

Acrison[®]

Weigh Feeders Models 402 and 404 Series 405, 406 and 408

'Weight-Loss-Differential'

*For Dry Solid Materials
and Liquids*



*Advanced, time-proven technologies for optimum
weigh feeder performance.*

Acrison®

Weigh Feeders

For Dry Solids and Liquids

'Weight-Loss-Differential'

Models 402 and 404 Series, 405, 406 and 408

Proven in thousands of installations world-wide, Acrison's various model 'Weight-Loss' Weigh Feeders provide users with superior operational performance, unexcelled reliability, minimal maintenance requirements, and unrivaled longevity.

Strong Innovative Weighing Technology

The robustly built Models 402, 404, 405, 406 and 408 Weighing Systems have been designed for operation with specific model Acrison metering mechanisms for feeding an exceptionally broad variety of dry solid materials accurately and reliably at feed rates ranging from a fraction of a pound upwards to thousands of pounds per hour. In addition, by replacing the dry solids metering mechanism with a pump (and the hopper of the metering mechanism with a tank), these weigh feeders are fully capable of handling a wide variety of liquid ingredients.

The various dry solids metering mechanisms utilized with these particular model 'weight-loss' weigh feeders mount onto Acrison platform type, time-proven, dynamic weighing systems, which have been *specifically designed for 'weight-loss' weigh feeding applications.*

The actual weighing systems consist of a technologically advanced, high-resolution, frictionless lever network designed with stainless steel flexures for all pivotal connections. As product discharges out of the metering mechanism, Acrison's Ratiometric Digital Weight Resolver precisely senses the loss of weight, which data is instantaneously transmitted to the feeder's controller for feed rate modulation, as well as for all other control system functions. Acrison weighing systems do not use a load cell(s), or any other type force measurement device for sensing weight (please reference page 5 for more information).

All of Acrison's various model 'weight-loss' weighing systems are permanently calibrated and will remain precise without the need for recalibration and/or adjustment. In addition, they are not in any way delicate and/or temperamental, and will operate over an ambient temperature range of -20 to 150 degrees Fahrenheit.



