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- AUTOMATION

Notes:
- **Means that the equipment is available for testing at PALAMATIC PROCESS**
- **Means that the equipment can be installed in ATEX zone**
- **Means that design and options can be customised**

PALAMATIC PROCESS reserves the right to make changes to the design of the facilities listed in this commercial documentation.
### Basic specifications for big bag filling systems and options

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The flow rates can vary according to the handled material.

### Utilities

- **Input TOR**: 0, 0, 6, 14, 3, 15, 2, 7, 14, 23
- **Output TOR**: 1, 2, 6, 13, 5, 13, 6, 3, 9, 17
- **Load cells**: 1
- **Installed power (kW)**: 0.2, 0.2, 1.7, 1.7, 1.6, 1.6, 1.6, 0.9, 1.5, 1.5
- **Service pressure (bar)**: 6, 6, 6, 6, 6, 6, 6, 6, 6, 6
- **Compressed air consumption (Nm³/hr.)**: 0.1, 0.3, 0.9, 1.0, 0.9, 2.9, 2.3, 10.2, 0.9, 2.1
- **Dust collecting rate (m³/hr.)**: 300, 300, 300, 300, 300, 300, 300, 300, 300, 300

Download videos & layouts from our website.
FlowMatic® 01

**Rate:** 10 to 20 big bags/hr.

**Weight capacity:** 2 tons/big bag

**Objectives:** cost efficient & dust containment

---

### Advantages

- **Fork height adjustment**
- **Double envelope filling head**
- **Round forks with adjustable width**
- **Inflatable seal for complete containment**

### Operating Sequence

1. The big bag is placed on the filling station
2. The big bag inlet is connected to the filling head by an inflatable gasket ensuring the sealing
3. Big bag filling process
4. When the big bag filling sequence is completed, the big bag can then be removed using either a forklift or a pallet truck

### Technical Specifications

- **Rate:** 10 to 20 big bags/hr.
- **Manufacturing materials:** mild steel, SS 304L, SS 316L
- **Finishes:** RAL 9006, micro-blasted, electropolishing
- **Installed power:** 0.2 kW
- **Compressed air consumption:** 0.1 Nm³/hr.
- **Service pressure:** 6 bars
- **Input TOR:** 0
- **Output TOR:** 2
- **Dust collecting rate:** 300 m³/hr.
- **Maximum dimensions of big bags:**
  - Length x width x height: 1.550 x 1.550 x 2,400 mm

**“U” version forks:** allows big bag removal with straps (optional)

### Options

- **Big bag pre-forming fan**
- **Big bag tension cylinder**

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See all our options on page 28


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**FlowMatic® 02**

**Rate:** 10 to 20 big bags/hr

**Weight capacity:** 2 tons/big bag

**Objectives:** ergonomic and dust containment

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**TECHNICAL SPECIFICATIONS**

- **Flow rate:** 10 to 20 big bags/hr.
- **Manufacturing materials:** mild steel, SS 304L, SS 316L
- **Finishes:** RAL 9006, micro-blasted, electropolishing
- **Installed power:** 0.2 kW
- **Compressed air consumption:** 0.9 Nm³/hr
- **Service pressure:** 6 bars
- **Input TOR:** 0
- **Output TOR:** 2
- **Dust collecting rate:** 300 m³/hr
- **Maximum dimensions of big bags:**
  - Length x width x height: 1.550 x 1.550 x 2.400 mm
  - "U" version forks: allows big bag removal with straps (optional)

---

**OPERATING SEQUENCE**

1. The big bag is placed on the filling station
2. The big bag inlet is connected to the filling head by an inflatable gasket ensuring the sealing
3. The height of the filling spout is adjusted by pneumatic cylinder according to the size of the big bag
4. Big bag filling process
5. Gradual lowering of the big bag with exhaust valve
6. Big bag laying on the pallet: bottom shaping (big bag stability during handling process)
7. When the big bag filling sequence is completed: the sealing gasket is deflated. The big bag is ready to be removed.
8. The big bag can be removed using either a forklift or a pallet truck

---

**Advantages**

- Hooking forks width adjustment allows conditioning of all types of big bags
- Inflating seal to ensure dust containment for a clean work area
- Tension cylinder insures a perfect big bag filling and handling stability
- Big bag removal with fork or pallet truck

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**Options**

- Weighing system integrated on big bag filling station
- Automatic big bag release

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**See all our options on page 28**
CONTAINMENT, DENSIFICATION AND GROSS WEIGHING

The whole adjustable structure provides flexibility to accommodate a range of bag sizes. The filling head is designed with a double envelope to ensure volume balancing and avoid dust contamination of the workplace. The tension cylinder, fan and vibrating table gives an optimal shape to the big bags. Vibrating table provides material densification with low density. Handling filled big bag is safe and without any tipping risk.

