



Bag Emptying Station

Drum Emptying System

EMPTYING SOLUTIONS FOR BAGS AND DRUMS



Emptying System for Bags and Drums

The Bag Dump Station represents the ideal solution for emptying powdered or granular products from sacks in completely dust-free environments. Its basic version consists of a grid mounted on a collection hopper supported by four legs (wheeled or static). The system could be customized by adding a Glove Box with a door and filters, a front shelf, a mobile external roller table, an integrated CIP system, a lump breaker, and loading cells.

The Bag Emptying System can be manufactured using different material types with a high degree of finish in versions with or without filters. It can be managed by a control panel with the pneumatic operating system or by the PLC according to the specific application.

The Bag Break Station is designed to minimize the internal stagnation of the product and can be customized with different solutions to serve a variety of applications.

Glove Box system: The Bag Emptying Station can be customized with a dumping hood consisting of an openable glass door with two gloves and an inflated gasket with security sensors. This system isolates the product from any external exposure, allowing the operator to manipulate the bag

inside the dust hood safely. Door opening and closing operations are always managed via the control panel.

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Ventilation system: The upper chamber can be connected to a general extraction system or can be used without ventilation by only employing the installed filters.

Filtration system: The working chamber is equipped with a filtration system selected according to the required containment level (polyester or HEPA filters).

Continuous liner system: It can be installed on the side of the upper chamber and used for the safe removal of waste or the introduction of instruments into the chamber. Inside there is a hinged door or a cap to guarantee the closure of such connection when the system is not being used.



After discharging the bag, the product passes either through a valve or a lump breaker (depending on application type) installed on the hopper discharge point. Then it is sucked through an aspiration hopper connecting Bag Dump Station with Vacuum Transfer System.
 Drum Emptying System: the machine can be designed for drum unloading thanks to an automatic drum-tilting mechanism with an inflatable seal ensuring an OEB4 containment level.

Grid with security sensors



Suction hopper



Square Lump Breaker



Glove Box



Filters



Control Panel



Drum tilting system

Lump Breaker

The **AGR-BREAKER** model Lump Breaker is used for crushing lumps that may form in materials during the powder handling and transfer processes.

The Lump Breaker Machine is particularly suitable for hygroscopic or packing materials and, thanks to its versatility, can be applied in all industries.

The Lump Crusher stands out for its self-cleaning design with minimal overall dimensions. It can also be installed within the existing equipment, including Big Bag Discharge Stations, Big Bag Docking Systems, and under the Glove Box System. The crushed powder output can then be conveyed using a Vacuum Transfer System.

The Lump Breaker consists of a stainless steel central body with a circular cross-section housing the shaft with the knives for crushing the product and a contrasting grid.

Two flanges are connected to the central body of the machine: an upper one for the intake of the raw product and a lower one for the discharge of the crushed product.

The breaking of the lumps takes place by rotating special knives inside a contrasting grid whose motion is driven by a geared motor.

For safety reasons, the AGR-BREAKER is equipped with inductive sensors, permitting the machine to start only when the assembly configuration is correct.

The Lump Breaking System is manufactured under the Machinery Directive 2006/42/EC and, upon request, can comply with ATEX classified zone requirements.

Round Lump Breaker Applications



Square Lump Breaker

The Square Lump Breaker is a heavy-duty AGR-BREAKER model designed to handle materials requiring a higher crushing force. It features a reinforced square-shaped inlet opening, allowing for a larger intake of lumpy or compacted materials. The robust construction and expanded inlet dimensions enable this model to process denser and harder lumps or clumps that may form during powder handling.