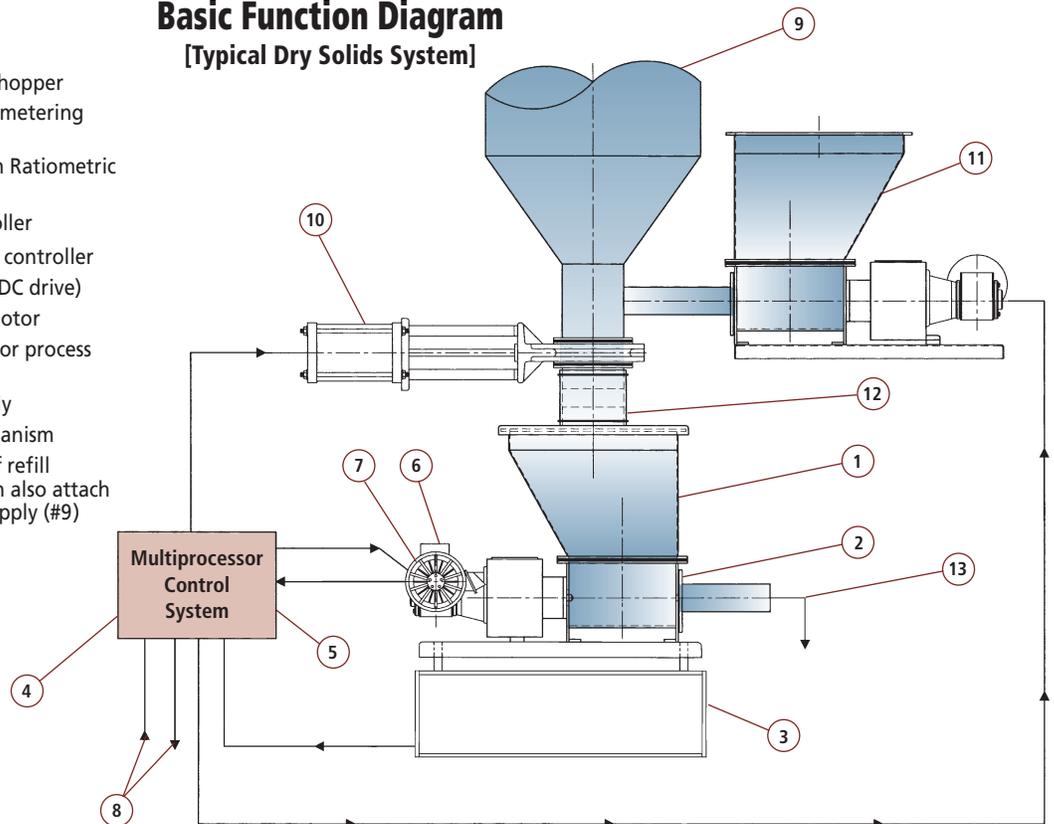
Model 402-170-2

Models 402 and 404 Series, 405, 406 and 408 Weigh Feeders

For Continuous or Batch Weigh Feeding Applications

Basic Function Diagram
[Typical Dry Solids System]

1. Weigh feeder supply hopper
2. Dry solids auger type metering mechanism
3. Weighing system with Ratiometric Digital Weight Sensor
4. Multiprocessor controller
5. Variable speed motor controller
6. Digital speed sensor (DC drive)
7. Variable speed gearmotor
8. Input/output signals for process control interfacing
9. Product storage supply
10. Automatic refill mechanism
11. Refill feeder in lieu of refill mechanism (#11) - can also attach to product storage supply (#9)
12. Flexible connection
13. Weighed output



Principles of Operation

As product discharges (feeds) from the scale-mounted metering mechanism, Acrison's ultra-high resolution Ratiometric Digital Weight Sensing System continuously transmits precise 'loss-of-weight' data to the feeder's controller on a 'real time' basis, which in turn, instantaneously calculates the rate at which product is discharging and compares that rate to the feed rate selection. Simultaneously, the control system adjusts the variable speed drive of the metering mechanism to accurately maintain the specified feed rate, while continuously monitoring all aspects of feeder operation. Response of the metering mechanism is instantaneous, thus achieving smooth short-term performance with the highest possible degree of long-term accuracy.

Unlike weigh feeders that utilize one or more load cells for sensing weight, the weight signal of Acrison weigh feeders is not integrated (averaged) or in any way manipulated for stabilization purposes; it is inherently stable for direct use by the feeder's control system. Signal integration, while giving the impression of good operational stability, can severely hamper a feeder's ability to respond quickly to changes in weight, compromising metering accuracy.

Easily capable of withstanding the harshest industrial environments, Acrison's time-proven, rugged duty weighing systems are unsurpassed in precision, durability, reliability

and longevity. In addition, they are also permanently calibrated and virtually maintenance-free.

The 'weight-loss' principle for continuous weigh feeding requires periodic refilling of the feeder's supply hopper (or tank for liquid applications) as an operational requirement, which is usually a completely automatic function. Frequency of refills is determined by the feed rate throughput relative to the size of the feeder's supply hopper (or tank) within the necessary parameters to ensure optimum weigh feeder performance.

All Acrison 'Weight-Loss' Weigh Feeder control systems also include 'Acri-Lok'®, an Acrison innovation that ensures accurate product delivery should the feeder's weighing system sense an abnormal disturbance during operation.

The entire weighing mechanism of an Acrison weigh feeder, including its Ratiometric Digital Weight Sensor (and associated electronics), is guaranteed for five years.

Continuous metering accuracy typically ranges between +/- 0.25 to 1 percent or better (error) at two sigma, based on a given number of consecutive one minute weighments.

