Vibratory Loss-in-Weight Feeder or Batcher

The Model 530 can be used to feed free flowing materials into a process at designated feed rates with gravimetric precision. It can also be utilized to deliver a set amount of weight (batch) into a process.

Theory of Operation

The vibratory discharge device of the feeder is operated at a variable speed to deliver material from the feeder hopper into a process. A weight signal output is supplied for closed-loop process control (see MC³ Specification Sheet).

Materials of Construction

- 304 Stainless Steel on all Metal Components
- Glass Bead 2B Finish
- All Material Contact Welds Continuous
- Internal Welds Ground Smooth

Hopper

- 1.0 Ft³ Volume
- Lift-Off Lid with Handle or Bolt-On

Discharge

- 304 Stainless Steel Construction
- U or V Style, Flat, Round, Open or Enclosed Trays Available
- 2” to 6” Width

Drive Components

- Electro-Permanent Magnetic Drive
- Dust and Moisture Tight Drive Elements
- No Sliding or Rotating Parts

Weight Sensing Device

- Single Strain Gauge Load Cell
  - Stainless Steel, Heretically Sealed, Temperature and Pressure Compensated
  - 350 Ohm Bridge
  - 2 or 3 mV/V Signal
  - 15 Volt Excitation Maximum

Accuracy

- +/- 0.5% Continuous
- +/- 0.1% Batching

Control

- MC³ Touch Screen Microprocessor
- Continuous, Batching and Rate-Controlled Batching Loss-in-Weight Applications
- Communication Interfaces:
  - Merrick Serial Communications Protocol
  - Modbus ASCII, Modbus +
  - DeviceNET, ControlNET
  - DF1, Data Highway +

Feed Rates

- 1 to 500 Lbs/Hr

Gravimetric Turndown

- 15:1 from Maximum Feed Rate

Power Requirements

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

Installed Weight

- 75 Lbs. (34 Kg.) Standard
Available Accessories

- Special Materials of Construction
- Hopper Vibrator
- Extended Discharge Tray Length
- Hazardous Location Components
- Larger Capacity Hopper