

HELIOS

Your perfect partner for material handling

MADE IN GERMANY

PRODUCT OVERVIEW

HELIO®Clean



Dedusters

for plastic granulate/regrind

20 years

JETBOXX®



Dryers

for plastic granulate

25 years

OKTOMAT®



Discharging stations

for Octabin and Big Bag

30 years

successfully in use worldwide

DEDUSTING | DRYING | DISCHARGING

2027

CONVEYING

www.helios-systems.com

Dedusting devices for plastic granulate and regrind

Professional cleaning of plastics before processing

Plastic processing, especially injection moulding, requires absolutely pure raw materials without dust, angel hair and other impurities for the production of high-quality parts. Often these only occur during conveying, so HELIO®Clean granulate cleaners are combined conveying and dedusting systems for mounting on the processing machine, which transfer the perfectly dedusted granules/regrind directly into the plasticizing unit.

The dedusting is carried out by air-sifting with a highly effective ion shower. Due to its absolutely new fountain principle, this washing process by air is able to perform even the most difficult cleaning tasks perfectly.



Reduce waste, increase efficiency



Waste

- combustions (black dots)
- unmelted parts (white dots)
- streaks
- surface problems
- reduced mechanical properties

Disruptions at the processing machine

- clogging and crust formation at the feeding zone
- abrasion on screw and barrel due to charred dust
- frequent machine downtime

Maintenance

- malfunctions in the conveying line
- clogged filters
- sensor issues
- increased effort for cleaning and fault acknowledgment



By using a suitable HELIOS deduster, you avoid rejects, machine downtime and reduce maintenance cost.

Only dedusted granulate enables the production of sophisticated technical parts

By a professional material cleaning, the quality of the resin can be brought back to its original state and optically perfect parts can be produced from it.



Example: PMMA raw granulate before and after dedusting.



✓ improved parts quality

✓ avoiding waste

✓ more regrind can be used

✓ less machine downtimes

4 proven type ranges are available

Try our configurator to select the right dedusting device



NEW
Discover the perfect product with just two specifications!

www.helios-systems.de/en/granulate-regrind-dedusting#c6983



HELIO®Clean 2
HELIO®Clean 2 MIX

Degree of dedusting
sufficient

Material throughput
up to 25 kg/h



HELIO®Clean 3 Plus

Degree of dedusting
good

Material throughput
up to 15 kg/h



HELIO®Clean 5

Degree of dedusting
perfect

Material throughput
up to 25 kg/h



HELIO®Clean Pro

Degree of dedusting
very good

Material throughput
up to 150 kg/h

HELIO®Clean 2 | HELIO®Clean 2 MIX

Compressed air conveyor with dust removal function

As a device with own control or as JETBOXX® dryer option

The HELIO®Clean 2 as well as the HELIO®Clean 2 MIX conveyor / dedusting units were specially developed for injection moulding and are suitable for mounting on a processing machine (type M) or container (type B).

With the aid of a **dedusting adapter**, the HC-2 M or HC-2 MIX M can be integrated into an existing conveying line on site.

