

How X-ray Solutions Support Contamination Detection For Small, Individually Wrapped Products



METTLER TOLEDO

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Introduction

Food and pharmaceutical manufacturers strive to produce products of high quality, free of contaminants and in compliance with regulations and standards.

Product inspection solutions such as X-ray systems support safety and quality assurance at every step of the production process.

When it comes to the detection of physical contaminants in products packaged in sachets, blister packs and individually wrapped products, manufacturers are faced with the challenge of making space on already crowded production lines. In many cases, this means placing an x-ray solution downstream to inspect multiple products in a carton or case.

This can lead to a potential increase in product waste, as entire cases get rejected rather than just the single item.

Ideally, a system inspects individual packs or sachets, resulting in reduced product waste and improved contaminant detection. With line space at a premium, however, it can be difficult to fit a system far enough upstream in the production process to accomplish this task.



X34C X-ray System

Compact, High-Speed, Precise

The new X34C is a compact, high-speed and precise x-ray system with the flexibility to be placed at a variety of insertion points along the production line, allowing the inspection of small, individually wrapped products.

The [X34C](#) has been designed to remove contaminated packets or sachets before they are placed into a case, reducing unnecessary product waste. The system fits neatly next to, for example, a flow wrapper without a reduction of line speed.

The three main design principles behind the development of X34C are:

- Compact Footprint
- High-speed Capabilities
- Precise Performance



Compact

Fitting into Existing Production Lines



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SAFELINE



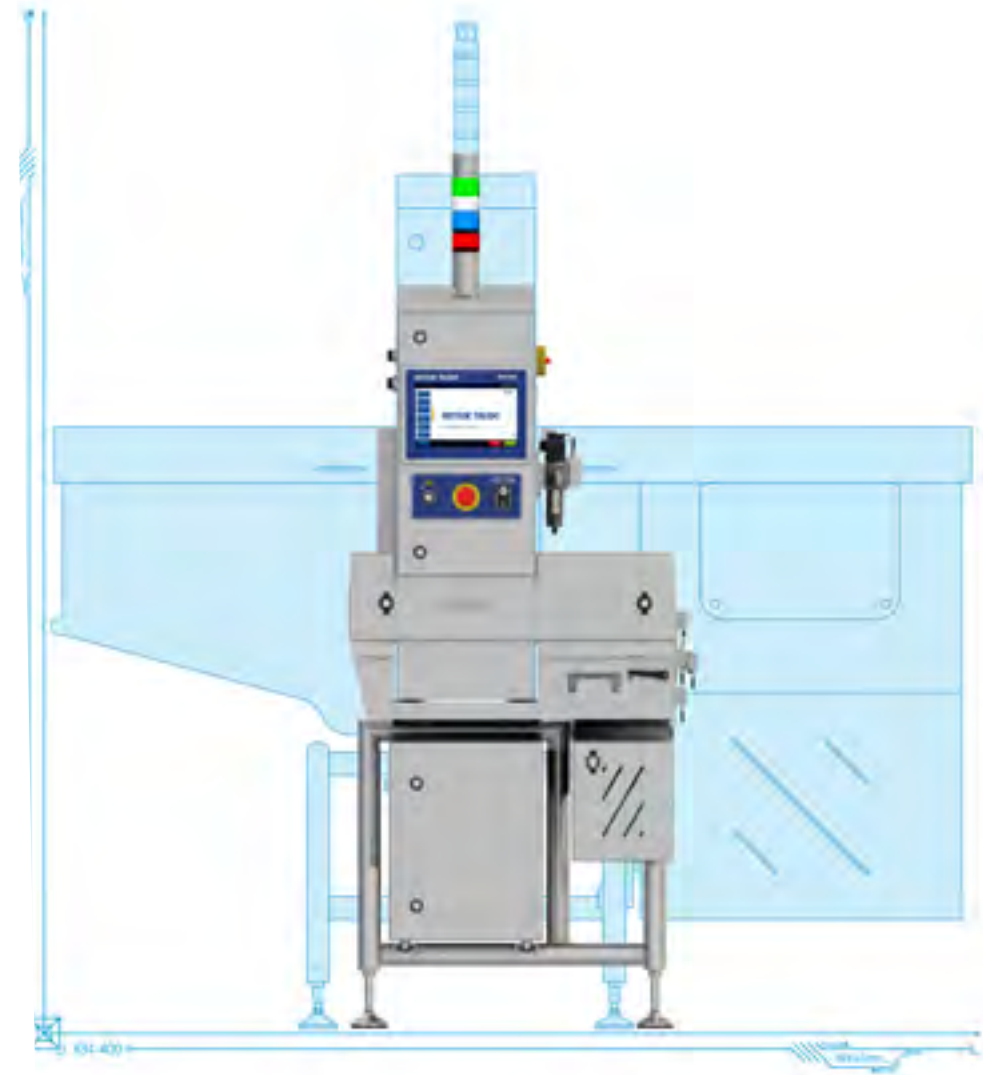
Compact

Fitting into Existing Production Lines

Regardless of the application, limited production space is always a challenge for food and pharmaceutical manufacturers. The more compact a system is, the easier it becomes to insert without the need for costly line restructuring.

