

Acrison®

Design Specifications
1-200-0802

Volumetric Feeder Model 170-MI-5

*For Accurate and Reliable
Metering of Dry Solid Materials
at Very Low Feed Rates*



*Advanced design technologies for superior
performance, quality and reliability.*

Volumetric Feeder Model 170-MI-5

*For Metering Dry Solid Materials at
Very Low Feed Rates*

Operational Overview

Specifically designed to accurately and reliably meter a wide range of dry solid ingredients at very low feed rates, the Model 170-MI-5 Volumetric Feeder includes a flat bottom feed chamber that attaches directly to the mating outlet of its supply hopper.

In operation, a slowly rotating, horizontally mounted “Conditioning Agitator” located within the feed chamber of the Model 170-MI-5 Feeder, promotes flow out of the feeder’s supply hopper and into the feed chamber, where the sweeping rotational action of the agitator “conditions” the material to a uniform and consistent state, while simultaneously filling the metering auger for accurate product delivery. The metering auger is housed in a trough beneath the feed chamber, offset to one side. The “Conditioning Agitator” is driven from beneath.

When permitted to feed until empty, only a minimal amount of residual material will remain within the self-emptying metering mechanism. The Model 170-MI-5 is designed for total product cleanout and is ideal for applications where frequent product changeover is a requirement. Additionally, all areas within the feed chamber and metering auger trough are active; dead zones do not exist and therefore, product stagnation cannot occur anywhere within the entire feeder.



**Model 170-MI-5
Volumetric Feeder**

Designed to meter a wide assortment of dry solid ingredients at lowest possible feed rates

All components of the Model 170-MI-5 Volumetric Feeder are fully machined and completely interchangeable from one feeder to another.



Features/Benefits

- Manufactured to the highest standards of quality, the Model 170-MI-5 Volumetric Feeder provides a high degree of materials-handling versatility for effectively and dependably metering a broad variety of dry solid ingredients at very low feed rates.
- Metering accuracy typically ranges between ± 1 to 2 percent or better (error) based on a given number of consecutive one minute samples.
- All components of the feeder are fully machined (excluding the hopper) and completely interchangeable from feeder to feeder.
- Available with both vertical and conical supply hoppers, the selection of which is determined by product handling characteristics.
- Designed with quick-disconnect features throughout; the entire feeder can be disassembled/reassembled in just minutes without the need for tools.
- Thorough cleaning has been made very simple and quick, ideally suited for sanitary, pharmaceutical and similar applications.
- Drive shaft seals are constructed of stainless steel and a food grade synthetic material, easily removed for cleaning or replacement.
- When permitted to feed until empty, the feeder will purge itself of virtually all material.
- The Model 170-MI-5 Feeder has only two moving parts and is silent when operating.
- Maintenance requirements are extremely low; equipment longevity is exceptional.

Specifications

- As standard, all product contact parts are constructed of 316 stainless steel. In addition, excluding the gearmotors, all other feeder hardware is 304 stainless steel (i.e., clamping devices, feeder base, etc.).
- The Model 170-MI-5 Feeder is available with either a vertical or conical supply hopper. The vertical hopper is 0.10 cubic feet in capacity; the conical hopper is 0.20 cubic feet in capacity.
- Output feed rates range from 0.0012 to 1.4 cubic feet per hour.
- Both the “Conditioning Agitator” and metering auger are independently driven by small, powerful, industrial-duty gearmotors. Normally, the agitator drive operates at a constant speed; the metering auger drive is variable speed. Both gearmotor drives are permanently lubricated.
- The two motors are TENV, rated inverter-duty, and suitable for wash down (IP65). Applicable VF controllers provide either a 30:1 or 50:1 speed range.
- The feeder is very compact; footprint measures 10 X 14 inches with a height of 16 inches.
- The ruggedly constructed standard Model 170-MI-5 Feeder weighs approximately 50 pounds.
- Power requirements are 115/1/60 or 230/1/60.

Options

- Available in full sanitary construction, including construction suitable for 3A Sanitary and pharmaceutical applications.
- Various AC variable speed drive control modes.
- Various hopper sizes, other than the indicated standard sizes, may be available predicated on product handling characteristics and application parameters.

Acrison Facilities



Empire Boulevard Facility
Moonachie, NJ USA



Trafford Park Facility
Manchester, UK



Joseph Street Facility
Moonachie, NJ USA

Acrison products...

- Models 101 and 130 Volumetric Feeders
- Models V-101 and V-130 Volumetric Feeders
- Model 1015 Volumetric Feeder Series
- Model 105 Volumetric Feeder Series
- Model W-105 Volumetric Feeder Series
- Model 120 Volumetric Feeder
- Model 140 Volumetric Feeder Series
- Model 170 Volumetric Feeder Series
- Model 905-14 Volumetric Feeder
- Bin Discharger Feeders
- Model 200 Series of Weigh Belt Feeders
- Model 203B Series of Weigh Auger Feeders
- Model 270 Series of In-Line Weigh Feeders
- Models 402, 404, A405, 406, 407 and 410 Series ("Weight-Loss-Differential") Weigh Feeders
- Model Series 403 ("Weight-Loss-Differential") Weigh Feeders
- Model 403B (D) Batch/Dump Weighing Systems
- Model 404BZ (BU) Bulk Bag Unloader Batch Weigher
- Models 350 and 301 Continuous Blenders and Blending Systems
- Multiple Auger Bin Dischargers and Multiple Auger Bin Discharger Hoppering Systems
- Vibratory Bin Dischargers
- Model 170-BD-30 Bin Dischargers
- Model 500 Series of Polyelectrolyte Preparation Systems
- Water and Waste Water Treatment Systems
- Volumetric and Gravimetric Feeder Controllers and Control Systems
- Accessory Equipment for Acrison Products
- Systems Engineering

*Quality built, total performance products to satisfy
your dry solids metering/handling needs.*

Acrison®

"Visibly Different... Measurably Better"

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