Standard Design Features

- **Continuous or batch weighing on a 'weight-loss' basis** – Acrison's 'weight-loss' operational concepts and equipment designs combine advanced weighing technologies with the most versatile dry solids metering/handling mechanisms and related controls to provide users with an unsurpassed level of overall performance.
- **Accuracy** – All Acrison continuous weigh feeders typically provide metering accuracies ranging between ± 0.25 to 1 percent or better (error), at two sigma, based on a given number of consecutive one minute weighments. Batch accuracies typically range between ± 0.1 to 0.5 percent or better (error), at two sigma, based on a given number of consecutive weighments.
- **No response lag** – Acrison's various metering mechanisms respond instantaneously upon command from the controller to alter the feed output. Absolutely no lag exists since product discharges directly out of the scale-mounted metering device.
- **Feed range** – As standard, all Acrison 'weight-loss' weigh feeders are capable of an overall feed range of 100:1
- **Feed output capacity** – Depending upon the model and size, the overall feed rate output capability for Acrison's various model 'weight-loss' weigh feeders described in this Bulletin ranges from less than one pound up to approximately 20,000 pounds per hour.
- **Weighing System** – Acrison's various weighing systems are the most durable, reliable, and accurate in the industry. The technologically advanced lever mechanisms of these frictionless, ultra-high resolution counterbalanced weighing systems have been specifically designed for tough industrial 'weight-loss' weigh feeding applications. They are also designed with an uncommonly high service factor easily capable of withstanding the continual 'impacts' associated with refilling without any adverse consequences.
Also, once calibrated (factory completed), these weighing systems do not require any type of mechanical recalibration or adjustment. In fact, such provisions do not exist, they are permanently calibrated.
- **Ratiometric Digital Weight Resolver (RDWR)** – Acrison's Ratiometric Digital Weight Sensing System utilizes synchro-resolver technology and innovative electronics to produce a digital weight signal having extraordinary performance specifications. This unamplified, non-integrated, highly precise and stable weight signal is a count ranging from 0 to 1,048,576 (20 bits), capable of use by any of Acrison's multiprocessor weigh feeder controllers. Please see page 5 for additional information.
- **No rezeroing** – Acrison's 'weight-loss' principle of operation does not require a 'scale' zero reference point; thus, rezeroing the weighing system is never required.
- **Acric-Lok®** – All Acrison 'weight-loss' weigh feeders include a unique operational feature... *Acric-Lok*... developed and patented by Acrison to ensure accurate metering whenever the weighing system is disturbed in any manner that would otherwise adversely affect the accuracy of the metered output.
- **Batch-Lok®** – In addition to *Acric-Lok*, should an abnormal disturbance be detected by the weighing system of an Acrison 'weight-loss' weigh feeder operating in a batching mode, a supplementary feature... *Batch-Lok*... is provided to ensure the highest possible degree of batch accuracy.
- **Automatic refilling** – All Acrison 'weight-loss' weigh feeder control systems provide for automatic refilling of the feeder's integral supply hopper (or tank). When automatically refilled, the controller initiates a refill command upon sensing low hopper (or tank) level, once the feed rate output is within pre-established tolerances.
During the refill period, the feeding mechanism operates in a volumetric mode, returning to gravimetric control after refill and when the controller senses a normal 'weight-loss' condition. In addition, Acrison 'weight-loss' controllers include a number of very effective operational features specifically designed to ensure optimum metering accuracy during all phases of refill, when the feeder is not in gravimetric control.
- **Unaffected by typical in-plant vibration and dust** – Typical in-plant vibrations do not affect Acrison weigh feeders, as proven in scores of installations. The novel mechanical design of Acrison weighing mechanisms inherently provides excellent resistance to in-plant vibrations without the need to integrate the actual weight signal for stability purposes. Also, based on the 'weight-loss' principle of operation, dust accumulation onto any part of the weigh feeder will not adversely affect metering performance.
- **Ambient operating temperature range** – All Acrison weigh feeders will operate within an ambient temperature range of -20 to 150 degrees Fahrenheit without any affect on performance.
- **Totally enclosed product zone** – Because of the completely enclosed design of all Acrison 'weight-loss' weigh feeders, product remains totally confined, thus assuring a clean dust-tight operation.
- **Minimum of moving parts** – All Acrison 'weight-loss' weigh feeders have been designed with a minimum number of moving parts to ensure the highest possible degree of reliability with lowest possible maintenance requirements. Longevity is exceptional.
- **Silent operation** – All Acrison weigh feeders are virtually silent when operating.