■ compact and light-weight construction

■ 1-component version -HC-2
2-components version -HC-2 MIX

■ easy operation

■ special glass construction

■ dust collection container in 5.5 liters effective size

■ optimum price/performance ratio

■ material throughput **up to 25 kg/h***

* depending on material and required degree of dedusting



type B



type M



type M on dedusting adapter



Option CE included in the WINneo®-2 control unit



type B MIX



type M MIX



type M MIX on dedusting adapter



Option ME included in the WINneo®-2 control unit

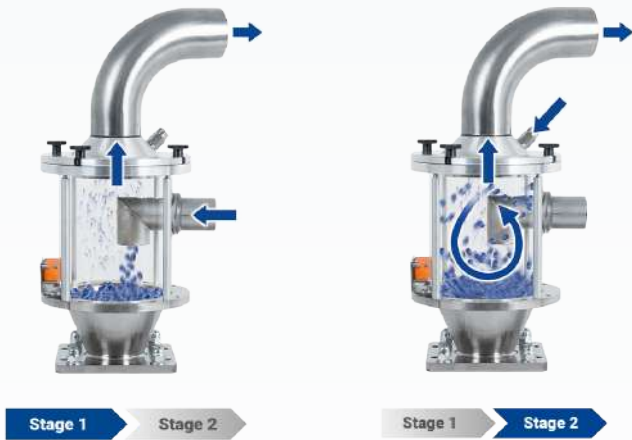
Special glass construction

The dedusting chamber is made of abrasion-resistant special glass. This enables efficient cleaning with the aid of ions, as these are not neutralised immediately when they hit the sifter wall, but can release the binding forces between dust and granules over a longer period of time.

This design also enables the conveying and cleaning process to be viewed from all sides.

2-stage dedusting process

Dust separation by compressed air jet and whirling



Filling

Conveying by using a Venturi suction lance, the material is already pre-dedusted during conveying, dust removal into the dust collection container.

Whirling

Dedusting after each conveying process by 1 to 9 dedusting impulses by means of compressed air jet from above onto the dedusting portion, dust removal into the dust collection container.



Control HC-2 for 1 component

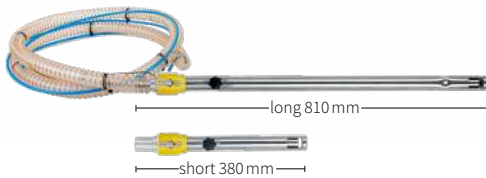
Fig.: model year 2025



Control HC-2 MIX for 2 components

Fig.: model year 2025

Equipment



Conveying hose set

- compressed air driven Venturi suction lance short or long version
- conveying height up to 6 m
- conveying hose PUR-H DN 32 (3 m) with earthing

Options

- conveying hose long (5 m)



STANDARD dust collecting container

- dust collecting container in 5,5 liters effective size
- dust removal hose 5 m (DN-50)

The removed dust is separated from the process air in a dust collecting container with an exhaust air filter.



OPTION dust collecting container with automatic filter cleaning

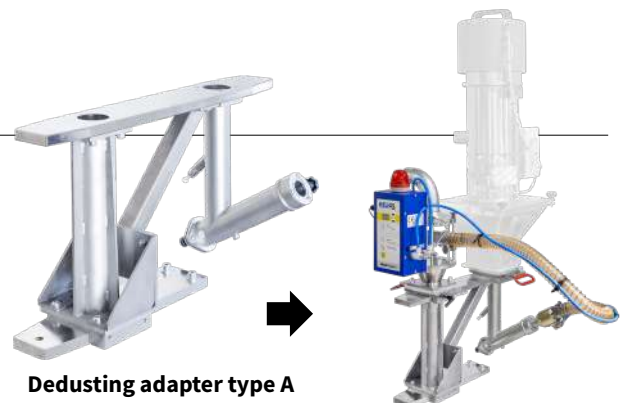
- dust collecting container in 15 liters effective size
- dust removal hose 5 m (DN-50)

The removed dust is separated from the process air in a dust collecting container with an exhaust air filter **and** automatic filter cleaning.

Dedusting adapter

For integration on existing conveying systems on site

The existing on-site conveying unit remains in use - it is simply moved sideways on a sliding rail. At this new position a suction device is located under the rail, from which the conveyed material is sucked into the HELIOS dedusting device, dedusted in portions and transferred to the processing machine (type A).



Dedusting adapter type A

HELIO®Clean 3 Plus

Conveying / dedusting device with ion shower

Reliable dust removal by 5-stage dedusting process

The new HELIO®Clean 3 Plus conveying / dedusting device has been specially developed for injection moulding processes with small to medium throughputs of up to 15 kg/h. It is suitable for direct mounting on a processing machine (type M) or on container (type B).

