

# Twin Screw Microfeeders

## Volumetric or Gravimetric Feeding of Bulk Materials at Extremely Low Rates



Coperion K-Tron's family of twin screw microfeeders has been specially designed to provide maximum accuracy at minimal feed rates, which makes these feeders ideal for use in the chemical and pharmaceutical processing industries. Unique design features ensure that high value ingredients are fed accurately at rates as low as 32 g/hr with minimal residual material left in the feeder. The modular design means more flexibility for the process and easy access to all parts for cleaning and maintenance. The 12 mm and 16 mm twin screw feeding modules are completely interchangeable and can feed a wide range of free-flowing to difficult powders.

### Design Features

- › 12 mm and 16 mm diameter twin screw feeding modules
- › Machined base with maximum screw opening and agitator for optimal screw filling
- › Bottom-driven vertical agitator provides accurate screw fill with minimal residual material
- › Quick coupling design for easy cleaning of product contact parts
- › All product contact parts in stainless steel
- › One stepper motor drives both screws and agitator
- › Completely oil and grease free drive system
- › Optional protective enclosure to reduce atmospheric/climatic influences
- › Versions available for ATEX and NEC hazardous locations
- › Twin screw feed rates: 0.031 to 33.11 dm<sup>3</sup>/h (0.0011 to 1.17 ft<sup>3</sup>/h)

To accommodate various materials and feed rates, there are 4 screw designs available which can easily be exchanged. The design of the feeding trough, combined with the bottom driven vertical agitator, makes it possible to practically eliminate the amount of residual product.

Both motor drive and high resolution digital weigh scale are completely enclosed within the feeder base for improved hygiene and ease of cleaning. Coperion K-Tron's Smart Force Transducer weighing technology features include an integrated microprocessor and digital filtering software to suppress environmental vibrations. The control module combines motor control, feeder control and an operator interface into a single unit that can be mounted by the feeder or in a control panel. Interface software is available for communication with a host control system.

Coperion K-Tron's family of twin screw microfeeders ideally fulfills the requirements for exact low rate feeding. It meets the high expectations regarding short term accuracy, reproducibility and linearity. Feeding tests can be conducted at the customer site or in one of Coperion K-Tron's test laboratories.

