

Acrison®

VOLUMETRIC FEEDER

Model 120

For Dry Solids



A rugged duty, Volumetric Dry Materials Feeder featuring a combination of Acrison's unique, dissimilar speed, Double Concentric Auger Metering Mechanism with an integral, flow-inducing (oscillating) R-P Hopper for accurate, exceptionally dependable metering performance.

VOLUMETRIC FEEDER

For Dry Solid Materials



Standard Model 120 Feeder

The Model 120 Volumetric Feeder consists of a flow-inducing *“Recipro-Pivotal” (R-P) Hopper* mounted above an Acrison *Dissimilar Speed, Double Concentric Auger Metering Mechanism* that combine to produce an extremely versatile and effective metering mechanism for feeding a wide variety of dry solid ingredients accurately and efficiently.

Operation

Mounted on pivots and oscillated at a predetermined frequency by an eccentric drive, the feeder’s integral oscillating *“R-P Hopper”* produces a positive downward flow of product into Acrison’s unique *Double Concentric Auger Metering Mechanism* located directly beneath.

The Double Auger Metering Mechanism consists of a large *“Conditioning Auger”, or Intromitter*, concentrically mounted around a smaller *Metering Auger*, independently driven at *dissimilar speeds* in a *“fixed proportion”* to each other by a single gearmotor drive, typically variable speed.

In operation, the unique *“Inter-Auger-Action”*, primarily created by rotation of the Intromitter, *“conditions”* the material to a very consistent state (density) while efficiently and reliably filling the Metering Auger *from a full 360 degrees* for accurate and totally dependable metering... **a feat unparalleled by any other auger type dry solids metering device.**

The Intromitter operates at a much slower speed than the smaller Metering Auger, with the selection of the *“ratio”* between the dual augers based on the physical characteristics of the product or products to be handled, and feed rate throughput requirements.

The metered output of the feeder is unaffected by the amount of material in the R-P Hopper, with both the speed of oscillation and amplitude of movement adjustable to accommodate the flow characteristics of any given material. The R-P Hopper is driven by a separate (constant speed) gearmotor.

For dimensional information on a standard Model 120 Volumetric Feeder, please request Engineering Drawing 120-1-582.

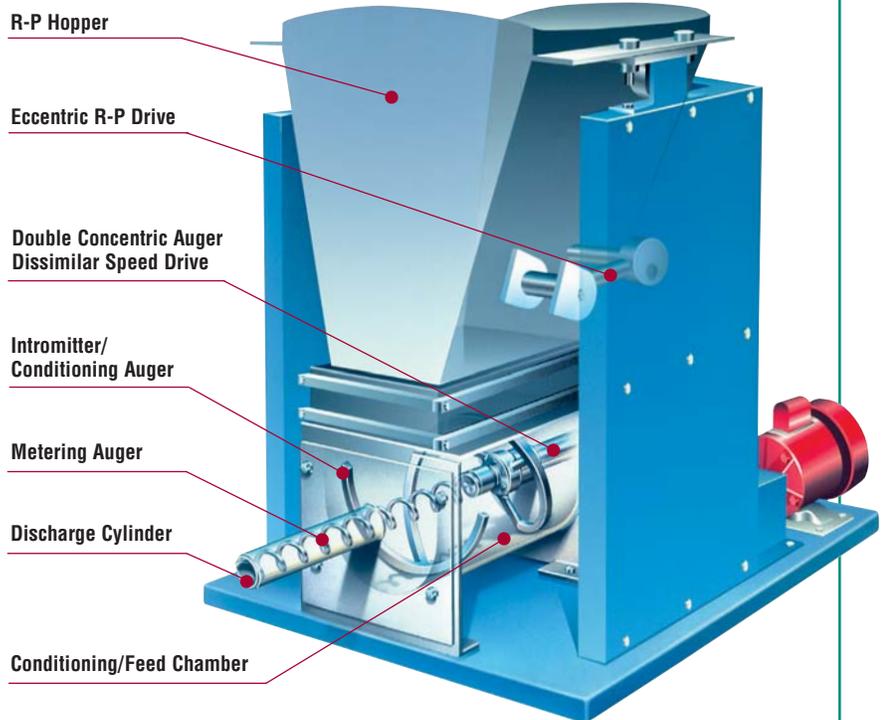
Model 120 Volumetric Feeder

An exceptionally versatile, accurate, and highly reliable Dry Solids Volumetric Feeder, ruggedly constructed for long life and very low maintenance requirements.

“Inter-Auger-Action”

Unlike volumetric feeders where a single auger is typically located at the very bottom of a converging “V” shaped trough (across which certain products easily and often bridge, regardless whether or not the trough is vibrated or agitated), Acrison’s **dissimilar speed**, Double Concentric Auger Dry Solids Metering Mechanisms not only assure positive feed, but also, maintain total control of the product for unsurpassed levels of metering performance.

Especially effective when handling the endless variety of dry solid amorphous ingredients that processors regularly meter, the unique “Inter-Auger-Action” – produced by the speed differential between the Double Concentric Augers – “conditions” the material to a very consistent state (density) as the Metering Auger fills efficiently, reliably and circumferentially for accurate and totally dependable product delivery (feed).



Standard features...

- All 304 stainless steel product contact surfaces, including drive shafts and seal components.
- A 2.5 cubic foot integral R-P Hopper.
- Dust-tight, heavy-duty construction.
- Silent when operating.
- A 1/2 HP, totally enclosed, variable speed AC or DC motor for powering the Metering Auger, and a 1/3 HP (constant speed) AC motor, totally enclosed, for driving the R-P Hopper.

For information on the various available AC or DC variable speed motor controllers, please contact Acrison.

Optional features...

- Various materials of construction.
- Various SCR/DC AC controllers, control modes and control options.
- Quick-disconnect construction for rapid disassembly and reassembly of all major components.
- Sanitary construction to suit food, pharmaceutical and similar sanitary requirements.
- Integral R-P Hoppers up to 5 cubic feet in capacity.

Feed Output Capacities

The capacity chart indicates the typical output range for each standard size metering auger available with the Model 120 Volumetric Feeder.

Since the physical properties of the actual product being metered may have an effect upon the exact output, the stated capacities could vary.

MODEL 120 FEEDER CAPACITY CHART (Capacities shown in cubic feet per hour)			
Model Size	MINIMUM OUTPUT		Maximum Output
	30:1 Speed Range	50:1 Speed Range	
120-A	.002	.0012	.06
120-B	.005	.003	.15
120-C	.030	.018	.9
120-D	.080	.048	2.4
120-E	.20	.12	6.0
120-F	.43	.26	13.0
120-G	.80	.48	24.0
120-H	1.70	1.02	51.0
120-K	3.83	2.3	115.0
120-M	5.33	3.2	160.0

Metering accuracies typically range between +/- 1 to 2 percent or better (error) for the majority of products, based on a given number of consecutive one minute samples.

Discover the difference!

We cordially invite you to witness a test in Acrison's state-of-the-art Customer Demonstration Facilities handling your actual product(s) with the specific equipment we recommend for the application. Usually, there is no cost or obligation for this service. Discover the difference in technology, quality and performance of Acrison equipment.



Acrison products...

- Models 101 and 130 Volumetric Feeders
- Models V101 and V130 Volumetric Feeders
- Model 1015 Volumetric Feeder Series
- Model 105 Volumetric Feeder Series
- Model W105 Volumetric Feeder Series
- Model 120 Volumetric Feeder
- Model 140 Volumetric Feeder Series
- Model 170 Volumetric Feeder Series
- 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 and 407 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 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

"Visibly Different... Measurably Better"

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