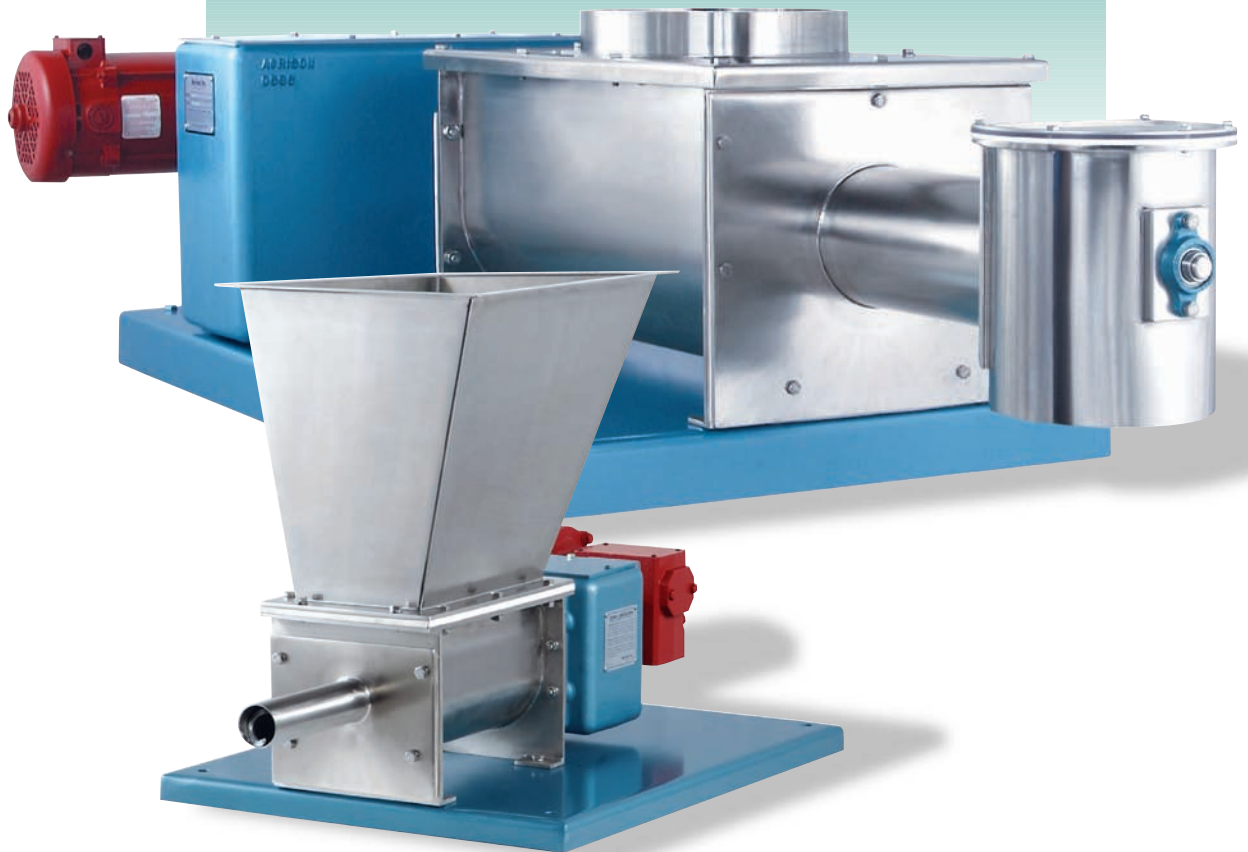


Acrison®

VOLUMETRIC FEEDERS

Models 105 and 140 Series

For Dry Solids



*World-class dry solids volumetric feeders featuring
Acrison's unique, dissimilar speed, Double Concentric
Auger Metering Mechanism for accurate, dependable
and versatile metering performance.*

