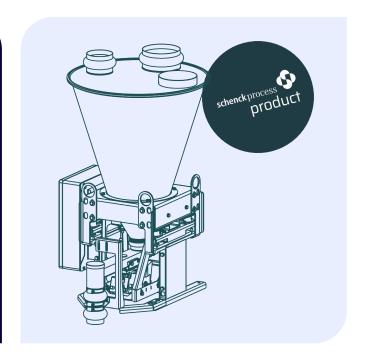


Feed System

MET L CS VB

- Feed system for volumetric and gravimetric feeding of bulk solids
- Maintenance-free vibration discharge and feed hopper type CS
- Fast, easy disassembly for cleaning and changing products
- Integrated measurement, control and regulation electronics
- High feeding accuracy and consistency, below ± 0.5%



Application

The MET dosing equipment 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.

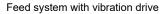
Design

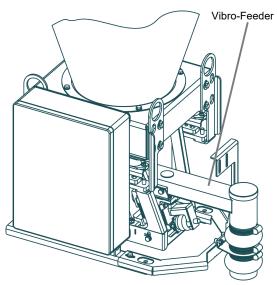
The MET type CS feed system, as a vibrating feeder, consists of the dosing trough with a vibration drive, the feed hopper, the extension hopper, and a support structure. In gravimetric operation, the gravimetric feeder includes two weighing modules. The geometry of the feed hopper ensures a reliable bulk material flow into the dosing trough.

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.



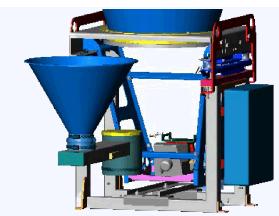




Function

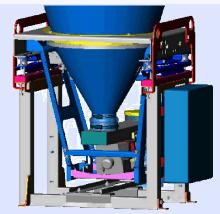
The MET feed system is used as a volumetric feeder or as a gravimetric feeder based on the principle of a differential gravimetric feeder.

In differential gravimetric feeders, the actual feed rate is determined from the weight loss per unit of time. A control system compares the actual feed rate with the feedrate setpoint and regulates the feed unit.



The CS type vibrating feeder is equipped with a maintenance-free dosing trough. The dosing trough, in combination with the special geometry of the bulk material feed, creates mechanically optimal conditions for high dosing quality.

The MET dosing system offers significant advantages, including the easy and quick disassembly and reassembly of parts in contact with bulk material for material changes and cleaning of the rear, non-process side.



Technical Data

| Metal parts in contact with bulk material | Stainless steel 1.4404 (316L) |
|---|---|
| Temperature bulks solids | -30 °C +100 °C |
| Ambient temperature | -10 °C +50 °C |
| Material bulk density | 0.3 1.0 kg/dm ³ |
| Design Pressure | -5 95 mbar |
| Operating pressure | -0.5 20 mbar |
| Conveying rate | 0.3 (min 0.3 kg/h) 1500 dm ³ /h |
| Feeding accuracy | ±0.5 % (typically) |
| Feed constancy | ±0.5 % (typically) |
| Drives | Magnetic vibration agitator for feed elements |



Design Variants

| Feed principle | Gravimetric (differential dosing belt scale) |
|------------------|--|
| | Volumetric |
| Feed units | Feed grooves |
| | Width 70 and 120 mm |
| Feed hopper | Stainless steel, 1.4404 (316L) |
| Extension hopper | Volume 30 and 83 dm ³ |

Layout