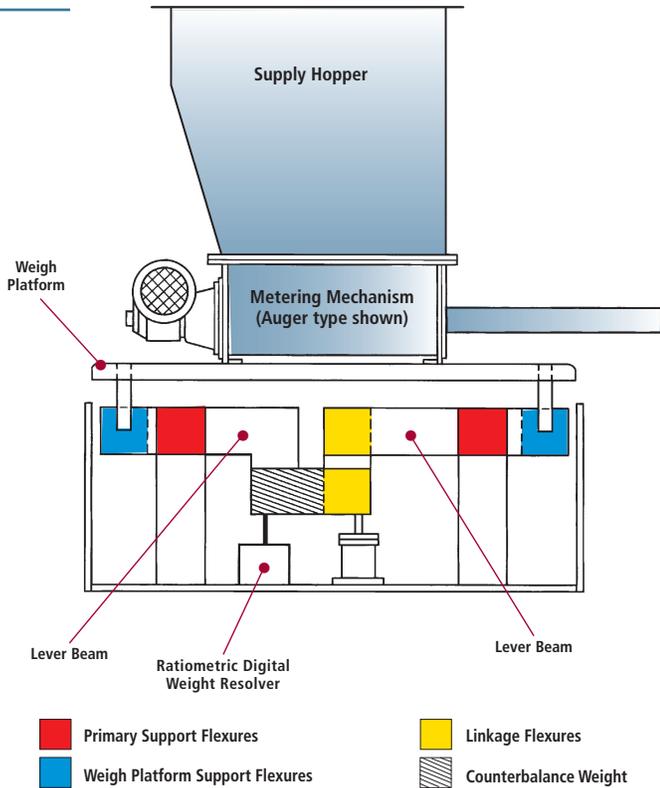
Weighing System

Technologically advanced, high resolution, counterbalanced Weighing Mechanisms

The weighing systems used with Acrison Models 402 and 404 Series, 405, 406 and 408 Weight-Loss Weigh Feeders are strong, industrial-duty lever mechanisms utilizing performance-proven stainless steel flexures for all pivotal connections. These frictionless weighing systems, completely designed and manufactured by Acrison, also include counterbalance provisions to 'offset' the weight of the metering mechanisms mounted on them, which greatly enhances weighing sensitivity for highest levels of metering performance. They are, in themselves, precision 'scales' that produce unamplified weight-sensing resolution of better than one part in over a million.

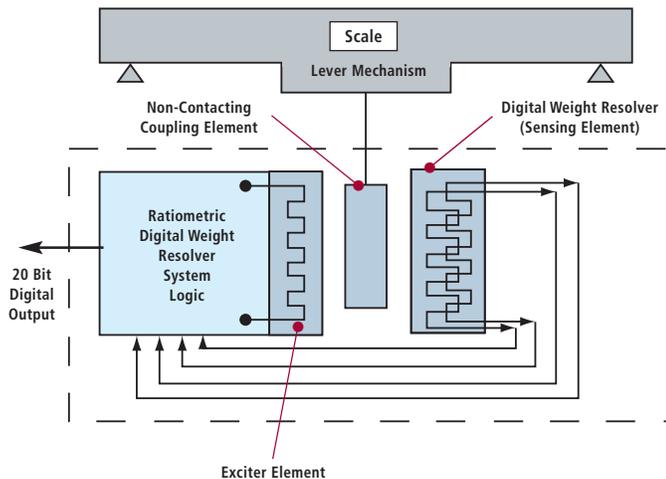
Operationally, as weight is added or removed from the metering mechanism and its supply hopper (or tank), the lever network 'moves' in an extremely precise relationship to that weight. This movement (or displacement) is sensed by Acrison's Ratiometric Digital Weight Resolver and instantaneously converted into an equally precise signal directly proportional to weight. The weight signal is not amplified or integrated (averaged), which ensures the fastest possible response to even the smallest changes in weight.

The entire weighing mechanism, including the Ratiometric Digital Weight Resolver, is completely calibration and adjustment-free, and guaranteed for five years.



NOTE: For liquid feeders, the dry solids supply hopper is replaced with a tank and the dry solids metering mechanism with a pump.

