 **MECABAG[®]**
SYSTEM

BIGBAG FILLING AND DISCHARGING SYSTEMS

WHO WE ARE?

In an ever more competitive environment, companies need to be efficient in dealing with their client demands.

*The type of containers that you use evolves rapidly, the norms and guidelines become more exacting, and yet you need to keep increasing your productivity... Therefore, to stay in the race-on the edge of competitiveness- you need **industrial equipment which is of high quality, reliable and deals with evolving demands.***

*MECABAG SYSTEM is an independent manufacturer of filling and discharging systems for bigbag since 1984, and has been the forerunner on the French market for several years. MECABAG SYSTEM reaches out to **various industries**, with clients' common demand centred around the handling of **powder** or **granular** products.*

Our mission is to understand and analyse your process, to offer you the right product tailored to your specific environment, and once manufactured, to install it and start-it up in production.

Our company's values:

- **Being ingenious and pragmatic to satisfy our clients,**
- **Being pro-active to adapt to our clients' needs,**
- **Guarantee our expertise and commitment.**

*Our equipment contributes to the health and safety requirements inherent to your process and your product, and the ergonomics of the workstation. With this in mind we offer a complete and patented range of evolving solutions to satisfy the specific user needs to **fill**, to **empty**, and to handle flexible intermediate bulk containers (FIBC).*

*This high quality machinery is **made in France**; it is ingenious, efficient and reliable, and it is designed to comply with any specific situation.*



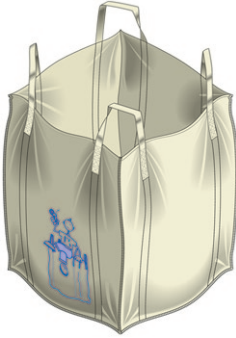
You have indeed found the number one "bigbag" specialist!