**TECHNICAL SPECIFICATIONS**

- **Flow rate**: 10 to 20 big bags/hr.
- **Weight capacity**: 2 tons/big bag
- **Objectives**: dosing & flexibility depending on powder characteristics

**OPERATING SEQUENCE**

1. The big bag is placed on the filling station
2. The big bag inlet is connected to the filling head by an inflatable gasket ensuring the sealing
3. The height of the filling spout is adjusted by pneumatic cylinder according to the size of the big bag
4. A fan inflates and shapes the big bag
5. Another fan is used to exhaust the air through a reverse jet filter
6. Big bag filling process at high flow rate
7. The big bag is laying on the pallet: bottom shaping (big bag stability during handling process)
8. The vibrating table provides material densification (operated by sequence during the filling process)
9. Weighing control: low filling flow rate to adjust final dosing
10. When the big bag filling sequence is completed, the sealing gasket is deflated. The big bag is ready to be removed
11. The big bag can be removed using either a forklift or a pallet truck

**Advantages**

- **FlowMatic® 03**

**Options**

- **Mobile station**
- **Rotating head**

See all our options on page 28

**See all our options on page 28**

**AVAILABLE CUSTOM MADE**

**LOW WITH 03 BIG BAGS SYSTEMS**

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**Download videos & layouts from our website**
**FlowMatic® 04**

**Rate:** 20 to 40 big bags/hr.

**Weight capacity:** 2 tons/big bag

**Objectives:** high flow rate & ergonomics of the filling station

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**AUTOMATIC GROSS WEIGHING BIG BAG FILLING UNIT**

The FlowMatic® 04 model is a complete solution for big bags automatic packaging with gross weighing (dosing / packaging / conveying). This model is designed for continuous operation at very high flow rate. The big bag FlowMatic® 04 is fitted with all the options necessary for big bag filling with minimal human intervention.

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**TECHNICAL SPECIFICATIONS**

- **Flow rate:** 20 to 40 big bag/hr.
- **Manufacturing materials:** mild steel, SS 304L, SS 316L
- **Finishes:** RAL 9006, micro-blasted, electropolishing
- **Installed power:** 8.7 kW
- **Average power consumption:** 1.1 kW
- **Compressed air consumption:** 6.8 Nm³/hr.
- **Service pressure:** 6 bars
- **Input 4-20 mA:** 1
- **Input TOR:** 1
- **Output TOR:** 1.3
- **Weighing precision:** ± 500 grams
- **Dust collecting rate:** 300 mg/hr.
- **Maximum dimensions of big bags:**
  - Length x width x height: 1.200 x 1.200 x 2.400 mm

---

**OPERATING SEQUENCE**

1. The empty pallets are automatically placed on a conveyor
2. The big bag is placed on the filling station
3. The big bag material is connected to the rotating filling head by an inflatable gasket ensuring the sealing
4. The height of the filling spout is adjusted by pneumatic cylinder according to the size of the big bag
5. A fan inflates and shapes the big bag
6. Another fan is used to exhaust the air through a reverse jet filter
7. Big bag filling process at high flow rate
8. The big bag is laying on the pallet; bottom shaping (big bag stability during handling process)
9. The vibrating table provides material densification (performed by sequence during the filling process)
10. Weighing control: low filling flow rate to adjust final dosing
11. When the big bag filling sequence is completed, the sealing gasket is deflated and the big bag is automatically released
12. Automatic big bag removal towards storage area (big bag stacker conveyor)

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**AVAILABLE CUSTOM MADE**

**WWW.PALAMATICPROCESS.COM**

- Welder for inner liner
- Big bag covering

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See all our options on page 28
**FlowMatic® 05 - LT**

**GROSS WEIGHT - COMMERCIAL WEIGHING**

**GROSS WEIGHING FILLING UNIT WITH SUSPENDED BIG BAG**

The FlowMatic® 05 model is an effective and flexible solution for bulk packaging that are subject to strong hygiene constraints: the weighing system is implanted on the filling head which reduces retention areas on the ground. The big bag can be lowered with a lifting table and automatic hooks.

**TECHNICAL SPECIFICATIONS**

- **Flow rate:** 10 to 30 big bags/hr.
- **Weight capacity:** 2 tons/big bag
- **Objectives:** hygienic & ergonomic system for operators

**OPERATING SEQUENCE**

1. The big bag is placed on the filling station
2. The big bag inlet is connected to the filling head by an inflatable gasket ensuring the sealing
3. A fan inflates and shapes the big bag
4. Another fan is used to exhaust the air through a reverse jet filter
5. Big bag filling process at high flow rate
6. Weighing control: low filling flow rate to adjust final dosing
7. When the big bag filling sequence is completed, the lifting table is raised, the sealing gasket is deflated and the big bag is automatically released
8. Lowering the lifting table
9. Use a forklift to transport the pallet containing the big bag

