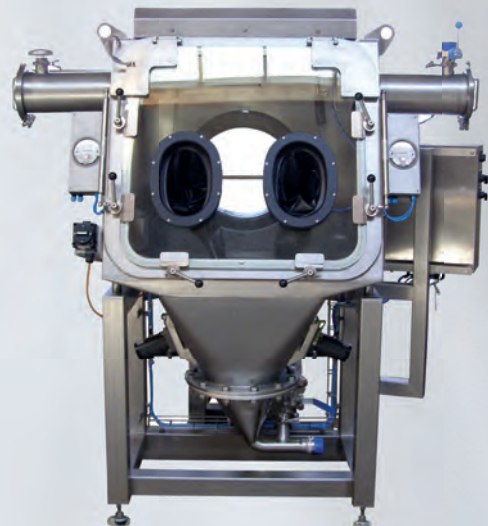


WE CARE.

HECHT
technologie

DISCHARGING DRUMS





Discharging drums

Drum discharge station with lance

HAND
OUT

DESCRIPTION



The HECHT **containment drum discharge station with lance type CFE-L** is used for contamination-free discharging of drums with inner liner up to OEB 5.

To ensure operator and product protection, the products supplied in drums are additionally packed in film also referred to as liner.

The product must be packed in at least one liner.

Discharging of drums using the suction lance is suitable in the case of limited space or weight-controlled removal of product.

HANDLING

In the case of loss-in-weight systems, the operator takes the drum via the roller conveyor directly underneath the glove box.

The drum is positioned by means of the lifting device.

Then the operator fixes the outer liner at the double O-ring port using a clamping ring. He removes the residues of the previous liner using the gloves and temporarily stores them in the glove box.

The drum is then pressed against the gasket at the bottom of the glove box and fixed using the lifting device. The inner liner (product liner) is opened, stabilized with a ring and sealed by means of an inflatable seal.

In order to stabilize the liner and facilitate discharging, the area between drum and outer liner is evacuated, preventing the liner from being sucked

in by the suction lance.

The drum is now connected, and the powder can be sucked out of the drum by means of a lance and vacuum. The linear guiding of the suction lance supports the easy handling during discharge. After the drum has been emptied, the residues of the previous liner can be disposed of in the drum. As soon as the outer liner has been loosened, the drum is closed by means of the double closing system as already described.

The empty drum can then be removed and a new cycle can be started.

AT A GLANCE



**Accurate sucking out,
with loss-in-weight
option**



Numerous options



**Operator and
product protection**



Ergonomic working

ADVANTAGES

- ◆ Discharging up to OEB 5, OEL < 1µg/m³
- ◆ Monitoring of the product flow
- ◆ Product handling via gloves
- ◆ Contamination-free replacement of gloves
- ◆ Contamination-free connection via double O-ring technology
- ◆ Positioning und docking of the drum by the automatic lifting device

OPTIONS

- ◆ WIP (Washing in Place)
- ◆ Inerting
- ◆ Ex-version for zones inside 1/21; outside 2/22
- ◆ Full FDA compliance of the materials used
- ◆ Waste can be properly disposed of via a drum with liner
- ◆ Different surfaces and materials depending on the version selected, e.g. 1.4301 oder 1.4404

