

# **OKTOMAT**<sup>®</sup> Octabin and BigBag emptying system

**OKTOMAT®** 

**Emptying stations series SOS** 

**OKTOMAT®** 

**Emptying stations series ECO** 

**OKTOMAT®** 

Conveyor technology series SFG / HFE / HCA





#### **The solution**

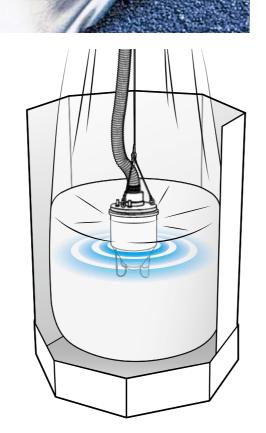
# **OKTOMAT®** Emptying stations

pipe by hand for a longer period of time in order to discharge a bulk bag.

The OKTOMAT® uses a vibrating suction head instead of the suction pipe and the automatic bag tightening mechanism pulls the foil inlet or BigBag upwards. The suction head floats and vibrates in the material and breaks up lumps. The loosened material flows towards the middle and is continuously sucked.



**Vibrating suction heads** 



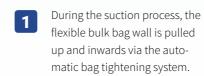
## **Functional principle**

Automatic bag tightening via pneumatic cylinder

autom. suction head follow-up with sinking filling level

Video at www.helios-systems.com







As a result, the bag tightens and the bulk material in the border area flows to the central suction



At the end of the discharging process, the almost empty bulk bag is automatically lifted up from the bottom, enabling a complete material discharging.

#### **System components**

#### **OKTOMAT® SYSTEM**





Controls







Base frames

Vibrating suction heads Foil/bag tightener

The two OKTOMAT® series (SOS and ECO) use components from the OKTOMAT® system in different combinations according to the modular principle. This allows the optimum emptying station to be configured for almost any application.

#### **OKTOMAT® SYSTEM**

**Bulk material in all variations** 

OKTOMAT® discharging stations are already suitable for most

applications in their basic configuration. However, there are special materials whose characteristic properties must be

taken into account when discharging and conveying.

## For all bulk bags with foil inlet or loops

The OKTOMAT® handles easily and effectively the discharging of all common types of BigBags, octabins, folding boxes, lattice boxes, bulk bags with foil inlet, etc.







**BigBag** 

bulk bags with loops

**Lattice boxes** with foil inlets

# Oscillating suction head

Fluidization

#### **Material-related solutions**

For every requirement there are appropriate options for the configuration of the optimal discharge station.

#### **Oscillating suction head**

Prevents the suction head from going down. Optimum material flow.

#### Oscillating foil/bag tightener

Brings bridged material and remaining edge areas to collapse.

#### **Special suction head**

Different distribution of vibration in the granules, approved materials for the bulk solids, ATEX-compliant, etc.

#### **Fluidization**

The material can also be fluidized, loosening is achieved by compressed air nozzles.

# Just pallet jack will do

bulk bags with foil inlets

Simply use a pallet jack to move the bulk bags, clamp the foil and the suction will follow without supervision and risk of interruption. The bulk bags will be compeltely emptied.



HELIOS

#### Typical bulk solids that can be discharged easily with OKTOMAT®



and foil/bag tightener











hot-melt adhesives grinding material from shredde





powder free-flowing





flat foil grinding material

pellets virgin material



rubber granulate

# **OKTOMAT®** Type overview















|               | SOS   | SOS INOX  | SOS Classic   | SOS Classic INOX   |
|---------------|---|---|---|--|
|               | SOS series ————————————————————————————————————   |   |   |  |
|               | _   | ng of the suction head for optimum suction flow aid for the bulk material in border are   |   |  |
| Range         | Bag tightening range 1000 mm  | Bag tightening range 1000 mm  | Bag tightening range 1000/1500 mm   | Bag tightening range 1400 mm   |
| Туре          | Pedestal version  | Pedestal version  | Portal version  | Portal version   |
| Tension force | Bag tightening force 1500 N   | Bag tightening force 1500 N   | Bag tightening force 2400 N   | Bag tightening force 2500 N  |
| Control       | SOS-control   | SOS-control   | SOS-control   | OKTOBAG-control  |
| Configuration | Full equipment  | Full equipment  | Full equipment  | Fully equipped high-end type   |
| Functions     | <ul> <li>Automatic complete emptying / automatic bag tightener</li> <li>Oscillating suction head system</li> <li>Oscillating foil/bag tightener system</li> <li>Pipe cleaning (conveying line)</li> <li>Remaining discharge time display</li> <li>Empty signal via LED light and potential-free contact</li> <li>Automatic changeover to the next OKTOMAT®</li> </ul> | <ul> <li>Automatic complete emptying / automatic bag tightener</li> <li>Oscillating suction head system</li> <li>Oscillating foil/bag tightener system</li> <li>Pipe cleaning (conveying line)</li> <li>Remaining discharge time display</li> <li>Empty signal via LED light and potential-free contact</li> <li>Automatic changeover to the next OKTOMAT®</li> </ul> | <ul> <li>Automatic complete emptying / automatic bag tightener</li> <li>Oscillating suction head system</li> <li>Oscillating foil/bag tightener system</li> <li>Pipe cleaning (conveying line)</li> <li>Remaining discharge time display</li> <li>Empty signal via LED light and potential-free contact</li> <li>Automatic changeover to the next OKTOMAT®</li> </ul> | <ul> <li>Automatic complete emptying / automatic bag tightener</li> <li>Oscillating suction head system</li> <li>Oscillating foil/bag tightener system</li> <li>Pipe cleaning (conveying line)</li> <li>Remaining discharge time display</li> <li>Empty signal via LED light and potential-free contact</li> <li>Automatic changeover to the next OKTOMAT®</li> <li>Fluidization control</li> <li>Graphic display</li> </ul> |
| Placement     | Especially space-saving in width  | Especially space-saving in width  | Especially space-saving in depth, installation on hall wall, several stations next to each other  | Especially space-saving in depth, installation on hall wall, several stations next to each other   |
| Operation     | Operation sideways  | Operation sideways  | Operation on front  | Operation sideways or on front   |
| Application   | Suitable for almost all tasks   | Suitable for almost all tasks, additional corrosion protection  | Regrind, punch scrap waste, almost all applications   | Foodstuffs, pharmaceutical industry, corrosion-protected, suitable for high-pressure cleaners  |

