# X-Ray SHARK® BULK series

XD25-L1, XD35-L1 & XD45-H1

High accuracy X-ray Inspection system for bulk flow materials.

*CASSEL XRAY SHARK® XD45-H1-BULK*

## Highlights

- Detects high-density materials such as metal, ceramic, stone, plastic, or glass.
- Easy-to-use touchscreen interface with auto-calibration
- CASSEL Inspection XIA software offers reliability and accuracy with instant contamination detection.
- Integrated rejection unit: Single or multi flap, as well as air gun option, to minimize product waste when rejection occurs

## Features

- Real time detection with color coded contamination analysis
- Masking function blocks off areas that do not require inspection.
- Auto-storage of inspection data with time and date stamp
- Windows 10 operating platform with USB and ethernet access for reporting and troubleshooting.
- Quick release conveyor belt for easy cleaning and maintenance
- Remote assistance available via ethernet connectivity
- Designed for 24 hr non-stop operations
- FDA Registered. Designed to meet German safety standards. Includes optional TÜV certification.

# X-Ray SHARK® BULK series

XD25-L1, XD35-L1 & XD45-H1 for bulk flow inspection

*Large display and clearly arranged functions for easy operating.*

## Overview

The bulk flow X-ray system is ideal for products in bulk, for example unpacked nuts, dried fruits or confectionary products.

CASSEL Inspection "XIA" software provides instant analysis and detection with high accuracy and reliability, thus avoiding false rejects. The innovative design offers maximum safety and comfort for daily operations.

The CASSEL Inspection XD Bulk X-ray inspection system is suitable for all industries, especially for those with stringent hygienic standards. Thoughtful design allows for simple cleaning & maintenance.

## Included

- CASSEL Xray Scanner with image processing software XIA
- Protection from radiation exposure
- Certified test cards/wands for assured performance of the X-ray system

## Application

Inspection bulk materials such as:

- peanuts, almonds and other tree nuts
- confectionary products
- dried fruit
- legumes

## Accessories & Extras

- Radiation Meter
- 21 CFR Part 11 compliance, BRC*
- Reject bin
- Air guns for reject (minimize rejected product)

## *BRC kit

With this option, the device meets the requirements of the British Retail Consortium (BRC) Global Standard for food safety and thus also the common standards for HACCP and IFS.

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## Specifications

| Model | XD25-L1-BULK | XD35-L1-BULK | XD45-H1-BULK |
|---|---|---|---|
| X-ray source | Single beam X-ray generator with | | |
| | max. 60kV (50W) | max. 60kV (50W) | max. 80kV (480W) |
| | variable in voltage + current | | |
| Radiation leakage | 1 µSv/h or less | 1 µSv/h or less | 3 µSv/h or less |
| | at 10 cm outside cabinet surfaces | | |
| Safety | Special product tunnel, 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 | | |
| X-ray detector | Low noise 307 mm | Low noise 408 mm | Low noise 612 mm |
| | line scan CCD, diode pitch 0.8 mm,<br>integrated X-ray beam stop<br>(optional diode pitch 0.4 mm) | | |
| Cooling | Highly efficient, silent DC filter fans | | |
| Housing finish | Stainless steel grade AISI 304 / DIN EN 1.4301 (X5CrNi18-10) | | |
| Enclosure rating | IP54 (according to IEC 60529), including touch panel and fans, optional IP69k, optional air-conditioner unit | | |
| Conveyor type | Polyurethan (PU) belt, light blue, food grade | | |
| Conveyor speed | Conveyor speed by product, 0,05 to 0,98 m/s | | |
| Flow rate | 4 – 25 m³/h | 6 - 35 m³/h | 8 - 45 m3/h |
| | for best sensitivity: 1-layer product thickness | | |
| Max. product weight | 7 kg | | |
| Estimated production sensitivity sphere Ø mm* | Metal (execpt aluminuim)<br>Glass (soda lime)<br>Ceramic (similar as many stonegrades) | 1.0 – 1.5 mm<br>2.0 – 4.0 mm<br>2.0 – 5.0 mm | |
| Belt width | 300 mm | 400 mm | 500 mm |
| Net. scanning width | 246 mm | 346 mm | 446 mm |
| Product memory | 255 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, super contrast, size filter, auto edge masking, auto save/load of images, multi-segment-inspection, generator energy by product, password protection | | |
| In-/Outputs | Programmable outputs (contamination, ready, Emergency OFF)<br>Programmable inputs (Emergency OFF, wake up, optional control signals) | | |
| Data transfer | Ethernet for remote support via internet, USB for external keyboard/ mouse/ memory stick | | |
| Max. weight | 0.5 ton | 0.7 ton | 1.4 ton |
| Power supply | 1ph, 230 VAC +/- 10%, 50/60 Hz, full operation:<br>max. 0.5 kW | max. 0.5 kW | max. 2.0 kW |
| Compressed air supply | Without reject unit 0 MPa (0 bar/0 psi) bar<br>With reject unit 0,4 MPa (4 bar/58 psi) | | |
| Available reject method | Reject flap, multi reject flaps or air guns | | |
| Environmental conditions | 10°C to +30°C / 50°F to 86°F | 10°C to +30°C / 50°F to 86°F | 10°C to +50°C / 50°F to 122°F |
| | with relative humidity max 90%, non-condensing<br>Option: additional external cooling devices to extend the temperature range | | |
| 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 to be excepted.

