

X36 Series

Inspection of Packaged Products



The X36 Series of x-ray inspection equipment was designed considering customer feedback and using the wealth of application knowledge from our in-house x-ray experts. Developing outstanding and technologically advanced x-ray systems, the X36 Series is designed to inspect small, medium and large sized packaged products. A full range of inspection tools are available to detect contaminants, regardless of their size, shape or location whilst simultaneously performing product integrity checks. Its design and core components are engineered in-house, offering inspection at high line speeds, like no other x-ray system on the market for a wide range of products on single and multi-lane applications.

Superior Product Safety

The X36 Series of x-ray systems deliver outstanding contamination detection of contaminants like glass, metal, mineral stone, calcified bone and high density plastics, even for products wrapped in aluminium foil or metallized film.

Maximum Uptime

The user friendly, intuitive interface ensures product menus can be set up or adjusted by line operators, without the involvement of an

engineer and automatic product set up can readily be completed within minutes.

Protect your Profitability

The X36 Series of x-ray systems offer not only contamination detection but are also able to simultaneously perform product integrity checks with its full suite of inspection tools ensuring product safety and quality.

X36 Series

The Big Difference is in Every Detail

The X36 Series of x-ray inspection systems offers consistent and reliable inspection results whilst the innovative design makes it the most adaptable x-ray system available on the market.

Software Capability

- The x-ray systems deliver optimal, consistent and reliable inspection results using the full range of inspection tools (contamination detection and product integrity checks).
- It's sophisticated yet simple to use with a flat menu structure, giving the operator full control without requiring special training or previous x-ray knowledge.
- Automated set-up and ready to use within minutes, ensuring maximum production uptime.
- Will typically inspect up to 1,000 products per minute (depending on product application).
- ProdX - Product Inspection data management software options deliver Production Management a wealth of realtime information, enabling the effective control of product inspection processes and devices.

Design / Hygiene

- Meticulous attention to hygienic design following EHEDG and NSF

recommendations developed one of the most hygienic systems on the market.

- IP65 as standard and IP69 is available as an option for harsh wash down environments.
- Including a robust, tubular hygienic frame design and sloped surfaces for allowing water roll-off as well as full access to the system, ensuring easy maintenance and servicing.

Audits / Verification

- Full statistics traceability for quality reporting.
- Performance verification built in to ensure constant optimum performance.
- Flexible approach to connectivity is offered with options for data retrieval via external USB or Ethernet ports, directly or via an OMAC compliant OPC server.
- Reject confirm and bin full options, ensure effective rejection from the line.

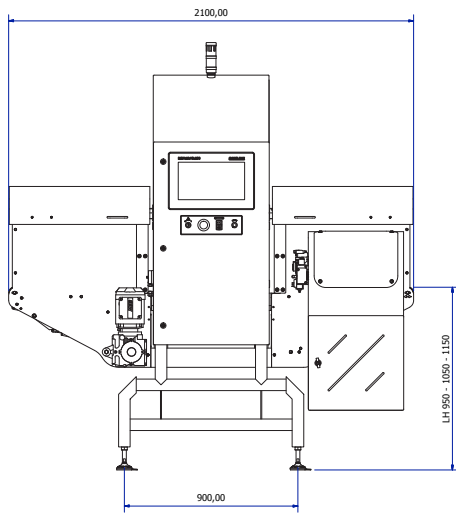
Flexibility / Safety

- 300mm, 400mm, 500mm, 600mm & 800mm belt widths are available to suit a diverse range of applications.
- Available in lengths of 1200mm or 2100mm, enabling manufacturers with limited factory floor space to select a system which best suits the manufacturing environment.
- The most energy efficient x-ray system with unique diverse range of proprietary generators and sensors to suit.

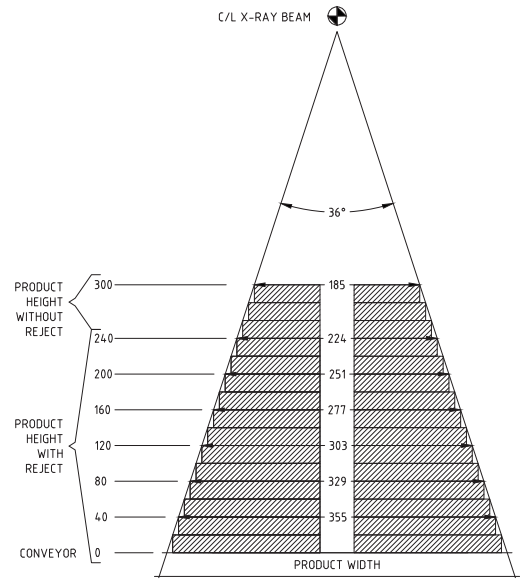
5 Year Generator Warranty*

- A 5 Year Generator Warranty covers the most expensive component of the X36 Series avoiding unexpected costs and production downtime.
- Budgets can be effectively managed with the warranty, fully protecting the investment.