With the aid of a **dedusting adapter**, the HC-3 Plus M can be integrated into an existing conveying system on site.

- **small and efficient**
- **compact construction**
- **light weight**
- **air sifting with ion shower**
- **special glass construction**
- **easy operation / good degree of dedusting**
- **dust collection container in 5.5 liters effective size**

- **cleaning by means of ions**
- **5-stage dedusting process**
- **optimum price/performance ratio**

- **material throughput** **up to 15 kg/h***

* depending on material and required degree of dedusting;
example based on PMMA/PC/COC/COP

Special glass construction

The dedusting chamber is made of abrasion-resistant special glass. This enables efficient cleaning with the aid of ions, as these are not neutralised immediately when they hit the sifter wall, but can release the binding forces between dust and granules over a longer period of time.

This construction also enables the conveying and cleaning process to be viewed from all sides.



i Ion shower

While the granulate is whirled up in the deduster, a continuous stream of ionised air is blown through the portion to be dedusted.

In this way, the binding forces between dust particles and granules are reduced to such an extent that the dust loosens and can be separated by air sifting. Due to the special glass construction, the ions are particularly „long-lasting“ and therefore lead to a high efficiency of the ion shower.



type B



type M



type M on dedusting adapter

Conveying and 5-stage dedusting using the DKM-process

1 Conveying

an exactly equal portion of granulate.



1

2 Air sifting 1 Air sifting 2

Dust separation by air sifting with ionised air with freely adjustable whirling.



2

3 Discharging

Transfer of the dedusted portion of granulate.



3

4 Cleaning 1 Cleaning 2

The sifter glass is neutralised with ionised air and perfectly cleaned then.



4



Control

Equipment



Conveying hose set

- compressed air driven Venturi suction lance short or long version
- conveying height up to 6 m
- conveying hose PUR-H DN 32 (3 m) with earthing

Options

- conveying hose PUR-H DN 32 long (5 m)



STANDARD dust collecting container

- dust collecting container in **5,5** liters effective size
- dust removal hose 5 m (DN-50)

The removed dust is separated from the process air in a dust collecting container with an exhaust air filter.



OPTION dust collecting container with automatic filter cleaning

- dust collecting container in **15** liters effective size
- dust removal hose 5 m (DN-50)

The removed dust is separated from the process air in a dust collecting container with an exhaust air filter **and** automatic filter cleaning.

HELIO®Clean 5

Conveying / dedusting device with ion shower and Superclean

Reliable dust removal by the new DKM process

The new HELIO®Clean 5 conveying / dedusting device has been specially developed for injection moulding processes with small to medium throughputs of up to 25 kg/h. It is suitable for direct mounting on a processing machine (type M) or on container (type B).

With the aid of a **dedusting adapter**, the HC-5 M can be integrated into an existing conveying system on site.

- **small and efficient**
- **compact construction**
- **light weight**
- **air sifting with ion shower**
- **SUPERCLEAN function***
- **special glass construction**
- **easy operation / perfect degree of dedusting**
- **Interface: MODBUS RTU**
- **dust collection container in 15 liters effective size**

■ **cleaning by ions**

■ **6-stage dedusting process**

■ **optimum price/performance ratio**

■ **material throughput** **up to 25 kg/h****

** depending on material and required degree of dedusting;
example based on PMMA/PC/COC/COP

Special glass construction

The dedusting chamber is made of abrasion-resistant special glass. This enables efficient cleaning with the aid of ions, as these are not neutralised immediately when they hit the sifter wall, but can release the binding forces between dust and granules over a longer period of time.