Ratiometric® Digital Weight Resolver System



Acrison's Ratiometric Digital Weight Resolver, used with all Acrison Weigh Feeders, computes the precisely linear movement of the weighing mechanism into a serially transmitted data stream having a discrete resolution of 20 bits (or the ability to sense 1 part in 1,048,576). This extraordinarily precise displacement measurement technique basically consists of a power supply, a sensing element, and computational logic. Also, because the microcomputer circuitry of the Ratiometric System compares relative measurements rather than absolute values, its power source can vary as much as +/- 30% without affecting performance. The Ratiometric Weight Resolver System is linear to within 0.01% and repeatable to 0.005%.

One of the significant features of the Ratiometric Weight Resolver System relates to the manner in which movement of the weighing mechanism is sensed; the physical displacement-sensing element does not attach (or contact) any part of the lever weighing network. In effect, the novel design of this device eliminates the possibility of damaging the Resolver's sensor due to any amount of overload or shock that the weighing system might experience, including the continual 'impacts' associated with refilling weight-loss weigh feeders, especially larger units.

The Ratiometric System is FM (Factory Mutual) Approved and Listed for operation in hazardous environments.... Classes I, II and III; Divisions 1 and 2; Groups C, D, E, F and G, and also complies with hazardous area classifications ATEX 3D or IECEx (Zone 22), 3G (Zone 2) and 2D (Zone 21).

Model 402 and 402X Weigh Feeders

For Dry Solid Materials

'Weight-Loss'

The Weigh Feeder Models shown in the following Chart are a combination of the Models 402 and 402X Weighing Systems with the indicated dry solids Metering Mechanisms.

The indicated maximum feed rate capacities are based on the largest size hoppers available with the specified Metering Mechanisms in conjunction with the output capacities available with these Mechanisms, combined with the maximum number of refills (e.g., refills per hour) that will ensure optimum overall weigh feeder performance.

Model Weigh Feeder	Metering Mechanism	Feed Rate Range	Max Hopper Size (cubic feet)
402-105Z	Model 105Z Reference Specifications 1-200-0480	20 pounds to about 60 cubic feet/hour	8
402-170-1 and 402-170-1-2	Models 170-1 and 170-1-2 Reference Specifications 1-200-0525 or 1-200-0072	20 pounds to about 45 cubic feet/hour	6
402-1015Z	Model 1015Z Reference Specifications 1-200-0481	15 pounds to about 60 cubic feet/hour	8
402-130	Model 130 Reference Specifications 1-200-0479	30 pounds to about 150 cubic feet/hour	20
402-V130	Model V-130 Fiberglass Feeder Reference Specifications 1-200-346	0.5 to about 45 cubic feet per hour	6
402-B21	Model B21 Belt Feeder - Special Applications	30 pounds to about 150 cubic feet/hour	20
402-905-14	Model 905-14 Reference Specifications 1-200-0804	1 cubic foot to about 45 cubic feet/hour	6
402-VT6	Model VT6 Vibratory Tray Feeder - Special Applications	1 cubic foot to about 150 cubic feet/hour	20
402X-BDF-1.5	Model BDF-1.5 Reference Bulletin 708 (Single Common Drive)	20 pounds to about 58 cubic feet/hour	12
402X-BDFX-1.5	Model BDFX-1.5 Reference Bulletin 708 (Individual Drives)	20 pounds to about 93 cubic feet/hour	12
402X-BDFX-1.5-2	Model BDFX-1.5-2 Reference Bulletin 708 (Individual Drives)	20 pounds to about 93 cubic feet/hour	12
402X-170-2 and 402X-170-2-2	Models 170-2 and 170-2-2 Reference Specifications 1-200-0525 or 1-200-0072	20 pounds to about 118 cubic feet/hour	20



