Processed and Packaged Food

Industrial Weighing and Product Inspection



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Making Informed Decisions

Investment in Software Supports Improvements

Future food processing and packing facilities will run on 'big data' intelligently improving decision making and planning. But how does making the right data collection software pave the way for improved operational efficiency?

A recent PMMI survey suggests that manufacturers in the grocery segment are facing a slowdown in growth, combined with a need to satisfy increasingly discerning consumers with an appetite for greater product diversity. This is partly due to changing lifestyle habits and seeking healthier food options.

Software supports improvements

To remain competitive, manufacturers are looking to streamline production processes. Advanced data collection software supports digitalization.

Benefits of digitalization

Digitalization provides improvements across all production areas. Placing live process data at the fingertips of managers and operators supports informed decision making, leading to increased uptime and better utilization of the workforce and materials.

Effective data collection

Software integration with weighing and inspection devices provides effective data collection and maximized efficiency. Find out how METTLER TOLEDO supports these improvements on pages 2 and 3.



Smart Software Solutions

Faster Access to Process Data

Placing critical information at the fingertips of managers and process owners enhances efficiency and supports informed decision making based on real-time, accurate data. Advanced software solutions increase productivity, improve product quality and support compliance with industry standards.



Data Visualization for Process Insights

Collect+ software is designed to collect data from your production devices in a central repository. You can view graphical representations using an integrated, web-based dashboard tool. Benefits include:

- Collection of weighing data from measuring devices
- Integrated dashboard visualization
- Ability to view data anytime, anywhere

www.mt.com/collectplus





Ensure Uptime with Cloud/Remote Service

InTouch monitoring is a service that constantly evaluates the condition of connected devices allowing personnel to be notified of critical equipment issues. It provides:

- Real-time awareness of equipment health
- Planned service interventions
- Increased productivity
- www.mt.com/ind-intouch





Increasing Product Inspection Efficiency

ProdX data management software provides seamless integration of product inspection devices to give complete control of the entire inspection management process. Benefits of using ProdX software include:

- Live collection of product inspection data
- Remote transfer of settings for rapid equipment setup
- Standard reporting to support compliance with regulations





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Quality and Production Data Management Enabling Smart Factory Transformation

A German dairy producer has installed an online data management solution on its production line and is benefiting from streamlined processes, improved quality control and more efficient production lines.

Heinrichsthaler Milchwerke GmbH produces over 200 tons of finished dairy products each day on 12 production lines. The company has five combination checkweigher/metal detection systems installed at critical control points, all connected through ProdX, an online data management solution from METTLER TOLEDO.



Quality and control

All production data is stored centrally and periodic data analysis is pulled at hourly intervals to check for quality incidents. All data is logged so it can be easily submitted to authorities to support audit requirements, giving them complete control of their business.



Production line efficiencies

Heinrichsthaler relies on ProdX for early warnings of issues that could lead to stoppages. The software monitors all inspection equipment and displays status information using easily-recognized color-coded icons so issues can be identified immediately.



Data and communication

ProdX supports Heinrichsthaler's smart factory initiatives and integrates into its existing production systems. Having a digital data management solution in place allows the food manufacturer to keep pace with technological developments in big data analysis.

■ We have reduced product waste from 3 to 0.9 percent. This saving of around 2 grams per package means our investment in the software has paid for itself in just three months.

Mr. Gründinger, Production Director at Heinrichsthaler



Reducing Product Waste and Saving Costs

By using ProdX, Heinrichsthaler can monitor and optimize the mean values of its pack weights. Real-time data helps avoid costly overfilling, which has led to a significant reduction in product waste. The reporting features within ProdX means that Heinrichsthaler is able to visualize all key information at any time in a condensed graphic format, ensuring a successful audit.

www.mt.com/prodx



Measure • Record • Analyze • Improve



Complete data control

Discover how ProdX is transforming business through digitalization. Download the ProdX brochure and Heinrichsthaler case study:



www.mt.com/prodx-download

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3 ways to limit packaging costs and optimize your filling process

Download the eBook to see which solution fits your processes best.



www.mt.com/ind-reduce-overfilling-costs

Make Your Data Work for You

Solutions to Optimize Food Packaging

Statistical quality control (SQC) is an efficient way to collect data for further process improvements. The right solution uses fill data as a basis for informed process decisions. See how our solutions help to increase efficiency using your filling data.

Our Solutions



The easy-to-use, all-in-one solution

IND890SQC is a complete, standalone solution containing everything a producer needs for single station SQC including charts and reports. No IT infrastructure or skilled technical personnel are needed to fulfill legal requirements.

www.mt.com/IND890SQC



The networked solution

FreeWeigh.Net is a PC-based software solution that enables tight and compliant production control as well as process optimization. The powerful, networked SQC system enables factory-wide data acquisition and can be expanded with different modules such as the statistical process control module to optimize filling processes.

www.mt.com/Freeweigh

Your Benefits from Both Solutions

Statistical quality control helps to save costs

When filling thousands of containers every day, overfilling by just one gram can result in tons of wasted material. An SQC solution shows you the result of the filling process for every controlled container, allowing you to reduce overfilling and material costs.