This design also enables the conveying and cleaning process to be viewed from all sides.



i SUPERCLEAN Function



type B

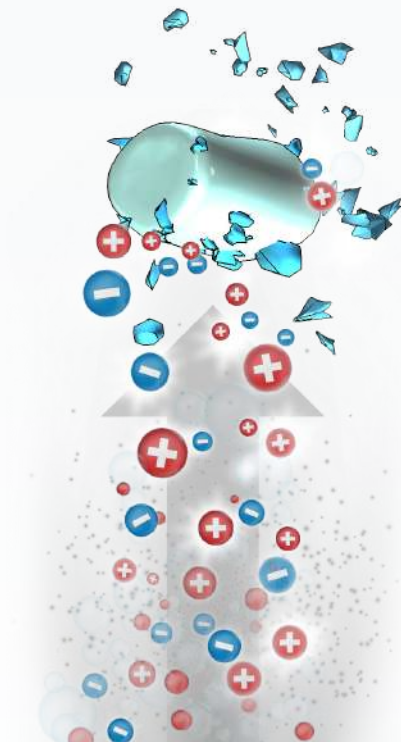


type M



type M on dedusting adapter

Conveying and 6-stage dedusting using the DKM-process



1 Conveying

an exactly equal portion of granulate

2 Air sifting 1

3 Air sifting 2

Perfect dust separation by air sifting with ionised air with freely adjustable whirling.

4 Discharging

Transfer of the dedusted portion of granulate.

5 Cleaning 1

The sifter glass is neutralised with

6 Cleaning 2

ionised air and then perfectly cleaned.

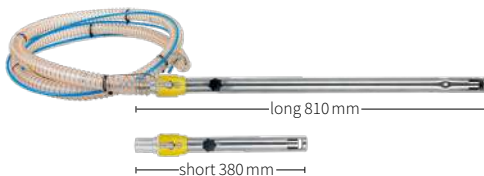
7 Cleaning 3

Dust collector exhaust air filter



Control

Equipment



Conveying hose set

- compressed air driven Venturi suction lance short or long version
- conveying height up to 6 m
- conveying hose PUR-H DN 32 (3 m) with earthing

Options

- conveying hose PUR-H DN 32 long (5 m)



STANDARD

dust collecting container with automatic filter cleaning

- dust collecting container in **15** liters effective size
- dust removal hose 5 m (DN-50)

The removed dust is separated from the process air in a dust collecting container with an exhaust air filter **and** automatic filter cleaning.

Dedusting dryers DD 12 / DD 24

Zero-defect production in the injection moulding of optical and medical parts

DD 12 / DD 24 for direct mounting on an injection moulding machine

Conveying + Dedusting + Drying

Compact material preparation unit for highest demands in injection moulding of optical parts. The unit consists of a **WINneo®-2** dryer and a **HELIOS HELIO®Clean-5** dedusting device with integrated filling technology.

- drying module in octagonal construction

- removable dryer control unit with filling level calculator

- drying with dry air / nitrogen

- dew point measurement with display and alarm function

- overdrying protection

- MODBUS RTU interface

- **NEW: WINneo®-2.com - Smart Factory interface (opt.)**

- Ethernet (TCP/IP)

- HELIOS® material database

- freely programmable database

- intuitive user guidance

- remote control (W-LAN)

- OPC UA Interface (LAN)

- **HELIO®Clean-5 - perfect degree of dedusting**

- 6-stage dedusting by the DKM process

- special glass / stainless steel

- portioner for transfer into the tower drying bin

- SUPERCLEAN deduster cleaning

- dust collecting container in 15 litres size with automatic filter cleaning



Application example for Smart Factory



ARBURG GESTICA-Control



ENGEL CC330-plus-Control



Haitian Sigmatek-Control



Sumitomo DEMAG MC5+ Control



Fanuc Roboshot-Control



Dr. Boy Procan-ALPHA-6°-Control

Technology
1. Modbus
2. OPC-UA

Features
1. ready
2. WINneo.com



Tower drying bin 'Optical Edition' in octagonal construction

- octagonal inner container of stainless steel, fully insulated
- powder-coated cladding sheet, very scratch-resistant
- optimal drying gas distribution
- viewing window



Viewing window with filling level scale

At the tower drying bin, the filling level can be continuously preselected between 4 – 10 liters or 6 – 20 liters by means of an adjustable filling level sensor, depending on the throughput and the permissible dwell time.