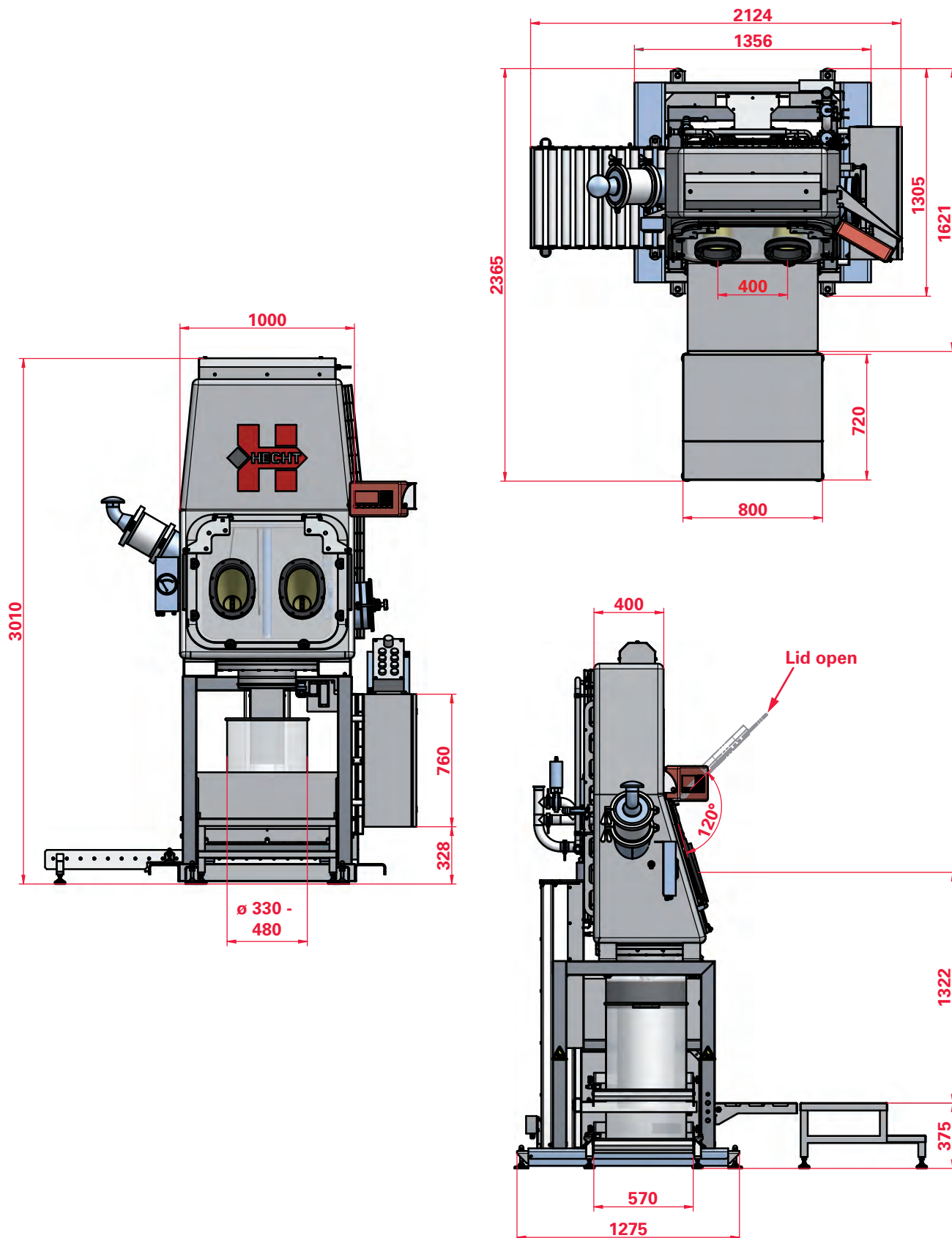


Discharging drums

Drum discharge station with lance

DIMEN-
SION
SHEET

STANDARD DIMENSIONS





Discharging drums

Drum discharge station with tipping device

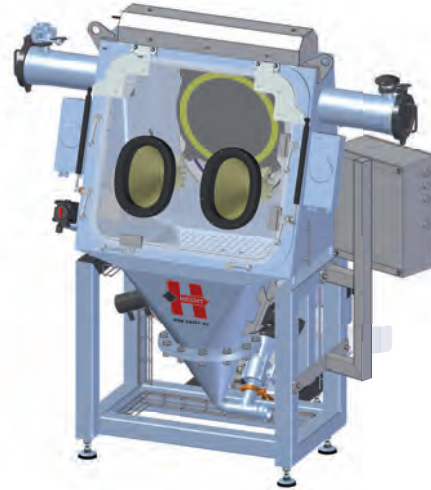
HAND
OUT

DESCRIPTION

The **containment drum discharge station with tipping device type CFE-K** from HECHT is used for low-contamination discharging of drums with inner liner up to OEB 5.