Model 402X-BDFX-1.5



Model 402-170-1-2



Model 402X-BDFX-1.5-2



Model 402-105Z

Model 404X and 404Z Weigh Feeders

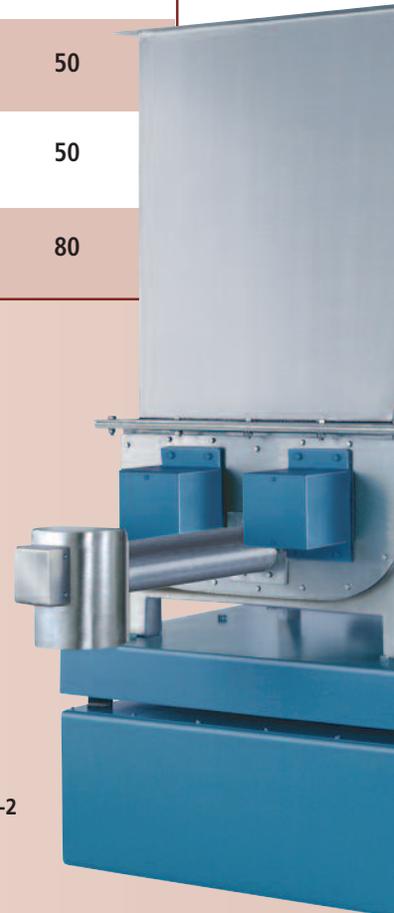
For Dry Solid Materials

'Weight-Loss'

The Weigh Feeder Models shown in the following Chart are a combination of the Models 404X and 404Z Weighing Systems with the indicated dry solids Metering Mechanisms.

The indicated maximum feed rate capacities are based on the largest size hoppers available with the specified Metering Mechanisms in conjunction with the output capacities available with these Mechanisms, combined with the maximum number of refills (e.g., refills per hour) that will ensure optimum overall weigh feeder performance.

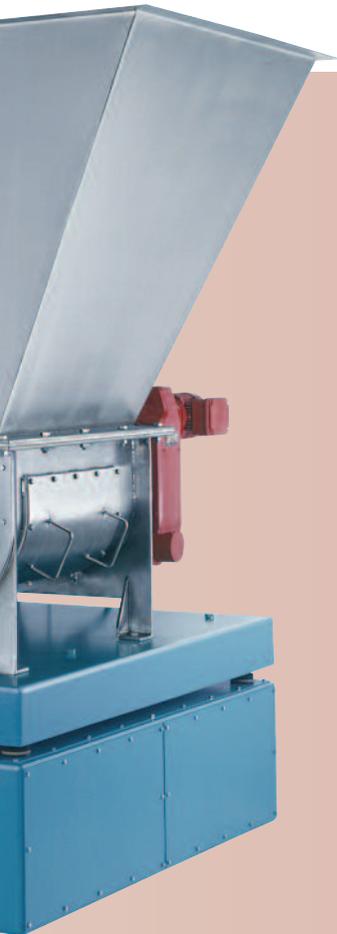
Model Weigh Feeder	Metering Mechanism	Feed Rate Range	Max Hopper Size (cubic feet)
404X-140-1	Model 140-1 Reference Specifications 1-200-0480	60 pounds to about 300 cubic feet/hour	40
404X-170-3	Model 170-3 Reference Specifications 1-200-0525	60 pounds to about 240 cubic feet/hour	40
404X-BDF-2	Model BDF-2 Reference Bulletin 712	90 pounds to about 150 cubic feet/hour	20
404X-BDF-2.5	Model BDF-2.5 Reference Bulletin 712	120 pounds to about 150 cubic feet/hour	20
404X-BDF-2.5-1	Model BDF-2.5-1 Reference Bulletin 712	120 pounds to about 240 cubic feet/hour	30
404Z-BDF-3	Model BDF-3 Reference Bulletin 712	150 pounds to about 320 cubic feet/hour	50
404Z-BDF-3-1	Model BDF-3-1 Reference Bulletin 712	150 pounds to about 400 cubic feet/hour	50
404Z-170-4	Model 170-4 Reference Specifications 1-200-0525	240 pounds to about 600 cubic feet/hour	80



Model 404X-BDF-2



Model 404Z-170-4



Model 404X-BDF-2.5

Model 405 Weigh Feeders

For Dry Solid Materials

'Weight-Loss'

The Weigh Feeder Models shown in the following Chart are a combination of the Model 405 Weighing System with the indicated dry solids Metering Mechanisms.