The complete X34C X-ray inspection system including its rejection mechanism is only 700 millimeters (27.5 inches) in length. This gives manufacturers more freedom in placing the system into the production line, even when dealing with limited line space.

To assist with insertion into small spaces and for ease of maintenance and cleaning, all areas of the x-ray system are accessible from the front e.g. electronics panel, belt removal, access to the reject bin.



Length of an X34C with an integrated reject compared with an X34 X-ray system

High-Speed

Keeping up with High Production Line Speeds



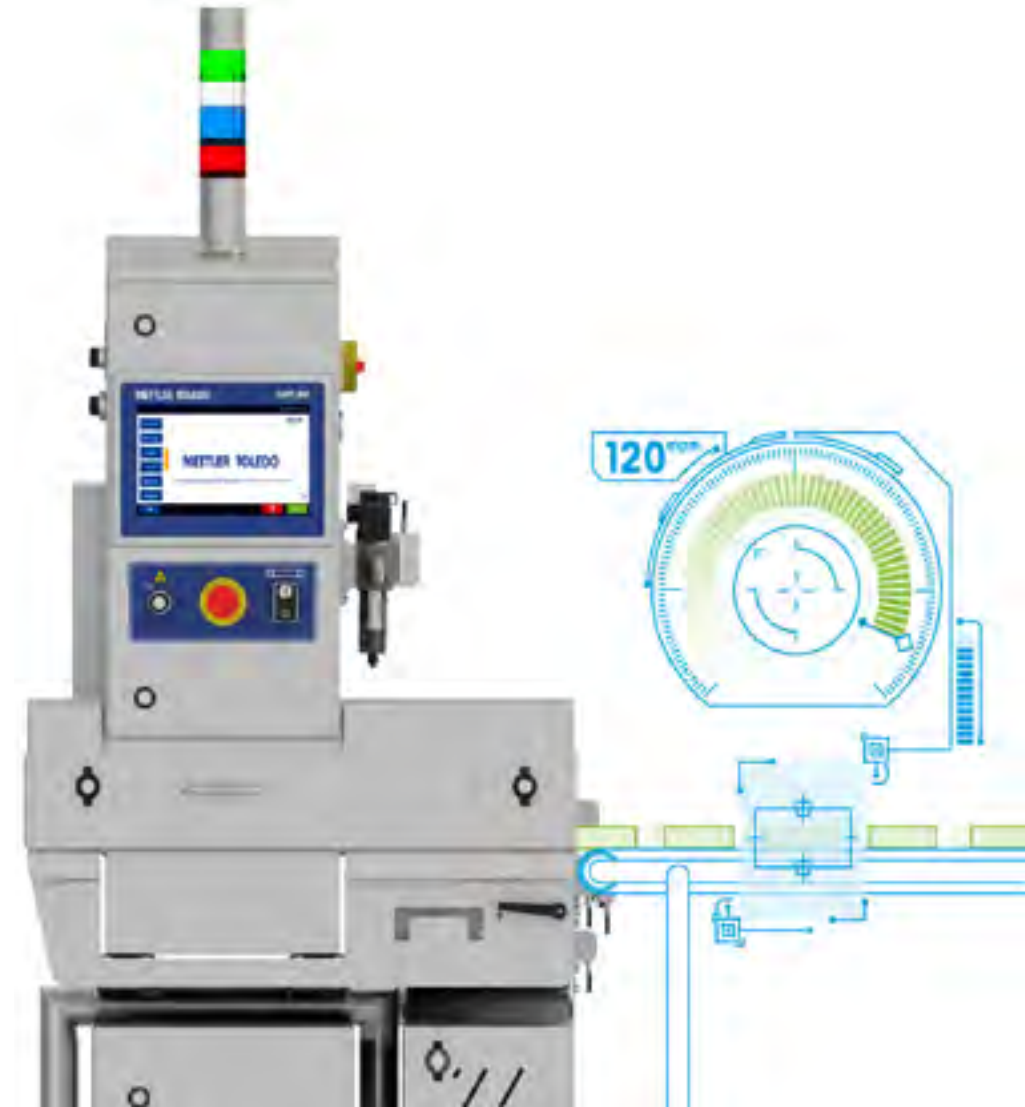
High-Speed

Keeping up with High Production Line Speeds

When adding new equipment such as an x-ray system to the production line, it is preferable to invest in a system capable of maintaining the pace of production. This minimizes the impact of the equipment on production throughput.