BIGBAGS - FIBC

Top

Open top



Filling spout



Top skirt

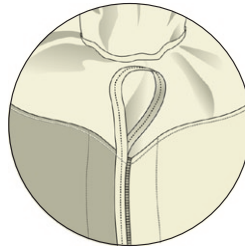


Inner Liner

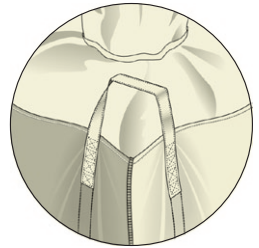


Loops

Corner loops



Cross corner loops



Construction

U+2



Circular



Cubic



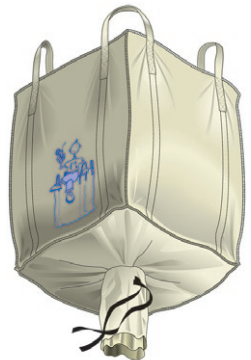
Bottom



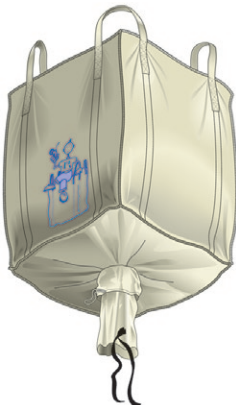
Flat base



Discharge spout



Double discharge spout



Discharge spout with pyjama base



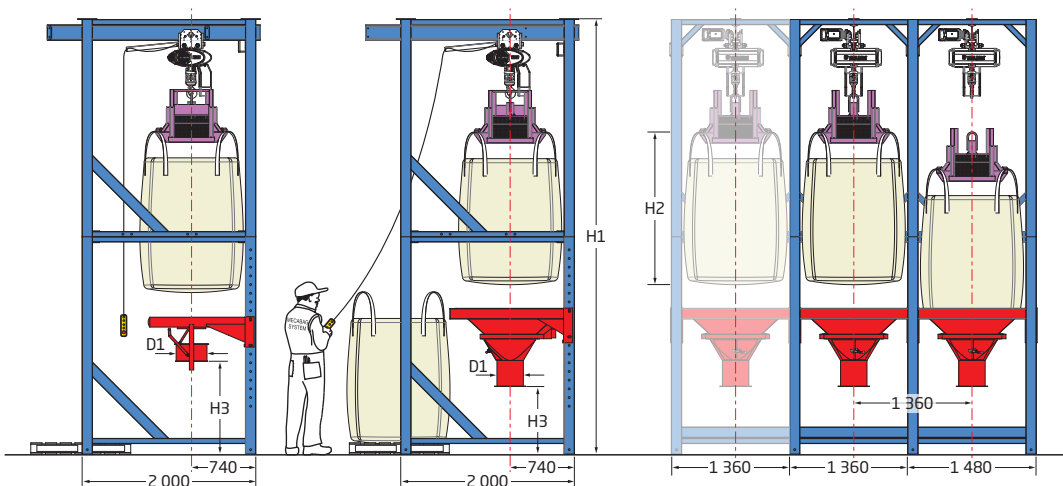
Cone base



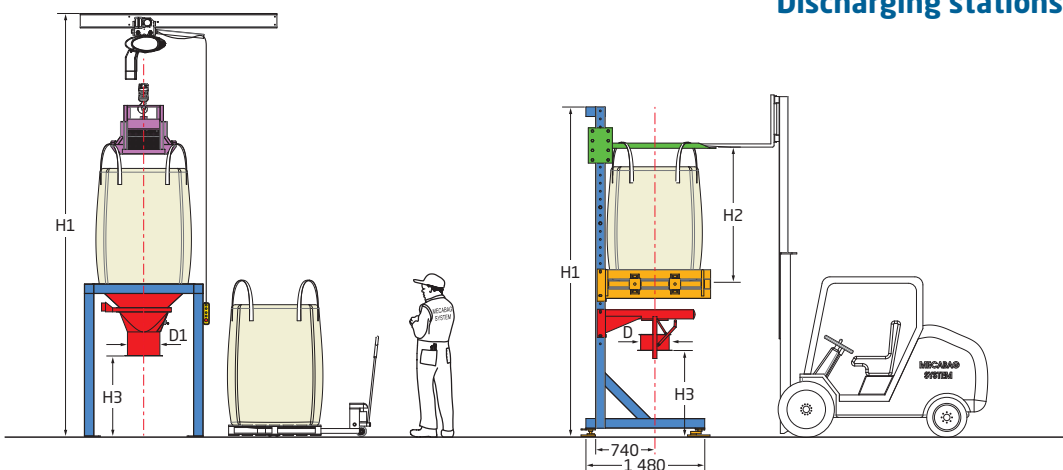
Fully opening base discharge

CONFIGURATIONS

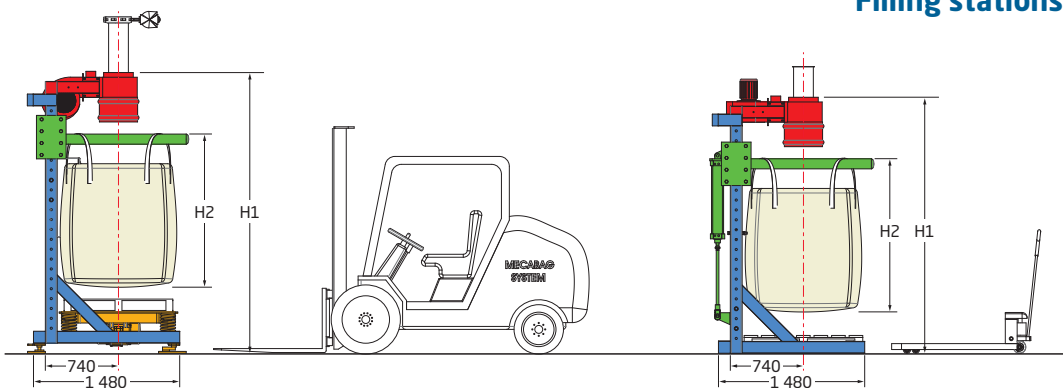
Multiple discharging stations



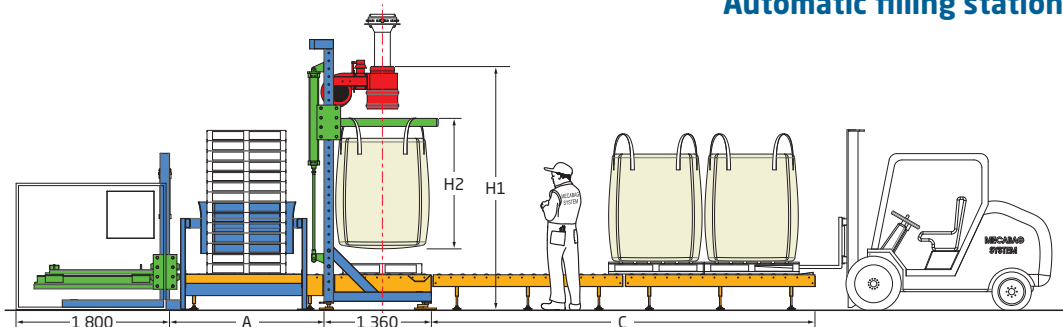
Discharging stations



Filling stations



Automatic filling station



FRAMES



Discharging station frame with forks - v Type (shown on the left)

To be used with a forklift truck.