The indicated maximum feed rate capacities are based on the largest size hoppers available with the specified Metering Mechanisms in conjunction with the output capacities available with these Mechanisms, combined with the maximum number of refills (e.g., refills per hour) that will ensure optimum overall weigh feeder performance.

Model Weigh Feeder	Metering Mechanism	Feed Rate Range	Max Hopper Size (cubic feet)
405-101	Model E101 Reference Specifications 1-200-0479	10 pounds to about 60 cubic feet/hour	8
405-105	Model 105 Reference Specifications 1-200-0480	10 pounds to about 14 cubic feet/hour	3
405-105X	Model 105X Reference Specifications 1-200-0480	10 pounds to about 60 cubic feet/hour	8
405-170-0	Model 170-0 Reference Specifications 1-200-0525	10 pounds to about 19 cubic feet/hour	4
405-BDF-1	Model BDF-1 Reference Bulletin 708	5 pounds to about 15 cubic feet/hour	2
405-1015	Model 1015 Reference Specifications 1-200-0481	10 pounds to about 19 cubic feet/hour	3
405-1015X	Model 1015X Reference Specifications 1-200-0481	20 pounds to about 60 cubic feet/hour	8
405-V-101	Model V-101 Fiberglass Feeder Reference Specifications 1-200-0346	0.2 to about 25 cubic feet/hour	3
405-B14	Model B14 Belt Feeder - Special Applications	20 pounds to about 40 cubic feet/hour	5
405-VT5	Model VT5 Vibratory Tray Feeder - Special Applications	0.6 to about 25 cubic feet/hour	3



Model 405-105X



Model 405-BDF-1



Model 405-170-0

Model 406 and 408 Weigh Feeders

For Dry Solid Materials

'Weight-Loss'

The Weigh Feeder Models shown in the following Chart are a combination of the Models 406 and 408 Weighing Systems with the indicated dry solids Metering Mechanisms.

The indicated maximum feed rate capacities are based on the largest size hoppers available with the specified Metering Mechanisms in conjunction with the output capacities available with these Mechanisms, combined with the maximum number of refills (e.g., refills per hour) that will ensure optimum overall weigh feeder performance.

Model Weigh Feeder	Metering Mechanism	Feed Rate Range	Max Hopper Size (cubic feet)
406-101-0	Model 101-0 Reference Specifications 1-200-0479	1 pound to about 25 cubic feet/hour	3
406-170-00	Model 170-00 Reference Specifications 1-200-0525	1 pound to about 6 cubic feet/hour	1
406-BDFM	Model BDFM Reference Bulletin 708	0.5 pounds to about 3 cubic feet/hour	0.4
408-101-1	Model 101-1 Reference Specifications 1-200-0479	5 pounds to about 40 cubic feet/hour	5
408-105	Model 105 Reference Specifications 1-200-0480	8 pounds to about 14 cubic feet/hour	2
408-170-0	Model 170 Reference Specifications 1-200-0525	5 pounds to about 15 cubic feet/hour	2



Model 406-BDFM



Model 408-170-0



Model 408-101-1



Model 408-105



Model 406-170-00



Model 406-101-0

Specialty Designs



Model 405L
(Liquid Feeder)



Model 405-B14
(Belt Feeder)



Model 402X-170-2
(Equipped with an optional hopper lift-off/swing-out mechanism, pneumatically operated)



Model 402-905-14
(Strand Feeder)

Weigh Feeder Controllers and Control Systems

Acriston Weigh Feeder Controllers and Control Systems are universally recognized for their design superiority, unparalleled versatility, ease-of-use and operational reliability. From basic single weigh feeder controllers to multi-feeder supervisory control systems, the technologically advanced designs of these devices, including their cutting-edge software routines, provide users with unexcelled weigh feeder performance to satisfy the most demanding metering requirements across a broad spectrum of applications. With a wide range of options, accessories and interfacing capabilities, these controllers and control systems are also available in a number of different packaging configurations.