**FlowMatic® 05 - TE**

**Options**

- Operator access platform
- Vibrating table

**Advantages**

- **Automatic release**
- **Suspended structure**
- **Filling head with double envelope**
- **Inflatable seal**

**Technical details**

- **Flow rate:** 10 to 30 big bags/hr.
- **Manufacturing materials:** mild steel, SS 304L, SS 316L
- **Finishes:** RAL 9006, micro-blasted, electropolishing
- **Installed power:** 1.6 kW
- **Average power consumption:** 0.2 kW
- **Compressed air consumption:** 2.9 Nm³/hr.
- **Service pressure:** 6 bars
- **Input 4 - 20 mA:** 1
- **Input TOR:** 3
- **Output TOR:** 5
- **Weighing precision:** ± 500 grams
- **Dust collecting rate:** 300 m³/hr.
- **Maximum dimensions of big bags:**
  - **Length x width x height:** 1.550 x 1.550 x 2.460 mm

**Rate:**

- **Weight capacity:** 2 tons/big bag

**Objectives:**

- **Hygienic & ergonomical system for operators**

**See all our options on page 28**

[See all options](#)

[Download videos & layouts from our website](#)
FlowMatic® 05 - HC*

GROSS WEIGHING FILLING UNIT WITH SUSPENDED BIG BAG

The FlowMatic® 05 model is an effective and flexible solution for bulk packaging that are subject to strong hygiene constraints: the weighing system is incorporated in the filling head which reduces retention areas on the ground. The big bag is designed to be actuated by a hydraulic cylinder.

**GROSS WEIGHT - COMMERCIAL WEIGHING**

**TECHNICAL SPECIFICATIONS**

- **Flow rate:** 10 to 30 big bags/hr.
- **Weight capacity:** 2 tons/big bag
- **Objectives:** hygiene & ergonomics for the operators
- **Hydraulic Cylinder**

- **Manufacturing materials:** mild steel, SS 304L, SS 316L
- **Finishes:** RAL 9006, micro-blasted, electropolishing
- **Installed power:** 1.6 kW
- **Average power consumption:** 0.2 kW
- **Compressed air consumption:** 2.9 Nm³/hr.
- **Service pressure:** 6 bars
- **Input 4 - 20 mA:** 1
- **Input TOR:** 3
- **Output TOR:** 5
- **Weighing precision:** ± 500 grams
- **Dust collecting rate:** 300 m³/hr.
- **Maximum dimensions of big bags:**
  - Length x width x height: 1.560 x 1.550 x 2.460 mm

**OPERATING SEQUENCE**

- **AVERAGE TIME FOR A COMPLETE CYCLE:** 2 min.

1. The big bag is placed on the filling station.
2. The big bag inlet is connected to the filling head by an inflatable gasket ensuring the sealing.
3. The big bag is raised.
4. A fan inflates and shapes the big bag.
5. Another fan is used to exhaust the air through a reverse jet filter.
6. Big bag filling process at high flow rate.
7. Weighing control: low filling flow rate to adjust final dosing.
8. When the big bag filling sequence is completed, the hydraulic cylinder is lowered, the sealing gasket is deflated and the big bag is automatically released.
9. The big bag can be removed using either a forklift or a pallet truck.

**Advantages**

- **Rate:** 10 to 30 big bags/hr.
- **Weight capacity:** 2 tons/big bag
- **Objectives:** hygiene & ergonomics for the operators
- **Hydraulic Cylinder**

**Options**

- **Automatic big bag release**
- **Magnetic detector**

**See all our options on page 28**

Download videos & layouts from our website.
**FlowMatic® 06**

**Rate:** 30 to 60 big bags/hr.
**Weight capacity:** 2 tons/big bag

**Objectives:** very high flow rate & loading station ergonomics

---

**NET WEIGHTING FOR HIGH FLOW RATE AND 100% AUTOMATED**

The FlowMatic® 06 model is a complete solution for big bag automatic net weighing packaging (dosing / packaging / conveying). This model is designed for a continuous operation with very high flow to maximize a number of simultaneous operator tasks. The FlowMatic® 06 is designed with all the options necessary for conditioning with minimal human intervention: pre-dosing weighed hopper, containment inflatable seal, big bag rotating head hooking, automatic release, height adjustable structure via a controlled pneumatic cylinder, commercial weighing, vibrating table for densification, pallet unstacker, handling conveyor...

