Design Specifications 1-200-0009



# **CONTINUOUS BLENDERS** Models 301 and 350 Series

For use with Acrison Feeders

Advanced design technologies for superior performance, quality and reliability.

# Acrison<sup>®</sup> Acrison<sup>®</sup> Acrison<sup>®</sup>

## Model 350 Double Concentric Auger CONTINUOUS BLENDER



Featuring "Inter-Auger-Action" for the thorough and homogeneous mixing of two or more dry solid ingredients.

### **Operational Overview**

The Model 350 is a versatile, multi-purpose continuous Blender utilizing Acrison's unique, dissimilar speed, Double Concentric Auger Mechanism (and "Inter-Auger-Action") for mixing dry solids with dry solids, and in certain applications, dry solids with liquids.

As two or more ingredients are continuously metered into a Model 350 Blender, they are very effectively combined into a homogeneous blend by the gentle, highly efficient mixing action produced by the dissimilar parallel motion of the Dual Concentric Augers operating at different, but constant speeds.

The Model 350 Blender operates in a 'starved' condition; retention time is minimal and the output delivery of the blended material is smooth and consistent.

Model 350 Blenders are only furnished with Acrison volumetric and/or gravimetric feeders to form a complete metering/blending system.

MODEL 350 BLENDER CAPACITY CHART	
Model size	Cubic feet per hour (maximum output)
350-0-D	1.2
350-0-E	2.5
350-0-F	6
350-0-G	11
350-1-H	20
350-1-K	50
350-1-M	70
350-1-N	110
350-2-P	160
350-2-R	250
350-3-S	400
350-3-T	520
350-4-U	800
350-4-V	1000
350-4-W	1500
350-5-X	3400
350-5-Y	5100

The maximum turn-down ratio of any Model 350 Blender is 20:1 from the indicated maximum output capacity.

### Operation (rotation) of the Dissimilar Speed, Dual Concentric Augers produces...

- A unique annular "interaction" by the speed differential of the concentrically mounted blending augers.
- Dissimilar longitudinal velocities produced by the speed differential between the dual, concentrically mounted blending augers.
- An alternating forward and reverse action produced by the right and left hand helix configuration of the larger (outer) blending auger.
- A "tumbling" action created by a number of horizontal bars strategically located and affixed to sections of both augers.



## **Model 350 Continuous Blending Systems**



Acrison 'Weight-Loss' Weigh Feeders.

## Model 350 Blender

The versatility and effectiveness of Acrison's Model 350 multi-purpose Blender has been proven time and time again in a broad variety of applications. Even products having input feed ratios as much as 2000:1 are successfully blended...from the simple and basic coating of a pelletized product with a lubricant or a releasing agent, to the mixing of a paste-like blend having the consistency of dough.

The major portion of the Model 350 Blender is "fixed" dimensionally, however, some flexibility does exist with respect to the length of the discharge cylinder.

Because of the many possible variations that can occur when mixing dry solids to dry solids, or dry solids to liquids, Acrison recommends that a physical evaluation of blending efficiency be performed (in our Customer Demonstration Facilities) to determine feasibility of the application and performance of the Model 350 Blender. The quick disconnect and/or sanitary features, optionally available with the Model 350 Blender, are designed for the rapid removal and cleaning of all major components without the need for tools. The sanitary Model 350 Blender is USDA approved and is manufactured in strict compliance with the most stringent sanitary requirements.



# Acrison<sup>®</sup> Acrison<sup>®</sup> Acrison<sup>®</sup>

## Model 301 Single Helicoidal Auger CONTINUOUS BLENDER

Featuring a specially designed single Blending/Conveying Auger for the thorough mixing of two or more dry solid ingredients.

## **Operational Overview**

The Model 301 is a moderately versatile, single auger continuous Blender designed for the thorough mixing of two or more dry solid ingredients. The blender consists of a single Blending/Conveying Auger housed in a trough or tube.

As various dry solid ingredients are continuously metered into a Model 301 Blender, its uniquely configured Helicoidal Blending/Conveying Auger produces a very effective and efficient mixing action by tumbling the material as it is being conveyed towards the blender's outlet. In certain applications, the design of the Blending/Conveying Auger includes provisions for generating a partial bi-directional flow pattern to produce a more intense mixing action.

Although standard Model 301 Blenders maintain specific dimensional parameters, the length of the blender can be designed to satisfy the layout requirements of a particular application, in conjunction with Acrison feeders.

Model 301 Blenders are only furnished with Acrison volumetric and/or gravimetric feeders to form a complete metering/blending system.

#### MODEL 301 BLENDER CAPACITY CHART

Model size	Cubic feet per hour (maximum output)
301-F	6
301-G	11
301-H	20
301-K	50
301-M	70
301-N	110
301-P	160
301-R	250
301-S	400
301-T	520
301-U	800
301-V	1000
301-W	1500
301-X	3400
301-Y	5100
301-YY	7600
301-YZ	10500

The maximum turn-down ratio of any Model 301 Blender is 20:1 from the indicated maximum output capacity.



# **Typical Metering/Blending Systems**



Two Model 301 Blending Systems incorporating a number of Acrison 'Weight-Loss' Weigh Feeders.



pneumatic loaders for 'refilling' the feeders.

#### **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 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 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, 407 and 410 Series ("Weight-Loss-Differential") Weigh Feeders

loseph Street Facility

Moonachie, NJ USA

- 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 170-BD-30 Bin Dischargers
- Model 800 Series of Bulk Bag Unloaders
- 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

Quality built, total performance products to satisfy your dry solids metering/handling needs.



#### "Visibly Different... Measurably Better"

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

Website: www.acrison.com

actison, INC.

Copyright 2008—Acrison, Inc.—all rights reserved. Domestic and Foreign Patents issued and pending. Acrison is a Registered Trademark of Acrison Inc., Moonachie, New Jersey

Trafford Park Facility

Manchester, UK