



**Sealtite / Open Diverter  
Gravity Fall**

Robust construction

Rapid, in-process test facilities

Easy-clean design

## Sealtite / Open Diverter Gravity Fall Metal Detection Systems for Powders & Granules

# Maximum Protection, Ultimate Product Quality

## Optimised Operational Efficiency

Designed to deliver ultimate product quality and total peace of mind for you and your customers, METTLER TOLEDO SAFELINE's Sealtite and Open Diverter gravity fall systems inspect free falling powdered and granular products for metal contamination.

High frequency operation and sophisticated electronic filtering techniques combine to deliver the ultimate in metal detection sensitivity. This enables all metals to be identified in the product flow. Contaminants readily detected include ferrous, non-ferrous (including aluminium) and the most difficult to find non-magnetic stainless steels.

On detection of metal, a fully automatic, high speed reject device is operated diverting the contaminated product and isolating it from the main product flow. The combination of maximum detection capability and the most efficient rejection systems lead to optimised operational efficiency, maximised profitability, and compliance with both internal and external standards and regulations.

### Rapid set-up through easy to use interfaces

Set up could not be easier through a choice of easy to use intuitive operator interfaces which can be located either adjacent to, or remotely from the working environment.



The Signature software platform provides access through a robust, menu driven membrane key panel.



The Profile software platform provides additional features through a full colour touch screen interface.

### Flexible design to suit all applications

Whether it's the inspection of fine, dusty powders or granular product with large particulates, METTLER TOLEDO SAFELINE has the solution.

**Sealtite** technology is utilised for dusty higher value products providing a dust-tight seal to reduce the escape of good product into the reject channel and minimising product waste.

**Open Diverter** technology provides a more cost effective solution mainly for non-dusty products. Open divert reject systems can be upgraded to Sealtite standards retrospectively if required.

### Maximised uptime through easy clean design

All reject devices are designed to be dismantled quickly and easily without the need for tools. This means that clean down procedures are shortened and production capacity is maximised.

### Reliable, robust construction

Built for installation in tough environments, all METTLER TOLEDO SAFELINE gravity fall systems utilise fully welded stainless steel support frames and robust construction techniques. This leads to low maintenance requirements and maximum reliability providing the lowest overall cost of ownership.

### Installation in the tightest spaces

All METTLER TOLEDO SAFELINE gravity fall systems utilise patented Internal Cancellation Field (ICF) technology which enables them to be installed close to other metal structures without compromising sensitivity performance.

This technology, combined with the compact, innovative reject device design, means that Sealtite and Open Diverter systems offer the best overall space-saving solutions for situations where height is restricted.

### Rapid in-process testing facilities

Optional integrated test facilities can be provided enabling performance validation procedures to take place without disrupting the production process to maximise up-time and plant efficiency. Data gathered from test procedures can be used to prove compliance with industry standards and regulatory requirements.

### ATEX compliance for explosive atmospheres

Designed for use in dusty environments, METTLER TOLEDO SAFELINE gravity fall systems can be supplied with full compliance with ATEX EXII Cat 2D T79 C.



### Optional extras

- Circular outlets
- Inclined systems
- Special throughput tubes for high abrasive non-food applications
- Rectangular apertures for increased throughput and improved sensitivity
- Air-cooled systems for high temperature products.



Easy-clean design



Rectangular outlets as standard for high volume throughput and reduced overall height



Integrated test facility provides efficient means of testing detector performance and reject diverter operation

## Product Data

Model	Nominal Internal	Typical	Overall	Max Fall
	Tube Diameter	Throughput Kg/hr*	Length**	Height***
GF 50	50 mm	1,500	720 mm	350 mm
GFRH 50	50 mm	1,500	650 mm	300 mm
GF 75	75 mm	3,500	873 mm	550 mm
GFRH 75	75 mm	3,500	650 mm	300 mm
GF100	102 mm	6,000	873 mm	550 mm
GFRH 100	102 mm	6,000	650 mm	300 mm
GF 125	121 mm	9,500	1,050 mm	800 mm
GFRH 125	121 mm	9,500	850 mm	500 mm
GF 150	145 mm	13,500	1,050 mm	800 mm
GFRH 150	145 mm	13,500	850 mm	500 mm
GF 200	200 mm	24,000	1,217 mm	800 mm
GFRH 200	200 mm	24,000	1,100 mm	500 mm
GF 250	250 mm	37,500	1,385 mm	800 mm

Larger diameter (300 mm & 400 mm) and rectangular GF systems are available upon request.

\* Actual rates will depend on the bulk density of the product and its flow characteristics.

\*\* Overall length with rectangular outlets, excluding test kits

\*\*\* Distance from inlet flange of the detector to the point where the product starts to fall

## Sensitivity

Sensitivities are given as a guide to performance and the data quoted is based on the SAFELINE "boost" performance algorithm being switched out. Achievable sensitivity will be dependent upon the product being inspected, the physical installation of the unit and the final specification of the model chosen.

Enhanced performance may be attainable in some installations by using the SAFELINE "boost" algorithm.

Model	Fe	Non-Fe *	SS**
GF 50	0.3 mm	0.3 mm	0.4 mm
GFRH 50	0.4 mm	0.4 mm	0.6 mm
GF 75	0.4 mm	0.4 mm	0.6 mm
GFRH 75	0.5 mm	0.6 mm	0.8 mm
GF100	0.5 mm	0.5 mm	0.7 mm
GFRH 100	0.6 mm	0.7 mm	0.9 mm
GF 125	0.6 mm	0.6 mm	0.8 mm
GFRH 125	0.8 mm	0.8 mm	1.1 mm
GF 150	0.7 mm	0.8 mm	0.9 mm
GFRH 150	0.9 mm	1.0 mm	1.2 mm
GF 200	0.8 mm	1.0 mm	1.1 mm
GFRH 200	1.1 mm	1.3 mm	1.4 mm
GF 250	1.0 mm	1.2 mm	1.3 mm

\* Non-Fe includes aluminium, brass, copper, phosphor bronze, etc.

\*\* Stainless Steel sensitivities quoted are for "non-magnetic grades."

[www.mt.com/metaldetection](http://www.mt.com/metaldetection)

For more information

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