Acrison®

Bulk Bag Unloaders
Models 821 and 822

For Discharging Dry Solid Materials From Within Bulk Bags

Advanced Materials-Handling Technologies Combined with Strong Mechanical Designs for Superior Operational Performance and Equipment Reliability.

Acrison®

Bulk Bag Unloaders
Models 821 and 822
For Dry Solid Materials

Acrison's Model 821 and 822 Bulk Bag Unloaders provide a safe, clean, dust-tight, and highly effective means for discharging a wide assortment of dry solid materials from within bulk bags.

Operation

When a bulk bag is placed into a Model 821 or 822 Unloader, the bag 'sits' on the unloader's vibratory bed, conforming to its shallow body. When energized, powerful flow-inducing forces (vibration) transfer from the bed into the bag and the material contained within, effectively and efficiently causing its contents to discharge until empty. The vibratory action, confined to the bed of the unloader, is produced by an adjustable, heavy-duty motorized vibrator, powered by a TENV motor (AC).

The vibratory body of the Bulk Bag Unloader is resiliently mounted onto the unloader's heavy-duty tubular support structure, designed for floor mounting. A Bag Lifting Rack attaches to the lifting straps (or loops) of a bulk bag to lift the bag into the unloader. From floor level, bulk bags are lifted and placed into the unloader by a fork truck, by a hoist and trolley system integral to the unloader's support structure, or by a separate overhead hoist.

Once a bulk bag has been placed into the unloader, the bag is primarily supported by the unloader, and to a small extent, by the Bag Lifting Rack. As an option, the Bag Lifting Rack may include Acrison's Automatic Bag Tensioner to maintain upward lift on the bag as it empties. The Bag Lifting Rack may also include Acrison's optional Bag Liner Tensioner.

The difference between the Model 821 and 822 Bulk Bag Unloaders is the manner in which the bag spout interfaces with auxiliary equipment, and the ability to remove a partially empty bag. The Model 821 is designed to completely empty a bulk bag; it is not capable of closing-off a partially empty bag for removal. However, the Model 822 Unloader does possess such capability when equipped with Acrison's optional Model 82-SCV Bag Spout Closure Valve.

Basic Model 821 Bulk Bag Unloader
designed for loading with a fork truck.

Model 821 Bulk Bag Unloader

In many applications, the Model 821 Bulk Bag Unloader discharges into an Acrison feeder mounted beneath. In other applications, the unloader discharges into auxiliary equipment.