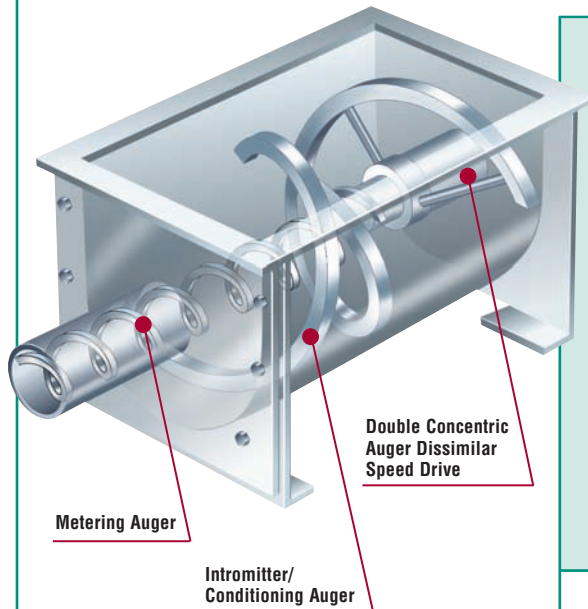
— Built to Last —

Acrison®
Acrison®
Acrison®

VOLUMETRIC FEEDERS

Models 105 and 140 Series

For Dry Solid Materials



An Extremely Effective Dry Solids Metering Concept

Acrison's dissimilar speed, Double Concentric Metering Mechanism efficiently and reliably fills the metering auger from a full 360 degrees.

Introduced in 1966, the Models 105 and 140 Series of Volumetric Feeders, designed with Acrison's unique *Dissimilar Speed, Double Concentric Auger Metering Mechanism*, operate in virtually every conceivable process where dry solids metering is a requirement. Their inherent ability to accurately and reliably meter an unparalleled variety of dry solid ingredients with extremely low maintenance requirements continues to strengthen their strong global popularity.

Operation

Acrison's *Double Concentric Auger Metering Mechanism* consists of a large "Conditioning Auger" or *Introritter*, 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.

Especially effective in handling the endless variety of dry solid ingredients that processors must regularly meter, the unique "*Inter-Auger-Action*", primarily produced by rotation of the *Introritter*, "*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 product delivery (feed). **Clearly, no other method for filling the metering auger of a dry solids feeder is as positive or effective.**

The *Introritter* operates at a much slower speed than the smaller *Metering Auger*, with the "ratio" between the two augers factory selected based on the physical characteristics of the product or products being handled and feed rate throughput parameters.

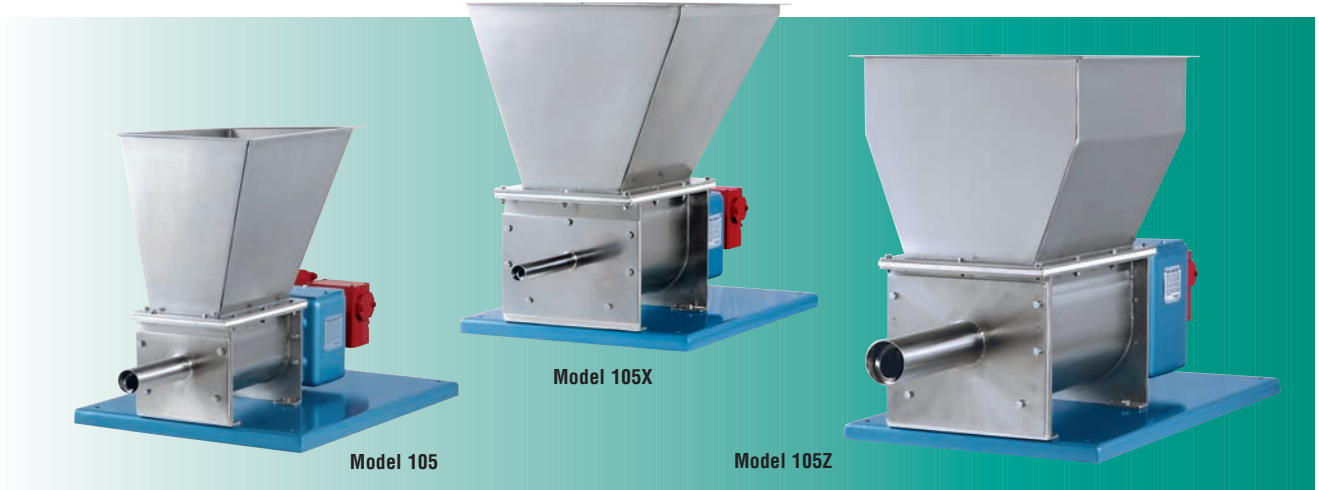
Acrison's Models 105 and 140 Series of Feeders are ruggedly constructed for long, durable service in the typically adverse industrial environment. Maintenance requirements are minimal and long-term operating costs are the lowest in the industry.

