

Metering Screw Feeders



Guttridge manufacture a range of Metering Screw Feeders for the accurate dosing of bulk solids, with capacities from 0.1 to 15000 litres per hour.

They offer true modular design and deliver superior performance at a truly competitive price.

Our standard machines can be quickly and easily customised to the customer's specific needs saving both time and money.

Multiple feeders can be integrated to form complete recipe preparation systems.

Key features

- *Accurate (typically +/- 0.5%)*
- *Modular design*
- *Compact and Robust*
- *Stainless steel construction, polished to customer requirement*
- *Easy clean and pharmaceutical options*
- *Fully sealed for dust free operation*
- *Independent control of agitator and auger*

Available Feeder Configurations

- *Volumetric*
- *Gravimetric (PID)*
- *Loss in weight*
- *Gain in weight*

Ideally suited to handling powders, flakes and granules for...

Batch preparation

Recipe formulation

Continuous dosing

Multiple feeder combinations

Product Conditioning

Product Range

Model Number	S3/1	S3/2	S3/3	S3/4
Auger diameter (mm)	12 and 20	25 and 50	75 and 100	175
Typical throughput (kgs/hr)	2 to 45	30 to 750	600 to 5000	3000 to 15000

NB. Capacity is dependant on bulk density, material flow characteristics and machine configuration

Component Details

Auger options

- Square profile spiral
- Spiral with central core
- Solid screw

Agitator options

- Scroll
- Paddle
- Hammer (lump breaking)

Conditioning Chamber

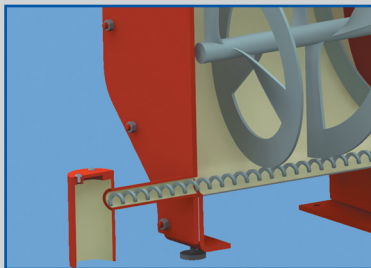
- Shaped to produce close coupling with feeder auger

Drive

- Right angle shaft mounted IP55 geared motor
- Independent auger and agitator drives
- Frequency inverter (10:1 turndown)
- DC drive (20:1 turndown)

Control Options

- Multiple feeders for multi-ingredient recipe preparation
- Interconnection through one multi-core cable or industry standard data links e.g. Profibus
- ISO 9000 compatible data logging
- Management information and stock control
- PLC/SCADA interfacing
- Load cells for precise gravimetric or loss in weight control



Cutaway showing spiral auger with scroll agitator

Available Configurations

● Volumetric

Continuous flow measured by volume
For materials with consistent density, particle size and moisture

● Gravimetric (PID)

Continuous flow measured by weight
Typically for materials where the density varies or where the process demands consistency by weight. A set-point target flow rate is set and the controller uses the load cell feedback to ensure an accurate feed rate

● Loss in weight

Batching systems e.g. where a raw material is being fed in to a mixer / blender from a bulk bag discharge system. One major advantage is that it allows multiple ingredients to be fed in simultaneously significantly reducing batch times

● Gain in weight

Batching systems e.g. where a raw material is being fed in to a bulk bag charging system to deliver a specific weight

Guttridge Limited

Wardentree Park
Spalding
Lincolnshire
PE11 3UU
United Kingdom

Tel: +44 (0) 1775 765 300
Fax: +44 (0) 1775 765 304
sales@guttridge.co.uk
www.guttridge.co.uk