| ECO  | ECO Classic  |  |  |  |
|--|--|--|--|--|
| ECO series   |  |  |  |  |
| Autom. lowering the suction head when the filling level decreases via counterweight, foil/bag tightener steplessly adjustable  |  |  |  |  |
| Bag tightening range 1000 mm   | Bag tightening range 1000/1500 mm  |  |  |  |
| Pedestal version   | Portal version   |  |  |  |
| Bag tightening force 1500 N  | Bag tightening force 2400 N  |  |  |  |
| ECO-control  | ECO-control  |  |  |  |
| Basic equipment  | Basic equipment, expandable to full equipment  |  |  |  |
| <ul> <li>Automatic complete emptying / automatic bag tightener</li> <li>Autom. follow-up of the suction head according to filling level via counterweight</li> </ul> | <ul> <li>Automatic complete emptying / automatic bag tightener</li> <li>Autom. follow-up of the suction head according to filling level via counterweight</li> </ul> |  |  |  |
| Especially space-saving in width   | Especially space-saving in depth, installation on hall wall, several stations next to each other   |  |  |  |
| Operation sideways   | Operation on front   |  |  |  |
| Free-flowing bulk materials  | Free-flowing bulk materials of high density  |  |  |  |

## **OKTOMAT®** SOS Series

The all-rounder among the OKTOMAT® discharge stations

#### For all free-flowing, up to "difficult" materials



The OKTOMAT® SOS series is able to empty also problematic materials:

- regrind
- free-flowing powders
- bridge-forming granules such as TPE / Soft PVC
- bridge building agglomerates or similar
- food / salts etc.

#### **Suction head oscillating system**

The suction head enters vibrating into the material, is pulled up again in a time-controlled manner (the resulting sinkhole in the material fills up), is lowered back onto the surface and the procedure starts all over again. Frequency, stroke, lifting force and sequence of short or long strokes are individually adjustable.

as standard

# Foil/bag tightener Oscillating system

In case of very bridging materials, a non-slip wall may occur during the suction process. By repeated lowering and lifting of the foil/bag tightener during suction, the material wall will be loosened, thus enabling the material to flow towards the suction point.

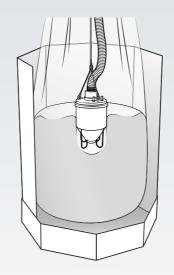
 $as\ standard$ 

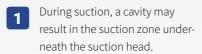
#### **Maximum functionality**

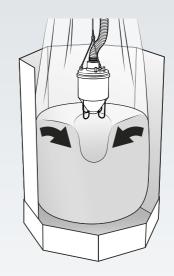
The OKTOMAT® SOS series is already equipped with the most important functions as standard.



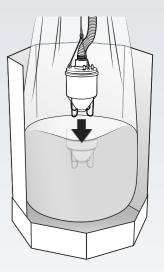
#### Oscillating system for suction head





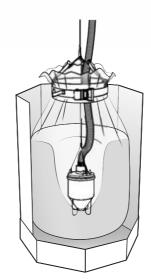


The suction head oscillation system raises the suction head. The resulting sinkhole fills up again.

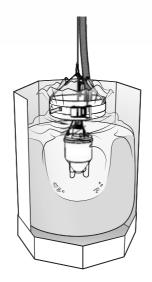


The system lowers the suction head back to the surface and makes it sink down time-controlled.

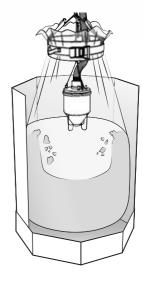
#### Oscillating system for foil/bag tightener



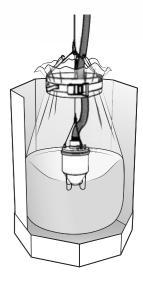
The border areas do not slip. A deep sinkhole is



The oscillation system lowers the foil/bag tightener towards the bulk material surface and the material under pressure in border area will be released.



The suction head is raised and the oscillating system pulls the foil wall upwards. The constricting container wall presses the material walls into the middle and causes them to collapse.



The suction head is lowered again and can suck away more material.