---

**TECHNICAL SPECIFICATIONS**

- **Flow rate:** 30 to 60 big bags/hr.
- **Manufacturing materials:** mild steel, SS 304L, SS 316L
- **Finishes:** RAL 9006, micro-blasted, electropolishing
- **Installed power:** 8.7 kW
- **Average power consumption:** 1.5 kW
- **Compressed air consumption:** 0.2 Nm³/hr.
- **Service pressure:** 6 bar
- **Input 4 - 20 mA:** 1
- **Input TOR:** 10
- **Output TOR:** 13
- **Weighing precision:** ± 500 grams
- **Dust collecting rate:** 600 m³/hr.
- **Maximum dimensions of big bags:**
  - Length x width x height: 1.200 x 1.200 x 2.400 mm

---

**OPERATING SEQUENCE**

**AVERAGE TIME FOR A COMPLETE CYCLE: 1 MIN.**

1. The empty pallets are automatically placed on a conveyor
2. The big bag is placed on the filling station
3. The big bag inlet is connected to the rotating filling head by an inflatable gasket ensuring the sealing
4. The height of the filling spout is adjusted by pneumatic cylinder
5. A fan inflates and shapes the big bag
6. Another fan is used to exhaust the air through a reverse jet filter
7. Big bag filling process with hidden time
8. Start the preparation of another dose (hidden time)
9. The vibrating table provides material densification
10. When the big bag filling sequence is completed, the big bag is automatically released
11. Automatic big bag removal by motorized conveyor

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**Avantages**

- Motorized conveyor for high production rates
- Pallet unloader can handle SS multistyle pallets
- Net weighing hopper for customized filling
- Big bag removal by lift truck

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**Options**

- Welding system
- Big bag covering

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See all our options on page 28

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**FLOWMATIC® 06**

- **Net Weighing Hopper**
- **Load Cells**
- **Motorized Conveyors**
- **Vibrating Table for De-aeration**
- **Big Bag Pre-forming Fan**
- **Automatic Release**
- **Tension Cylinder**

---
MOBILE CONDITIONING UNIT FOR TRUCK CONNECTION OR SILO UNLOADING SPOUT

PALAMATIC PROCESS has developed a complete range of big bag filling stations to meet different industrial needs. The FlowMatic® 07 model is the most effective and flexible solution for simple packaging of bulk materials under multiple feeding points. It is particularly suitable for loading under silos or feeding points that require complete cleaning.

Rate: 20 to 30 big bags/hr.
Weight capacity: 2 tons/big bag
Objectives: mobile station & connection to trade loading spout

TECHNICAL SPECIFICATIONS

- Flow rate: 20 to 30 big bags/hr.
- Manufacturing materials: mild steel, SS 304L, SS 316L
- Finishes: RAL 9006, micro-blasted, electropolishing
- Installed power: 1.7 kW
- Average power consumption: 0.2 kW
- Compressed air consumption: 0.9 Nm³/hr.
- Service pressure: 6 bars
- Input 4 - 20 mA: 1
- Input TOR: 2
- Output TOR: 5
- Weighing precision: ± 500 grams
- Dust collecting rate: 300 m³/hr.
- Maximum dimensions of big bags:
  - Length x width x height: 1,550 x 1,550 x 2,400 mm
- Round forks or « U » version (to remove big bag with the straps)

Unloading cone
Filling head
Forks with adjustable width
Inflatable seal for complete dust containment
Support framework
Vibrating table
Load cells
Handling frame
Removable access platform

See all our options on page 28
FlowMatic® 08

PACKAGING UNIT FOR SINGLE HANDLE BIG BAG WITH TELESCOPIC FILLING TUBE

PALAMATIC PROCESS has designed a complete range of big bag filling stations to meet diverse needs of the industries. The FlowMatic® 08 model is an efficient and flexible solution for a simple conditioning of bulk materials with important tonnage, mainly dedicated to quarries, grain or fertilizer industries.

Advantages

- The fan inflates and shapes the big bag
- Holding hook for big bag and feeding tube
- Flow rate: 20 to 40 big bags/hr.
- Weight capacity: 2 tons/big bag
- Objectives: big bag with single handle & loading from the bulk products storage

TECHNICAL SPECIFICATIONS

- Flow rate: 20 to 40 big bags/hr.
- Manufacturing materials: mild steel, SS 304L, SS 316L
- Finishes: RAL 9006, micro-blasted, electropolishing
- Installed power: 5.6 kW
- Average power consumption: 0.3 kW
- Service pressure: 6 bars
- Input 4 - 20 mA: 1
- Input TOR: 7
- Output TOR: 3
- Weighing precision: ± 500 grams
- Dust collecting rate: 300 m³/hr.
- Maximum dimensions of big bags:
  - Length x width x height: 1.300 x 1.300 x 2.400 mm

Objectives:
big bag with single handle &
loading from the bulk products storage

FlowMatic® 08

Rate: 20 to 40 big bags/hr.
Weight capacity: 2 tons/big bag
Objectives: big bag with single handle &
loading from the bulk products storage

GROSS WEIGHT - COMMERCIAL WEIGHING

www.palamaticprocess.com/powder-machine/flow-solutions/
big-bag-filling-systems/flowmatic-08
Download videos & layouts from our website

See all our options on page 28
HIGH FLOW RATE FIBC FILLING UNIT WITH NET WEIGHING FOR SINGLE HANDLE BIG BAG

The FlowMatic® 09 model is intended for a continuous use with high flow rate by optimizing process time with hidden process tasks. The FlowMatic® 09 big bag filler is equipped with all the necessary options for packaging with minimum human intervention: pre-dosing weighing hopper, containment inflatable seal, automatic cluster removal, height adjustable structure via a controlled pneumatic cylinder, big bag pre-forming fan, optional commercial weighing, vibrating table for densification, pallet unstacker, handling conveyor, etc.

