

# Acrison®

## Volumetric Feeder Model 905-18

*For 'Strand' type Materials*



*Advanced Dry Solids Metering  
and Handling Technologies*

## Volumetric Feeder Model 905-18

*For 'Strand' Type Materials*

In combining a number of innovative technologies, Acrison's Model 905-18 Volumetric Feeder has been specifically designed to accurately and reliably meter certain types of 'strand or fibrous' materials at feed rates typically ranging from about 1.5 to approximately 40 cubic feet per hour.

### Model 905-18

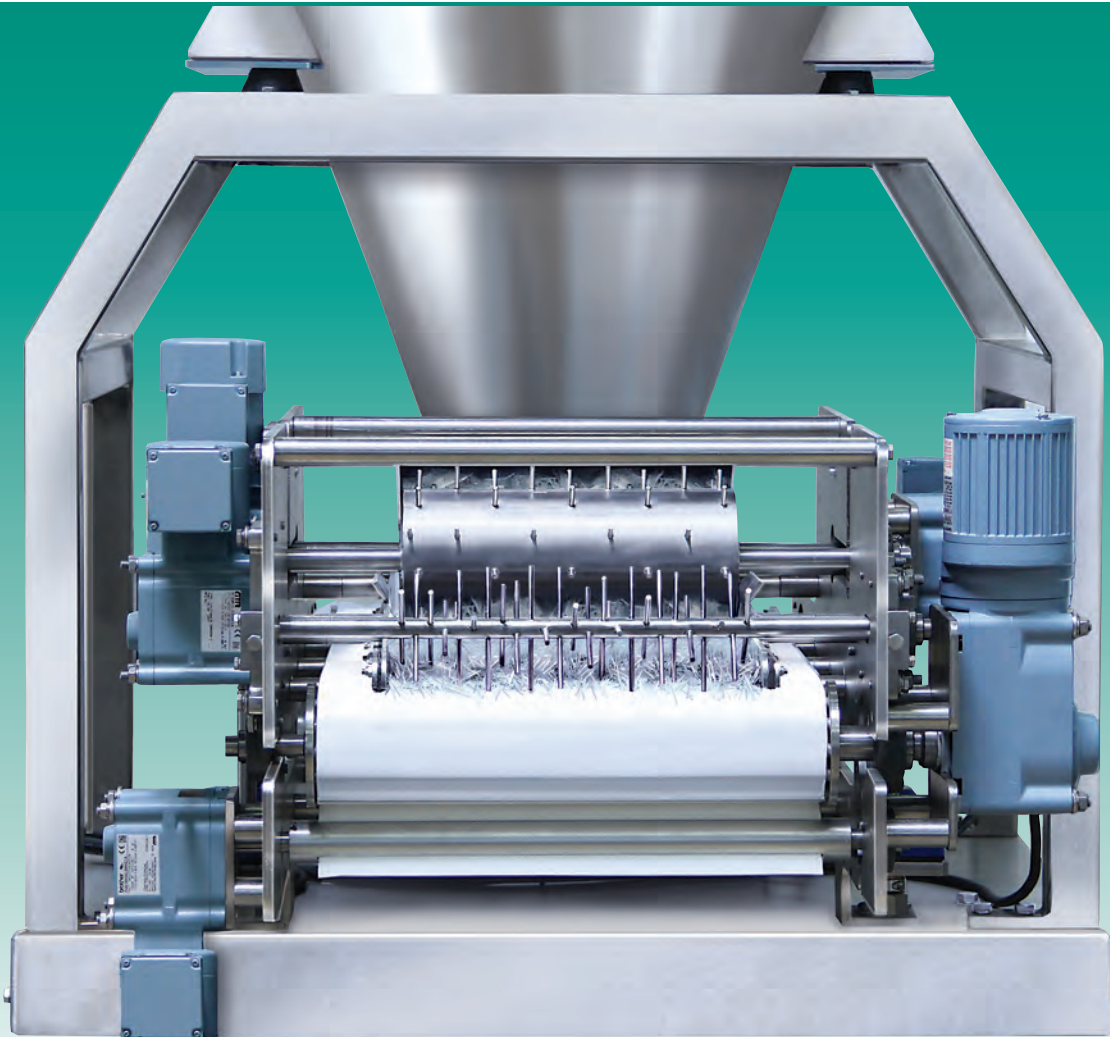
Manufacturers who must feed strand-type materials into their processes, typically with lengths ranging between 0.4 to 0.75 inches (e.g., fiberglass or the like), have historically found this to be a very challenging task, whether the requirement is for volumetric or gravimetric metering. In addition, continuous processes usually require a relatively uniform discharge feed stream, which due to the nature of such materials, represents an additional challenge.

Basically, strand type materials, typically with lengths as indicated above, are difficult to feed uniformly and reliably because the strands have a tendency to interlock and form clumps that make consistently accurate metering difficult, especially at feed rates under 100 pound per hour. In fact, feeders supposedly capable of feeding such materials often experience intermittent bridging or clumping within their supply hoppers and/or operating mechanisms resulting in sporadic material flow and inaccurate metering performance.



Model 905-18 Volumetric Feeder

## Designed to meter 'strand' type materials



Model 905-18 Feeder

### Operational Overview

In operation, the Model 905-18 Volumetric Feeder maintains a specific volume of material on a metering/conveyor belt, thereby producing a given volumetric output based on the speed of the belt.