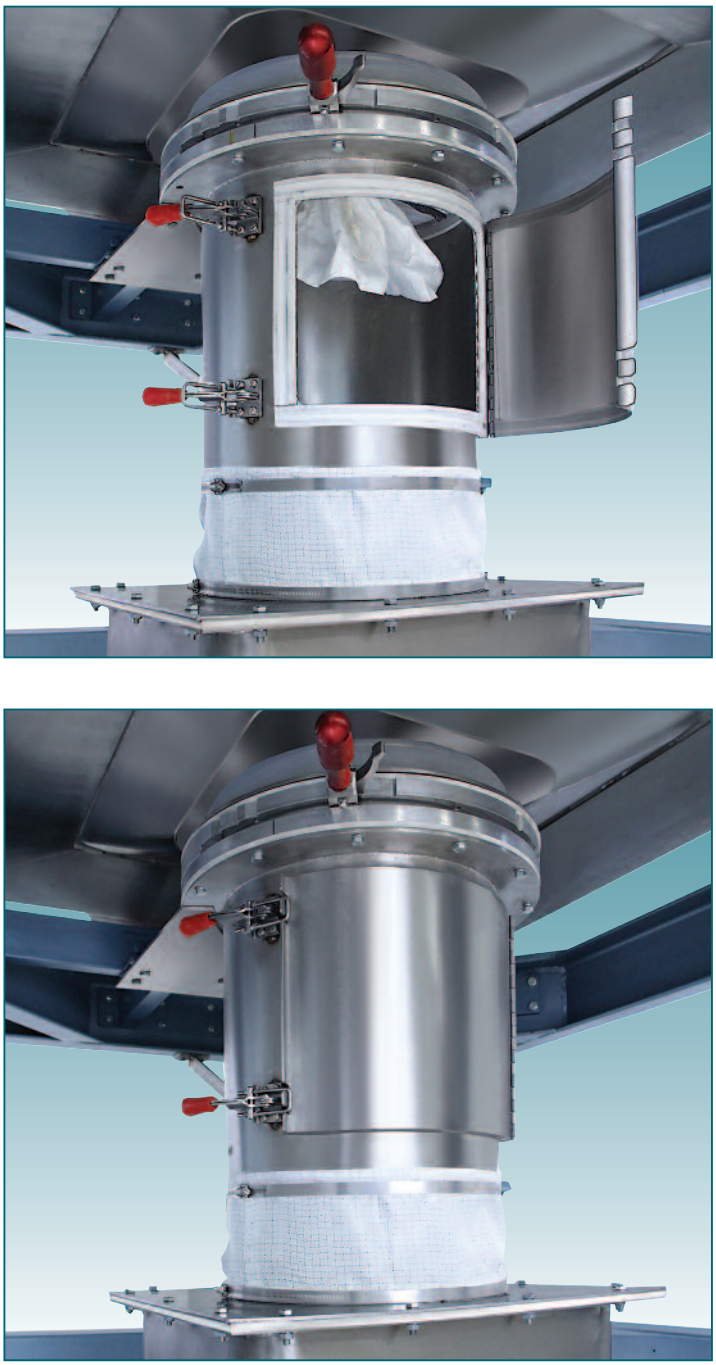
Iris Valve/Bag Spout Untie Receptacle

Beneath the Model 821 Bulk Bag Unloader, an independently mounted Iris Valve, with Acrison's Bag Spout Untie Receptacle attached, flexibly connects to the outlet of the unloader. The Untie Receptacle includes a hinged and clamped entry hatch, with the outlet of the Receptacle flexibly connected to mating equipment for a totally dust-tight assembly.

After a bulk bag has been placed into the unloader, and with the Iris Valve wide open, access to the unopened bag spout is made through the hatch in the side of the Untie Receptacle, allowing the spout to be pulled downward through the Receptacle.

The Iris Valve is then closed and the bag spout string untied. The hatch of the Untie Receptacle is secured and the Iris Valve fully opened to commence discharge of product.

***Note:** The Iris Valve cannot close-off the flow (discharge) of material from within a bulk bag by sealing-off the bag spout when the spout is filled with product. In order to remove a partially empty bag, please reference Acrison's Model 822 Bulk Bag Unloader, which has been designed to close-off the bag spout and remove a partially empty bag.*



Iris Valve/Bag Spout Untie Receptacle Assembly shown discharging into the hopper of an Acrison Volumetric Feeder.

Model 822 Bulk Bag Unloader

A Model 822 Bulk Bag Unloader discharging product into the hopper of a portable flexible screw conveyor for transporting the product into auxiliary equipment. The unloader operates on demand from level probes located in the flexible screw conveyor's supply hopper.

Model 822 Bulk Bag Unloader

In many applications, the Model 822 Bulk Bag Unloader discharges into an Acrison feeder mounted beneath. In other applications, the unloader discharges into auxiliary equipment.

Model 84-SCM Bag Spout Clamping Mechanism

Designed for use with the Model 822 Bulk Bag Unloader, Acrison's Model 84-SCM Bag Spout Clamping Mechanism provides a quick, easy and secure method of attaching the discharge spout of a bulk bag to downstream equipment.

The Model 84-SCM utilizes a pneumatically actuated mechanism to produce a high-integrity dust-tight seal between the bulk bag spout and the equipment below.

When a bulk bag has been placed into a Model 822 Bulk Bag Unloader, the bag spout is pulled downward to interface with Acrison's Model 84-SCM Bag Spout Clamping Mechanism and its associated transition chute for a totally dust-tight connection to downstream equipment.

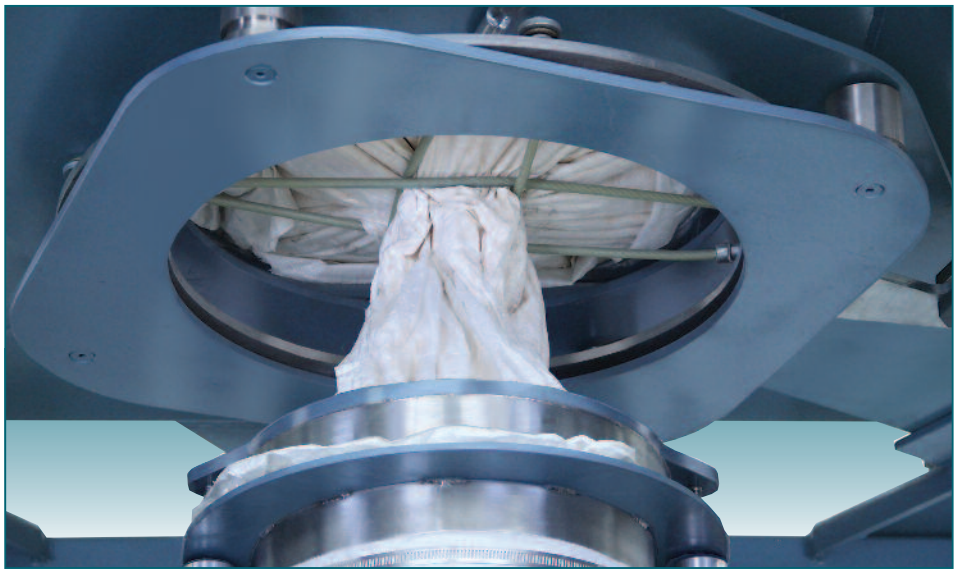
During the discharging process, a pneumatically regulated network integral to this system, applies optimal tension onto the bag spout to eliminate any pleats or folds in the bag spout that could entrap product and/or impair discharge.

