Drum Dump Station

TO GRIP, TO LIFT, TO MOVE AND TO EMPTY A METAL OR PLASTIC DRUM

Our handling tools allow easy handling, lifting, turning and emptying of drums and barrels. Thanks to our many options available, the operator can completely or partially empty the contents of drums, into hoppers, reactors or mixers manholes.

PALAMATIC PROCESS design office offers multiple solutions to manually or automatically empty drums (tipping or turning system) according to your site constraints...

DrumFlow® 01 Suction pipe
- Emptying directly on the pallet, without drum manipulation
- Removal of the inner sack layer for emptying

DrumFlow® 02 Discharge by sack extraction
- Confined dump station
- Drilling connection on drum enclosure
- Possibility to empty sacks

DrumFlow® 03 Tilting
- Emptying by tilting directly on a collecting hopper
- Options: suction booth, handling conveyor, facilitated product flowing

DrumFlow® 04 Tilting and containment
- Completely confined emptying by means of containment and sealed connection
- Options: suction booth, handling conveyor, facilitated product flowing

TO DISCHARGE AND DOSING BOOTH FOR RAW MATERIAL PACKAGED IN DRUMS

The suction pipe allows the vacuum of the material with a manual operation. This suction pipe is ideal for emptying drums.

This system is intended to be coupled with our powder pumps from our VFlow® range to discover in our “Pneumatic Conveying” booklet. Vacuum is directly conducted into the drum from the cyclone.

The flow rate varies from 100kg/h to 20t/h, depending on the model of cyclone chosen.

Optionally, the drum or cyclone can be implemented on a weighing system allowing the weighing and the dosing.

Drum discharging for mixer feeding

+-+ Advantage
The DrumFlow® 01 solution prevents the operator from handling the drums that can be left on the pallet

+-+ Advantage
Integration of a weighing device, weight gain or loss-in-weight

01 SUCTION PIPE

Drum discharging for mixer feeding

02 DISCHARGE BY SACK EXTRACTION

Discharge of end products stored in drums to feed a packing system

Operating mode for an optimized containment

Drum positioning in deconditioning cabin

Drum containment by external sack

Container opening via glove ports and product discharge into the hopper (sieve)

Barrel evacuation in the sack and sack sealed closing (no contact with operator)

Drum discharging for mixer feeding

+-+ Advantage
No drum manipulation
+-+ Advantage
All sizes
+-+ Advantage
No manipulations
+-+ Advantage
CMR toxic products applications
+-+ Advantage
Total containment
+-+ Advantage
No manipulations

Ronds de gant
Connexion dépoussiérage
Néon d’éclaireur
- Arceau de dépoussiérage
- Barreau de positionnement du fût
- Zone de prévisée
- Témoins collectrice produit
- Alimentation transfert pneumatique
+-+ Advantage
Completely confined emptying by means of containment and sealed connection
+-+ Advantage
CMR toxic products applications
+-+ Advantage
Total containment
+-+ Advantage
No manipulations

CMR toxic products applications

Lifting and positioning of the drum in the booth is performed by the elevator integrated on the booth

Our engineering office offers you turnkey customized solutions according to your product constraints, applications and drum dimensions.

DrumFlow® CUSTOM MADE

www.palamaticprocess.fr/machines-industrielles/solutions-futs/vidange

Vidéos & plans téléchargeables en ligne
Barrel Dump Station

DrumFlow®

Advantages

1. Compatible with drums fitted with internal sack
2. Compatible with drums fitted with internal sack
3. Tonic products applications
4. Adjustable to all drum types
5. Maximal containment enclosure for a healthy workplace

+[ Security

1. Protective screen
   It is positioned near the tilting engine and guarantees the operator’s security
2. Lock system
   The cycle start is forbidden when the door is open
3. Control system
   The control is conducted by "maintained" push buttons. The cycle is interrupted if the operator loses one of the buttons
4. Security area
   Between the conveyor and the tipping device, it avoids all risks of collision and ensures the installation reliability


1. TECHNICAL SPECIFICATIONS

Rate: 1 drum/4-5 min.
Manufacturing: framework in painted steel / stainless steel
Loading capacity: 250 kg
Angle: up to 180°
Drum tipping: electrical engine of 7.5 kW
Drum containment: pneumatic cylinder with sealing control by overpressure
Drum flow rate: 7-10 m³/h
Connection: by low-pressure inflatable seal
Draining butterfly valve: DN150
Product flow assistance: fluidiser on the discharge cone, vibrator on the cone or drum bottom

2. OPERATING MODE

Average Time of a Complete Cycle: 2 Min.
1. The drum positioning on the inlet conveyor.
2. The drums are led by gravity to the emptying area.
3. The first drum is put at the positioning stop; rubber pads ensure drum accommodation without any impact.
4. When the drum is positioned, the operator can start the tipping cycle. The control of the cycle is conducted by means of two push buttons for lifting and two buttons for descending of the drum. The tipping is ensured by a gearmotor. The moving assembly arrives to abutment against the rubber pads.
5. When emptied, drums return to their initial position under the operator’s control.
6. The operator can then manually move the drums to the soiled drums station.

1. Drum placing on the inlet conveyor and on tipping cradle
2. Drum confinement is assured by cradle lifting on the containment cone. The internal cone forks prevent the reversal of the internal sack
3. Drum tilting
4. Connection to the hopper by means of inflatable seal and dump valves opening

DrumFlow®
Tipping
AND TIGHT CAPPING

DrumFlow®
Contamination
Fixation
Discharging