An 'active', specially designed five cubic foot integral supply hopper ensures reliable product flow into a uniquely configured distribution trough and onto a slow-speed metering/conveyor belt where two rotating pile depth leveling drums produce a consistent depth and width of material. Both the metering/conveyor belt and the two leveling mechanisms operate independently, but in a proportional relationship to each other, powered by

variable speed garmotors. The output feed rate is controlled by the speed of the belt.

In addition, a rotating dispersing mechanism, installed at the discharge of the belt, ensures a uniform flow of material off the belt. Also, a slowly rotating wiper mechanism, operating on the underside of the metering/conveyor belt, removes any residual material that may remain on the belt. Side guides prevent product spillage off the belt.

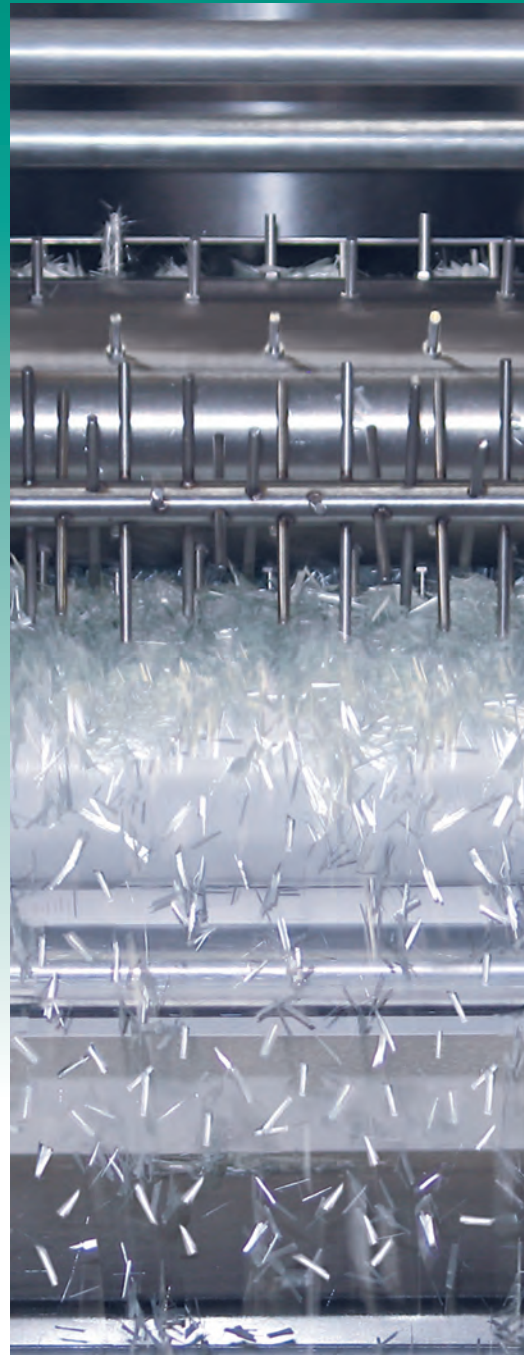
Gravimetric metering is obtained by utilizing the Model 905-18 Feeder as the metering mechanism of an Acrison Model 402 'Weight-Loss' weighing system.

# Model 905-18 Volumetric Feeder

**Acrison's Model 905-18 Volumetric Feeder will meter 'strand' type materials ranging in length from 0.4 to 0.75 inches, even when such products contain a small percentage of moisture.**

## Specifications

- The Model 905-18 Volumetric Feeder will accurately and reliably meter a variety of strand-type materials, typically not exceeding 0.75 inches in length.
- Volumetric metering accuracies typically range between +/- 2 to 5 percent (error) based on a given number of consecutive one-minute sample weighments. Metering accuracy is dependent upon material characteristics (e.g., the length of the strands, coatings on the strands, moisture content, etc.).
- Output feed rates range from about 1.5 to approximately 40 cubic feet per hour.
- The Model 905-18 Feeder is powered by three directly connected, heavy-duty variable speed gear motors operating in a proportional relationship to each other; they drive the metering/conveyor belt and the two spiked pile-leveling drums. Two smaller constant speed gearmotors operate the rotating product discharge disperser and the belt wiper mechanism. All motors are TENV.
- The entire structure of the metering/conveyor belt assembly is manufactured in 304 stainless steel, as is the feeder's active supply hopper, which is five cubic feet in capacity. The multi-ply metering/conveyor belt is white reinforced PVC.
- The feeder includes a specially configured discharge chute with a rectangular outlet for connection to downstream equipment. A Lexan guard covers the feeder's operating mechanism.
- The Model 905-18 is furnished completely assembled; it is self-emptying, very easy to clean, simple to operate, virtually silent when operating, and requires minimal maintenance.
- The standard feeder controls are furnished in a NEMA 12 enclosure. Power requirement is 115/1/50-60 or 460/3/50-60.



**A Model 905-18 Feeder metering 0.5 inch long fiberglass at approximately 300 pounds per hour.**

# Model 402-905-18 'Weight-Loss' Weigh Feeder



A Model 402-905-18 'Weight-Loss'  
Weigh Feeder

## 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.



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 905-18 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, 407X, 408 and 410 ('Weight-Loss') Weigh Feeders
- Model Series 403 ('Weight-Loss') 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



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*"Visibly Different... Measurably Better"*

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