 mm
Product memory	250 different product set-ups	
Display	17" Color-TFT capacitive Touchscreen	
Inspection features	Auto Calibration, Auto adaption to density distribution, Density, Hard Contrast, Soft Contrast, Masking Technology, SuperContrast, SizeFilter, AutoEdge, Images AutoSave/Load, Multi Segment Inspection, Generator Energy by Product, Password protection	
In/Outputs	Programmable outputs (contamination, ready, Emergency Stop) Programmable inputs (Emergency Stop, wake up, optional control signals)	
Data transfer and reporting	Ethernet for remote support via internet, USB for external keyboard/ mouse/ memory stick	
Other features	Direct variable conveyor speed by product, Intel Core i, MultiCore CPU, Win OS	
Supplied test equipment	Certified test cards with glass, ceramics, steel spheres in various diameter	
Available accessories	Radiation detector, SHARKNET® data management software, reject bin	
Weight	0,4 t	0,5 t
Electrical mains connection	220-240 VAC, 1ph, 50 to 60 Hz, 0.3 kW full operation, <0.1 kW stop/idle	
Compressed air supply	Without reject system 0 (zero)bar With optional reject system minimum 4 bar	
Environmental conditions	0 to +30 °C, with relative humidity max 90% non-condensing	
Conformity	CE, compliant to German x-ray regulations, specific adaptation for other countries	

* All information is based on standard devices. There possibly will be differences depending on the application. Changes and errors excepted.

XRAY SHARK® XBD10

Bulk Flow X-Ray Inspection System



Cassel Messtechnik GmbH (Germany) – Headquarters and main production site

With its production facilities located near Hannover, Germany, Cassel manufactures approximately 1,000 inspection systems annually. Nearly 80 percent of Cassel equipment is exported to the European Union, United States, Southeast Asia, Australia, South Africa and South America. Cassel supplies equipment to several industries, including food production, plastics, pharmaceuticals, textiles, forestry and mining. Cassel machinery can be found in the production lines of many global and respected brands.



Cord Cassel
Managing Director of Cassel Messtechnik GmbH

Customers receive valuable service and support wherever their product inspection systems are located around the world. Over 50 representative offices around the globe provide service performed by factory-trained technicians.

Since 1994, Cassel Messtechnik GmbH (Cassel) has led the production machinery industry in the design and construction of metal detection, checkweigher and x-ray inspection systems for industrial applications. Cassel systems specializes in protecting valuable production machinery against damage caused by undiscovered metal parts. Cassel also succeeds in quality control in the consumer goods industry. Cassel strives to supply quality and high performance at a reasonable price.