

Acrison®

Water & Waste Water Treatment Systems



Product Line Overview

*Quality built, total performance products to satisfy your
dry and liquid chemical feeding and handling needs*

Superior Quality, Rugged-Duty Equipment For Dry Chemical...

Hoppering - Metering - Dissolving



Headquartered in Moonachie, New Jersey, Acrison's North American facilities total over 140,000 square feet and accommodate a staff of several hundred employees conducting marketing and sales, research and development, mechanical and electrical engineering, manufacturing, customer support services and equipment demonstrations. Additional facilities serve markets outside of North America.

Acrison offers equipment to meet the growing needs of the various water and wastewater treatment industries by applying its industrially designed equipment to water treatment processes. From simple chemical feeding and dissolving packages, to advanced dry and liquid polyelectrolyte preparation systems, Acrison's heavy-duty dry solids metering equipment is widely specified for water treatment applications.

With a strong emphasis placed on new product development, as well as on product improvements and enhancements, Acrison maintains an aggressive staff for mechanical, electronic and software development...a "think-tank" that

boasts a solid history of successful innovations and industry "firsts", allowing Acrison to maintain its leading technological edge. Acrison's basic philosophy is to produce the most viable and reliable equipment encompassing innovative, exceptionally functional, rugged-duty designs, and to provide strong user support.

Acrison builds equipment to satisfy the needs of its customers. Acrison is proud of its innovations and products, and their contribution to the municipal industries. Acrison is proud of its people, and most of all, Acrison is very proud of its customers.

Each of Acrison's various products is fully described in individual bulletins. Acrison welcomes the opportunity to make equipment recommendations, demonstrate the selected model, and in general, assist with any of your dry solids handling requirements, usually without charge or obligation.

Please fill-in the enclosed card for additional information, or visit Acrison's website @ www.acrison.com

Let's Talk Performance

Clearly, there is a difference... a significant difference in technology, quality, durability, maintenance parameters and attainable performance.

Acrison strongly encourages a prospective user to visually and physically compare the available devices in order to select the most viable hardware to satisfy the metering requirements of the most demanding processes. The information obtained from a personally witnessed equipment operational demonstration will prove to be invaluable in the decision-making process.



Demonstration Facilities

Acrison's new, ultra-modern equipment demonstration facilities are the largest, most advanced and best-equipped in the industry. We'll be glad to demonstrate the operation of the selected equipment model with your actual product, normally, without any charge or obligation. Test procedures are generally completely automatic.

We guarantee the equipment we offer will meet or exceed the performance specifications of your application.

In addition to equipment demonstration/materials testing, Acrison also offers comprehensive user training programs, focusing on equipment operation and maintenance. Acrison also offers customized seminars dealing with the application of Acrison products.

Discover the difference in technology, quality of construction, and performance.

Volumetric Feeders

Model W105 Feeder Series

Designed to handle various dry chemicals, the Models W-105 and W-105Z Volumetric Feeders are usually supplied as part of a "package" for water and waste water treatment processes. These rugged-duty feeders employ Acrison's *dissimilar speed*, Double Concentric Auger Metering Mechanism for unequalled performance and trouble-free operation.

Typical metering accuracies range between ± 1 to 2 percent or better (error) based on a given number of consecutive one minute samples.

Model W105

Used for semi-free flowing materials, this model features a six inch diameter Intrromitter or "conditioning" auger. Output capacity ranging between 0.03 and 57.5 cubic feet per hour.