**Options**

- Feeding hopper
- Feeder
- Pre-dosing hopper
- Filling head
- Shaping cylinder
- Belt conveyor
- Platform

**Technical Specifications**

- **Flow rate:** 40 to 60 big bags/hr.
- **Manufacturing materials:** mild steel, SS 304L, SS 316L
- **Finishes:** RAL 9006, micro-blasted, electropolishing
- **Installed power:** 7.8 kW
- **Average power consumption:** 1.4 kW
- **Compressed air consumption:** 2.1 m³/hr.
- **Service pressure:** 6 bars
- **Input 4 - 20 mA:** 1
- **Input TOR:** 1
- **Output TOR:** 9
- **Weighing precision:** ± 500 grams
- **Dust collecting rate:** 600 m³/hr.
- **Maximum dimensions of big bags:** L x W x H = 1,300 x 1,300 x 2,400 mm

See all our options on page 28
FlowMatic® 10

**Rate:** 30 to 50 big bags/hr.
**Weight capacity:** 2 tons/big bag
**Objectives:** high flow rate & maximum hygiene

**TECHNICAL SPECIFICATIONS**
- Flow rate: 30 to 50 big bags/hr.
- Manufacturing materials: painted steel, SS 304L, SS 316L
- Finishes: RAL 9006, micro-blasted, electropolishing
- Installed power: 15.0 kW
- Average power consumption: 3.8 kW
- Compressed air consumption: 4.9 Nm²/hr.
- Service pressure: 6 bars
- Input 4 - 20 mA: 1
- Input TOR: 23
- Output TOR: 17
- Weighing precision: ± 500 grams
- Dust collecting rate: 300 m³/hr.
- Maximum dimensions of big bags:
  - Length x width x height: 1,300 x 1,300 x 2,400 mm

**Advantages**
- **Automatic big bag release:** process time optimization
- **Commercial weighing with net weight hopper (optional):**
- **Station with pre-dosing hopper (optional):**
- **Conveyor and automation:**

**Options**
- **AVAILABLE:
- CUSTOM MADE:
- **Download videos & layouts from our website:**

**High Rate Loading with Maximum Hygiene**
Developed for pharmaceutical and agro-food industries, the FlowMatic® 10 model is designed for filling big bags in white room and extract them towards the storage area. A compartment (grey area) closed by two sealed doors can make the link between the two areas and prevents the pallets from being introduced into the sensitive area. The commercial weighing associated to feeding pallets and big bag extraction line allows the preparation of big volume ready to ship with little intervention from operator.
PALAMATIC PROCESS engineering office offers custom-made solutions for your filling station with different types of flexible or rigid containers: big bag, octabins, cardboards, drums, buckets... depending on your implementation restrictions and your flow rate. We define together the customized solution after visiting your site and according to your detailed specifications.

POSSIBLE FUNCTIONALITIES
- Containment adapted to your powders
- Extraction of extremely difficult products (vibration, massage...)
- Reduced installation height
- Ergonomic station
- Hygienic system
- CIP/NEP integrated
- Conditioning station for flexible or rigid containers: big bags, drums, cardboards, octabins, buckets...
- Nitrogen (N₂): controlled atmosphere packaging area with continuous flow extraction or by breaking the vacuum

www.palamaticprocess.com/powder-machines/custom-made-big-bag-filling-system
**WEIGHING & DOSING PRECISION**

To control the filling flow and ensures final dosing.

- **Unit capacity:** 1,000 kg
- **Number of unit eichsions:** 3,000 points (+/- 166 g)
- **Commercial weighing:** yes
- **Deformation measurement with Wheatstone bridge**
- **Installation with shock absorber**
- **Communication:** profibus, modbus, ethernet
- **Compatible with PALAMATIC PROCESS vibrating tables**
- **Weighing label printing with tracking**

**OPERATOR ACCESS PLATFORM**

To facilitate access to the upper part of the conditioning unit to close a filling spout of the flexible container.

- **Material:** steel and inox manufacturing
- **Specific certifications:**
- **Access improved with retractable projection**
- **Possibility to include reclining barrier**

**MOBILE BIG BAG CONDITIONING UNIT**

The handling forks can be fitted to the packaging system, which allows the safe displacement of the entire station with a fork lift or a pellet truck.

