schenckprocess

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**

Materials of Construction
Contact materials –
- 304 stainless steel
- Food-grade and industrial vinyl hoppers
- UHMW polyethylene

Non-contact materials –
- 304 stainless steel

Feed Rates
- 100 Series – .000017 - .5 cubic feet per hour
- 300 Series – .000168 - 3.69 cubic feet per hour
- 600 Series – .0008 - 48 cubic feet per hour
- 900 Series – .1 - 280 cubic feet per hour

Helix Sizes
- 100 Series – . 125”, .25”, .38”, .50”, .75”
- 300 Series – .25”, .38”, .50”, .75”, 1.00”
- 600 Series – .50”, .75”, 1.00”, 1.38”, 1.75”, 2.25”
- 900 Series – 2.25”, 3”, 4”

Vinyl Hopper Capacity
- 100 Series – .1 cubic feet
- 300 Series – .33 cubic feet
- 600 Series – .9 cubic feet
- 900 Series – 2.65 cubic feet

Hopper Extensions
- 100 Series – .25 cubic feet
- 300 Series – 1 cubic feet
- 600 Series – 2.5, 5, 10, 20, 50 cubic feet
- 900 Series – 5, 10, 15, 20, 50 cubic feet (other sizes also available)

Electrical Requirements
- 100 Series – 110 VAC (220 VAC optional) 50/60 Hz, single phase
- 300 Series – 110 VAC (220 VAC optional) 50/60 Hz, single phase
- 600 Series – 110 VAC (220 VAC optional) 50/60 Hz, single phase
- 900 Series – 220 VAC (110 VAC optional) 50/60 Hz, single phase

Motor Specifications
- 100 Series – 1/60 HP, 24 VDC, 45 RPM, shaded pole
- 300 Series – 1/8 HP, 90 VDC, 1750 RPM, TENV, PM
- 600 Series – 1/4 HP (up to 1/2 HP optional), 90 VDC, 1750 RPM, TENV, PM
- 900 Series – 3/4 HP (up to 1-1/2 HP optional), 180 VDC, 1750 RPM, TEFC, PM

Standard Control (optional range of controls available)
- 100 Series – SCR control, 20:1 speed range, adjustable current limit
- 300 Series – SCR control, 50:1 speed range, adjustable current limit, UL recognition, touchpad potentiometer
- 600 Series – SCR control, 50:1 speed range, adjustable current limit, UL recognition, touchpad potentiometer
- 900 Series – SCR control, 50:1 speed range, adjustable current limit, UL recognition, touchpad potentiometer

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. (See back for testing information.)

FOUR ACCURATE® VOLUMETRIC SERIES FEEDERS ARE AVAILABLE
Schenck Process AccuRate® 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.

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.

STANDARD MODELS MEET MOST NEEDS

Standard features on all Schenck Process AccuRate® Volumetric Series Feeders include easy to remove outside panels, vinyl hoppers, digital touchpad potentiometers, SCR variable-speed control, DC motor control, stainless steel construction, lifetime lubricated bearings, double shaft seals to prevent powder leakage, and gasketed covers.

Optional features to meet specific needs include extended or specially designed helixes and mounted or free-standing carbon or stainless steel hopper extensions.

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.

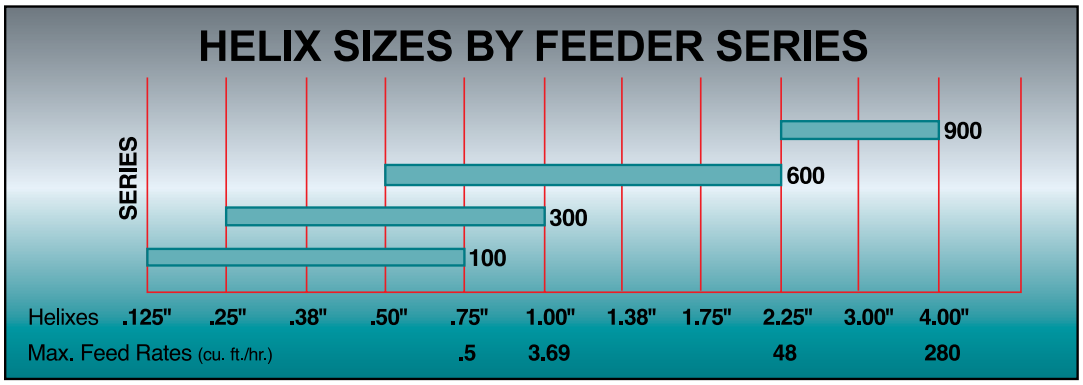
MODEL 10

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.

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



schenckprocess

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.

STANDARD UNIT SIZE

- 100 Series Feeder – Unit size: 8.5" (216 mm) x 8.5" (216 mm) x 7.63" H (194 mm)
- 300 Series – Unit size: 14.5" (368 mm) x 14.5" (368 mm) x 11.89" H (302 mm)
- 600 Series – Unit size: 21.74" (552 mm) x 21.74" (552 mm) x 15.77" H (401 mm)
- 900 Series – Unit size: 31.55" (801 mm) x 28.81" (732 mm) x 23.02" H (585 mm)

WEIGHT

- 100 Series –15 lbs.
- 300 Series –65 lbs. (70 lbs. with dual drive)
- 600 Series –140 lbs. (155 lbs. with dual drive)
- 900 Series –495 lbs. (545 lbs. with dual drive)

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.

TESTING FOR VERIFICATION

Schenck Process and most of its affiliates throughout the world have test facilities to prove how our feeders can handle your material.

Trained personnel will review your individual requirements and duplicate them with customer-supplied materials. We will provide complete laboratory reports showing the individual test sample weights with computations at 2 Sigma, the industry norm. Also provided are graphs of your sample weights plotted so you can actually see trends of the material being fed.

With the hundreds of materials Schenck Process has successfully fed, chances are we've already solved a problem the same as yours. Challenge us by comparing Schenck Process 2 Sigma accuracy results to any other feeder on the market.

CE approval for the 300, 600, and 900 models only.

Schenck Process
746 E. Milwaukee Street
Whitewater, WI 53190
800-558-0184 or Fax: 262-473-4384
E-mail: mktg@schenckprocess.com
Web site: www.accuratefeeders.com