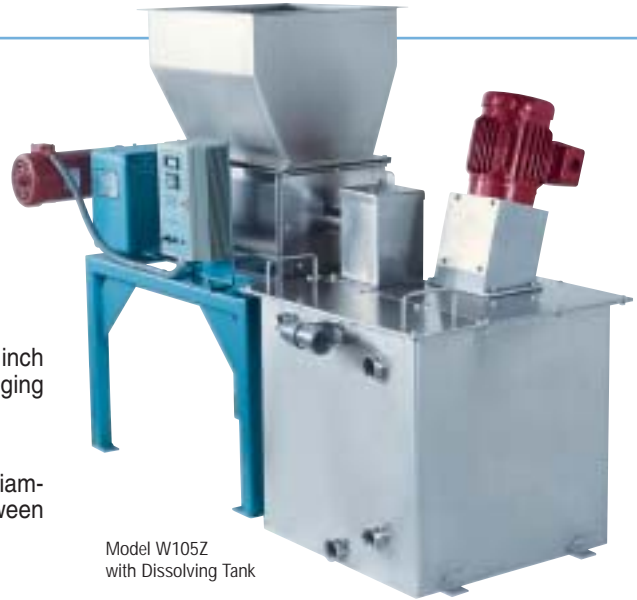
Model W105Z

Used for non-free flowing materials, this model features a ten inch diameter Intrromitter or "conditioning" auger. Output capacity ranging between 0.03 and 110 cubic feet per hour.

Optional and Accessory Equipment

To operate in conjunction with its equipment, Acrison provides various size feeder supply hoppers, hopper discharging equipment, dust collectors, bulk bag unloaders, vacuum loaders, various controls, etc.

Equipment Bulletin W-718



Model W105Z
with Dissolving Tank

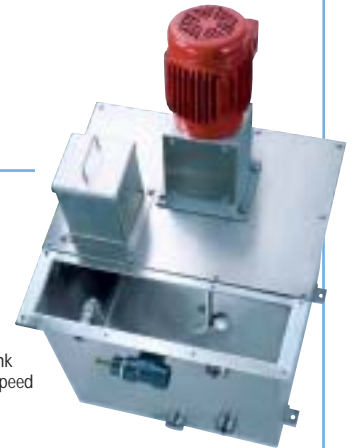
Wetting Cone

Operating in conjunction with an Acrison Model W-105 Series Volumetric Feeder, Acrison's Wetting Cone has been specifically designed for "wetting" activated carbon, potassium permanganate and certain other dry chemicals.

The Wetting Cone is constructed of 316 stainless steel and includes a PVC eductor that ensures both complete wetting of the chemical and transport of the solution. The Wetting Cone includes an overflow port as standard and is available with an optional high level probe.



A Model W-105Z Feeder
with a Wetting Cone



A 50 gallon
Dissolving Tank
with a Slow Speed
Mixer

Dissolving Tanks

Available in various sizes, Acrison Dissolving Tanks are used to produce solutions or slurries by efficiently mixing dry materials (chemicals) with water. An Acrison Volumetric Feeder is used to meter a dry chemical into a Dissolving Tank.

Model 060 Variable Speed SCR/DC Controller

For use with Acrison Volumetric Feeders

Acrison's Model 060 is an industrial-duty, variable speed SCR/DC motor controller providing accurate and dependable speed control of direct current (DC) motors used primarily as variable speed drives for Acrison's various model feeders.

The Model 060 is available in two sizes. In one configuration, the Model 060 will control DC motors ranging from 1/8 to 1 horsepower (inclusive). In a second configuration, the Model 060 Controller will operate 2 to 5 horsepower DC motors. The standard enclosure for each configuration is dust-tight/water tight. Optional mountings and enclosures are also available.

The Model 060 Controller will operate with either armature or tachometer feedback.

Design Specifications 1-200-0437



Vibrating Bin Dischargers with integral storage

Model VBDSB

Acrison's Vibrating Bin Discharger (VBD) with integral storage promotes continuous positive discharge of dry solid products from within its integral storage hopper into an Acrison feeder. Product discharge is on a first-in/first-out basis, accomplished without compaction, degradation or attrition. When combined with an integral supply bin (or hopper), the Model designation becomes VBDSB.

Acrison manufactures three different size Vibrating Bin Dischargers...the Model VBD-18, which utilizes an 18 inch Vibrating Bin Discharger, the Model VBD-26, which utilizes a 26 inch Vibrating Bin Discharger, and the Model VBD-32, which utilizes a 32 inch Vibrating Bin Discharger. They are used with standard size integral storage hoppers that range in capacity from 3 to 60 cubic feet in conjunction with Acrison feeders as a factory-assembled package. Larger supply hoppers, also equipped with large size Vibrating Bin Dischargers are also available.

Standard materials of construction are carbon steel, 304 stainless steel and 316 stainless steel. Special coatings and finishes are available. Electrical requirements are 115/230/1/60 or 230/460/3/60.