#### SOS series

#### BigBag

Bags with loops

**Octabin** 

Bags with foil inliner

Particularly space-saving in width

Fully equipped

Suitable for almost all tasks

Suction head oscillating system

Foil/bag tightener oscillation system



- easy to operate
- unmanned operation
- minimal operating costs
- low maintenance
- robust and durable

#### STANDARD EQUIPMENT

- Pedestal version made of steel, powder-coated
- 8-fold height adjustable
- Universal foil/bag tightener made of stainless steel for foil inliners and BigBag Ø 600 mm
- Automatic complete emptying / automatic bag tightener
- Suction head type S-38 / S-45 / S-50 conveying hose 38 / 45 / 50 mm
- Suction head oscillating system
- Foil/bag tightener oscillating system
- Tension force 1500 N
- SOS control
- Oscillation
- Empty suction function (conveying line)
- Dual emptying time display
- Empty signal via LED light and potential-free contact
- Automatic changeover to the next  ${\tt OKTOMAT^{\scriptsize @}}$

Delivered pre-assembled in transport box.

#### **MATERIALS**

#### Level of difficulty

| free-flowing    | Materials |
|-----------------|-----------|
| poorly flowable | Materials |
| bridge-forming  | Materials |

OKTOMAT® SOS is ideally suited for the majority of applications. It handles the emptying of free-flowing to bridge-forming materials. For even more difficult tasks, the discharge station can be extended with options.

| Materials       | standard | optional |
|-----------------|----------|----------|
| free-flowing    | •        |          |
| poorly flowable | •        |          |
| bridge-forming  | •        |          |
| difficult       | _        | •        |

#### Placement

#### Footprint

Due to its pedestal form, the OKTOMAT® SOS is particularly space-saving in its width. An area of approx.  $1000 \text{ mm} \times 1700 \text{ mm}$  is recommended.

#### Operation

Containers can be transported on the front, left and right to the OKTOMAT®. The control unit can be easily operated from the side. A remote control is available as an option.

#### Installation height

#### Installation height

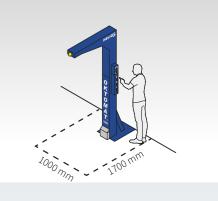
The OKTOMAT® SOS is 8-fold height-adjustable. The installation height can be selected from 2620 mm - 3670 mm.

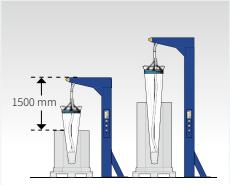
#### Container height

In order to achieve complete emptying, there must be a minimum distance of 1500 mm between the top edge of the container and the top edge of the discharge station.

#### Special versions

- OKTOMAT® SOS INOX
- OKTOMAT® SOS INOX ATEX
- OKTOMAT® SOS partial food version







#### OPTIONS

- Switchover valve, automatic switching to next OKTOMAT®
- Special suction heads SM / M / XL / SM Clean / XL Clean available with conveying line 38/45/50/60/65/80 mm
- Additional weight for suction head S-38/45/50
- Compressed air vibrator for all suction heads
- Fluidization by compressed air via nozzles (for SM and XL)
- Protection cover for containers + foil/bag tightener
- Special size foil/bag tightener Ø 260 / 400 / 500 mm
- Remote control with 5 m cable
- Movable frame Standard
- Movable frame INOX 1.4301
- Increase by 300 mm base element
- Partial food version for suction head and conveying hose
- OKTOBAG® control with intuitive operator guidance and display of all operating states via graphic display

#### ATEV



#### ATEX Zone 2 / 22

OKTOMAT® discharge stations are optionally available in ATEX version

- partial ATEX: suction head + conveying hose
- partial ATEX: foil/bag tightener
- complete ATEX Zone 2/22

| Technical specifications  |                           |  |
|---------------------------|---------------------------|--|
| height                    | 2600 - 3650 mm            |  |
| width / depth             | 500 mm / 1640 mm          |  |
| weight/with packaging     | 179 / 329 kg              |  |
| tension force             | 1500 N                    |  |
| compressed air connection | min. 6 bar. Ø DN 9 mm     |  |
| electrical connection     | ~ 230V AC, 1 ph, 50/60 Hz |  |
|                           | ~ 110V AC, 1 ph, 60 Hz    |  |

#### **OKTOMAT®** SOS Classic

#### SOS series



#### Placement

#### Footprint

Due to its portal form, the OKTOMAT® SOS Classic is particularly space-saving in depth. An area of approx. 1520 mm x 1160 mm is recommended.

#### Operation

Containers are transported on the front to the OKTOMAT®. The control unit can be operated directly on the front. A remote control is available as an option.

# 1520 mm

#### Installation height

#### Installation height

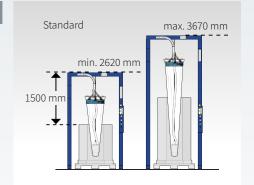
The OKTOMAT® SOS Classic is 8-fold height-adjustable. The installation height can be selected from 2620 mm - 3670 mm.

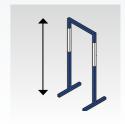
#### Container height

In order to achieve complete emptying, there must be a minimum distance of 1500 mm between the top edge of the container and the top edge of the discharge station.

As an option, the maximum construction height can be extended to 4270 mm with an extension (600 mm).