A Model 822 Bulk Bag Unloader showing the bag spout being connected to Acrison's pneumatically operated Model 84-SCM Bag Spout Clamping Mechanism. The bottom collar of the mechanism attaches to the process or adjoining equipment. The above Bulk Bag Unloader is also equipped with Acrison's Model 82-SCV Bag Spout Closure Valve.

Model 82-SCV Bag Spout Closure Valve

Acrison's optional (patented) Model 82-SCV Bag Spout Closure Valve is typically used to close-off the discharge spout of a bulk bag so that the bag spout can be re-tied, usually when it's desired to remove a partially emptied bag.

When this mechanism is set in motion by a pneumatic actuator, four high strength coated flexible steel cables converge around the center of the bag's discharge spout forming a tight "basket weave" closure. Once closed, product is prohibited from discharging.



Close-up of a Model 82-SCV Bag Spout Closure Valve in the open position (top), and then closed onto the bag spout (bottom). Normally, this option is included when a user desires to close-off a partially empty bag. Once closed, the bag spout can then be tied-off and the bag removed.

The Model 82-SCV Bag Spout Closure Valve is shown in conjunction with the Spout Clamping Mechanism of a Model 822 Bulk Bag Unloader.

Models 821 and 822 Bulk Bag Unloaders

Standard Features

Model 821

- See page 2 for operational details.
- Available for bag loading with either a fork truck or integral hoist.
- The outlet of the Model 821 Unloader flexibly connects to an independently mounted Iris Valve/Untie Receptacle Assembly.
- The standard Iris Valve includes an aluminum body (does not come in contact with the product). Other materials of construction are optionally available.
- As standard, the Untie Receptacle is constructed in 304 stainless steel (other materials of construction are available).
- The Untie Receptacle includes a hinged and clamped door for access to the bag spout. The outlet of the Untie receptacle typically connects to auxiliary equipment.
- As standard, the body of the unloader is available in mild steel and 304 SS construction (other materials of construction may be available).
- Includes the applicable basic Bag Lifting Rack (various Bag Lifting Rack accessories are optionally available).
- Operated by an adjustable motorized vibrator equipped with a TENV (AC) motor. Requires 230/460/3/60 power (other voltages are available).
- The unloader's heavy-duty main support structure is constructed with 4" square tubing.
- The unloader's NEMA control panel is mounted on a separate floor-mounted support adjacent to the main structure of the unloader.
- Completely dust-tight in operation.
- All non-stainless steel surfaces are painted with Acrison's standard blue enamel.

Model 822

- See page 2 for operational details.
- Available for bag loading with either a fork truck or integral hoist.
- As standard, the body of the unloader is available in mild steel and 304 SS construction (other materials of construction may be available).
- Includes the applicable basic Bag Lifting Rack (various Bag Lifting Rack accessories are optionally available).
- Operated by an adjustable motorized vibrator equipped with a TENV (AC) motor. Requires 230/460/3/60 power (other voltages are available).
- The unloader's heavy-duty main support structure is constructed with 4" square tubing.
- The unloader's NEMA control panel is mounted on a separate floor-mounted support adjacent to the main structure of the unloader.
- Completely dust-tight in operation.
- All non-stainless steel surfaces are painted with Acrison's standard blue enamel.

Optional Equipment, Construction and Accessories

- Available with 316 SS product contact surfaces.
- The unloader's main support structure is available in stainless steel construction (304 and 316 SS).
- Available with a pneumatically operated hoist and trolley.
- Bag Lifting Racks are available with Acrison's Automatic Bag Tensioner to maintain the bag taut during the bag emptying process (also aids in the downward flow of material through and out of the bag).
- Bag Lifting Racks furnished with the Automatic Bag Tensioner are also available with Acrison's Bag Liner Tensioner.
- Available in Sanitary Construction whereby all product contact surfaces are either 304 or 316 SS and finished in accordance with USDA and FDA Sanitary requirements.
- Electrical construction for operation in certain hazardous areas, which may include the use of a pneumatically operated hoist and trolley.