A Model W-105Z Feeder with a 200 gallon Dissolving Tank beneath a 50 cubic foot storage bin. The storage bin is equipped with a Vibrating Bin Activator and Level Probes

The Vibrating Bin Discharger is suspended from the hopper above by three or four suspension rods equipped with vibration isolators specially designed to virtually eliminate transfer of vibration to the supply hopper and its integral structure. Vibration is produced by a totally enclosed, permanently lubricated, adjustable motor-driven vibrator, silent in operation.

Design Specifications 1-200-0296

Model VBDSB-60-105Z

Series 400 Weigh Feeders

“Weight-Loss-Differential”

For reliable dry solids or liquid metering... featuring exceptionally durable, non-load cell, counterbalanced weighing systems that are permanently calibrated and adjustment-free.

Equipment Bulletins 897 and 893

Model 407 Weigh Feeder

- Compact platform type scale
- Up to 500 pounds per hour output capacity
- Dry material or liquid metering
- Metering accuracy will be ± 0.25 to 1 percent or better (error) based on a given number of consecutive one minute weighments
- Patented “Acric-Lok” disturbance protection
- Long-life, non-contacting Ratiometric Weigh Sensor
- All flexure weighing mechanism
- Digital microprocessor control
- Hopper capacity up to 3 cubic feet
- Free of calibration, adjustment and re-zeroing
- Five year warranty on the flexures and Digital Weight Resolver

Model 407-105



Model 402 Weigh Feeder

- Compact platform type scale
- Up to 1000 lbs. per hour output capacity
- Dry material or liquid metering
- Metering accuracy will be ± 0.2 to 1 percent (error) based on 30 consecutive one (1) minute weighments
- Patented “Acric-Lok” disturbance protection
- Long-life, non-contacting Ratiometric Weigh Sensor
- All flexure weighing mechanism
- Digital microprocessor control
- Hopper capacity up to 6 cubic feet
- Free of calibration, adjustment and re-zeroing
- Five year warranty on the flexures and Digital Weight Resolver

Model 402-105Z



Model C-702 Continuous Weigh Feeder Controller

Compact Design

Utilizing state-of-the-art multiprocessor logic, Acrison's Model C-702 Weigh Feeder Controller provides an economical Weigh Feeder Controller for continuous “Weight-Loss-Differential” weigh feeding applications which do not require extensive capabilities. The Model C-702 cannot operate a weigh feeder in a batching mode.

Provided in a convenient, panel-mountable enclosure (measuring 7.25" high x 5.5" wide x 6.5" deep) meeting NEMA 4/12 ratings, the Model C-702 Controller has full certification to UL, CSA and IEC specifications, and includes built-in feeder emulation for training and testing purposes.

Design Specifications 1-200-434



Dry/Liquid Polyelectrolyte Processing Systems

Model 500 System

The Polymair® Model 500 Polyelectrolyte Processing System automatically prepares a homogeneous and precise polymer solution at moderate to high capacities via the use of a novel dry air atomizing system and wetting chamber, especially effective for conveying and wetting very fine dry polymers. Although usually furnished to handle only a dry polymer, the Model 500 System can also be furnished to handle both dry and liquid polymers. To accomplish this, a dry solids feeder and a liquid metering pump are included. Manual selection provides automatic transfer from dry to liquid or liquid to dry operation without the need for any modification whatsoever.

The Model 500 Polymair Processing System is completely assembled and mounted onto a "skid" type base. A feed tank, when furnished, is shipped separately.

Equipment Bulletin 500



Model 512 Module

The Polymair Model 512 Polyelectrolyte Processing System automatically prepares a uniform and consistent polymer solution at moderate capacities using an air-assisted process. The Model 512 uses a blower to create suction at the inlet to the wetting chamber, drawing polymer into a continuously flowing, turbulent water/air cyclone, which in turn ensures the complete wetting of polymer without agglomeration. The wetted polymer then flows to a receiving vessel prior to being transferred (pumped) to a separate mix/age tank or holding feed tank. The Model 512 can also be adapted to handle both dry and liquid polymers.

