

Model 970 – Weigh Belt Feeder

[Model 970 Brochure](#) | [Food & Pet Food Industries Brochure](#)

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Simplicity and Accuracy in One Design



The Model 970 can be designed for a 12” or 24” belt. Both belts are designed to meter various materials into a process at a designed feedrate with gravimetric precision. The feeder belt speed is varied to deliver material from a supply device into a process at a desired rate. A weight signal output and speed signal output are supplied for closed-loop process control.

Materials of Construction

- 304 Stainless Steel on all metal components
- Glass beaded 2B finish, or surface finished to customer specifications
- All Welds Continuous and Ground Flush

Enclosure

- 0.1875” Thick Stainless Steel, Welded Construction
- Full-Length LEXAN® Conveyor Access Door

Feed Rates

- Volumetric Throughput: 0.60 to 500 Ft³/Hr (0.17-14.115 M³/Hr.)
(Multiply Volumetric Rate by Bulk Density of Material to Compute Gravimetric Feed Rate)

Gravimetric Turndown

- 40:1 from Maximum Feedrate

Standard Power Requirement

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

- Two, One-Third Length LEXAN® Access Doors on Back Side of Feeder

Conveyor

- Entire conveyor removable from the side
- Two cantilevered Arms for Support
- Sealed for life pulley Bearings
- Double-Bladed Removable Belt Scraper

Standard Drive Components

- 0.25 HP DC, Washdown TENV Motor
- SCR Motor Speed Controller
- Lubricant-Free, Steel Reinforced, Polyurethane Drive Belt with Elastometer Tensioner

Weight Sensing Device

- Direct Mounted Weigh Suspension (no moving parts)
- Easy, 3-point Alignment
- Single Strain Gauge Load Cell
 - Stainless Steel, Hermetically Sealed, Temperature and Pressure Compensated
 - 350 Ohm Bridge
 - 2 or 3 mV/V Signal
 - 10 to 15 Volts Excitation

Accuracy

- $\pm 0.25\%$

Installed Weight

- 505 Lbs. (315 Kg.) Standard

Ambient Temperature Limits

- 0° to 77° C (32° to 170° F)

Control

- [Genetix Touch Screen Process Controller](#)
- Continuous Weighing or Rate-Control Feeding, Batching and Rate-Controlled Batching Applications
- Communication Interfaces
 - Merrick Serial Communications Protocol
 - Modbus ASCII, Modbus+
 - DeviceNET
 - DF1, DH-485, Data Highway+

Optional Accessories

- Calibration Roller Chain
- Maintenance Arms
- Infeed and Discharge Flexible Connections
- Clean-In-Place Systems
- Transitions to and From the Feeder
- Hazardous Location Electrical Components
- AC Drive and Motor Components
- Chemical Duty or BISSC Certified Motors and Reducers
- Special Materials of Construction
- Hung-from-Above Support Structures Available
- Extended Infeed to Discharge Lengths

- Special Bottom Enclosures and Support Stands
- Material Stream Viewing Windows
- Dust Collection Connection Stubs
- Automatic and Manual Discharge Sampling Valves
- Manual Infeed Material Cut-Off Gate