Close-up of the Bag Spout Clamping Mechanism of a Model 822 Bulk Bag Unloader.

Models 821 and 822 Bulk Bag Unloaders

Fork Truck Loading

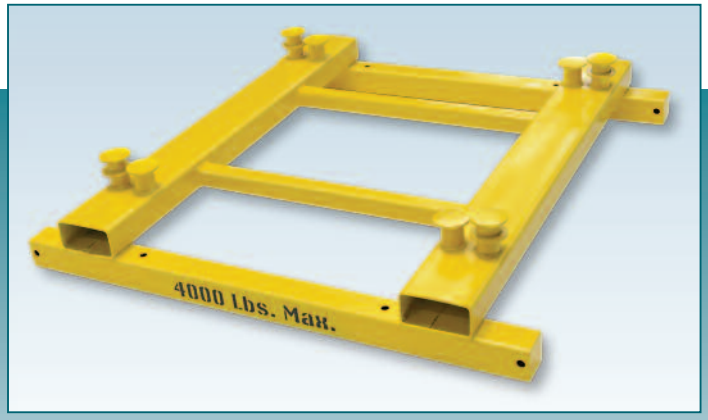
When it's desired to lift a bulk bag into a Model 821 or 822 Bulk Bag Unloader with a forktruck, the unloader's main structure and Bag Lifting Rack are specifically designed for this purpose. The Bag Lifting Rack is raised into position and placed onto adjustable mounting rails located on the upper portion of the unloader's structure. The mounting rails have guides to aid in positioning the Bag Lifting Rack.

When loaded with a fork truck, the Models 821 and 822 Bulk Bag Unloaders are available with several different Bag Lifting Racks, the selection of which is determined by the specifics of a given application and/or user preference. The basic Bag Lifting Rack includes four bag support studs for attachment of the bag, channels for the blades of a fork truck, and can be furnished with a number of optional accessories.

For such applications, the unloader's main support structure is furnished with a Bag Lifting Rack Support Cradle designed with two horizontal rails that extend across the unloader's main structure to support the Bag Lifting Rack.

The Support Cradle includes four mounting pin assemblies, two on each end, for attachment of the Cradle onto each of the four vertical support beams of the unloader's main support structure, which also includes Cradle height adjustment provisions. [The Bag Lifting Rack Support Cradle requires vertical (height) adjustment based on the length of the bulk bag.] The majority of the bag's weight rests on the bed of the unloader, with the Bag Lifting Rack providing only a small amount of support.

Also, utilizing a Bag Lifting Rack equipped with Acrison's optional Automatic Bag Tensioner will lift the bag upwards as it empties, thereby enhancing the bag emptying process by eliminating pleats and folds that may form as the bag discharges its contents.



A basic Bag Lifting Rack for placing a bulk bag into a Model 821 or 822 Unloader with a fork truck.

A Model 821 Bulk Bag Unloader configured for fork-truck loading discharging into a pneumatic conveying system.

Models 821 and 822 Bulk Bag Unloaders

Hoist Loading (Hoist is integral to the Bulk Bag Unloader)

When it's desired to lift a bulk bag into a Model 821 or 822 Bulk Bag Unloader with an integral hoist, the unloader's main structure and Bag Lifting Rack are specifically designed for this purpose. The bag is raised into position by the hoist and remains attached to the hoist during the unloading process.

When loaded by an integral hoist, the Models 821 and 822 Bulk Bag Unloaders are available with several different Bag Lifting Racks, the selection of which is determined by the specifics of a given application and/or user preference. The basic Bag Lifting Rack includes four bag support studs for attachment of the bag, a lifting lug for attachment of the hoist, and can be furnished with a number of optional accessories.

After a bag has been lifted into position above the body of the unloader, the bag is then lowered until the majority of the bag's weight rests on the bed of the unloader, with the Bag Lifting Rack providing only a small amount of support. And if the Bag Lifting Rack is equipped with Acrison's optional Automatic Bag Tensioner, it will maintain upward lift to the bag as it empties, facilitating the bag emptying process by avoiding pleats and folds that may occur, while also eliminating the need to adjust the height of the Bag Lifting Rack as the bag discharges its contents.

A Model 822 Bulk Bag Unloader configured for loading with an integral hoist and trolley system.

A basic Bag Lifting Rack for placing a bulk bag into a Model 821 or 822 Unloader with a hoist.