- **The versions with rails and wheels are also standard models at PALAMATIC PROCESS.**

**GROUNDING CLAMP**

Ground clamps are fitted on the whole station. A rapid connection allows big bag grounding for an equipotential bonding of the entire unit.

- **Amount of clips per station:** 1 or 2
- **Grounding controller:** 24VDC power
- **Intrinsic Circuit:** Ex ia IIC
- **Big bag class:** C

**HOOK FOR BIG BAG WITH SINGLE LOOP**

Filling system for FIBC with one loop. The technology involves bags that are filled, weighed and transported while hanging, and assures bag stability for transport by forklift.

- For filling, the spout is inserted into the bag opening. The bag loop is hooked to the suspension hook which in its turn is connected to the suspension eyelet of the weigh load cell.
- **Loading capacity:** 2,000 kg
- **Lifting:** with a hydraulic tension cylinder
- **Maximum pressure:** 230 bars

**VIBRATING TABLE**

Very fluidisable materials make big bags unstable and dangerous to handle. The vibrating table enables the product to be de-aerated and compacted by means of vibration ensuring maximum volume reduction as well as stable shape.

- **Quantity of unbalanced motors:** 2
- **Loading capacity:** 2,000 kg
- **Isolation:** calibrating springs
- **Oscillation by counterbalance**
- **Compatible with PALAMATIC PROCESS® weighing systems**

**FAN**

The fan, fitted on the main structure, shapes the big bag.

- It facilitates the big bag filling fitted with an inner line (PE or aluminium) A by-pass valve completes the aereal line for de-aerating fines, captured by the double envelope tube during the conditioning phase.
- **Noise level:** 68 dBa
- **Blowing rate:** 600 m³/h
- **Rotation speed:** 3,000 tr./min

**AUTOMATIC BIG BAG RELEASE**

Automatic hooks with latch spring for easy big bag handles hooking

- **Unit loading capacity:** 500 kg
- **Service pressure:** 6 bar
- **Developed torque:** 156 Nm

**PALLET UNSTACKER**

Automation of the big bag packaging station for automatic stacking/unstacking and pallets positioning.

- The stacked pallets are stored in the storehouse and then placed one by one on the packaging line via a motorized conveyor.
- **Storage capacity:** 15 pallets (maximum 450 kg)
- **Unstacking cycle:** 15 sec./palette
- **Pallet dimensions:** 1,200 x 1,000 mm / 1,000 x 1,000 mm (adjustable unstacker thanks to flexible indexing pins)

**OUTFEED CONVEYOR**

It enables the big bag removal on pallet through a motorized roller conveyor for process time optimization.

- **Loading capacity:** 2,000 kg/m²
- **Drive train:** chain bevelket
- **Motorization by section**
- **Accumulation sensor:** by roller-feeler
- **Conveying speed:** 9 m/min.
WELDING MACHINE FOR INNER LINER
The thermo-welding system enables to seal the big bag.
After welding, there is the possibility to put a big bag under vacuum by a nitrogen conditioning.
Seal length: 350 to 1,000 mm
Power consumption: 200 ± 630 VA
Bi-manual control (optional)

ROTATING HEAD AND HOOKS LED
System allowing an ergonomic positioning of the big bag with a high resistance bearing.
A simple rotation (± 180°) of the handling system allows the operator to position the 4 handles from his workstation. The automatic handles release, once the big bag filled, completes the system and makes it a perfect equipment, particularly suitable for high conditioning cabsines. The big bag pre-forming fan is fitted to the casing of the whole system, enabling use in harsh environments subject to strong hygiene constraints.
Loading capacity: 2,000 kg
Rotation: ± 180°
E/S TOR: 16 / 55
Hooks: automatic with linear pneumatic cylinder

MAT LAYING
A post for mat laying is located between the unstacker and the big bag filling unit. It enables the automatic setting up of a mat on the empty pallet, before the filling. This post is necessary for a maximum big bag hygiene for meeting the quality standard of many industries. Mat: roller or precut
Staple: optional
Equipment casing: included in the option

HYGIENIC DESIGN
For environments particularly binding in terms of hygiene, we adapt all components of the conditioning system:
- Manufacturing materials: stainless steel 316L, polished finish.
- Quick disconnection system: clamp connection, sms, hanting socket and studdable connector
- Welded conception adapted tube on the field, closing pipes or open profile, minimizing congestion on the ground and bolted systems.
All equipment is removable for an easy cleaning. We pay special attention to the weight of detachable equipment and to the ergonomic access for the operator.

BIG BAGS COVERING
At the output of big bag filling unit, an automatic coverer provides the final containment of big bag on its pallet.
The feeding of the big bag is performed by a motorized conveyor.

