

Loss-in-weight feeder MET M CS

- Loss-in-weight feeder for gravimetric or volumetric feeding of bulk solids
- Discharge element with internal agitator
- Feeding and extension hopper made of stainless steel and acid-resistant steel
- Fast, easy disassembly for cleaning and changing products
- Integrated measurement, control and regulation electronics
- High feeding accuracy and consistency, below ± 0.5%



Application

The loss-in-weight feeder MET is used for continuous volumetric and gravimetric feeding of bulk solids such as powders, granulates, chips, flakes and fibers.

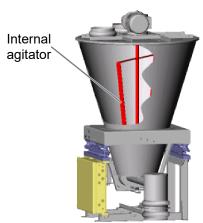
Typical applications can be found across the board in all industries, though principally in the plastics, chemicals, foodstuffs, detergents and pharmaceuticals industries.

Design

The MET type CS consists of the feeder, an internal agitator, the feed hopper, the extension hopper and a support structure. In gravimetric operation, the gravimetric feeder includes two weighing modules. An interior agitator moves the product in the hopper and ensures reliable product flow into the feed element. For conveyor elements, feed spirals and screws in single and double-shaft versions are used.

The extension hopper is available in different sizes for customization based on feed rate and application.

The gravimetric feeder weighing modules consist of hermetically sealed precision load cells using resistance strain gauge technology with integrated overload, lifting and skewing protection. The evaluation and control electronics are integrated into the feeder mechanical system. However, it can also be installed separately if required.





Function

The MET loss-in-weight feeder is used as a volumetric feeder or as a gravimetric feeder based on the principle of the loss-in-weight feeder.

In the loss-in-weight feeders, the actual feedrate is determined from the loss in weight per unit of time. A controller compares the actual feedrate with the feedrate setpoint and regulates the feed element.

The container geometry with steep walls and an internal agitator enables the reliable feeding of even poorly flowing products with high feeding accuracy and consistency.





Dismantling the simple screw/helix

Technical Data

Metal parts in contact with bulk material	Stainless steel 1.4404 (316L)
Temperature bilk solids	-30 °C +100 °C (higher on request)
Ambient temperature	-10 °C +50 °C
Material bulk density	0.3 1.2 kg/dm ³
Design Pressure	-5 95 mbar
Operating pressure	-0.5 20 mbar
Feed rate	5 9,500 dm³/h
Feeding accuracy	±0.5 % (typically)
Feed constancy	±0.5 % (typically)
Drives	AC drives for feed elements and agitator
Single screw/helix	Diameter 35, 57 mm and 89 mm
Twin screw/helix	Diameter 28, 35 mm and 47 mm
Discharge element	Internal vertical agitator
Extension hopper	Volume 75, 210 and 380 dm ³

