

Volumetric Screw Feeder Application

The Model 100-V3 is a screw feeder designed to volumetrically deliver dry materials into a process at varying rates by changing the speed of the auger.

Theory of Operation

The Model 100-V3 is supplied with a variable speed drive that allows the user to adjust the percentage of drive output to a rotating auger style discharge. The auger draws material out of the integral storage hopper. An overwind helix, concentric to the auger, conditions the material and serves as an agitator.

Materials of Construction

- 304 Stainless Steel on all Metal Components
- Glass Bead 2B Finish (optional)
- All Welds Continuous
- Internal Welds Ground Smooth

Hopper

- 15.0 Ft³ Volume
- Lift-Off Lid with Handle (optional)

Discharge

- 3.00" to 6.00" Dia. Auger
- 304 Stainless Steel Auger and Spout
- Material Conditioner/Agitator by Overwind Helix

Standard Drive Components

- 2.00 HP DC, TEFC Motor
- Right-Angle Gear Reducer

Volumetric Throughput

- 2.02 to 700 Ft³/Hr

Control

- PWM (Pulse Width Modulated)
- Simple User-Friendly Interface
 - LED Status Indicators
 - Start/Stop Switch
 - Potentiometer Speed Control 0-100%
- NEMA 4X, IP-65 Enclosure
- Electronic Start/Stop
- Analog Remote Setpoint Input (optional)
 - Remote/Local Switch

Turndown

- 50:1 from Maximum Capacity with DC Motor/PWM
- 20:1 from Maximum Capacity with AC Motor/VFD

Accuracy

- +/- 1.0 to 2.0 %

Standard Power Requirements

- 230 Volts, 1 Phase, 60 Hertz
- 15 Amp Service

Installed Weight

- 300 Lbs. (68 Kg.) Standard

Available Accessories

- 316 Stainless Steel Construction
- Hopper Vibrator
- Bolt-on Hopper Cover with Infeed and Vent Connection Stubs
- Discharge Extensions
- Hazardous Area Electrical Components
- Loss-in-Weigh Conversion Kit
- Bag Loading Hopper
- Feeder Support Stands
- Feeder Extension Hoppers

THEORETICAL FEED RATES

(STANDARD FEEDER CONFIGURATION)

AUGER DIAMETER (In)	CENTER ROD	MAXIMUM FEED RATE (Ft³/Hr)
3.00	YES	101.00
3.00	NO	108.00
3.50	YES	152.00
3.50	NO	170.00
4.00	YES	238.00
4.00	NO	260.00
4.50	YES	325.00
4.50	NO	373.00
5.00	YES	480.00
5.00	NO	500.00
5.50	YES	600.00
5.50	NO	680.00
6.00	YES	700.00
6.00	NO	900.00

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