# Manual bag dump station\_\_\_\_

Custom Made



Painted steel, 304L stainless steel, 316L stainless steel manufacturing

The PALAMATIC PROCESS engineering office offers customized solutions for your sack opening process according to your layout and flow constraints. We define together the adequate solution after visiting your site and following your needs and technical conditions.

## • POSSIBLE FEATURES

Specific and reduced dimensions

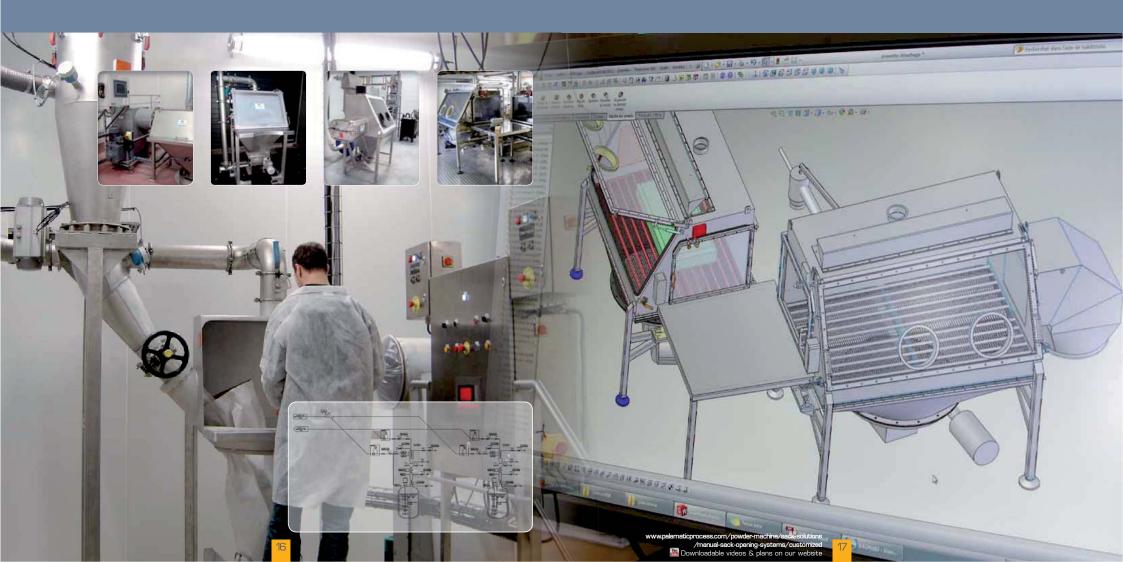
Applications for toxic materials

Nuclear industry

Advanced containment

Manufacturing specific to the bulk material and work environment: steel, stainless steel, Hastelloy, Uranus B6, liton, Perbunan, Nitrile...

Surface treatment adapted to your powders: electropolishing, mirror polished, vulcanization, teflon
 Process features integration: dosing, screening, milling, granulation, anti-bridging device, mechanical conveying
 Ideal design for all types of bags
 ATFX



## \_OPTIONS\_\_Manual bag dump station\_



## VACUUM SACK LIFTER

#### Easy lifting and handling of the bag.

The manipulator provides the operator with maximal working ergonomics. The problem of load handling is fully resolved with the introduction of this equipment. The manipulator is suitable for all types of bags (materials and weight).



## GLOVE BOX

#### It optimizes containment and enables the handling of toxic materials.

The gloves are set on the door and mounted on PVC glove ports. Spring clips provide containment and closing. A neon facilitates opening operations through the plexiglass. The glove box is designed to allow bags or small sacks to be opened and dumped into a process in a close environment. The operator is protected from any contact with potential hazardous bulk materials. Also, it prevents the bulk material from contamination or interaction with the outside environment.



## MAGNETIC BARS

#### It guarantees the hygiene process by eliminating foreign substances.

The magnetic bars, implanted on the dumping system offer protection on the quality of materials brought into your process. The strong magnetic power capacity (13,000 Gauss) can capture the sub-millimeter particles.



## BELT CONVEYOR

### To provide buffer storage upstream of the unloading system.

The conveyor belt allows the operator to make a buffer storage of sacks to optimize the discharge cadences. The layout length and configuration are custom manufactured to suit your needs and your constraints on site.



## WEIGHING - DOSING

## To inform the process of the quantity of powder introduced, the unloading hopper can be mounted on load cells.

Number of cells: 4
Weighing accuracy: < 1kg
Implementation: shock absorber + anti-failover device
Input signal 4-20 mA
Possible profibus communication + RS 232 + Ethernet



## CIP

## Rotative cleaning nozzles/heads - Clean In Place (CIP).

To ensure the material change without cross-contamination, the washing nozzles are located inside the unloading unit.

Pressure of washing nozzles: 3 bars

Technology: fixed or rotating 360 °

Centralized wirings and connection to the network with a clamp system.



## VIBRATORS / VIBRATING BIN AERATORS

## They facilitate the flow and discharge of stored materials.

These vibrators transmit multi-directional vibrations to the walls, while the vibrating bin aerators combine a fluidization effect against the inner walls your hopper wall.



These devices allow proper flowing of your bulk materials. They help break vaults or chimneys and greatly reduce retention.



## AUTOMATIC CUTTING SYSTEM FOR SACKS

## This system ensures maximum ergonomics and safety by preventing the operator from cutting and turning the bag.

A blade actuated by a pneumatic cylinders penetrates the bag through the grid. The operation is secured with a safety switch fitted on the door or with hand control.



## LUMP BREAKER

## Our lump breakers are the ideal solution to crush materials that tend to form

Your materials stored in bags may tend to make lumps during storage. It is then sometimes imperative to standardize the particle size of a powder in order to allow its use in the downstream process, such as pneumatic conveying or introduction into a reactor or a mixer.



## > SACK COMPACTOR

### Protect the operator against potential exposure to dust during unloading.

The PALAMATIC PROCESS sack compactor enables to reduce waste and maintains a healthy, dust-free environment. It can be mounted on one side or the other of the hopper. The compacted sacks are contained within a polyethylene sheath (up to 60 sacks/m. - depending on the size and type of sacks).

It may be positioned on the left, on the right or at rear of the unloading unit, with three possible positions for each of these orientations.