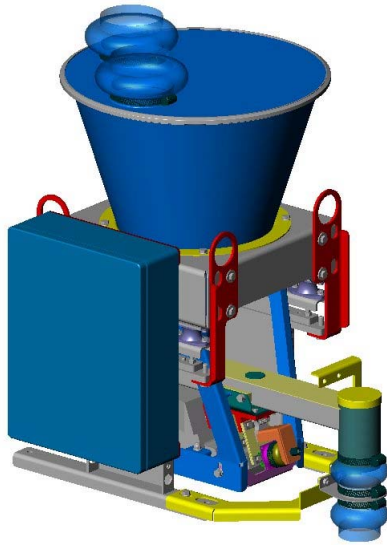


MechaTron® Feed System, Series L – Coni-Steel® Vibro Feeder



- Feed system for volumetric and gravimetric bulk solids feeding
- Coni-Steel® feed hopper with service-free Vibro Feeder
- Quick and easy dismantling for cleaning and product change
- Integrated measuring, control, and supervisory electronics
- High feed accuracy and constancy, better than $\pm 0.5\%$

Application

The MechaTron® feed system is used for continuous volumetric and gravimetric feeding of bulk solids, e.g. powders, granules, chips, flakes and fibres.

Typical applications come up in any industrial area, particularly in the plastics, chemical, food, detergent and pharmaceutical industries.

Application

The MechaTron® Coni-Steel® Vibro Feeder comprises a Vibro Feeder, feed and extension hoppers, and a support structure.

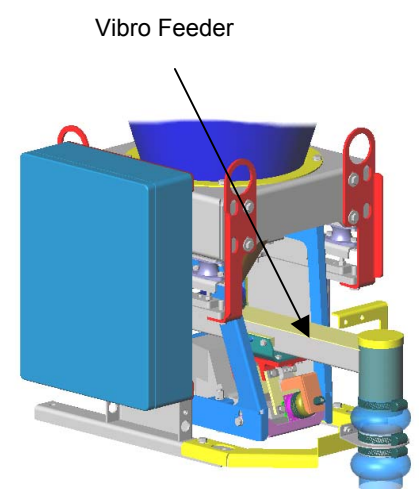
Gravimetric feeders are completed by two weighing modules.

The special feed hopper geometry of the MechaTron® Vibro Feeder ensures consistent material flow to the feed unit.

For adaption to feed rate and application, the extension hopper is available in various sizes.

The weighing modules of the gravimetric feeder consist of hermetically sealed precision load cells in strain-gauge technique with integral overload and anti-rotation protections and hold-downs.

The weighing electronics is integrated into the mechanical system but can also be installed separately.



Feeder system with Vibro Feeder

Operating Principle

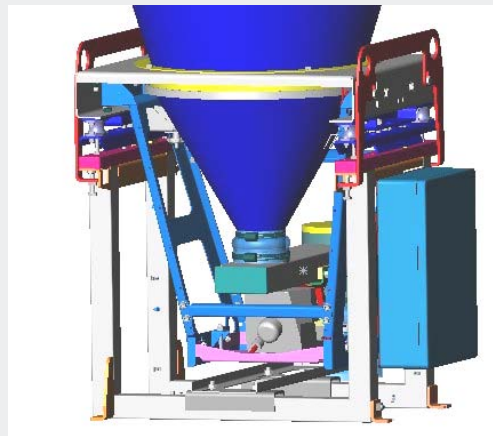
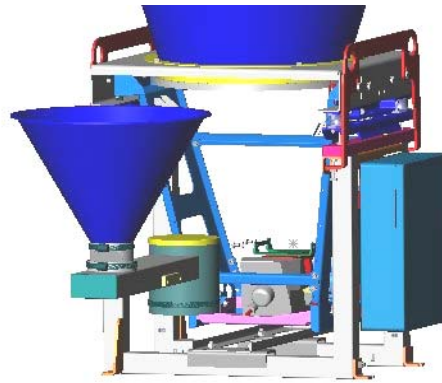
The MechaTron[®] feed system is used as volumetric feeder with controlled prefeeder or as gravimetric feeder operating on the loss-in-weight principle.

With loss-in-weight feeders, the actual feed rate is determined from the decrease in weight per unit time.

A controller compares the actual feed rate to setpoint and controls the feed element.

The new Coni-Steel[®] Vibro Feeder is equipped with a service-free feed unit which combined with the special hopper geometry ensures optimal conditions for high feed quality.

The MechaTron feed system excels through quick and easy dismounting and reassembly of contact parts for product change and cleaning from the back (non-process side) of the feeder.



Technical Data

Parts in contact with bulk solid	Stainless steel 1.4404 (316L)
Material temperature	-30°C to +100°C
Ambient temperature	-10°C to +50°C
Bulk density	0.3 – 1.0 kg/dm ³
Design pressure	-5 to 95 mbar
Operating pressure	-0.5 to 20 mbar
Feed rate	0.3 (min 0.3 kg/hr) to 1500 dm ³ /hr
Feed accuracy	± 0.5% (typical)
Feed constancy	± 0.5% (typical)
Drives	Magnetic exciters for discharge units

Variants

Feed principle	Gravimetric (loss-in-weight feeder) Volumetric
Feed elements	Feed units 70 and 120 mm width
Feed hopper	Stainless steel 1.4404 (316L)
Extension hopper	30 and 83 dm ³ volumes

Possible Arrangements



Installed in platform



Standing on platform



Suspended from hopper