Optionally, the OKTOMAT® can be extended with an extension (300 mm) (for extra wide containers, max. container width 1500 mm).





+ 600 mm max. 4270 mm



width 1820 mm

#### STANDARD EQUIPMENT

■ robust and durable

- Portal version made of steel, powder-coated
- 8-fold height adjustable
- Universal foil/bag tightener made of stainless steel for foil inliners and BigBag Ø 600 mm
- Automatic complete emptying / automatic bag tightener
- Suction head type S-38 / S-45 / S-50 conveying hose 38 / 45 / 50 mm
- Suction head oscillating system
- Foil/bag tightener oscillating system
- Increased tension force 2400 N
- SOS control
- Oscillation
- Empty suction function (conveying line)
- Residual emptying time display
- Empty signal via LED light and potential-free contact

Delivered pre-assembled in transport box.

– Automatic changeover to the next  $\ensuremath{\mathsf{OKTOMAT}}^{\ensuremath{\mathsf{e}}}$ 

# p b

MATERIALS

Level of difficulty

free-flowing Materials

poorly flowable Materials

bridge-forming Materials

OKTOMAT® SOS Classic is ideally suited for the majority of applications. It handles the emptying of free-flowing to bridge-forming materials. For even more difficult tasks, the discharge station can be extended with options.

| Materials       | standard | optional |
|-----------------|----------|----------|
| free-flowing    | •        |          |
| poorly flowable | •        |          |
| bridge-forming  | •        |          |
| difficult       | ı        | •        |

#### **OPTIONS**

- Switchover valve, automatic switching to next OKTOMAT®
- Special suction heads SM / M / XL / SM Clean / XL Clean available with conveying line 38/45/50/60/65/80 mm
- Additional weight for suction head S-38/45/50
- Compressed air vibrator for all suction heads
- Fluidization by compressed air via nozzles (for SM and XL)
- Protection cover for containers + foil/bag tightener
- Special size foil/bag tightener Ø 260 / 400 / 500 mm
- Remote control with 5 m cable
- Special height max. 4270 mm (+ 600 mm)
- Special width 1820 (+ 300 mm)
- Partial food version for suction head and conveying hose
- OKTOBAG® control with intuitive operator guidance and display of all operating states via graphic display

#### ATEX versio



#### ATEX Zone 2 / 22

OKTOMAT® discharge stations are optionally available in ATEX version

- partial ATEX: suction head + conveying hose
- partial ATEX: foil/bag tightener
- complete ATEX Zone 2/22

| Technical specifications  |                           |  |
|---------------------------|---------------------------|--|
| height 2620 - 3670 mm     |                           |  |
| width / depth             | 1520 mm / 1160 mm         |  |
| weight/with packaging     | 260 - 320 kg              |  |
| tension force             | 2400 N                    |  |
| compressed air connection | min. 6 bar. Ø DN 9mm      |  |
| electrical connection     | ~ 230V AC, 1 ph, 50/60 Hz |  |
|                           | ~ 110V AC, 1 ph, 60 Hz    |  |

#### ECO series

BigBag

Bags with loops

**Octabin** 

Bags with foil inliner

Particularly space-saving in width

Suitable for a wide variety of tasks

**Basic configuration** 

Special heights possible min. 2500 mm max. 3900 mm

- easy to operate
- unmanned operation
- minimal operating costs
- low maintenance
- space-saving
- robust and durable



#### Placement

#### Footprint

Due to its pedestal form, the OKTOMAT® ECO is particularly space-saving in width. The required area to the front depends on the container type used. An area of approx. 1200 mm x 1900 mm is recommended.

#### Operation

Containers can be transported on the front, left and right to the OKTOMAT®. The control unit can be easily operated from the side.

#### Installation height

#### Installation height

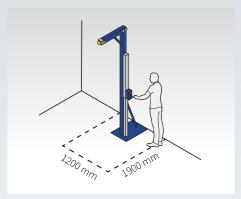
The OKTOMAT® ECO is 5-fold height-adjustable.

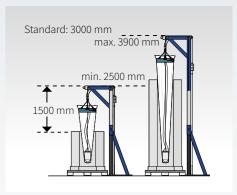
The standard installation height can be selected from 3000 mm - 3500 mm. A special height from 3000 mm up to 3900 mm and a space-saving height of only 2500 mm - 3000 mm (4 x 125 mm grid) are available as an option.

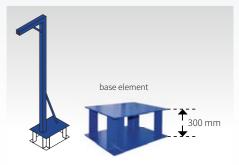
#### Container height

In order to achieve complete emptying, there must be a minimum distance of 1500 mm between the top edge of the container and the top edge of the discharge station.

An increase of 300 mm can be achieved subsequently by means of a base element.