The X34C is capable of performing accurate inspection at line speeds up to 120 meters per minute (393 ft/min) depending on the product type. This means it can keep up with modern production speeds and gives manufacturers more freedom when deciding where to place the system for optimized productivity and performance.

The optimum power generator and detector within the X34C facilitates accurate high-speed inspection, helping increase Overall Equipment Effectiveness (OEE).



Precise

Supporting Compliance and Brand Protection



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Precise

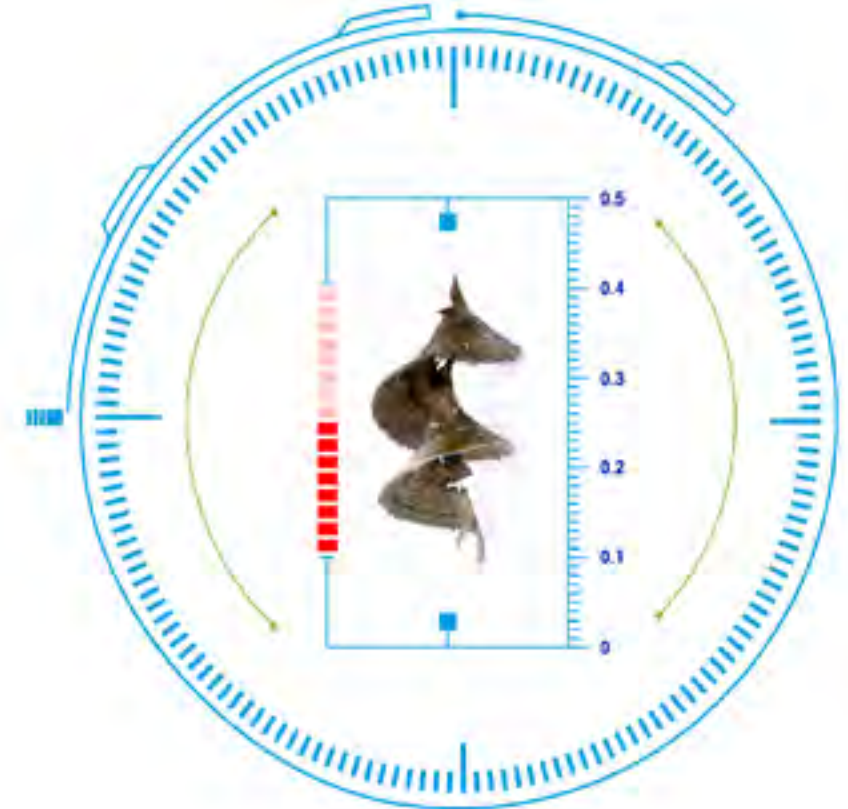
Supporting Compliance and Brand Protection

For an x-ray system to be precise, it must be able to detect small, hard-to-find contaminants – metal, glass, bone, plastic and other materials – while minimizing false reject rates.

Being precise also means giving operators an interface allowing them to quickly access the tools they need to configure the system easily. A sensitive detector and powerful software combine to enable the detection of difficult-to-find physical contaminants.

The X34C runs ContamPlus™ X-ray inspection software from METTLER TOLEDO on Windows 10. Offering a fully automated product setup removes the need for training, reduces potential human error and optimizes power settings for each product to provide the highest levels of detection.

Combined with an advanced 0.4 millimeter detector and an optimized focal distance, the system is able to inspect small, individual packs with better accuracy than previous models. Only packs which are contaminated are removed, avoiding unnecessary product waste.



Global Service Support

Keeping Your Production Running

Uptime

- Regular preventive maintenance
- Professional repairs using genuine METTLER TOLEDO spare parts and kits
- Dedicated service contracts to minimize risks and allow equipment to perform at peak performance

Performance

- Professional equipment setup and configuration
- Regular performance verification
- Regular updates & upgrades

Compliance

- Professional documentation and certification of compliance-related service activities
- Expert startup to help meet food and pharmaceutical standards with IPac (Food) or EQPac (Pharma)

Expertise

- Training for operators, quality control and maintenance staff
- Comprehensive solutions literature and technical documentation
- Expert trusted advice



Our x-ray systems include a [Five Year Generator Warranty](#) with the purchase of a standard or comprehensive service contract.