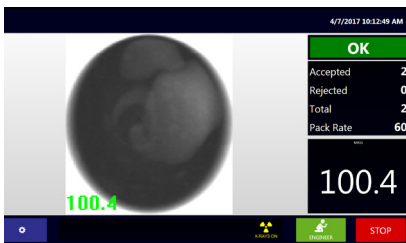
X36 Series - 2100mm long option



X36 Series beam diagram with 400mm scan width

X36 Series Software Tools

The X36 Series of x-ray systems can perform contamination detection whilst simultaneously performing gross and zoned mass measurement and object counting on single or multi-lane applications.



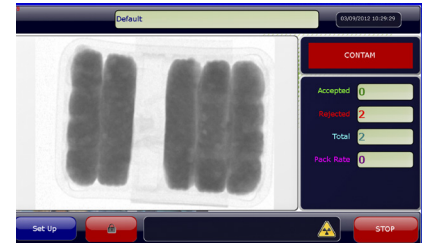
Gross Mass Measurement

To check that the correct amount of product is present, the x-ray system compares each x-ray image of a pack with an image from a known good pack. If the calculated mass falls within a programmed tolerance, the pack is good. If it deviates, the pack will be rejected.



Zoned Mass

Working on the same principles as mass measurement, the zoned mass tool is suited to inspecting product with multiple objects or compartments within a pack, measuring the mass of individual zones.



Object Counter Tool

This is a highly automated tool which is easy to setup and aimed at counting objects of the same type (shape and density) and in the same pack, avoiding over or under-filled packs. The object counter tool can also be used to check for damaged items.

Sustainability Credentials

The X36 Series is available with a range of power options; some models don't even require a cooling system due to its low power consumption, contributing to overall reduced total cost of ownership for the customer and making it the most energy efficient system on the market.

Lower energy consumption	•
Thinner Stainless Steel used due to low power x-ray generator	•
Recyclable materials	•
Fewer production steps	•
Reduction in weight	•
Reduction in (transport) volume	•
Less cooling required	•
LED display instead of CCFL	•
Reduced electronic components, less PCB's used	•
Miniature LED lamp stack	•



Specification Table

Feature	Specifications
Conveyor Speed	Typical line speeds 10-100 m/min (dependent on product dimensions)
Lane Configurations	Single or multilane
Throughput Rate	Typical throughput rates up to 1000 products per minute (dependent on product dimensions)
Maximum Product Height	240 mm with a reject, 300 mm without reject
X-ray Detector	0.4mm 0.8mm
X-ray Generator	20W, 84kV, 0.25mA Glass or optional beryllium tube* 100W, 84kV, 1.2 mA Glass or optional beryllium tube 420W, 84kV, 5.0 mA Glass or optional beryllium tube 300W, 100kV, 3.0mA Glass or optional beryllium tube
X-ray Beams	Single beam
X-ray Emissions	< 1uSv/hr
X-ray Protections	Fully contained emissions within construction, lightweight lead-free blue curtains at tunnel apertures
Cooling Method	20W = Internal Fan Only* 100W = Air Conditioner 420W = Radiator Pump & Air Conditioner
Operating Humidity	Up to 90% RH
Operating Temperature	5 – 40°C
Power Supply	208 - 240 Vac, 1 phase, 50-60 Hz, 10 A 100 - 120 Vac, 1 phase, 50-60 Hz, 16 A
Pneumatic Supply	6 Bar(g) clean air supply required for air operated reject system
Casing Material	304 stainless steel
Finish	180-240 Grit Brushed on main components
Ingress Protection	IP65 as standard. IP69 as an optional upgrade
Operating Height	850mm, 950mm or 1050mm (+/- 50mm)
System Conveyor	FDA and EU food use approved TPU conveyor belt, 0.55 kW motor unit, 60 mm diameter roll ends
System Length	2100mm or 1200mm options
Screen Display	15" LED touchscreen display (16:9 ratio)
Reject Type	Pusher or Airblast options
Reject Bin	Front mounted lockable reject bin with vision window as standard
Operating System	Microsoft Windows 64 bit
Connectivity Options	Ethernet connection available
Traceability Options	Full event log tracks changes of parameters, users and products
Guide Rails	Optional infeed or full length guide rails up to reject station. 10mm round bar style
UL Approved	Yes

* 20W options are not available for the 800mm detector width

Mettler-Toledo Group

Product Inspection Division
Local contact: www.mt.com/contacts

www.mt.com/safeline-xray

For more information

Subject to technical changes
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