

## Metal Detection and Weight Control

### Maximum Configuration Flexibility



#### CM Combination

**Combine metal detection and checkweighing capabilities for a powerful critical control point in one space saving device. Choose from our comprehensive set of metal detectors and dynamic in-line weighing solutions designed for your application.**

##### Maximum Configuration Flexibility

Mix and match the metal detector and checkweigher models to meet your specific inspection requirements.

##### Compliance and Product Quality

The metal detector establishes a critical control point, supporting compliance with food safety requirements, and when combined with a checkweigher, adds 100% monitoring of product weights.

##### Enhanced Operator Efficiency

One-touch operation via the checkweigher HMI supports easy and automated product changeovers, and monitors statistical information for both devices.

**METTLER TOLEDO**

# Checkweighers

## 100% Weight Control



Precision weighing for every product type and at production throughputs up to 800 packs per minute. Reliably remove under-filled or incomplete products from the production line, supporting compliance with weighing regulations.

Checkweigher	C31 StandardLine	C33 PlusLine	C35 AdvancedLine
<b>Description</b>	Efficient entry-level checkweigher for simple weighing applications	Flexible mid-level checkweigher for standard weighing applications	High-performance checkweigher suitable for challenging weighing applications
<b>HMI</b>	7 inch color touchscreen	12 inch color touchscreen	15 inch color touchscreen
<b>Weighing Range**</b>	20 g - 6,000 g	3 g - 7,000 g	3 g - 10,000 g
<b>Maximum Product Weight</b>	6 kg	7 kg	10 kg
<b>Weighing Technology</b>	Strain Gauge load cell	FlashCell™ EMFR load cell; Strain Gauge load cell	FlashCell™ EMFR load cell
<b>Accuracy***</b>	from $\pm 0.5$ g (500 mg)	from $\pm 0.05$ g (50 mg)	from $\pm 0.01$ g (10 mg)
<b>Line Height</b>	550 mm - 1,100 mm ( $\pm 50$ mm)	550 mm - 1,100 mm ( $\pm 50$ mm)	550 mm - 1,500 mm ( $\pm 50$ mm)
<b>Throughput</b>	200 ppm	350 ppm	800 ppm
<b>IP Rating</b>	IP54; IP65	IP54; IP65; IP69	IP54; IP65; IP69

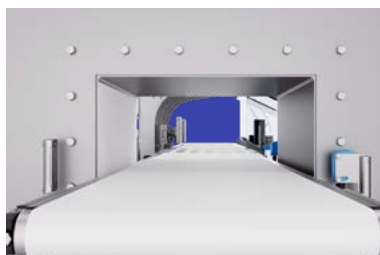
\*\* Dependent on product (article) weight and the design and dimensions of the weighing conveyor being used

\*\*\* Within official margins of error, depending on weight, dimensions and transport characteristics of the product being weighed

Learn more about in-line weighing at  
[www.mt.com/checkweighing](http://www.mt.com/checkweighing)

# Metal Detectors

## Increased Sensitivity



Detection of ferrous, non-ferrous and stainless steel metals in wet and dry products. Remove metal contaminants from the production line, to reduce the potential for product recalls and protect consumers and your brand. Reduce false reject rates through advanced software algorithms that quickly detect contamination and reject only those affected products.

Metal Detection	M31R	M33R	M34R	Profile	Profile Advantage
<b>Description</b>	Ideal for dry or wet product applications to deliver excellent sensitivity and stability	Suitable for dry or deep frozen products with high-tuned frequencies	Enhanced for challenging wet or metalized film applications with dual-simultaneous frequencies for very high sensitivity	Ultimate performance for dry products with ultra high-tuned frequencies	Optimized for wet products with high moisture or salt content, or are wrapped in metalized film
<b>Operating Frequency</b>	Tuned multiple frequency with eDrive™ up to 300 kHz	Tuned multiple frequency with eDrive™ up to 600 kHz	Dual simultaneous frequency with 7 modes and 3S Algorithm	Multi-tuned frequency up to 800 kHz	Multi-simultaneous frequency (MSF) with 10 modes and 3S Algorithm
<b>Zero Metal Free Zone (ZMFZ)</b>	Option	Option	No	Option	No
<b>Standard Aperture Sizes (mm)</b>	<b>Width Options:</b> 200 - 450; <b>Height Options:</b> 100 - 400				
<b>IP Rating</b>	IP65; IP69K				
<b>Relative Humidity</b>	Maximum relative humidity: 93% for temperatures up to 45 °C (113 °F)				

Discover our complete portfolio here  
[www.mt.com/metaldetection](http://www.mt.com/metaldetection)

## Combination Systems

### Advantages

#### Mix Our Solutions to Match Your Requirements

Choose from a variety of inspection technologies and product handling options to meet your individual packaging and environmental needs.



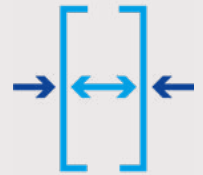
#### Reduced Total Cost of Ownership

Working with a single vendor for installation, training, and in-life service improves efficiency. Plus, shared components reduces the cost of spare parts and our comprehensive service solutions help achieve regulatory compliance, maximize performance and improve uptime.



#### Space-Saving Design

Minimize the required production space thanks to a compact footprint. Easy cleaning access supports increased efficiency.



#### Advanced Connectivity Options

Integration with ProdX™ food safety and quality management software enables real-time monitoring and food safety compliance. Additionally, open interfaces such as OPC UA, PackML, and Fieldbus enable IoT/Industry 4.0 initiatives to access, analyze, and control data from anywhere.



Choose from our other combination solutions:



CMV Combination



CV Combination



CX Combination



**Mettler-Toledo Group**

Product Inspection Division

Local contact: [www.mt.com/contacts](http://www.mt.com/contacts)



Subject to technical changes.

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[www.mt.com/cw-md](http://www.mt.com/cw-md)

For more information