Made of 120 x 120 mm profiles, this system is designed to support any kind of flexible containers that can be handled by their straps. Standard height: 4 000 mm. The set of U-shaped forks (UPN 160 mm) enables easy entry of the container with a fork lift truck. Adjustable in height with linchpins every 100 mm.

Frame to be bolted in the ground with 3 bolts or fixed on a set of 4 weighing cells.

Discharging station frame with rail and hoist - VA Type (shown in the centre)

Can be fed with the bigbag on the ground.

Made of 120 x 120 mm profiles, this frame has been designed to support any kind of flexible container by using a bi-directional hoist. Height made on demand - Base: 1 480 x 2 000 mm. Rail length: 2 400 mm. To be bolted in the ground with 4 bolts or fixed on a set of 4 weighing cells

Support for the funnel - kv Type (shown on the right)

Simplified frame made of 120 x 120 mm profiles to be bolted in the ground.

Epoxy paint

Process as follows: Degrease with a solvent - Shot-blast with cast-iron hematite for a degree of cleanliness of SA 2.5 - Apply epoxy powder with an electrostatic gun at a thickness of 60 microns - Heat up to 180° C for 20 minutes.

Fork lift system

This is composed of 2 gas jacks which automatically lift the flexible container at the end of the discharge process and thereby ensure that the product has been completely discharged.

Hoist

Designed to lift and to safely and easily feed the bigbag on the discharging station.

Hoist of various working loads 500 to 2 000 kg.

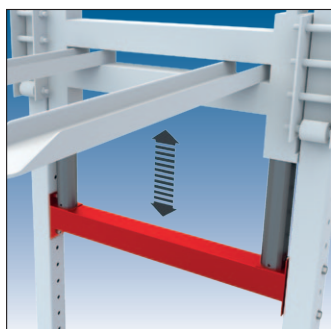
Available in chain or belt version.

Electric or pneumatic motorization.

ATEX version on demand.

Stainless steel finish

Your domain of activity is exacting. We know how to tailor our equipment to your specific environment in order to comply with the health and safety requirements.



EQUIPMENT

Discharge funnel

Made of sheet metal or stainless steel, this funnel is designed to support the container and therefore provide a safe and easy access from below.

- Top dimensions: 1 240 x 1 240 mm.
- Bottom dimensions: 600 x 600 mm.
- Height: 300 mm.

The funnel can be adjusted in height every 100 mm.



De-dusting ring

To be connected to a dust-extractor.

Made of sheet metal or stainless steel, attached between the funnel and the cone, with a \varnothing 100 mm outlet pipe in order to direct the dust toward the dust extractor.

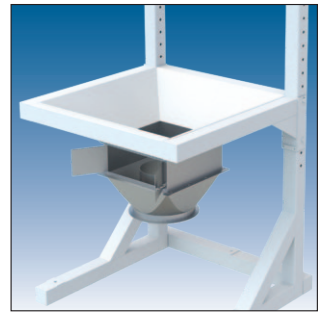
- Height: 50 mm.
- Flow rate required 400m³/h, 10m/s.



Access to the bottom of the container

A cone made of stainless steel fixed under the funnel, with a double lateral hatch designed for easy opening of the container's discharge spout.

- Top dimensions: 600 x 600 mm.
- Bottom dimensions: 300 to 600 mm of diameter with the corresponding standard bridle depending on the bag's shape.
- Height: 550 mm.



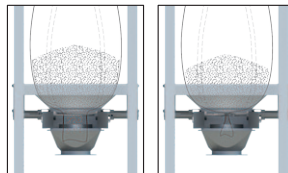
Mecastop

Designed to strangle the flexible container's discharge spout during the discharging process and therefore stop the product from flowing.

Then, it becomes possible to tie the strap and remove the container even if it still contains some product.

The Mecastop system comprises:

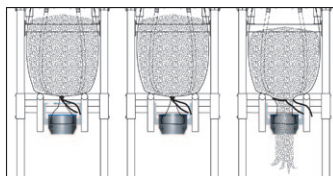
- Two forks made of stainless steel operated by two pneumatic jacks.
- A complete control cabinet all pneumatic, equipped with a pressure reducer-manometer and a bi-manual command.