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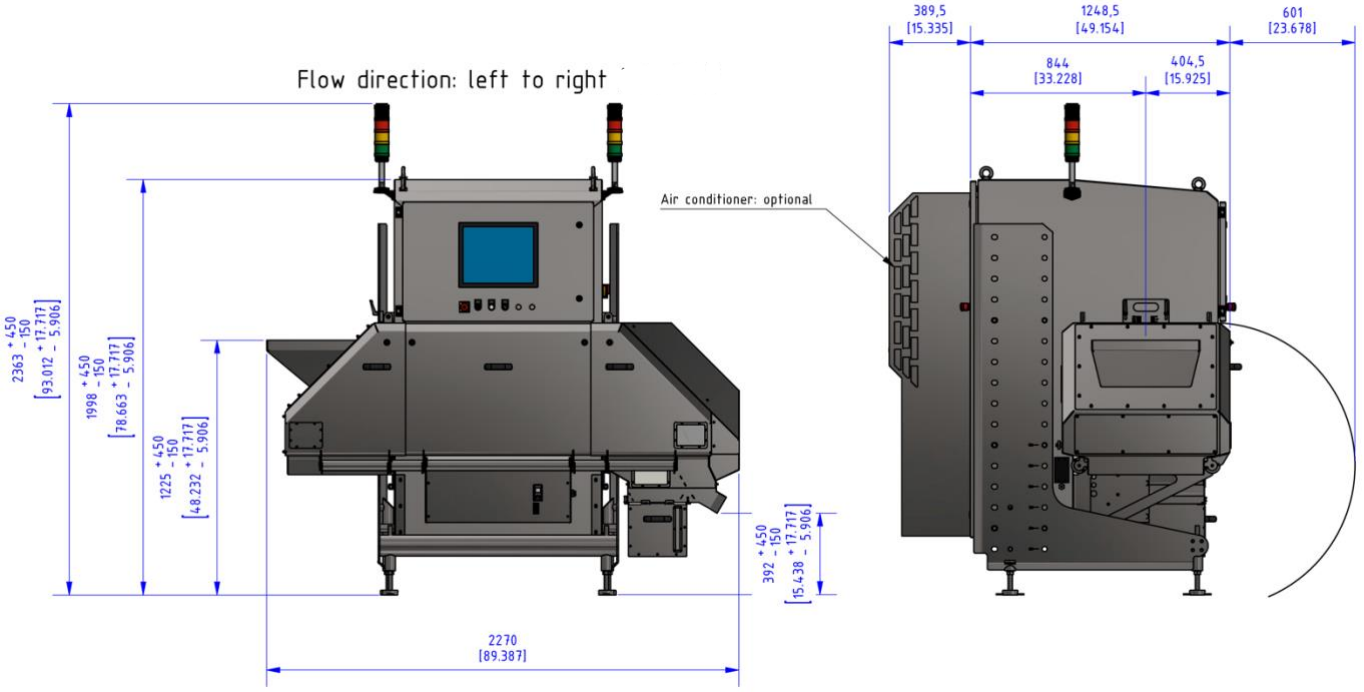
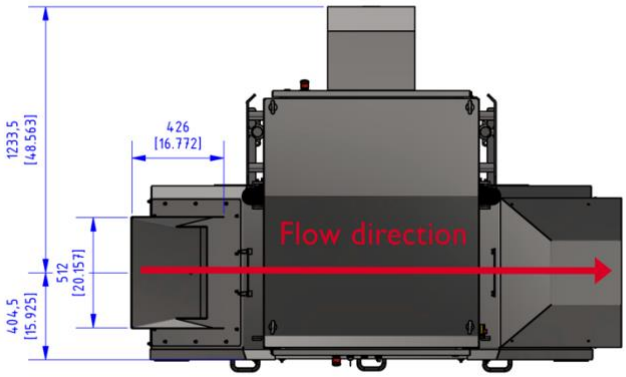
*Multilane rejection system*