#### STANDARD EQUIPMENT

- Pedestal version made of steel, powder-coated
- 5-fold height adjustable
- Universal foil/bag tightener made of stainless steel for foil inliners and BigBag Ø 600 mm
- Automatic complete emptying / automatic bag tightener
- Suction head type S-38 / S-45 / S-50 conveying hose 38 / 45 / 50 mm
- Autom. follow-up of the suction head according to filling level via counterweight
- Weight force can be adjusted by number of discs
- Tension force 1500 N

#### **MATERIALS**

#### Level of difficulty

| free-flowing    | Materials |
|-----------------|-----------|
| poorly flowable | Materials |

OKTOMAT® ECO is ideally suited for the majority of applications. It handles the emptying of free-flowing to poorly flowable materials.

| Materials       | standard | optional |
|-----------------|----------|----------|
| free-flowing    | •        |          |
| poorly flowable | •        |          |
| bridge-forming  | _        | •        |
| difficult       | _        | ı        |

#### **OPTIONS**

- ECO-control for empty signal via LED light and potential-free contact, display of residual emptying time, automatic switching on
- Switchover valve, automatic switching to next OKTOMAT®
- Special suction heads M / XL / XL Clean available with conveying line 38/45/50/60/65/80 mm
- Additional weight for suction head S-38/45/50
- Compressed air vibrator for all suction heads
- Protection cover for containers + foil/bag tightener
- Special size foil/bag tightener Ø 260 / 400 / 500 mm
- Movable frame
- Increase by 300 mm base element
- Partial food version for suction head and conveying hose
- Special height: 2500 to 3000 mm
- Special width: 3500 to 3900 mm



#### ATEX Zone 2 / 22

OKTOMAT® discharge stations are optionally available in ATEX version

- partial ATEX: suction head + conveying hose
- partial ATEX: foil/bag tightener

| Technical specifications       |                           |  |
|--------------------------------|---------------------------|--|
| height 3000 - 3500 mm          |                           |  |
| width / depth 500 mm / 1540 mi |                           |  |
| weight/with packaging          | 125 - 145 kg              |  |
| tension force                  | 1500 N                    |  |
| compressed air connection      | min. 6 bar. Ø DN 6mm      |  |
| electrical connection          | ~ 230V AC, 1 ph, 50/60 Hz |  |
|                                | ~ 110V AC, 1 ph, 60 Hz    |  |

Delivered pre-assembled in transport box.

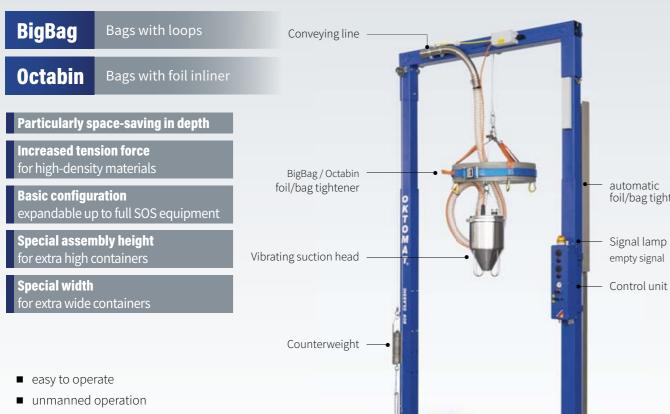
#### **OKTOMAT®** ECO Classic

#### ECO series

automatic

Signal lamp

foil/bag tightener



Delivered pre-assembled in transport box.

#### Placement

#### Due to its portal form, the OKTOMAT® ECO Classic is particularly space-saving in depth.

An area of approx. 1520 mm x 1160 mm is recommended.

#### Operation

Footprint

Containers are transported on the front to the OKTOMAT®. The control unit can be operated directly on the front.

#### Installation height

#### Installation height

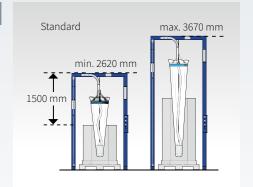
The OKTOMAT® ECO Classic is 8-fold height-adjustable. The installation height can be selected from 2620 mm - 3670 mm.

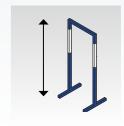
#### Container height

In order to achieve complete emptying, there must be a minimum distance of 1500 mm between the top edge of the container and the top edge of the discharge station.

As an option, the maximum construction height can be extended to 4270 mm with an extension (600 mm).

A special width of 1820 mm is available (for particularly wide containers, max. container width 1500 mm).





+600 mm max. 4270 mm



Width 1820 mm

#### minimal operating costs

- low maintenance
- robust and durable

#### STANDARD EQUIPMENT

- Portal version made of steel, powder-coated level of difficulty
- 8-fold height-adjustable
- Universal foil/bag tightener made of stainless steel for foil inliners and BigBag Ø 600 mm
- Automatic complete emptying / automatic bag tightener
- Suction head type S-38 / S-45 / S-50 conveying hose 38 / 45 / 50 mm
- Autom. follow-up of the suction head according to filling level via counterweight
- Weight force can be adjusted by number of discs
- Increased tension force 2400 N

#### MATERIALS

#### Level of difficulty

| free-flowing    | Materials |
|-----------------|-----------|
| poorly flowable | Materials |

OKTOMAT® ECO is ideally suited for the majority of applications. It handles the emptying of free-flowing to poorly flowable materials. For even more difficult tasks, the discharge station can be extended with options.

| Materials       | standard | optional |
|-----------------|----------|----------|
| free-flowing    | •        |          |
| poorly flowable | •        |          |
| bridge-forming  | _        | •        |
| difficult       | _        | •        |