Mecaclip, discharging system

This system ensures discharging of the container without any pollution that could come from the bottom of the container. It comprises:

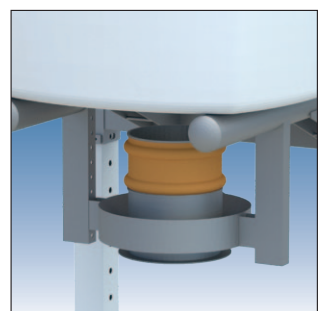
- A set of tubes \varnothing 100mm, designed to support the container and therefore provide safe and easy access below.
- A double discharge tube to receive the bag's spout.
- A stainless steel clip fitted with a foodgrade silicon joint ensuring a tight connection with the bigbag spout. The system is operated manually.



Mecapharm, safe discharging system

Designed for flexible containers with a double discharge spout or with an inner liner. This system ensures discharging of the container without any pollution that could come from the bottom of the container. It comprises:

- A set of tubes \varnothing 100 mm, designed to support the container and therefore provide safe and easy access below.
- A tube of discharge \varnothing 300, 350 or 400 mm to receive one spout inside and one outside. This tube is surrounded by a de-dusting ring with a \varnothing 100 mm outlet pipe in order to direct the dust toward the dust extractor.
- An inflatable joint made of 3 mm thick PARA rubber, it functions at low pressure (0.12 bars) and makes the space between the metallic spout of the machine and the flexible container's outer spout airtight.



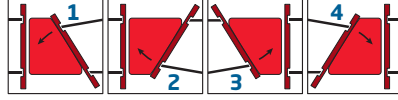
EQUIPMENT

Mecapress, shaking system

A powerful system for shaking the bulge of the container, which enables emptying of low density products at staggered flow.

The system can be adjusted in height every 100 mm and comprises 2 articulated arms which alternately push the product towards the centre of the flexible container; 4 pneumatic jacks to operate the arms; a complete control cabinet all pneumatic, equipped with a sequencer to be adjusted to match the difficulty of the product.

- Energy: air 6 bars - 24 Nm³/h.
- Side guarding.



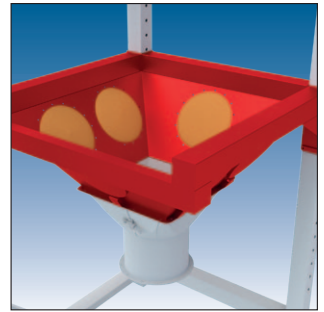
Mecamass funnel, shaking system

A powerful system massaging the base of the flexible container, which enables discharge of products with difficult flow.

The system can be adjusted in height every 100 mm and comprises:

- A funnel, made of sheet metal or stainless steel, designed to support the container and therefore provide safe and easy access below.
- 6 rubber lungs with a force of 550 kg, alternately pushing each bottom side of the container.
- A complete control cabinet all pneumatic, equipped with a sequencer to be adjusted to match the difficulty of the product.

Energy: air 6 bars - 24 Nm³/h.



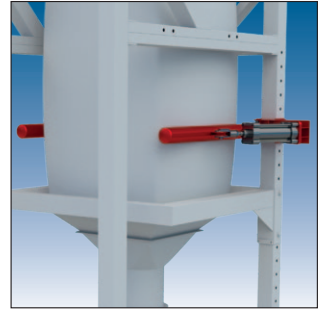
Mecagit, shaking system

A system for shaking the bulge of the container, which enables emptying of low density products at medium flow.

The system can be adjusted in height every 100 mm and comprises:

- 2 articulated arms which alternately push the product towards the centre of the flexible container.
- 2 pneumatic jacks to operate the arms and a complete control cabinet all pneumatic.

Energy: air 6 bars - 18 Nm³/h.



Vibrating funnel

Made of sheet metal or stainless steel, this funnel is designed to support the container and therefore provide a safe and easy access below.

The funnel can be adjusted in height every 100 mm.

It is mounted on 4 silent blocks and equipped with an unbalanced motor 0.3 kW.

- Top dimensions: 1 240 x 1 240 mm.
- Bottom dimensions: 600 x 600 mm.
- Height: 300 mm.

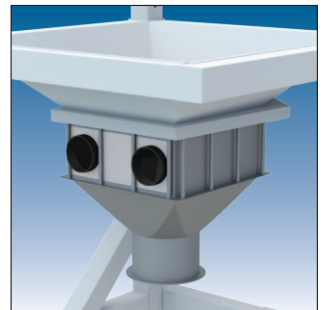


Glove box

Designed to access to the bottom of the container for hazardous products.