Models 821 and 822 Bulk Bag Unloaders

Bag Lifting Racks

The Models 821 and 822 Bulk Bag Unloaders are available with several different Bag Lifting Racks, the selection of which depends on how the bulk bag will be lifted into the unloader. Bag Lifting Racks include either a lifting lug for attachment to a hoist, or channels for the blades of a fork truck. Bag Lifting Racks may be equipped with Acrison's Automatic Bag Tensioner and/or Bag Liner Tensioner.

All of Acrison's various Bag Lifting Racks are heavy-duty in construction, designed with robust bag attachment studs. When furnished with the optional Automatic Bag Tensioner, lifting hooks with spring-actuated safety latches are provided for safe, positive attachment to the four bag lifting straps (or loops).

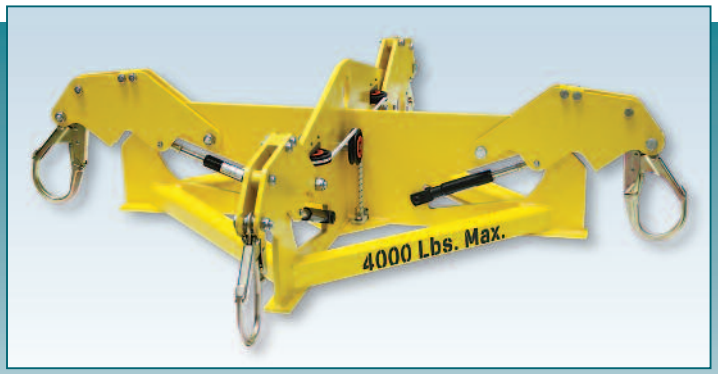
Acrison's standard Bag Lifting Rack is designed with heavy-duty studs for attachment of a bulk bag's lifting straps.

Bag Lifting Racks with the Optional Automatic Bag Tensioner and Bag Liner Tensioner

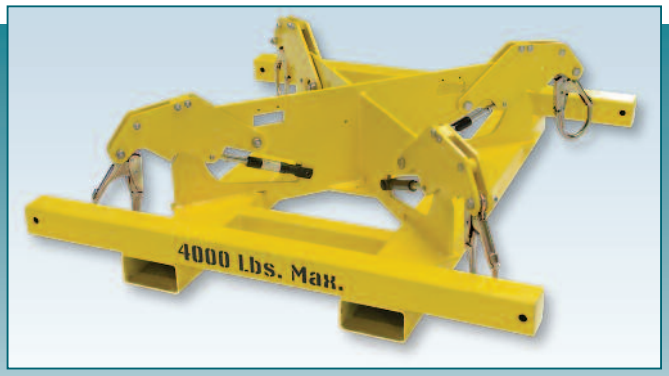
To avoid the possibility of a bulk bag folding inward during the unloading process, which can adversely affect downward product flow and bag emptying, Acrison's Automatic Bag Tensioner will automatically maintain upward tension (or lift) on a bulk bag as it empties. The Automatic Bag Tensioner also eliminates the need for operator intervention during the bag emptying process in order to verify that the bag hasn't developed any folds or pleats that could trap material and interfere with product discharge.

The Automatic Bag Tensioning Mechanism includes four independently actuated heavy-duty hooks, with safety latches, that individually attach to each of a bag's four lifting straps (or loops) to lift the bag vertically as its contents are being discharged to ensure complete bag emptying. The Automatic Bag Tensioner may be utilized with any of Acrison's Bag Lifting Racks, and may also be equipped with a Bag Liner Tensioner to maintain upward tension (lift) on a bag liner to prohibit the possibility of the liner sliding downward with the material, which could also interfere with product discharge.

Acrison Bag Lifting Racks that include the optional Automatic Bag Tensioner are designed with lifting hooks for attachment of a bulk bag's lifting straps.



A Bag Lifting Rack for placing a bulk bag into an Acrison Bulk Bag Unloader with a hoist. The Lifting Rack (as shown) includes both Acrison's optional Automatic Bag Tensioner and Bag Liner Tensioner.



A Bag Lifting Rack for placing a bulk bag into an Acrison Bulk Bag Unloader with a fork truck. The Lifting Rack (as shown) includes Acrison's optional Automatic Bag Tensioner.

Model 822 Bulk Bag Unloader

Close-up of a Model 822 Bulk Bag Unloader and its Model 84-SCM Bag Spout Clamping Mechanism.

A Model 822 Bulk Bag Unloader, configured for fork-truck loading.

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

Joseph Street 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 and 404 Series, 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
- Model 800 Series 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

"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

300-0088/A/04-21/7005