#### **OPTIONS**

- ECO-control for empty signal via LED light and potential-free contact, display of residual emptying time, automatic switching on
- Switchover valve, automatic switching to next OKTOMAT®
- Special suction heads M / XL / XL Clean available with conveying line 38/45/50/60/65/80 mm
- Additional weight for suction head S-38/45/50
- Compressed air vibrator for all suction heads
- Fluidization by compressed air via nozzles (for XL)
- Protection cover for containers + foil/bag tightener
- Special size foil/Bag tightener Ø 260 / 400 / 500 mm
- Special height max. 4270 mm (+600 mm)
- Special width 1820 mm (+ 300 mm)
- partial foodstuff version for suction head and conveying hose
- Oscillating system suction head
- Oscillation system foil/bag tightener

retrofittable



#### ATEX Zone 2 / 22

OKTOMAT® discharge stations are optionally available in ATEX version

- partial ATEX: suction head + conveying hose
- partial ATEX: foil/bag tightener
- complete ATEX Zone 2/22

| Technical specifications  |                           |  |
|---------------------------|---------------------------|--|
| height                    | 2620 - 3670 mm            |  |
| width / depth             | 1520 mm / 1160 mm         |  |
| weight/with packaging     | 125 - 145 kg              |  |
| tension force             | 2400 N                    |  |
| compressed air connection | min. 6 bar. Ø DN 6mm      |  |
| electrical connection     | ~ 230V AC, 1 ph, 50/60 Hz |  |
|                           | ~ 110V AC, 1 ph, 60 Hz    |  |

17

## **OKTOMAT® SOS Classic INOX**

HELIOS

OKTOMAT'CH

#### SOS series

#### **PHARMA**

**FOOD** 

**ATEX** 

#### Completely made of stainless steel

OKTOMAT® SOS Classic INOX emptying stations are used especially in sensitive production areas with the highest demands.

Oscillating system suction head

Oscillating system foil/bag tightener

- Suitable for high-pressure cleaning
- Resistant to aggressive cleaning agents

#### Control

The OKTOBAG® control is an extremely comprehensive discharge control and includes

- Graphic display with intuitive operator guidance
- Display of all operating states
- 5 function keys
- Buttons for automatic operation
- Button for conveyor unit ON/OFF

The entire program sequence can be individually programmed and individual functions can be disabled or enabled. The operating personnel have to take care only of manual or automatic operation.

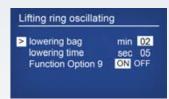


HELIOS

#### Status OKTOMAT kg 280 actual weight change bag after kg 50 02 2.0 alarm at immersion time lower bag

| Switch-Over              | Option 2 |
|--------------------------|----------|
| automatic<br>switch-over | ON OFF   |
|                          |          |







#### Bag tightener

The ring is suitable for BigBag with loops. It can be easily converted from low to high containers. Material: stainless steel

#### Suction head

Vibrating suction head to loosen and suck off the bulk material. Material: stainless steel 1.4408/1.4571 (AISI 316), PUR conveying hose.

#### STANDARD EQUIPMENT

- Portal version made of stainless steel 1.4301/AISI 304
- 10-fold height-adjustable
- Suction head SM Clean made of stainless steel 1.4571/AISI 316 with compressed air vibrators, available with conveying hose 38/50/65/80 mm
- Bag tightener with 4 stainless steel carabiners for BigBag
- Automatic complete discharge / automatic bag tightener
- Discharge aids by means of
  - steplessly adjustable vibrators in the suction head
- oscillation of the suction head
- oscillation of the bag tightener
- Empty suction function (conveying line)
- Empty signal, potential-free contact
- OKTOBAG® control with intuitive operator guidance and display of all operating states via graphic display

#### MATERIALS

#### Level of difficulty

| free-flowing    | Materials |
|-----------------|-----------|
| poorly flowable | Materials |
| bridge-forming  | Materials |
| difficult       | Materials |

OKTOMAT® SOS Classic INOX masters all materials from free-flowing to the most difficult materials and is used in particularly sensitive production areas with the highest demands.

| Materials       | standard | optional |
|-----------------|----------|----------|
| free-flowing    | •        |          |
| poorly flowable | •        |          |
| bridge-forming  | •        |          |
| difficult       | •        |          |

#### **OPTIONS**

- Change-over switch, automatic to the next OKTOMAT®
- Residual material quantity weighing < 150 kg via strain gauge unit
- Weighing platform with negative weighing of the entire system
- Foil/bag tightener for foil inliners
- Protection cover for bulk bags + foil/bag tightener
- Suction head XL-Clean with fluidization



#### ATEX Zone 2 / 22

- partial ATEX: suction head + conveying hose
- partial ATEX: suction head
- + conveying hose + bag tightener
- complete ATEX version including portal and control

| reclifications |                   |  |
|----------------|-------------------|--|
| materials      | 1.4301 und 1.4571 |  |
| height         | 2230 - 3730 mm    |  |
| width / depth  | 1840 / 1150 mm    |  |
| weight         | 260 / 420 kg      |  |
|                | ID CC / ID CO I/  |  |

protection type IP 66 / IP 69 K compressed air min. 6 bar, max.8 bar, Ø DN 13 connection electrical connection ~ 230V AC, 1 ph, 50/60 Hz 110V AC, 1 ph, 60 Hz