To ensure operator and product protection, the powder delivered in drums is additionally packed in a film also referred to as liner.

The product must be packed in at least one liner.



HANDLING

If the drum discharge station is equipped with a tipping device, the drum can be lifted via a special lifting device at the back of the glove box and docked to the connection port provided. In the initial position, the glove box is closed by a shower cap.

The operator fixes the outer liner at the double O-ring-port of the isolator over the shower cap.

Afterwards, the operator pulls the shower cap into the isolator using the gloves. Then he pulls the clamping ring to the outer groove of the isolator where the shower cap was before, and pushes the drum opening into the isolator.

Using the gloves, he opens the inner liner inside the isolator and empties the contents.

The bulk material is then taken to the next process step by means of gravity.

As an alternative, if desired, a suction shoe can be integrated at the outlet of the glove box for connection to a downstream vacuum conveying system.

After the content has been emptied, the liner is closed twice towards the drum and the isolator.

This double-closure technology ensures protection of both the isolator and the product against unwanted product escape (or product entry as well).

The cycle can then start again, and a new drum can be connected.

AT A GLANCE



Different versions available



Numerous options



Operator and product protection



Ergonomic design

ADVANTAGES

- ◆ Discharging up to OEB 5, OEL < 1µg/m³
- ◆ Monitoring of the product flow
- ◆ Product handling via gloves
- ◆ Contamination-free change of gloves
- ◆ Contamination-free connection by means of double O-ring technology
- ◆ Drum positioning and docking by means of hand pallet truck

OPTIONS

- ◆ WIP (Washing in Place)
- ◆ Nitrogen purging
- ◆ Ex-version for zones inside 1/21; outside 2/22
- ◆ Full FDA compliance of the materials used
- ◆ Passing out by means of optional empty sack disposal
- ◆ Different surfaces and materials depending on selected version, e.g. 1.4301 or 1.4404

