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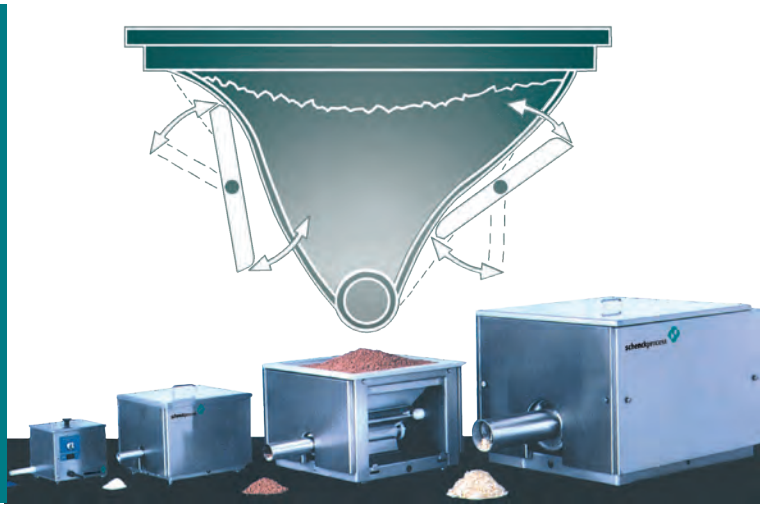
AccuRate® Volumetric Series Feeders

- **Volumetric feeding in rates from .000017 to 280 cubic feet (.0005 to 7,928 liters) per hour**
- **Paddle agitation to the Tuf-Flex™ vinyl hopper gently massages materials into the feeding screw**
- **Proven technology with installations in a wide range of industries throughout the world**



Application
The AccuRate® Series Feeders are an economical solution for volumetric feeding of bulk solids.

With a feed rate range of .000017 to 280 cubic feet (.0005 to 7,928 liters) per hour, these feed systems can be used for:
- continuous feeding
- batching and blending

of materials up to 0.4 inches (10 mm) grain size.

The AccuRate® Volumetric Series Feeders have been proven to handle a wide range of materials from powders to pellets and flakes for multiple applications in process industries throughout the world. Their simple, compact design not only ensures easy service and maintenance, but also economical integration into existing production plants.

Features
The AccuRate® Volumetric Series Feeders are equipped with the following features:
- Housing (rugged welded structure) of stainless steel, with easily removable side panels
- Tuf-Flex™ vinyl flexible hopper
- "Massaging" paddle system
- Double shaft seals to prevent powder leakage
- Digital touchpad potentiometers
- Protective screen
- Lifetime lubricated bearings
- Gasketed covers
- DC motor control

Options
- Extended or specially designed helixes
- Mounted or free-standing carbon or stainless steel hopper extensions

Function
AccuRate® Volumetric Series Feeders operate using flex-wall technology introduced by Schenck AccuRate more than 40 years ago.

Instead of the usual internal agitators, all feeders are fitted with one or two external paddles that gently massage the vinyl hopper. This ensures a continuous, even flow of material into the helix with a uniform bulk density while alleviating bridging and material build-up.

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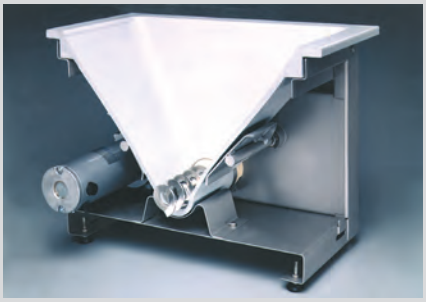
AccuRate® Volumetric Series Feeders

Industry Leading Accuracy and Dependability

Designed to deliver accuracy

Features designed into all Schenck Process AccuRate® Volumetric Series Feeders that contribute to their high degree of accuracy include:

- Large inlet to prevent bridging
- Seamless hopper with rounded corners for uninterrupted flow
- Four-way hopper flexing action
- Adjustable amplitude and frequency of the hopper flexing mechanism to gain optimum performance for each material



Volumetric feeding deviations generally range from ±.5 to 3% for most materials. Loss-in-weight feeding systems are available for even more precise accuracies.

Four AccuRate® volumetric series feeders are available

AccuRate® Series Feeders range in size from 8-1/2" square to 31-1/2" square and can deliver feed rates ranging from a few grams up to 280 cubic feet per hour.

Top to bottom: Models 102, 302, 602 and 902.