#### System Components

#### **OKTOMAT®**



#### Base frames









**Pedestal version ECO** 

**Pedestal version SOS** 

**Portal version** 

**Portal version CLEAN** 

#### Vibrating suction heads



| Туре | Ø Conveying hose               | diameter                 | Vibrator<br>pneumatic | Vibrator<br>electric | partial<br>ATEX | CLEAN |
|------|--------------------------------|--------------------------|-----------------------|----------------------|-----------------|-------|
| S-38 | 38 mm                          | 295 mm                   | •                     | •                    | •               | _     |
| S-45 | 45 mm                          | 295 mm                   | •                     | •                    | •               | _     |
| S-50 | 50 mm                          | 295 mm                   | •                     | •                    | •               | _     |
| SM   | 38 / 45 / 50 / 60 / 65 / 80 mm | 295 mm<br>(Clean) 250 mm | •                     | -                    | •               | •     |
| М    | 38 / 45 / 50 / 60 / 65 / 80 mm | 360 mm                   | •                     | •                    | •               | _     |
| XL   | 38 / 45 / 50 / 60 / 65 / 80 mm | 495 mm<br>(Clean) 450 mm | •                     | •                    | •               | •     |

suitable for all OKTOMAT® types

#### Foil/bag tightener



Special sizes and versions

| Тур                  | Use              | Diameter | Fixation                  |
|----------------------|------------------|----------|---------------------------|
| Bag tightener        | BigBag + foil    | 260 mm   | lashing strap + carabiner |
| Bag tightener        | BigBag + foil    | 400 mm   | lashing strap + carabiner |
| Bag tightener        | BigBag + foil    | 600 mm   | lashing strap + carabiner |
| BigBag bag tightener | BigBag           | 500 mm   | carabiner                 |
| Foil tightener       | Foil (ATEX Zone) | 600 mm   | clamping jaws             |

suitable for all OKTOMAT® types

#### Controls



ECO



SOS





Control OKTOBAG®

ECO Classic SOS Classic SOS ECO Control ECO \_ Control SOS Control OKTOBAG Control OKTOBAG ATEX \_ \_ \_ without control

#### **ECO-Basic control**



with potential-free contact for empty signal

- adjustable residual emptying time
- basic control for switchover valve

Included as standard in SOS control

suitable for series OKTOMAT® ECO

#### Switchover valve



As soon as a signal is received from the basic control / SOS control or residual quantity weighing, the conveying is switched on to the next full container via shut-off valves.

- Any number of OKTOMAT® stations can be combined
- Ideal for unmanned shifts

suitable for all OKTOMAT® types

#### Remote control

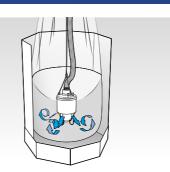


Lifting and lowering of suction head and foil/bag tightener

■ 5 m cable

suitable for series OKTOMAT° SOS

#### Fluidization



For loosening up dense bulk material, compressed air can be injected to fluidize the material to be sucked off.

available for suction head SM and XL only

separate control with two independent pneumatic circuits

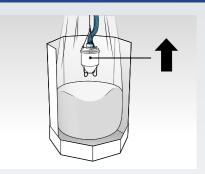
suitable for series OKTOMAT® SOS

#### Options

#### **OKTOMAT®**

# Options

#### Emptying



In order to be able to empty the pipeline after each conveying process (e. g. in the case of long rising pipes), the suction head is raised above the bulk material level in the container when a signal is received from a conveyor control system and the pipeline is emptied.

suitable for series OKTOMAT® SOS

#### Protection cover



Cover for containers + foil/bag tightener PVC, transparent with zipper

| protection cover | 1200 mm |
|------------------|---------|
| protection cover | 1500 mm |

suitable for all OKTOMAT® types

#### Additional weight



The additional weight increases the contact weight of the suction head on the bulk material and thus helps to enter into the bulk material.

- avaible for suction head S38 / S45 / S50 only

suitable for all OKTOMAT® types

#### Frame on castors



Frame with 4 castors incl. fixing bolts. Suitable for continuous use

suitable for series OKTOMAT® SOS

#### Pipe elbows



DN38, DN45 and DN50 (outer diameter)

- Standard pipe elbow (stainless steel 1.4301)
- Stainless steel pipe elbow (hardened) wear-resistant
- Glass pipe elbow highly wear-resistant

suitable for all OKTOMAT® types

#### OKTOBAG control

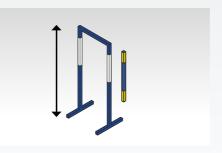


Strain gauge system for residual quantity weighing

Weighing platform for complete OKTOMAT® emptying system including container

suitable for series OKTOMAT° SOS

#### Special height



Extension 600 mm for maximum installation height of 4270 mm

suitable for series OKTOMAT® ECO Classic OKTOMAT® SOS Classic

#### Special height

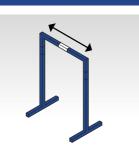


A: Special height: 3500 - 3900 mm (4 x 100 mm steps)

B: Special height: 2500 - 3000 mm (4 x 125 mm steps).

suitable for series OKTOMAT° ECO

#### Special width



Extension 300 mm for maximum portal width of 1820 mm for extra wide containers, max. width of container 1500 mm

suitable for series OKTOMAT® ECO Classic

#### Height increasing part / foot part



Pedestal for increased height. Mounting on OKTOMAT® foot section.