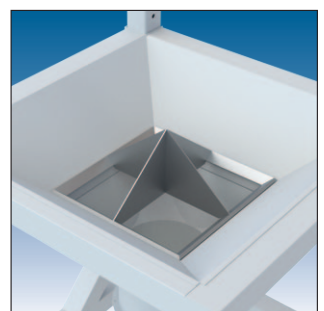
Equipped with :

- A transparent plexiglass glove box.
- A pair of neoprene gloves.
- A stainless steel discharge tube adapted to your bag's spout.



Special knife for flat base bags

Made of stainless steel, this knife is placed manually inside the discharge funnel. The weight of the container which sits on sharp edges, cuts the bag open.



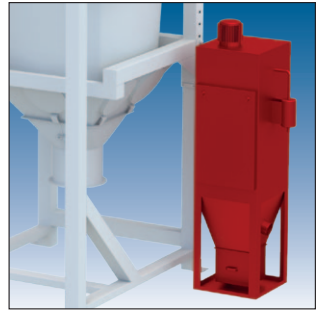
OPTIONS

Dust extractor

Can be used with all MECABAG products. Made of sheet metal or stainless steel.

- A 2.5 m² filter cartridge.
- A pneumatic block remover.
- A block remover programming system.
- A motor-fan unit.
- A 30 l dust recovery bucket.
- An ON/OFF control box.

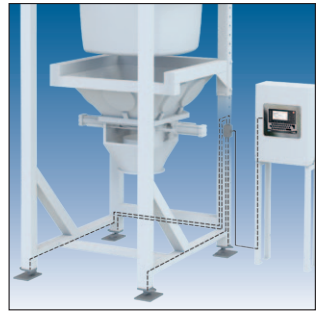
Flow rate :400m³/h. Motor power 0.4 kW.



Weighing system

Designed to measure and control the weight loaded inside the bigbag. The system comprises:

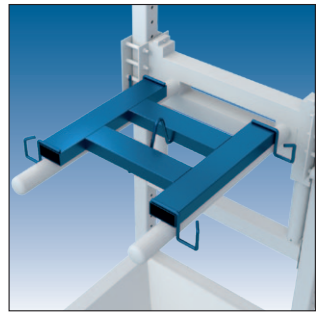
- 1 industrial weight indicator/transmitter which incorporates all the main control functions required for industrial weighing applications such as: loading/unloading of products, tolerance check, set-points, product flow monitoring and dosing.
- 4 load cells which consist of a stainless steel strain member hermetically sealed by laser welded stainless steel cups. These load cells have been designed for use in industrial environments with an aggressive atmosphere, such as the chemical industry.
- 1 junction box.



Corner strap adaptor

Designed to be manipulated either with a fork lift truck or a hoist.

This adaptor allows use of any flexible containers equipped with 4 loops.



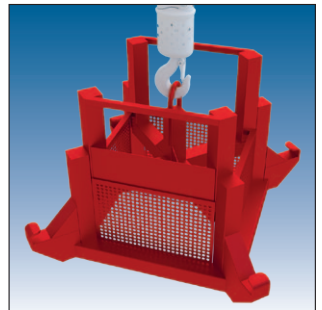
Telescopic corner strap adaptor

Designed to support any kind of flexible container with four loops, this corner strap adaptor is equipped with four gas jacks which automatically lift the flexible container at the end of the discharge process and thereby ensure that the product has completely been removed.

As an option, it can be equipped with a system for holding up the inner-bag.

This system prevents the inner PE bag from being pulled out with the product.

A constant upward tension is applied to the liner.



Crucifix

Designed to be manipulated with a hoist.

This adaptor allows use of any flexible containers equipped with 4 loops.

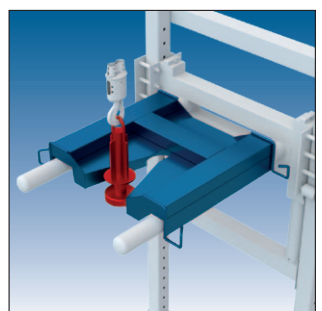


Corner strap adaptor with automatic disconnecting system

Designed to be manipulated with a hoist.

This adaptor allows use of any flexible containers equipped with 4 loops.

The automatic disconnecting system allows the loading of two (or more) discharging stations equipped with forks using only one hoist.





MECABAG SYSTEM

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