Container lid can be folded down for easy cleaning

The container lid can be opened in just a few steps.

The lid, together with the dedusting device is tilted 90° to the side.

Two stable flap holders ensure a safe cleaning position.

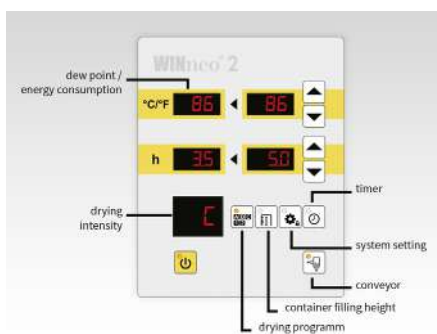
Process control



Control detachable

The drying process control can be easily detached from the tower drying bin by means of a clamping lock, e. g. in order to attach a bridging control unit during recalibration without interrupting production.

Compressed air or nitrogen can be used as drying gas.



Drying Process Control

- heating power 750 W
- drying gas flow rate 85 | 115 | 150 l/min
- compressed-air dry-gas dryer with patented HELIOS digital pneumatics
- drying temperature range 30–150 °C
- quick selection button for 3 drying intensities A, B, C
- drying programs 1, 2 and 3
- weekly timer
- dew point measuring down to –50 °C
- display of drying temperature and drying time
- factory calibration with a calibration certificate for
 - 2 drying temperatures
 - 3 drying gas volume flows
 - 2 dew points
- overdrying protection depending on throughput
- alarm lamp and potential-free contact
- MODBUS RTU
- WINneo®-2.com prepared



Deduster control

- conveying
- air sifting
- cleaning
- status display
- error messages / notes
- ioniser maintenance
- reset to factory settings
- display of operating hours
- discharging time
- filter cleaning

HELIOS dedusting dryers for maximum purity and perfect drying result



DD 12 "Optical Edition"

Tower Drying Container:
Octagon construction for the best possible drying efficiency

SUPERCLEAN included



DD 24 "Optical Edition"

Tower Drying Container:
Octagon construction for the best possible drying efficiency

SUPERCLEAN included



DD 6

Filling volume:
2–6 Liter



DD 20

Filling volume:
20 Liter



DD 30

Variable filling volume:
20–30 Liter

Highlights



DD 12 "Optical Edition"

Stepless filling level:
4–10 Litres



DD 24 "Optical Edition"

Stepless filling level:
6–20 Liter Litres



HELIO® Clean 3 Plus

For optical applications with throughputs
up to 15 kg/h



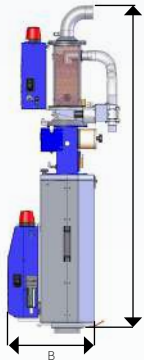
HELIO® Clean 5

up to 25 kg/h



**"SUPERCLEAN"
Function**

Technical Data

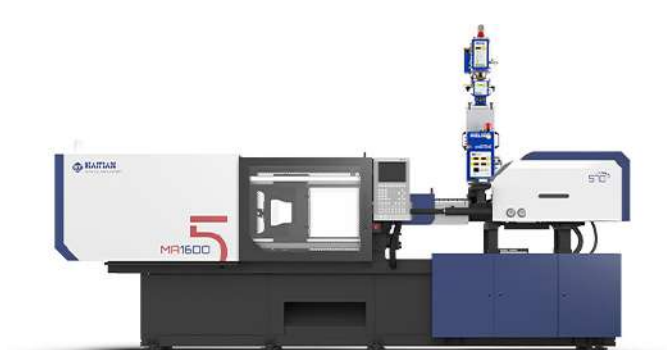
	DD 12 Optical Edition	DD 24 Optical Edition	DD 6	DD 20	DD 30
					