The Model 512 Polymair Processing System is completely assembled and mounted onto a "skid" type base. Mixing and feed tanks, when furnished, are shipped separately.

Equipment Bulletin 512



Model 515 Module

The Model 515 Polyelectrolyte Processing Module is capable of automatically preparing a congruous and precise solution from dry polyelectrolytes at low to moderate capacities; it is ideally suited for granular type polymers. Dry polymer is metered into the wetting chamber, where it comes in contact with turbulently flowing water. After effective and efficient wetting in the wetting chamber, the solution is immediately and continuously transferred (pumped) into a mixing tank without damaging the polymer chains. The Model 515 is also capable of handling both dry and liquid polymers.

The Model 515 Polyelectrolyte Processing System is completely assembled and mounted onto a "skid" type base. Mixing and feed tanks, when provided, are shipped separately.

Equipment Bulletin 515



Liquid Polyelectrolyte Processing Modules

Model 580 Module

For the efficient and precise activation of liquid polymers.

The Model 580 Polyelectrolyte Processing Module automatically prepares an extremely congruous and active solution from liquid polyelectrolyte emulsions and solutions.

To accomplish this, a pump meters the polymer to a two-state activation system that consists of a Dispersion-Injector which utilizes a high efficient technique to first dispense and then mix liquid polymer with water. The resultant solution then enters a motorized activation chamber where it becomes activated without in any way exposing the fragile elongated polymer chains to damaging energy. By controlling the liquid polymer throughout both stages of the activation process, polymer short-circuiting and/or under-processed or over-processed polymer cannot occur.

The Model 580 is available with a variety of microprocessor-controlled liquid polymer pumps and dilution water rotameters for operation over a wide polymer dosage range.

Equipment Data Specifications #1-200-0552

Model 580-00 - Rated for a maximum polymer flow of 0.6 gallons per hour and a maximum water flow of 3 gallons per minute. The minimum water flow is 0.5 gallons per minute.

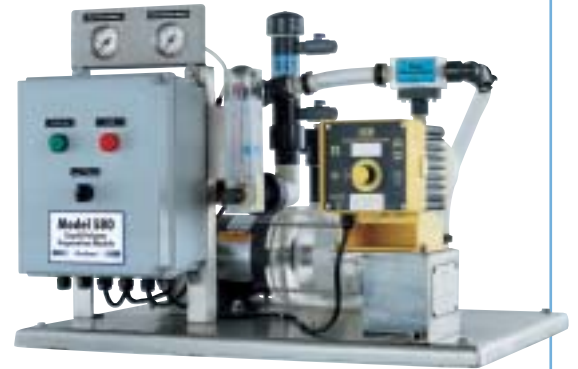
Model 580-0 - Rated for a maximum polymer flow of 1.5 gallons per hour and a maximum water flow of 8 gallons per minute. The minimum water flow is 2 gallons per minute.

Model 580-1 - Rated for a maximum polymer flow of 4.5 gallons per hour and a maximum water flow of 14 gallons per minute. The minimum water flow is 4 gallons per minute.

Model 580-2 - Rated for a maximum polymer flow of 8 gallons per hour and a maximum water flow of 18 gallons per minute. The minimum water flow is 7 gallons per minute.

Model 580-3 - Rated for a maximum polymer flow of 15 gallons per hour and a maximum water flow of 28 gallons per minute. The minimum water flow is 9 gallons per minute.

Model 580-4 - Rated for a maximum polymer flow of 30 gallons per hour and a maximum water flow of 50 gallons per minute. The minimum water flow is 15 gallons per minute.



Model 580 mounted above a 55 gallon polymer supply drum

Model 530 Module

The Model 530 has the same features and performance of the Model 580 except that it has a motorless activation chamber.

Equipment Data Specifications #1-200-0558



Acrison Facilities



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
- Model 200 Series of Weigh Belt Feeders
- Model 203B Series of Weigh Auger Feeders
- Model 270 Series of In-Line Weigh Feeders
- Models 402 and 404 Series, A405 and 406 ("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
- Multiple Auger Bin Discharger Feeders
- 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

Industrial and municipal chemical feed equipment

Acrison®

"Visibly Different... Measurably Better"

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