

**Simple.
Robust.
Reliable.**



Application

The ProRate PLUS Continuous Gravimetric Feeder Line was designed with the specific requirements of the plastics processing industry in mind. The single screw feeders in three sizes are designed for free to moderate flowing bulk materials. An additional twin screw feeder is available for feeding bulk materials with more challenging flow properties, such as powders. These feeders are simple to integrate, to fill, to operate and to clean. They are robust and reliable. They get the job done.

The compact design and low space requirements of the ProRate PLUS feeders allow up to six feeders to be easily grouped around an extruder inlet. The feeders can also be placed individually.

Features

- **Simple** to install and operate
- **Robust** design
- **Reliable** feeding, weighing and control technology
- ProClean Rail for easy cleaning
- Both vertical and horizontal outlets included

Design

The ProRate PLUS Gravimetric Feeders feature a robust frame design.

Single Screw Feeders

The ProRate PLUS line includes three sizes of single screw feeders for feeding free-flowing bulk materials (PLUS-S, PLUS-M, PLUS-L). The feeders feature a streamlined design, optimized to get the job done reliably without all the costly extras you don't need.

Twin Screw Feeder

For more difficult to handle materials we offer a twin screw feeder (PLUS-MT). This gravimetric feeder with its horizontal agitator ensures that the two screws are always optimally filled with material. The twin screw technology also has the advantage of reducing pulsations and the screws have a self-cleaning effect.

All feeders are mounted in individual stands and can either be installed individually or combined to form a compact cluster without the need of an additional structure. The feeders are designed to allow for easy access to the feeding section even when installed in a cluster formation. PLUS-S, PLUS-M and PLUS-MT feeders are mounted on a single load cell, PLUS-L feeders are mounted on two load cells. The feeding section of all four units can be easily retracted and rotated out for maintenance or cleaning without disturbing the rest of the set-up.

The state-of-the-art digital load cells provide reliable feeding performance, ensuring your mixture is on spec even in challenging environments. Feed rates from 3.3 to 4800 dm³/h [0.12 to 169.5 ft³/h] can be achieved, depending on feeder model, screw configuration, and bulk material.

Each feeder is equipped with an individual ProRate PCM control module with the possibility to connect up to eight feeders to one main control device featuring integrated support for single loaders.

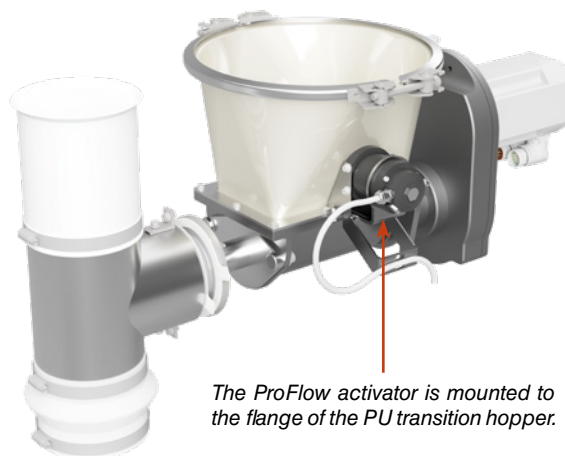


Features and Options

ProFlow Bulk Material Activator

The ProFlow bulk material activator is an economical solution available as an option to promote bulk material flow within the feeder for medium free-flowing materials without the need for mechanical vertical agitation. ProFlow comprises an electromagnetic vibrating device which activates the polyurethane transition hopper and stainless steel feed hopper. The device operates at an optimized frequency and amplitude to minimize energy consumption while maximizing material flow. Smart electronics limit the power consumption to only 3.6 Watts.

To further improve screw fill in the smaller diameter screws of the PLUS-S model, we offer overflight screws. The overflight screws have wings which loosen the bulk material and ensure it keeps moving into the screw trough.



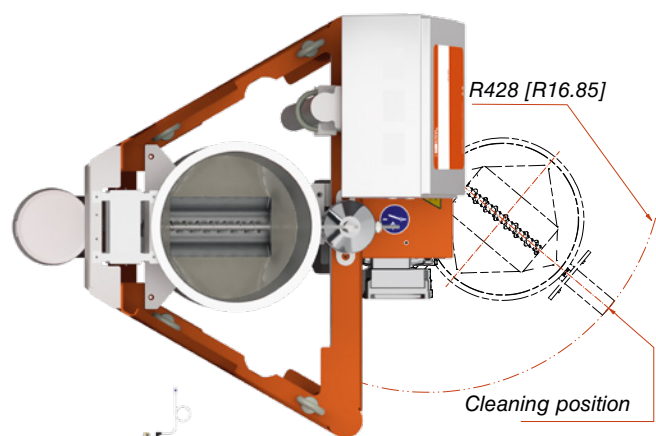
The ProFlow activator is mounted to the flange of the PU transition hopper.

ProClean Rail

Easy access for cleaning and maintenance is always guaranteed thanks to the patent-pending ProClean Rail system. ProClean Rail is designed to allow the base unit to be retracted the rear and then rotated for optimal access. This facilitates maintenance and cleaning of the feeding unit without having to move the feeder.

Thanks to patent-pending state-of-the-art magnetic coupling technology, the bellows and screws can be released from the outlet section without tools, while still being strong enough to guarantee the required holding force during operation.

All ProRate PLUS models are outfitted with the ProClean Rail as a standard feature.



ProRate Refill

Tailor-made pneumatic refill solutions are available for each feeder size. Each feeder can be outfitted with either a filterless vacuum receiver for pellet applications or a vacuum receiver with a cartridge filter for applications where there may be dust that must be kept out of the air only line of the vacuum conveying system. Refill solutions include a compact support stand, level indicators, butterfly valves and electrical terminal boxes. The Series 4 MPC controller is ideal for up to 24 vacuum receivers on one blower with one back-up blower.



PLUS-M (left) and PLUS-S (right) with refill stackup