

How does the ProRate PLUS line of feeders correlate with Coperion K-Tron feeders?

ProRate PLUS feeders are a stand-alone line of feeders. They are designed to deliver simple, robust, and reliable feeding technology at an economical price. The simple design features offer plenty of value and feeding capabilities. Designed on the same weighing technology employed by Coperion K-Tron feeders, ProRate PLUS feeders can deliver accurate gravimetric feeding for most plastics applications. If you are looking for an economical solution for a simple application, ProRate PLUS is the right choice.

What makes ProRate PLUS feeders unique?

The design principles behind the ProRate PLUS line of feeders are to offer a robust feeder that is simple to install and operate. The compact design allows for a potential cluster of up to six units around a process inlet. The patented ProClean Rail system allows for ease of access for cleaning, inspection, and maintenance, even when situated in a cluster. The ProRate PLUS PCM-KD control module includes simple line control functionality and offers the possibility to connect up to eight feeders to one main controller.

What options are available with ProRate PLUS feeders?

ProRate PLUS feeders offer simple product configurations – single screw feeders in three standard sizes (S, M, and L) and a twin screw feeder (MT). In order to offer economical feeding solutions and quick delivery times, ProRate PLUS feeders are designed to serve most common market demands and material handling requirements with minimal customization. Regardless of the size, each feeder comes with a stainless-steel feed hopper and screw, robust stand, digital P-SFT load cell(s), motor drive, and controller as well as both horizontal and vertical outlets.

What feed rates can be achieved with ProRate PLUS feeders?

The ProRate PLUS feeder line comes in four models. Single screw models can deliver feed rates ranging from 3.3 to 4800 dm³/h (0.12 to 169.5 ft³/h). This is dependent on the feeder model, screw configuration, and bulk material. The twin screw model can deliver feed rates from 40 to 1500 dm³/h (1.4 to 53 ft³/h).

What type of weighing technology is used with ProRate PLUS feeders?

ProRate PLUS feeders employ the same Smart Force Transducer (SFT) weighing technology that is currently being used with Coperion K-Tron feeders. The P-SFT load cells have been proven to provide accurate, stable, and reliable digital weight measurements under a broad range of operating conditions. With a resolution of 1 : 500,000, the P-SFT load cells offer a combined error of < +/- 0.03%.



What materials can be fed using ProRate PLUS feeders?

ProRate PLUS single screw feeders are designed to handle free flowing, easy-to-handle materials. Geared towards pellets and granules, the ProRate PLUS feeders can also handle flakes and free-flowing powders. For moderately flowing powders, we offer the PLUS-MT twin screw feeder as well as the optional ProFlow bulk material activator, which can be added to any model. If flow-ability is a question, testing can be done at Coperion K-Tron's global state-of-the-art testing facilities to determine if ProRate PLUS is the right solution for the application.

Note that ProRate PLUS feeders are not suitable for feeding magnetic materials because they may interfere with the magnetic couplings for the screws.

What type of controls are supplied with ProRate PLUS feeders?

Every ProRate PLUS comes equipped with a PCM control module. You can choose either the PCM-KD which boasts a fully-fledged operator interface with line control functionality in addition to its single feeder motor drive. In a line setting, additional feeders need only have the PCM-MD controller with just a motor drive (must be connected to a feeder controlled via PCM-KD).

How easily are ProRate PLUS feeders cleaned or maintained?

ProRate PLUS feeders come equipped with the ProClean Rail system. This system allows the feeding module to be retracted and swiveled up to 140 degrees from the working position. This allows for easy cleaning, replacement of the feed screw, and inspection. This can all be completed while feeder remains in place, minimizing downtime and maximizing process uptime.