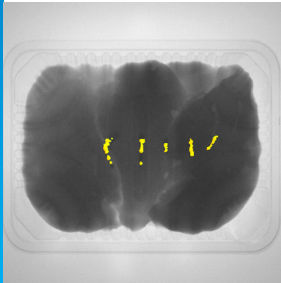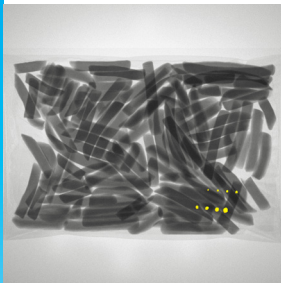# X52 X-ray System

# Detecting Hard-to-Find Contaminants
## In Small to Medium Products

### Premium Product Safety

The X52 dual energy system offers remarkable detection capabilities for low-density contaminants like calcified bone, glass and rubber, especially in complex applications, enhancing product integrity and supporting brand protection.

### Effective Quality Control

The X52's Advanced Material Discrimination software (AMD) is our proprietary software for dual energy applications. AMD detects low-density contaminants in products with high contrast differences, providing you with high quality end products even in noisy, complex applications.
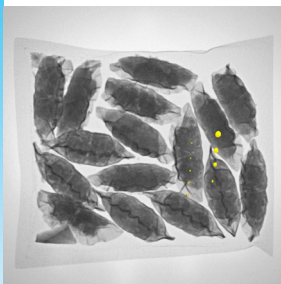
### Enhanced Productivity

The X52 maximizes production uptime by combining superior industrial design with a range of productivity tools. These include simplified cleaning routines, an intuitive user interface, and a reliable set of state-of-the-art subsystems.
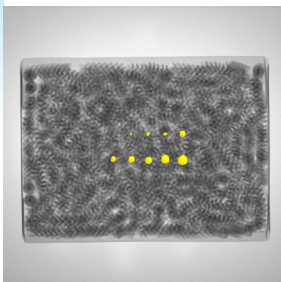
### Compliance Made Easier

The X52 has built-in software capabilities that allow full product traceability through a recorded image database. This can be accessed directly with the system's interface or connected remotely to ProdX, or any of the most common network protocols.

## The X52 Dual Energy X-ray System
### Premium Product Inspection

The X52 is a premium, dual energy, x-ray inspection system designed to identify contaminants even in complex applications such as noisy, overlapping products.

Built with cutting edge HiGain+ DE technology, the X52 provides an unprecedented level of detection of low-density contaminants, like calcified bone, rubber and glass in food applications.

**METTLER TOLEDO**

## Technical Details
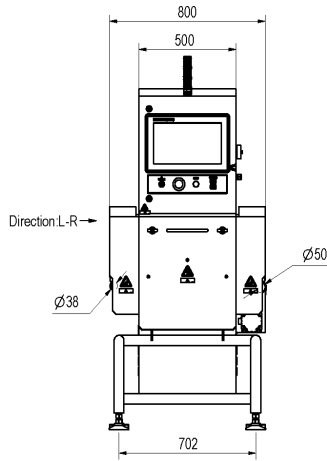


800 mm, X52 Short System Diagram
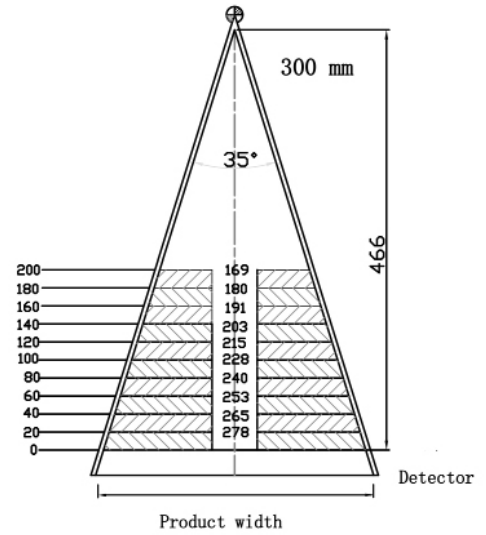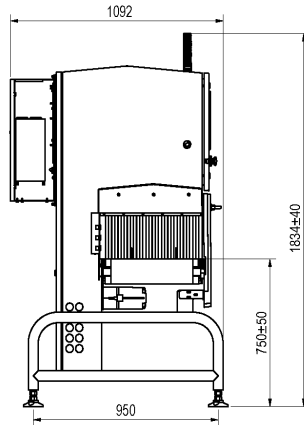


X52 Beam Size Diagram

## Specification Table

| Feature | X52 Specifications |
|---|---|
| Contamination Detection | Metal from 0.3 mm, shards of glass under 2 mm and stones, bones and several low-density materials |
| Product Quality Tools | Completeness check, product fill level, clip and product trapped in seal detection* |
| Compliance | User management, segregation of rejected goods, reject confirmation including manual verification, bin full and almost full sensors. Product validation feature and performance verification routine (PVR). Fully lockable inspection tunnel. |
| Conveyor Speed | 10-100 m/min** |
| Lane Configurations | Single and Multi-lane |
| Throughput Rate | 1000 products/min** |
| Maximum Product Height | 200 mm |
| Product Set-up | Automatic configuration and fast set-up with ContamPlus |
| X-ray Detector | 300 or 400 mm length, HiGain+ DE Technology |
| X-ray Generator | Optimum Power 100 W, up to 84 kV, up to 1.2 mA Beryllium tube |
| Operator Safety | X-ray emissions <1uSv/hr, fully contained within construction, lead-free curtains with non-contact safety interlocks |
| Cooling Method | Air Conditioner |
| Environmental Conditions | Operating humidity up to 90% RH. Operating temperature 5-40°C |
| Power Supply | 208-240 Vac, 1 Phase, 50-60Hz, 10A max |
| Pneumatic Supply | 6 Bar(g) clean air supply required for air operated reject system. With built-in pressure monitoring |
| Hygienic Features | Durable body in 304 Stainless Steel, with anti-accumulation sloped surfaces. Finish 180-240 Grit brushed on main components. Toolless removable belt and curtains. Integrated cable management |
| External Interface | Customer dedicated 5 digital inputs 8 digital outputs, dependent on product configuration |
| Ingress Protection | IP65, IP66 or IP69 for main enclosure and conveyor. Air conditioner IP34 |
| Operating Height | 750 mm, 850 mm, 950 mm, 1050 mm or 1150 mm (+/- 50 mm) |
| System Conveyor | FDA and EU food use approved TPU conveyor belt 90 W motor unit, 38 mm diameter infeed roller, 50 mm diameter outfeed roller |
| System Length | 800, 1300, 1800 or 2000 mm |
| Screen Display | 15.6″ Capacitive Touchscreen display (16:9 aspect ratio) |
| Reject Type* | Pusher, Air blast |
| Operating System | Concurrent algorithms Flex system software with Microsoft Windows 10 (upgradable via USB) |
| Traceability Options | Event log tracks changes of parameters, users and products. Product traceability through recorded image database, accessed via USB, ProdX, Ethernet/IP |
| Product Handling | Optional infeed or full-length guide rails, optional in-feed and out-feed lights |
| Service | Remote support ready, 5-year generator warranty, spare parts kits and service plans |

*dependant on application
**dependant on product dimensions

**www.mt.com/safeline-xray**

For more information