

Target countries: Global ex China

Mettler-Toledo's new Combination Checkweigher Metal Detection Systems Reduce Cleaning Downtime

The new CM33 Washdown and CM35 Washdown combination systems are specifically designed to address the needs of manufacturers operating in harsh production environments that need both metal detection and checkweighing.

Giesen, Germany, 28th June 2021 – [Mettler-Toledo Product Inspection](#) has launched a new series of smart-design washdown-resistant combination product inspection systems, integrating sophisticated checkweighing and metal detection technologies. The CM33 Washdown and CM35 Washdown combination systems are aimed at manufacturers of packaged food products, including dairy and meat products, who require a quick-cleaning, advanced contaminant detection and precision weighing solution.

The CM33 Washdown is based on the C33 PlusLine Washdown Checkweigher, announced in 2020, but with an integrated metal detector from Mettler-Toledo's Profile range of systems. It is capable of mid-range frequency operation and throughput of up to 250 weighings per minute, with weighing accuracy of up to +/- 0.2g. With the CM35 Washdown, manufacturers get a system that is capable of a high frequency range and high sensitivity.

To complete their combination CM33 Washdown or CM35 Washdown, customers can choose one of three stainless steel Mettler-Toledo Profile metal detectors. These are the Profile Combi LS (for small, packed product applications), Profile Advantage (maximum sensitivity to take on challenging applications) and Profile R / RZ (advanced inspection of bulk, dry product applications).

As with the C33 PlusLine Washdown Checkweigher and C35 AdvancedLine Washdown Checkweigher, the combination CM33 Washdown and CM35 Washdown reduce downtime when cleaning due to their smart hygienic design. This makes them ideal for use with applications that require stringent cleaning processes using caustic cleaning agents to combat bacterial contamination risks, without compromising their weighing accuracy and detection sensitivity. Potential applications include yoghurt cups and cheese trays without aluminium foil lids. These are the kinds of applications where ingredients can spill over and contaminate parts of the product inspection machinery, hence requiring robust washdown cleaning.

Quick and efficient cleaning is aided by the washdown systems' sloped surface design, which discourages liquid or debris collection. Ingress protection is also a key design factor: the CM33 Washdown and CM35 Washdown and their Human-Machine Interfaces (HMIs) are IP69 rated, so able to resist the most caustic detergents and disinfectants. Together, these hygienic design features reduce the amount of operational downtime needed to efficiently complete rigorous cleaning regimes.

Components such as the metal detector conveyor and the product collection bin are easily dismantled and reassembled, while tool-free maintenance delivers even greater uptime. A self-adjusting elastic belt removes the need for tensioning, and ensures the belt is correctly aligned in the centre of the conveyor. This helps to reduce the possibility of damage to the belt and subsequent unexpected downtime. Customers can choose from a range of options for dealing with rejected products, including a tunnel for under- and over-weight products, and swing gate, air jet and pusher mechanisms.

Further time is saved through storing job parameters in the HMI that can be instantly recalled for automatic job set up on both the checkweigher and metal detection system. Up to 250 recipes can be stored in the HMI and additional memory for more recipes can easily be provided when required.

“The CM33 Washdown and CM35 Washdown systems bring something new to the market,” said Frank Borrmann, Market Manager at Mettler-Toledo Product Inspection. “These are highly automated, high performance machines, utilising Mettler-Toledo’s well-known precision technology – among the most advanced in these fields today – packed into a compact, open frame unit that is proven to be able to work in the harshest of washdown environments with no loss of quality. In addition, by combining checkweighing and metal detection in a single machine, food manufacturers can also save space in their factories, and benefit from service and support from a single supplier”.

Mettler-Toledo began developing combination product inspection systems in response to customer issues such as the difficulty of fitting all the inspection technologies they require into limited factory floorspace. The foundation stone of these product innovations is Mettler-Toledo's modular C-Series range of checkweighers, which enable great flexibility when integrating other product inspection technologies. As well as metal detection, Mettler-Toledo's combination systems can also include x-ray, vision inspection and track and trace technology.

The integration includes not only hardware but also software. The CM33 Washdown and CM35 Washdown, as with other combination systems, have two HMIs that run in parallel – one for the checkweigher, one for the metal detection system – communicating with each other, and giving the combination systems built-in redundancy. If one HMI fails, the

other automatically takes over, ensuring that no unnecessary downtime is incurred, and all Critical Control Points continue to function.

For more information, visit <https://www.mt.com>

About METTLER TOLEDO

METTLER TOLEDO is a leading global manufacturer of precision instruments and a service provider. The company ranks highly in a number of market segments and is a global market leader in many areas. METTLER TOLEDO is the largest provider of weighing systems and analysis instruments for use in laboratories and in-line measurement within demanding industrial and food production processes.

The Product Inspection division of METTLER TOLEDO is one of the leading providers within the field of automated inspection technology. The division includes the following brands: Safeline metal and X-ray inspection, Garvens and Hi-Speed checkweighers, and CI-Vision and PCE Track & Trace. The product inspection solutions improve manufacturers' process efficiency and help them comply with industry standards and regulations. METTLER TOLEDO systems ensure consistently higher product quality, helping protect both consumers as well as the reputation of manufacturers and their products and brands.

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