Acriston's SBC-2000 Family of Weigh Feeder Controllers presently include the Models SBC-2000-CM, SBC-2000-DSP, and SBC-2000-DSP/C. These small, yet powerful devices encompass latest technologies and functional algorithms, providing users with an unprecedented number of standard and optional features, including native Ethernet and Profibus connectivity, and a single operating program capable of controlling one or more Acriston weigh feeders. In particular, these controllers are ideally suited for those applications that require central computer control with minimal hardware. A variety of keyboard/display options is also available to suit specific user requirements.

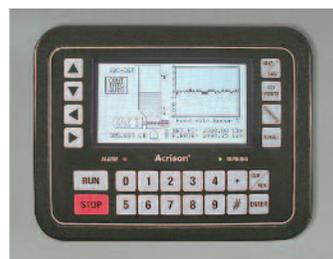
Model SBC-2000-CM Controller

The Model SBC-2000-CM Controller operates a single Acriston Weigh Feeder. It consists of a single circuit board (module) designed for applications that utilize a central computer, PLC or DCS for monitoring and control, which do not require a local operator interface. The Model SBC-2000-CM Controller is typically supplied in a card rack, the size of which depends upon how many SBC-2000-CM Controllers will be required for a given application. A local Keyboard/Display unit is available as an option.



Model SBC-2000-DSP Controller

The Model SBC-2000-DSP Controller operates a single Acriston Weigh Feeder. It consists of a single circuit board (module) designed primarily for applications that require a local operator interface. Basically, the SBC-2000-DSP Controller integrates an SBC-2000-CM Control Module with a dust-tight/water-tight monochrome LCD graphic Keyboard/Display Unit (KDU), designed for panel mounting.



Model SBC-2000-DSP/C Controller

The Model SBC-2000-DSP/C Controller operates a single Acriston Weigh Feeder. It consists of a single circuit board (module) designed primarily for applications that require a local operator interface. The SBC-2000-DSP/C Controller also integrates an SBC-2000-CM Control Module with a Keyboard/Display Unit (KDU) comprised of a dust-tight/water-tight aluminum keyboard utilizing piezoelectric keybutton technology, coupled with a color graphic TFT display (shown in a NEMA 12 enclosure).



Multiple Weigh Feeder Control Systems

When combined with Acriston's Acriston-Data® Supervisory Control Software hosted on a Microsoft® Windows® (XP/Vista/7/8/10) based panel or wall-mounted embedded PC, or a desktop/laptop PC, the Models SBC-2000-CM, SBC-2000-DSP or SBC-2000-DSP/C Controllers form the basis for the SBC-2000 Multi-Feeder Control System. This control system, with its color touchscreen, provides the ability to operate and control up to 20 Acriston Weigh Feeders while displaying rapid data and screen updates, and includes master/slave and ratio-proportioning operation, unlimited recipe storage and retrieval, trending, event and alarm logging, automatic shut-down configurability, and more.

User PLC and DCS equipment can also serve as a host for an SBC-2000 Family Controller System.

Equipment Specifications 1-200-0601 and 1-200-0627.



All Acriston controllers are certified to UL, CSA and EC specifications.

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 recommended for the application. Usually, there is no cost or obligation for this service. Discover the difference in technology, quality and performance of Acrison equipment.



Empire Boulevard Facility
Moonachie, NJ USA

Acrison products...

- Models 101 and 130 Volumetric Feeder Series
- 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 Weigh Belt Feeder Series
- Model 203B Weigh Auger Feeder Series
- Model 270 In-Line Weigh Feeder Series
- Models 402, 404, 405, 406, 407, 408 and 410 ("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 Discharger Hoppering Systems
- Model 170-BD-30 Bin Discharger
- Models 810 and 820 Bulk Bag Unloaders
- Models 500, 515, 530, and 580 Polyelectrolyte Preparation Systems
- Water and Waste Water Treatment Systems
- Volumetric and Gravimetric Feeder Controllers and Control Systems
- Silo Systems
- Accessory Equipment for Acrison Products
- Systems Engineering



Joseph Street Facility
Moonachie, NJ USA

"Visibly Different... Measurably Better"

Acrison[®], Inc.

20 Empire Blvd., Moonachie, NJ 07074
201-440-8300 • Fax: 201-440-4939
Toll Free: 800-4ACRISON
Email: informail@acrison.com
www.acrison.com