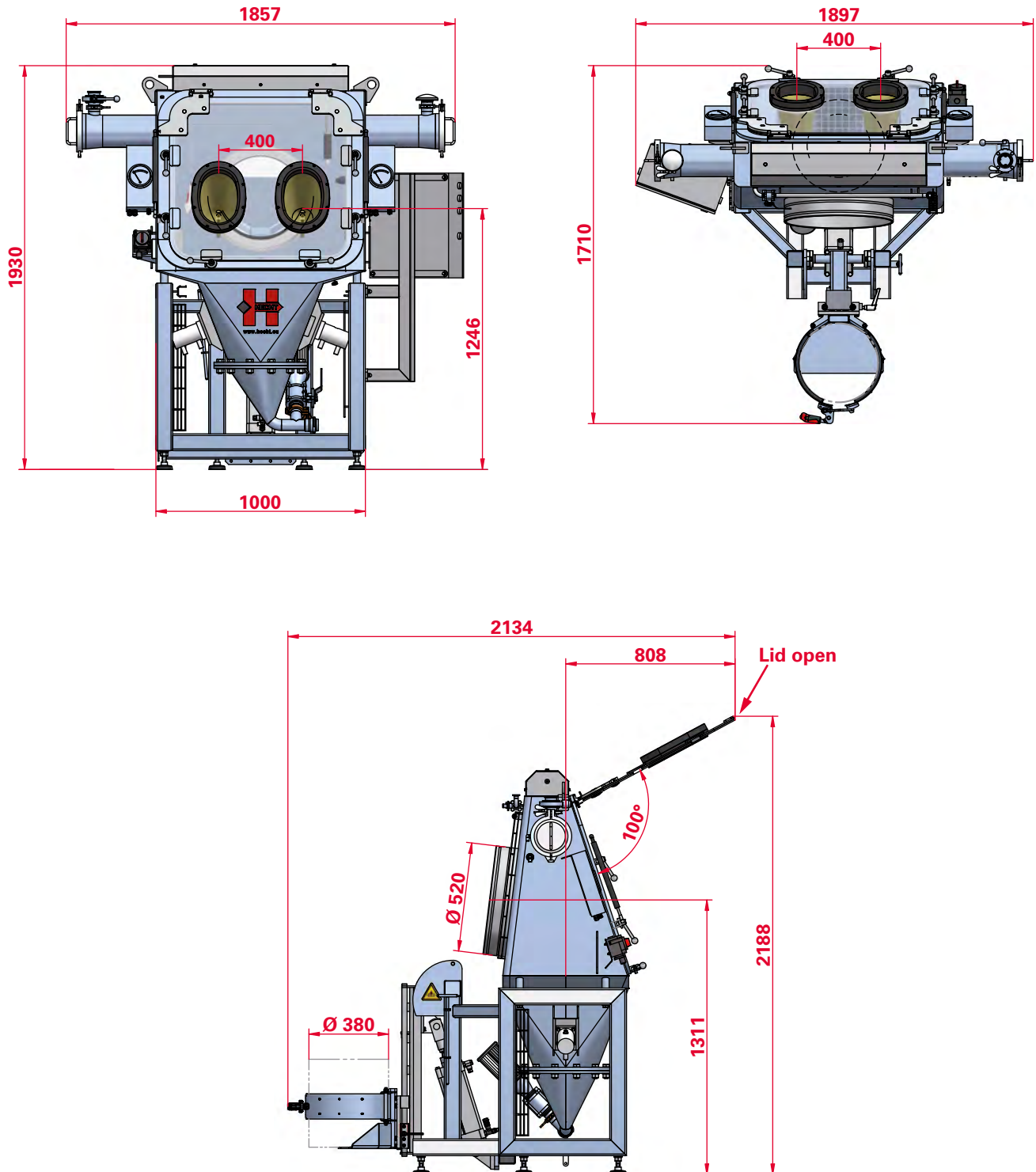


Discharging drums

Drum discharge station with tipping device

DIMEN-
SION
SHEET

STANDARD DIMENSIONS





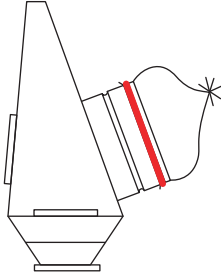
Discharging drums

Drum discharge unit

HAND
LING

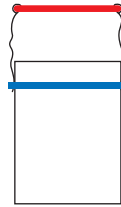
HANDLING

1



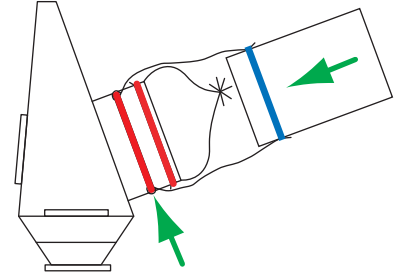
Initial position:
The o-ring port is closed
with shower cap.

2



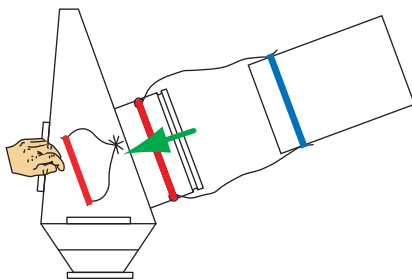
Fix a connecting liner with
clamping ring on the drum.

3



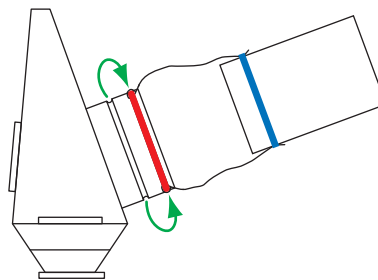
Fix the open side of the connecting
liner with the clamping ring
in the inner flute.

4



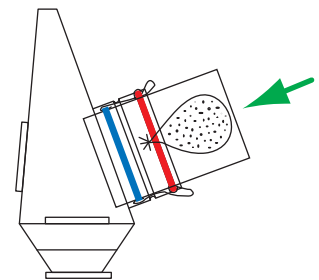
Remove the shower cap,
using the gloves.

5



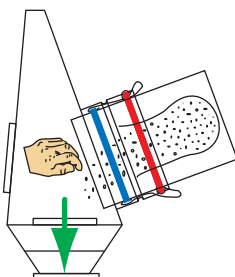
Move the clamping ring from
the inner to the outer flute.