Volumetric metering accuracies generally range between ± 1 to 2 percent or better (error) for the majority of products. Accuracy is based on a given number of consecutive one minute samples.



Acrison's Double Concentric Auger Metering Mechanism shown on a Model 105Z Volumetric Feeder

Model 105 Series of Volumetric Feeders



Model 105

Utilizes a 6 inch diameter Intromitter or “Conditioning Auger”. The feeder is powered by a 1/2 horsepower variable speed gearmotor drive.

Model 105X

Utilizes an 8 inch diameter Intromitter or “Conditioning Auger”. The feeder is powered by a 3/4 horsepower variable speed gearmotor drive.

Model 105Z

Utilizes a 10 inch diameter Intromitter or “Conditioning Auger”. The feeder is powered by a 1 horsepower variable speed gearmotor drive.

Capacities

The capacity chart indicates the typical output range for each standard size metering auger available with the Model 105 Series of Volumetric Feeders.

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



Model 105Z with a 6 cubic foot hopper.

MODEL 105 FEEDER SERIES CAPACITY CHART

(Capacities shown in cubic feet per hour)

Model Size	Minimum Output		Maximum Output
	30:1 Speed Range	50:1 Speed Range	
105-A	0.002	0.0012	0.06
105-B	0.005	0.003	0.15
105-BC	0.0127	0.0076	0.38
105-BB	0.018	0.0108	0.54
105-C	0.03	0.018	0.9
105-CC	0.047	0.028	1.4
105-D	0.08	0.048	2.4
105-DD	0.14	0.084	4.2
105-E	0.2	0.12	6
105-EE	0.29	0.174	8.7
105-F	0.47	0.28	14
105-FF	0.63	0.38	19
* 105-G	0.97	0.58	29
* 105-GG	1.4	0.84	42
* 105-H	1.7	1.02	51
* 105-HH	2.4	1.4	72
** 105-K	3.2	1.9	96
** 105-KK	3.9	2.4	118
** 105-M	5.3	3.2	160
** 105-N	6.7	4.0	202

* Available on the Models 105X and 105Z only.

** Available on the Model 105Z only.

NOTE: The Speed Range is determined by the selected variable speed drive/controller.

Model 140 Series of Volumetric Feeders



Model 140-2

Model 140-0

Utilizes a 12 inch diameter Intromitter or “Conditioning Auger”. The feeder is powered by a 2 horsepower variable speed gearmotor drive.

Model 140-1

Utilizes a 15 inch diameter Intromitter or “Conditioning Auger”. The feeder is powered by a 3 horsepower variable speed gearmotor drive.

Model 140-2

Utilizes an 18 inch diameter Intromitter or “Conditioning Auger”. The feeder is powered by a 5 horsepower variable speed gearmotor drive.

Capacities

The capacity chart indicates the typical output range for each standard size metering auger available with the Model 140 Series of Volumetric Feeders.