## Dimensions XD45-H1-BULK

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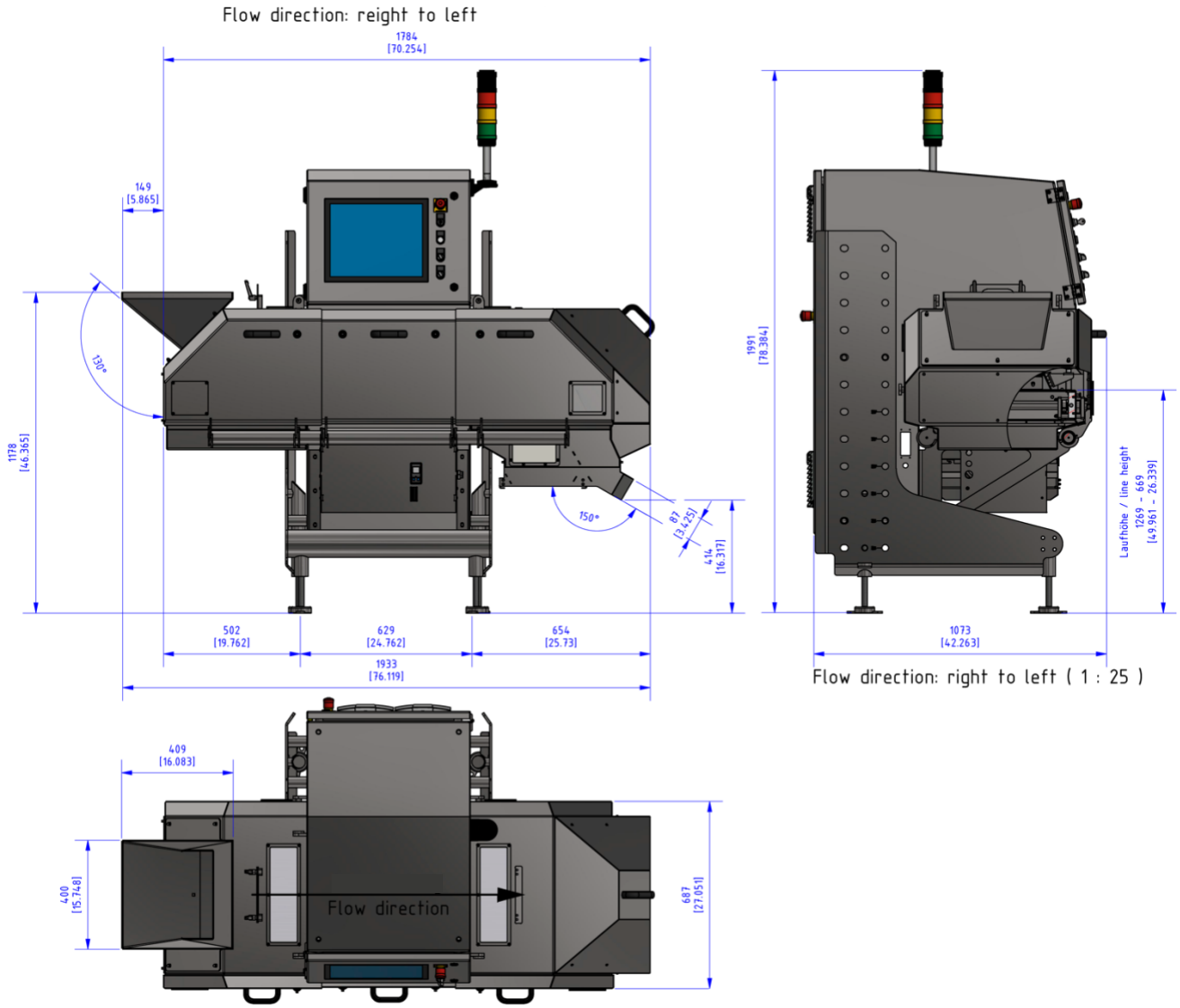
# X-Ray SHARK® BULK series

*Infeed funnel*

## Dimensions XD35-L1-BULK

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