6



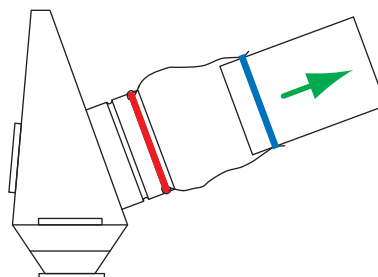
Move the drum inward.

7



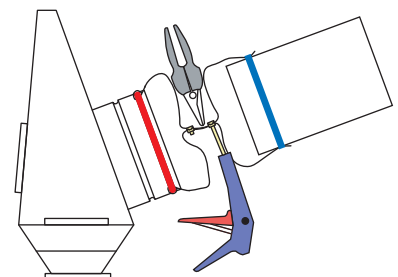
Open the sack inside the drum,
using the gloves and discharge it.

8



Move the drum outward.

9



Seal it two times and cut it
between the closures.

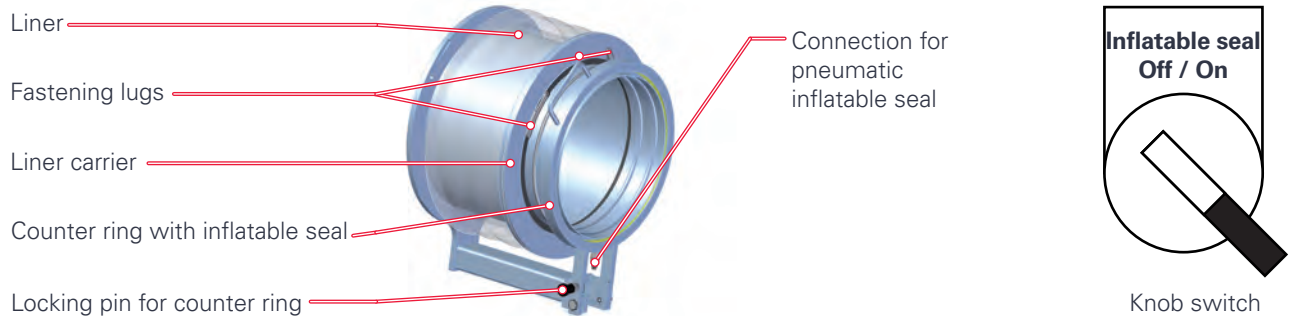


Discharging drums

Transfer port - passing out sacks

**HAND
LING**

SETUP



PASSING OUT EMPTY SACKS

- Discharge as many sacks as required to reach the desired amount of product. Set the knob switch to "Inflatable seal Off". Pull out approx. 20 cm of liner.
- Close the liner twice using the closing tool. Cut the liner between the liner clips using the liner scissors. Set the knob switch to "Inflatable seal On".

CHANGING THE LINER

- Liner carrier is empty. Shower cap closes the empty sack outlet. Deflate inflatable seal. Pull out locking pin and fold down the counter ring.
- Shift the clamping ring from the inner into the outer groove.
- Turn the fastening lugs until they are flush and the empty liner carrier can be removed outwards.
- Push a new liner package onto the liner carrier. Put the liner carrier over the liner port.
- Turn the fastening lugs outwards so as to hold the liner carrier.
- Pull out the inner liner from the new liner package and fix in the inner groove using a clamping ring.
- Pull the outer end of the liner outwards and close the liner with a liner clip using the closing tool.
- Pull off the shower cap with the clamping ring. Close the liner twice and cut between the liner clips using the liner scissors.
- Dispose of the shower cap with the clamping ring. Pull out the locking pin and fold up the counter ring. Activate the inflatable seal.