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

Model Size	Minimum Output		Maximum Output
	30:1 Speed Range	50:1 Speed Range	
	140-0-NN	8	
140-0-P	11	6.4	320
140-0-R	20	12	600
140-1-S	30	18	900
140-1-T	40	24	1200
140-1-U	60	36	1800
140-2-V	80	48	2400
140-2-W	113	68	3400

NOTE: The Speed Range is determined by the selected variable speed drive/controller.



Model 140-1 with a 20 cubic foot hopper.

Models 105 and 140 Series of Volumetric Feeders

Standard Features for Model 105 Series

- Features Acrison's dissimilar speed, *Double Concentric Auger Metering Mechanism*.
- All product contact surfaces are constructed of 304 stainless steel, including the feeder's drive shafts and seal components. The metering auger is 316 stainless steel.
- The Intrometer is flange-attached to its drive shaft. The metering auger utilizes a threaded attachment to its drive shaft.
- Variable speed DC gearmotor drive with either a 30:1 or 50:1 speed range.
- Variable speed AC gearmotor drive with either a 30:1 or 50:1 speed range.
- Furnished with a one cubic foot supply hopper, flanged feed chamber, or a flanged feed chamber with a cover having a circular inlet.
 - Maximum circular cover inlet sizes (OD) are as follows:

105	6 inches
105X	9 inches
105Z	12 inches
 - Flanged rectangular feed chamber inlet sizes (inside dimensions) are as follows:

105	6 1/2" x 11 5/8"
105X	9" x 13 1/2"
105Z	12" x 17 3/8"
- All steel construction.
- Totally enclosed motor.
- Dust-tight, heavy-duty construction.
- Silent when operating.

Standard Features for Model 140 Series

- Features Acrison's dissimilar speed, *Double Concentric Auger Metering Mechanism*.
- Available in mild steel, 304 or 316 stainless steel construction. As standard, the feeder's drive shafts and seal components are 304 stainless steel. The Intrometer and metering auger are constructed of the same material as that of the feeder.
- The Intrometer is flange-attached to its drive shaft. The metering auger utilizes a threaded attachment to its drive shaft.
- Variable speed DC gearmotor drive with either a 30:1 or 50:1 speed range.
- Variable speed AC gearmotor drive with either a 30:1 or 50:1 speed range.
- Furnished with a flanged feed chamber or a flanged feed chamber with a cover having a circular inlet.
 - Maximum circular cover inlet sizes (OD) are as follows:

140-0	12 inches
140-1	15 inches
140-2	18 inches
 - Flanged rectangular feed chamber inlet sizes (inside dimensions) are as follows:

140-0	13" x 26"
140-1	16" x 29 1/2"
140-2	20" x 34 1/2"
- All steel construction.
- Totally enclosed motor.
- Dust-tight, heavy-duty construction.
- Silent when operating.

Optional or Accessory Equipment



- Various materials of construction.
- Model 105 Series of Feeders are available with integral supply hoppers up to six cubic feet in capacity (depending upon material flow characteristics).
- Model 140 Series of Feeders are available with integral supply hoppers with their design and size determined by material flow characteristics.
- Various DC and AC variable speed motor controllers and control modes.
- Quick-disconnect construction for ease-of-cleanout.
- Sanitary construction to satisfy USDA and FDA codes (includes quick disconnect construction).
- High temperature construction.
- Pressure construction.

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"

Acrison®

20 Empire Blvd.
Moonachie, NJ 07074 USA
201-440-8300 • Fax: 201-440-4939
Email: informail@acrison.com
Website: www.acrison.com



Empire Boulevard Facility
Moonachie, NJ USA



Trafford Park Facility
Manchester, UK



Joseph Street Facility
Moonachie, NJ USA

acrison, INC.

Copyright 2005—Acrison, Inc.—all rights reserved.
Acrison is a Registered Trademark of Acrison, Inc., Moonachie, New Jersey
© Registered Acrison Trademarks
Domestic and Foreign Patents issued and pending.