Statistical process control delivers insight to optimize filling

An SQC solution not only displays and stores weight data but also provides relevant insights for informed decision making in process control. It offers the opportunity to compare processes, optimize manual filling procedures and adjust the filling machine to the optimal fill amount.



X-ray Across the Value Chain

Contaminant Detection and Integrity

X-ray inspection solutions can be installed at different stages of a production line to provide complete product safety and cost savings. They inspect goods for contaminants such as metal, glass, mineral stone, calcified bone and high-density plastics, across all stages of production.

Placing an X-ray inspection system within food processing detects problems before further value is added to the product. X-ray inspection can also provide quality and integrity checks at the end of the production line.



X33 Bulk

Loose, bulk-flow applications

Provides contamination detection in unpackaged bulk-flow food products such as grains, nuts and cereals.

www.mt.com/xray-x33bulk

X38

Pumped applications

Specifically designed to inspect liquids and pumped products at any stage before final processing and packaging.

www.mt.com/xray-x38

X-ray inspection portfolio

Discover METTLER TOLEDO's full x-ray inspection portfolio and find out how they can improve product quality and process efficiency.

www.mt.com/xray-inspection



Measurement and recording of data from x-ray inspection systems enables in-depth analysis and improvement of production processes whilst ensuring compliance with industry standards.







X34

Packaged applications

Provides high detection sensitivity when inspecting for contamination in packaged ready meal products.

www.mt.com/xray-x34



X37 Series

Glass and canning applications

Designed to inspect tall, rigid containers such as metal cans and glass jars with the capability to inspect for glass-in-glass.

www.mt.com/xray-x37

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Safe, High-Quality Food **Ensures Customer Satisfaction**

Canada's leading dry food blending and packaging co-manufacturer explains how an investment in flexible and reliable product inspection technology is helping the company fulfill its

primary goal of meeting brand owners' specifications to ensure safe, high-quality products.

Rex Pak Limited is Canada's largest independent co-packer of dry powder goods. The company packs everything from rice and pasta to cheese, soup mixes and sugar sachets. "If you open your cupboards, there's a 60 percent chance you're going to find a nationally branded product that was packaged by us," explains Denise Sabatini Fuina, Vice President of Operations, who manages the company day-to-day with her brother, Vice President of Manufacturing Devin Sabatini.

Flexibility is key

Louis Sabatini, Founder of Rex Pak explains that: "A great deal of flexibility is required from co-packers to keep brandowners happy and ready to respond quickly to new trends. This is why we provide such a wide range of options." Mr. Sabatini emphasizes that the company must offer this flexibility while fulfilling its number one priority: meeting its customers' specifications to ensure consumers receive the safest, highestquality finished product possible.

We're very happy with our x-ray systems. They're very reliable and allow us to search for a wide range of contaminants such as small mineral stones and other natural products.

Mr. Sabatini

Product inspection solutions

Each of Rex Pak's 30 packaging lines is equipped with a METTLER TOLEDO checkweigher to weigh pouch fills. There's also a checkweigher at the end of the line to weigh the total weight of each finished, packed product.

In addition, the company has invested in three METTLER TOLEDO x-ray systems: an X33, installed in 2013, and two X36 models which have been in operation since early 2016.

Running at just 20 watts of generator power, the X33 was chosen due

to its low total cost of ownership. It is used for finished product inspection of filled, sealed and weighed bags. "The X36 systems are used to inspect Rex Pak's larger products and are adept at handling multiple product types and changes, providing the vital flexibility Rex Pak needs.

"In fact, all our METTLER TOLEDO equipment, from the checkweighing systems to our x-ray and laboratory equipment, provides both the customer and us with complete peace of mind that only safe food is going out in the market."

www.mt.com/xr-rex-pak



Laboratory Equipment Solutions

Rex Pak uses METTLER TOLEDO's Titrator Excellence T5 system to conduct chemical analyses that identify ingredient concentrations to meet customers' specifications. The lab also employs additional METTLER TOLEDO laboratory equipment, including a Smart-Sample reader, the InMotion Flex autosampler and a P25 printer.

www.mt.com/analytical



Customer video

Watch Mr. Sabatini explain how METTLER TOLEDO equipment provides the quality assurance and trend response to keep Rex Pak's brand owners happy.





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In packaged and processed food manufacturing, it is vital to deliver highquality food while responding to customer demands quickly. Check out our variety of educational tools for the latest tips on how you can increase efficiency while still delivering quality.

Automated inspection devices sit at the heart of any well-designed production process. They can assist with:

- Foreign body detection and rejection
- Reducing product waste
- Packaging integrity

www.mt.com/packaged-pi



Discover eight solutions to optimize production processes across your facility, including:

- Manual checkweighing
- Filling and dosing
- Formulation

www.mt.com/ind_food_8paths



METTLER TOLEDO Group

Industrial Division
Local contact: www.mt.com/contacts

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For more information