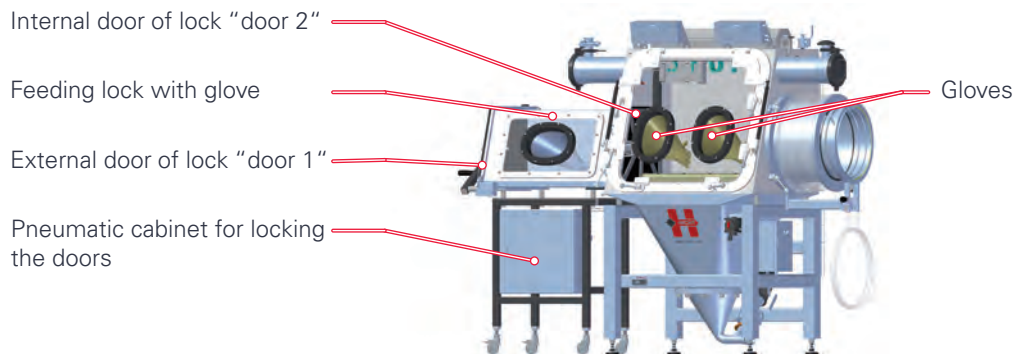


Discharging Drums

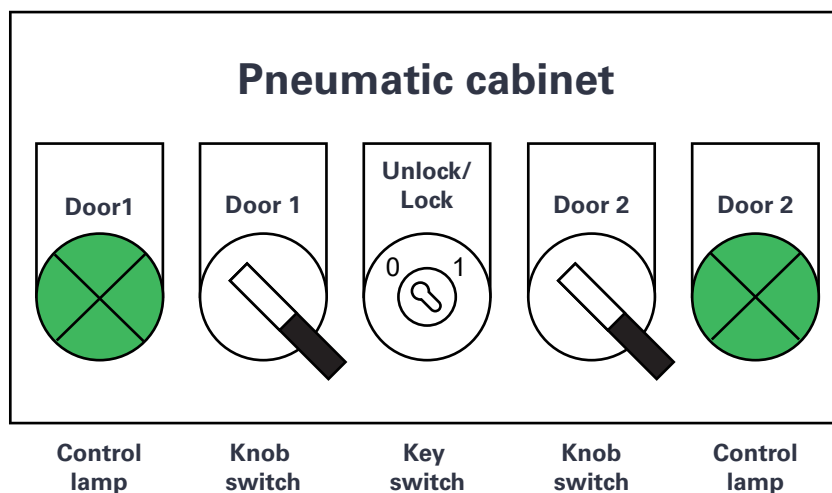
Lock operation

HAND
LING

SETUP



BASIC SETTING



In the basic setting, door 1 and door 2 are closed and locked.

Both control lamps light green.

Lock = left-hand pushbutton

Unlock = right-hand pushbutton



Door 1 and door 2 are interlocked.



When the key switch is set to 1, both doors are unlocked.

OPERATION

1



Turn the knob switch "Door 1" to the right.

✓ Door 1 is unlocked.



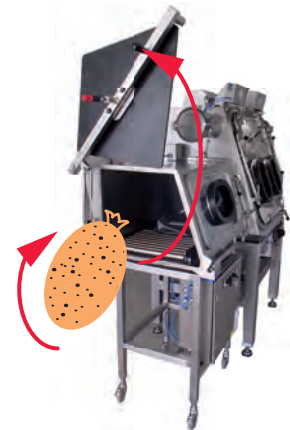
✓ Control lamp goes out.



OPERATION

2

Open the Destaco clamp and lift door 1 using the black handle. Push a sack onto the roller conveyor in the feeding lock.

**3**

Lower door 1 using the black handle. Lock door 1 using the Destaco clamp.



Turn the knob switch „Door 1“ to the left.

✓ Door 1 is locked.



✓ The control lamp lights green.

4

Turn the knob switch „Door 2“ to the right.

✓ Door 2 is unlocked.



✓ The control lamp goes out.

5

Reach into the gloves and open the Destaco clamps.

Remove the latch from the lugs and turn the door away towards the back.

Door 2 in opened position

**6**

Use the gloves to pull the sack into the glovebox.

Close door 2 by turning it towards the front again. Insert the latch into the lugs and close the door using the Destaco clamp.

Discharge the sack.



Door 2 is not locked. For discharging the next sack, door 2 must be locked at the pneumatic cabinet so that door 1 can be opened (interlock).