ProdX

Software to Improve Productivity

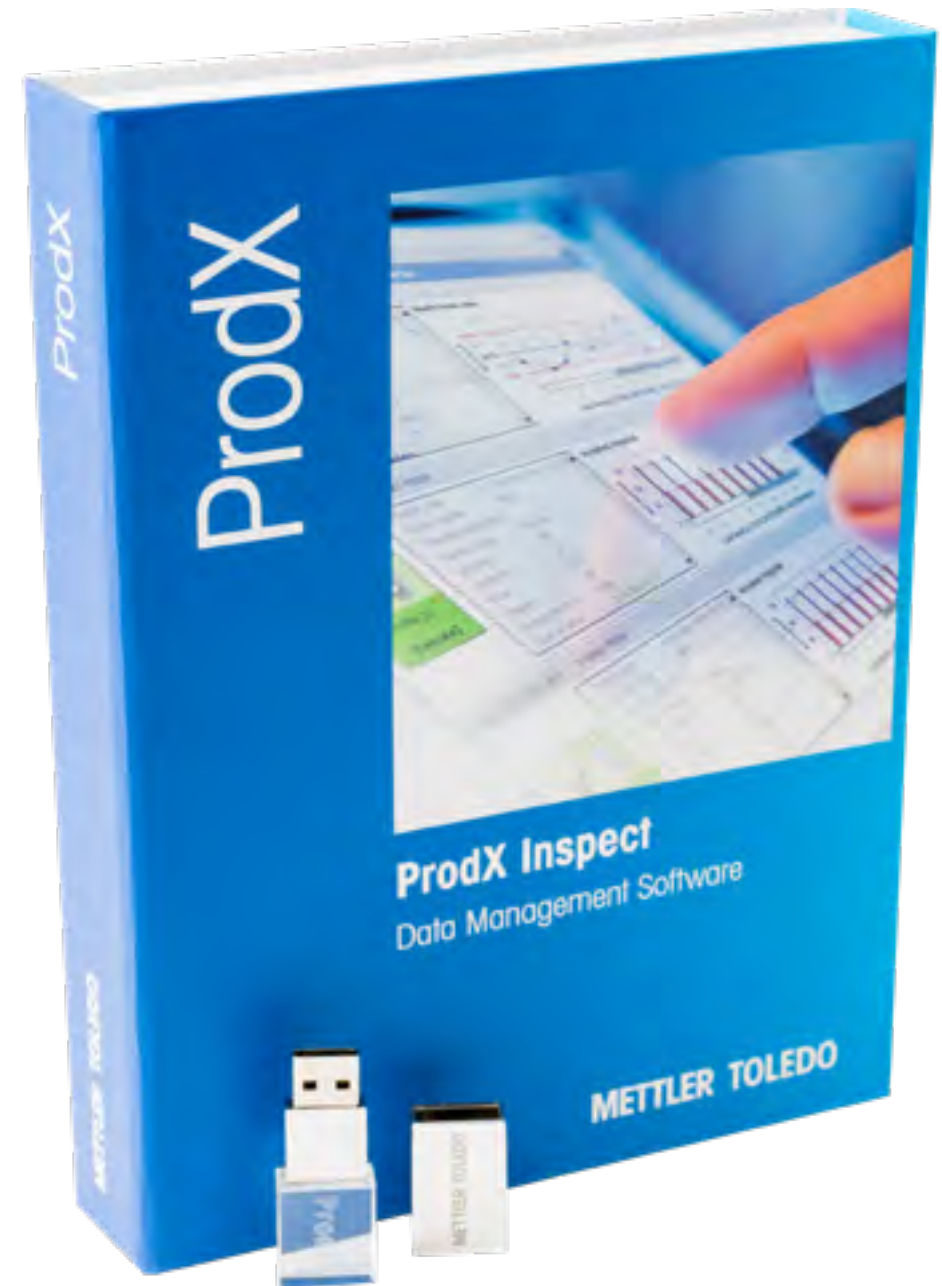
ProdX™ Data Management Software monitors and manages data collected from METTLER TOLEDO product inspection devices. It supports rigorous quality control regimes, enables production optimization and simplifies line operation.

ProdX helps you to manage:

- Production and efficiency
- Quality and compliance
- Data communication

ProdX delivers real time monitoring of the production process, monitoring everything from system health to incident logs. This enables easier process audits, helping to spot areas for improvement.

Rather than having multiple systems report to the production network, ProdX routes all traffic so that it comes from a single source. The data can be accessed remotely via a connection to the secure company network. This enables remote reporting, auditing and even adjustment of system settings when necessary.





► www.mt.com/xray-X34C

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Product Inspection Safeline X-ray
Subject to technical changes
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