- Height = 300 mm
- Weight = 64 kg

suitable for series OKTOMAT® SOS

OKTOMAT° ECO

#### **OKTOMAT® SYSTEM**

#### **Robust and durable**

Thousands of OKTOMAT® systems are in use worldwide. Most of them work in 3-shift operation under the hardest conditions, e. g. in the plastics and chemical industries.

#### Low maintenance

OKTOMAT® discharging stations are designed for low maintenance and service-friendly. Any necessary spare parts can be changed with just a few steps.

#### **Short payback period**

OKTOMAT® discharging stations usually amortize after a few months. The exact amortisation period depends on the savings in terms of man-hours in the respective application case and the costs incurred so far due to production disruptions.

#### **After Sales Service**

We do not leave you alone with the HELIOS components, but accompany you through the entire process from the selection up to starting up and training of your employees. That is what we understand by partnership. Our staff will be pleased to advise you on the possible applications of our products and to inform you about our latest technical developments - also for possible retrofits.



- starting up
- training
- upgrade
- maintenance/checking up
- spare parts supply within 24h

# OKTOMAT SE WORLDW!

#### History of a success story





#### OKTOMAT® system discharging station wins out worldwide

HELIOS was granted an EP and a US patent for a suction device based on a patent application in 1995, in which a floating suction head is used for discharging bulk bags from above instead of the usual suction pipe. The foil bag is automatically pulled upwards via a tensioning device in order to achieve a complete discharging.

Following this fundamental idea, further procedural and additional features were developed gradually, such as

- Raising the remaining bulk material off the floor
- Clamping of the foil bag by means of a tension belt
- Oscillation of the suction head while discharging
- Fluidization of the bulk material by compressed air via nozzles at the suction head
- Clamping and relieving the bulk bag wall while discharging

which were also protected by patent, the "OKTOMAT®" system.

Depending on the task, various frame types have proven to be particularly advantageous in practice.

Since its launch at FAKUMA in 1996, more than 5000 systems have been installed worldwide.

## **OKTOMAT**° in practice

#### **OKTOMAT®**

- robust and durable
- unmanned operation
- proven in thousands
- easy to operate
- min. operating costs
- suitable for all materials
- short payback period

#### injection molding blow molding extrusion compression molding

paper finishing

■ chemistry / raw materials

■ medical technology

- paper / foil
- PVC processing
- recycling
- cable
- optics
- lighting
- WPC
- food ■ raw material handling
  - technical parts

■ logistics

packaging ■ foil production

automotive

plug connectors

HELIOS



















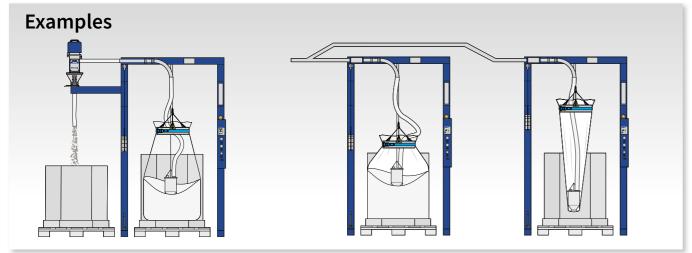
HELIOS

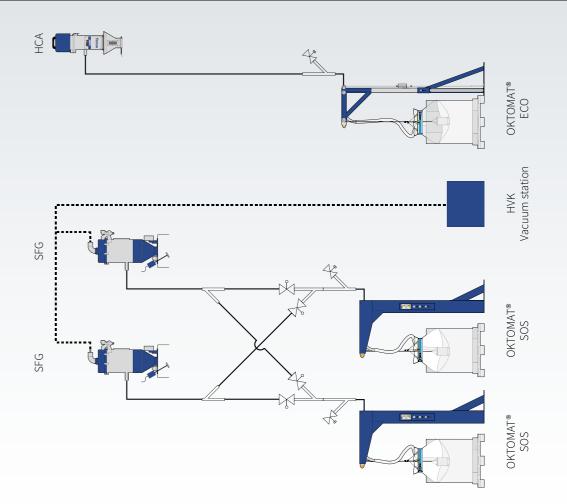


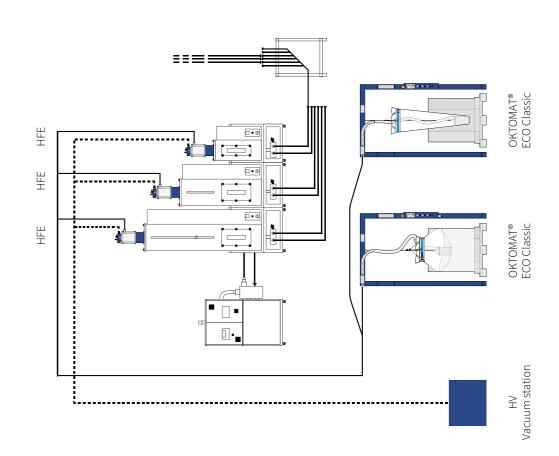




Double station with switchover







## Machinery and equipment for material handling



**HELIOS** GmbH Gerätebau für Kunststofftechnik

Hechtseestraße 8 83022 Rosenheim GERMANY

Tel +49 (0)8031 35418-0 Fax +49 (0)8031 35418-60

info@helios-systems.com www.helios-systems.com