HOIST FOR HEIGHT ADJUSTMENT
Facilitate big bag format change.
The hoist enables the filling station adjustment in height in order to raise or lower the big bag supporting structure.
Leverage capacity: 270 kg
System: self-locking
Cable length: 6 m of galvanized cable

BIG BAG TENSION CYLINDER
The big bag filling unit integrates on the back of its structure a pneumatic cylinder to adjust big bag tension.
During the conditioning process, the pneumatic cylinder compression ensures big bag laying on the handling pallet for vibrating table in order to ensure big bag stability. The cylinder position can be modified to adapt to different heights of the big bag.
Effort capacity: 250 kg adjustable with integrated valve
Type: double acting ISO range
Service pressure: 3 bars and adjustable valve

CLAMPING RING
Positioned around inflatable seal, the clamping ring permits the connection of different diameters of big bag cuffs. It is removable.

HYDROGEN
Controlled atmosphere packaging with continuous flow or by vacuum breaker.
The conditioning with nitrogen involves introduction of specific big bag and an internal bag closing by welding.

CIP (Clean in Place):
PALAMATIC PROCESS integrates washing nozzles to ensure a perfect hygiene at the end of the usage period.

Welded conception adapted (tube on the field, closing pipes or open profile, minimizing congestion on the ground and bolted systems)
Service pressure: 3 bars and adjustable valve

FlowMatic® Octabin

Semi-Automatic Conditioning Line

The FlowMatic® Octabin model represents the complete solution for a semi-automatic conditioning with gross weighing for octabins (dosing/conditioning/conveying). This model ensures containment, safety and commercial weighing.

Advantages

- Automatic adjustment of covering plate adaptable to several octabin sizes

Technical Specifications

- Flow rate: 10 to 30 octabins/hr.
- Manufacturing materials: mild steel, SS 304L, SS 316L
- Finishes: RAL 9006, micro-blasted, electropolishing
- Installed power: 1.7 kW
- Average power consumption: 0.2 kW
- Compressed air consumption: 0.7 Nm³/h.
- Service pressure: 6 bars
- Input 4 - 20 mA: 1
- Input TOR: 2
- Output TOR: 5
- Weighing precision: ± 500 grams
- Dust collecting rate: 300 m³/h.
- Maximum dimensions of octabin:
  - Length x width x height: 1.200 x 1.200 x 2.400 mm

Options

- Vibrating table provides a compacted material by means of vibration ensuring a maximum of volume reduction of the material in octabin
- Fan for internal bag pre-forming
- Dosing and weighing to control business transaction of your products
- Automatic adjustment of covering plate adaptable to several octabin sizes

Rate: 10 to 30 octabins/hr.
Weight capacity: 2 tons/octabin
Objectives: efficient & ergonomical station

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Finishes: RAL 9006, micro-blasted, electropolishing
Installed power: 1.7 kW
Average power consumption: 0.2 kW
Compressed air consumption: 0.7 Nm³/h.
Service pressure: 6 bars
Input 4 - 20 mA: 1
Input TOR: 2
Output TOR: 5
Weighing precision: ± 500 grams
Dust collecting rate: 300 m³/h.
Maximum dimensions of octabin:
- Length x width x height: 1.200 x 1.200 x 2.400 mm

See all our options on page 28

Download videos & layouts from our website
FlowMatic® Octabin

Rate: 20 to 40 octabins/hr.
Weight capacity: 2 tons/octabin
Objectives: efficient & ergonomical station

HIGH LOADING RATE WITH GROSS WEIGHING

The FlowMatic® Octabin high flow rate model is designed to optimize the conditioning rate of your octabins. The pallet unstacker associated to the conveying line and to net weighing system allows the conditioning of large ready to sell quantities. The access platform and overall ergonomics simplify and optimize operator process.

Densification with vibrating table provides a compacted material by means of vibration ensuring a maximum of volume reduction of the material in octabin

Motorized conveyor for high production rates

Conveyor for high rates

Options

Welding for inner liner

Octabin covering

See all our options on page 28

Flow rate: 20 to 40 octabins/hr.
Manufacturing materials: painted steel, SS 304L, SS 316L
Finishes: RAL 9006, micro-blasted, electropolishing
Installed power: 10.9 kW
Average power consumption: 1.0 kW
Compressed air consumption: 1.1 Nm³/h.
Service pressure: 6 bars
Input 4 - 20 mA: 1
Input TOR: 10
Output TOR: 15
Weighing precision: ± 500 grams
Dust collecting rate: 300 m³/h.
Maximum dimensions of octabin:
Length x width x height: 1.200 x 1.200 x 2.400 mm
**FlowMatic® Octabin**

**Rate:** 30 to 60 octabins/hr.  
**Weight capacity:** 2 tons/octabin  
**Objectives:** efficient & ergonomic station

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**AUTOMATIC CONDITIONING LINE**

In order to minimize the number of operator tasks, the majority of operations is automated on FlowMatic® Octabin automatic high flow rate design. This installation is designed for a continuous use with high flow rate. It includes automatic covering plates, conveying, filling and weighing, closing and wrapping of octabins.