100 Series

The smallest of the four AccuRate® Series Feeders is the 100. The 100 is commonly used for feeding soap powder, nutraceuticals, Arizona road dust, and colors like cobalt, iron oxide, and gold for the production of glass. Many customers mount the 100 inside other pieces of equipment to feed very small quantities.

300 Series

The 300 Series is often found in food processing and plastic compounding plants because of its ability to feed flour, salt, vitamins, and color additives. It is also used in industrial applications with size and/or weight restrictions.

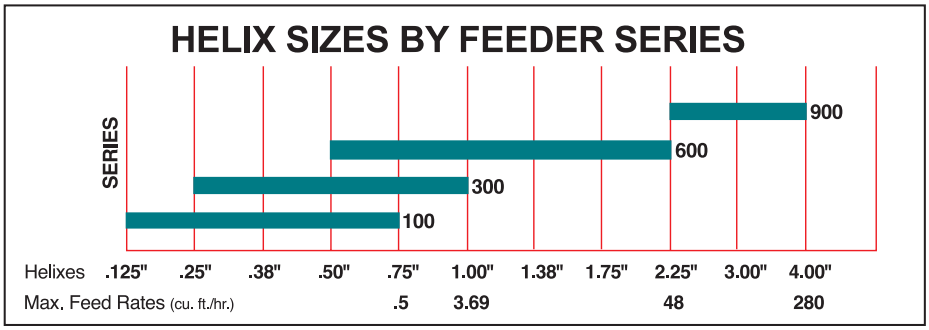
600 Series

The 600 Series, with its wide range of available helixes and feed rates, is the most versatile and consequently the most widely used AccuRate® Series Feeder.

900 Series

For higher feed rates, the 900 Series is used for applications up to 280 cubic feet per hour.

HELIX SIZES BY FEEDER SERIES



AccuRate® Volumetric Series Feeders

Standard models
Descriptions of the standard models are listed below. Each two-digit number shown is preceded by a series number; for instance, the standard variable-speed feeder in the 300 Series is a Model 302.

Model 02
The AccuRate® Model 02 is a standard variable-speed dry materials feeder with a 50:1 turndown.

Model 04
The AccuRate® Model 04 is the same basic design as the Model 02, but has a separate speed control for the dual mechanical devices that create the agitation on the Tuf-Flex™ hopper. The feed screw is also equipped with its own speed control. This unit allows the user to vary the agitation while maintaining a constant feed rate or vice versa.

Model 10
The AccuRate® Model 10 is easily disassembled for cleaning or for applications that require separate hoppers for different materials. The Tuf-Flex™ hopper in the Model 10 can be changed in less than two minutes without tools.

Model 12
The AccuRate® Model 12 is a sanitary design, encompassing quick disassembly features for easy cleaning.

Extension hoppers
Schenck Process offers hopper extensions and storage bins ranging in sizes from .25 cubic foot up to 50 cubic foot. Standard hoppers are provided in stainless steel and have gasketed covers.

Hopper extensions (.25 - 10 cubic foot) fit down inside the feeder's Tuf-Flex™ hopper, as well as form a lip overlapping the outside of the feeder. A gasket inside the lip prevents material leakage.

Larger capacity storage hoppers (20 - 50 cubic foot) are free standing. Available in stainless or carbon steel, these hoppers angle down to a guillotine slide gate. Sanitary storage hoppers have no cracks or crevices with continuously welded and ground corners.

Special hoppers are also available such as 2 and 4 cubic foot round stainless hoppers for sanitary applications, and bag dump hoppers for easy handling of bagged products up to 100 pounds.

Dimensional drawings on each hopper are available upon request.

Control modules
A wide range of standard optional controls can be specified. These include:

Loss-in-weight control: Feeders can be equipped with a scale and loss-in-weight controller to obtain excellent accuracies and verification of the amount fed.

Tach feedback: Keeps motor RPM at a constant speed where plant voltages fluctuate, headloads vary, or accuracy is critical over long continuous feeding periods.

Batch timer: Allows feeder to automatically shut off after dispensing proper amount of material; accurate to .01 second; various range timers available.

Dual touchpad potentiometers: Used for fast and dribble feed rates.

Automatic input control: For applications where automatic control is necessary; a fluctuating signal speeds up or slows down the feeder as necessary.

Dual controls: Separate control of agitation speed and screw speed (see Model 04).

Totalizer: Total number of screw revolutions are multiplied by the amount of material dispensed on each revolution, giving total amount of material dispensed over a long period of time.

Special enclosures: Schenck Process controls can be mounted in special enclosures, ranging from NEMA or IP-rated dust-tight to full explosion-proof boxes.