



STINGER® Feeder Model 1 with ST Feeder Tube

APPLICATION:

Fast batch weighing of fine difficult to handle materials without the use of any moving parts.

DESIGN FEATURES:

- Compact, economical design combines feeder tube support frame and hopper into one weldment
- Highest turn down rate (500:1) for reducing your process time.
- Batch Accuracy up to +/- .1 Lbs.
- Standard inlet to discharge lengths from 1' to 10', longer lengths are also available as options
- Wide range of standard hopper sizes
- Feed rates up to 30,000 lbs./hr. provide fast accurate batches
- Feeder Tube features Young Industries STINGER® Technology
- STINGER® Feed Hopper features a built in Young Industries SilentFlow® Discharger that conditions material without any moving parts or vibration
- Available in NEMA 4 or Explosion Proof designs

UNIQUE DESIGN QUALITIES:

- No Auger means no moving parts to wear out or replace
- Low energy costs
- No safety hazards common to screw augers
- No vibration to disrupt scale
- No bearings or motors to maintenance or replace
- Minimal maintenance
- Dependable service

FEED RATES:

Note: Feed rates will vary based on feeder configuration and material properties.

Approximate capacities listed below

Feeder Tube Size		Maximum Capacity	
Inches	mm	Lbs/hr	Kg/hr
1.50	38	2,400	1,091
2.00	51	4,000	1,818
3.00	76	8,000	3,636

Feeder Tube Size		Maximum Capacity	
Inches	mm	Lbs/hr	Kg/hr
4.00	102	16,000	7,273
5.00	127	24,000	10,909
6.00	152	30,000	13,636

A FEW OF THE COMMON MATERIALS HANDLED:

- Adipic Acid
- Carbon Black
- Fly Ash
- Metal Powders
- Powdered Sugar
- Aluminum Oxide
- Ceramic Powders
- Fumed Silica
- Sodium Bicarbonate
- Pigments
- Antomite
- Corn Flour
- Iron Oxide
- Powdered Minerals
- Spices
- Borax
- Clays
- Lime
- Polymers
- Titanium Dioxide (all grades)
- Calcium Carbonate
- Dextrose
- Magnetite
- Powdered Ceramics
- Zinc Oxide

FEED HOPPER:

STINGER® Feed Hopper with built in SilentFlow® Discharger conditions material and discharges it into the feeder tube without the use of any moving parts or vibration

Features:

- Standard hopper capacities range from .3 to 30 cu. ft. (8.5 to 850 liters)
- Standard hopper sizes range from 12" to 36" square.
- Removable covers available in carbon steel or stainless steel

SUPPORT FRAME:

- Skirt supported for compact low head room design
- Hanging mount frames are available as a special option

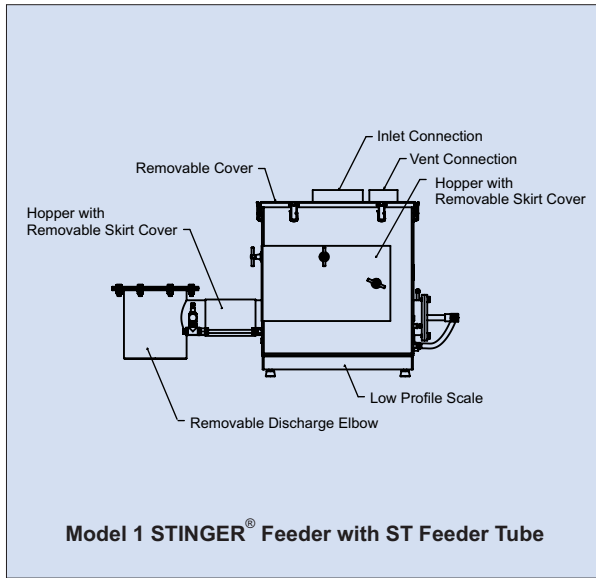
SCALE:

- Precision platform type scale for stable accurate weighing
- Available in carbon steel or stainless steel
- Standard scale capacities range from 30 to 5,000 lbs. (13.6 kg. to 23,272 kg.)

Note: Actual scale capacity needed is based on material bulk density and feeder configuration



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MATERIALS OF CONSTRUCTION:

Per customer order requirements, available options include:

Housing:

- Option 1: Painted Carbon Steel Exterior with bare metal interior
- Option 2: 304 WPC Stainless Steel
- Option 3: 316 WPC Stainless Steel

Note: All interior TransFlow® lined surfaces constructed of 316 Stainless Steel

Standard. Hopper Cover:

- Removable sizes 12" to 36" square
- Standard Construction of High Density Polyethylene (HDPE)

Support Frame:

- Option 1: Painted Carbon Steel
- Option 2: 304 Stainless Steel

Feeder Tube:

- Standard - 304 Stainless Steel Housing with 316 Stainless Steel TransFlow® Fluidizing Media
- Option 1: Carbon Steel Housing with 316 Stainless Steel TransFlow® Fluidizing Media
- Option 2 - 316 Stainless Steel Housing with 316 Stainless Steel TransFlow® Fluidizing Media

Assembly Hardware

- Standard: Plated Carbon Steel
- Optional : 8-18 Stainless Steel

INTERIOR PRESSURE:

Operates at ambient pressure
 Standard Design Pressure - 10" W.C.
 Custom Design Pressure up to 150 PSIG

TEMPERATURE RANGE:

Scales are temperature compensated from 14° F to 104° F (10° C to 40° C)

COMPRESSED AIR/GAS USAGE

Pressure: 10 to 30 psig

Volume:

Feeder Size	Flow Rate
12"	5 - 12 SCFM
18"	11 - 25 SCFM
24"	20 - 50 SCFM
36"	36 - 90 SCFM

Usage dependent on feeder hopper, tube size and materials handled

TECHNICAL DATA:

CONTROLS:

The Young Industries Model ST-1 Feeder is suitable for use in loss-in-weight or gain-in-weight batch applications. The controls package determines the actual feeder package operation. Our family of Young Industries TOUCHSTONE™ controllers are designed to work seamlessly with each of our STINGER® Feeders. Customers may choose a suitable Batch, Continuous, control to meet your feeder and specific application needs.

Standard TOUCHSTONE™ features include:

- Ships pre-configured for quick setup
- NEMA 4 enclosure with optional upgrade to explosion proof enclosure
- Features Quick Disconnect Electrical Fittings for quick and easy maintenance

ELECTRICAL AREA CLASSIFICATIONS:

Standard NEMA 4
 Optional NEMA 4X
 Optional NEMA 7/9

POWER REQUIREMENTS:

TOUCHSTONE™ controls: Universal input voltage accepts 110 - 220Volts, 50/60hz single phase electrical supply. Instrument power: Standard 24VDC

DRIVE:

Because the "ST-1" STINGER® Feeder uses STINGER® Technology and is capable of making fast, accurate, consistent weighments without any moving parts, there is no need for a drive system or a motor. This smart, economical design not only saves money through reduction in spare parts but also results in savings of reduced utility and maintenance costs.