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**TECHNICAL SPECIFICATIONS**

- **Flow rate:** 30 to 60 octabins/hr.  
- **Manufacturing materials:** painted steel, SS 304L, SS 316L  
- **Finishes:** RAL 9006, micro-blasted, electropolishing  
- **Installed power:** 16.3 kW  
- **Average power consumption:** 4.1 kW  
- **Compressed air consumption:** 0.6 Nm³/h.  
- **Service pressure:** 6 bars  
- **Input 4 - 20 mA:** 1  
- **Input TOR:** 13  
- **Output TOR:** 24  
- **Weighing precision:** ± 500 grams  
- **Dust collecting rate:** 300 m³/h.  
- **Maximum dimensions of octabin:**  
  - Length x width x height: 1.200 x 1.200 x 2.400 mm

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**Options**

- **FlowMatic® Octabin**
- **See all our options on page 28**

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**Automatic high velocity**

- **Vibrating table** provides a compacted material by means of vibration ensuring a maximum of volume reduction of the material in octabin  
- **Adaptable conception** depending on your octabin dimensions  
- **Dosing and weighing** for commercial dosing of your materials  
- **Conveying and dynamic buffer storage** high flow rates and flexible implementation

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**FlowMatic® Octabin**

See all our options on page 28

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See all our options on page 28

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Welding for inner liner  
Octabin covering

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**Download videos & layouts from our website**
**AUTOMATION & ELECTRICITY**

**PAL’TOUCH® TECHNOLOGY**

As the designer of specific equipments, PALAMATIC PROCESS associates programmed PLCs with its production units in an ergonomic and visual way. The production control is as important for us as the result. That is why automation and IT engineers of PALAMATIC PROCESS review the raw material feeding, the batches traceability, operators identification and dosings database. Thanks to continuous exchanges, during the step of project realization, between production team and our engineering office, screens of packaging lines control offer ergonomic and easy use with unique personalization.

**Equipment and programs**: Schneider, Siemens, Rockwell, Omron, Philips, Intouch, Pce Vue, WestDesigners, ...

**COMMERCIAL WEIGHING CONTROL**

In order to help you to sell your final products in big bag or in sacks, PALAMATIC PROCESS integrates commercial weighing systems to its filling unit. Compliant to IPPA directives, our equipment is calibrated during commissioning by our partners recognized organisations.

Your materials conditioned in big bags or sacks are hence immediately ready to sell. Associated with our customizable labels printing systems, these reliable systems represent a perfect solution to distribute your powders in large quantities with minimum human intervention.
EXAMPLES OF OUR PRIOR INSTALLATIONS

Cacao
Animal food
Plastic
Cleaning products
Chemical components
Paints

Nutrition
Aromas
Pharmaceutical products
Plastic pellets
Wiring
Minerals

Veterinary products
Milk powder
Cosmetics
Control cabinet
See our big bag filling unit in video on our YouTube channel:
www.youtube.com/user/Palamaticprocess

500 + 500 installations
of big bag filling unit in
FRANCE and ABROAD

Download videos & layouts from our website
Our expertise:

**FILLING SOLUTIONS FOR BIG BAG AND OCTABIN**
To fill

**EMPTYING SOLUTIONS FOR BIG BAG AND OCTABIN**
To empty, compact and massage

**SACK, DRUM AND CARDBOARD FILLING SOLUTIONS**
To fill, package, handle

**SACK AND DRUM EMPTYING SOLUTIONS**
To empty, compact, handle, discharge

**SOLUTIONS FOR PNEUMATIC CONVEYING**
Vacuum, pressure

**SOLUTIONS FOR MECHANICAL CONVEYING**
To transfer with screw, belt conveyor, bucket elevator, aeromechanical or vibratory conveyor, truck loading spout

**CRUMBLING AND GRINDING EQUIPMENT**
To granulate, crumble, grind, pound, micronise, disagglomerate

**SIFTING EQUIPMENT**
To sift, segregate, sieve, protect

**CONTAINERS AND STORAGE SOLUTIONS**
To fill, charge, empty, contain

**DOSING EQUIPMENT**
To control, regulate, empty, extract

**MIXING EQUIPMENT**
To homogenise, incorporate, fluidify, stir, mix

**FLOW AND CONNECTION**
To vibrate, fluidise, unclog, drain, facilitate extraction, control the descent, prevent stacks and vaults, connect

**INDUSTRIAL DUST COLLECTING EQUIPMENT**
To filter, clean, confine, secure

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