Throughput* [kg/h]	0,4 – 2,4	0,8 – 4,8	0,2 – 1,2	4,0	4,0 – 6,0
Drying Air [m³/h]	4,5 – 9,0		2,4 – 4,8	4,5 – 9,0	
Max. Heating Power [kW]	0,75	0,75	0,4	0,75	0,75
Width A [mm]	304	335	260	396	396
Depth B [mm]	361	405	293	415	415
Height C [mm]	1222	1380	1097	1115	1283

at a bulk density of 0.6 kg/dm³

Injection moulded sample parts



Application examples



HELIO® Clean Pro

Granulate cleaner for plastics processing

The new HELIO®Clean Pro devices are the most powerful HELIOS dedusting units and have been specially developed for injection moulding and extrusion. They are characterised by particularly gentle conveying and dedusting with an ion shower and are suitable for the most difficult dedusting tasks.

- 5-stage dedusting process

- gentle dedusting

- max. dedusting capacity

- special glass construction

- control stand with cleaning aid

- air-sifting with ion shower
2 integrated ionisers



HELIO® Clean Pro 20

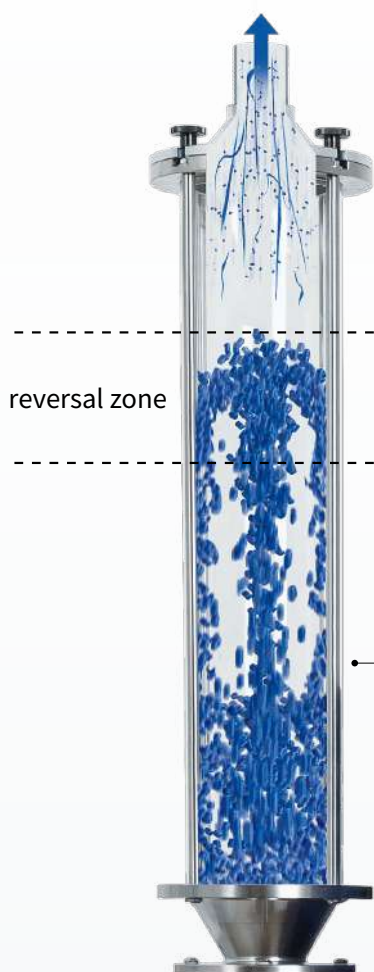
material throughput
up to 60 kg/h*



HELIO® Clean Pro 30

material throughput
up to 150 kg/h*

* depending on material and required degree of dedusting, example based on PMMA/PC



dust separation

Light parts such as dust or lints leave the sifter at the top through the sieve disc and are separated into the dust collection container.

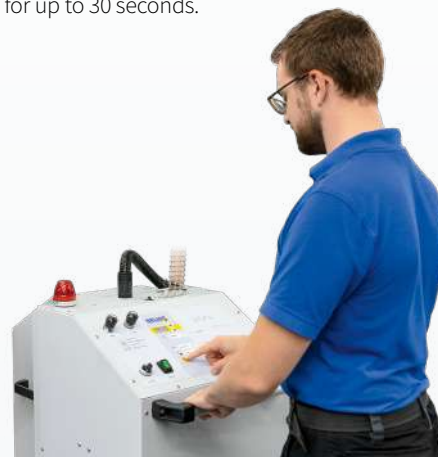
material fountain



A laminar air stream with ionized air carries in an adjustable way the material to be dedusted up to the upper third of the sifter, where it reverses by gravity and flows back along the glass wall to the point of origin. This ion shower repeats for up to 30 seconds.

special glass construction

The dedusting chamber is made of abrasion-resistant special glass. This enables efficient cleaning with the aid of ions, since these are not neutralised immediately when they hit the sifter wall, but can release the binding forces between dust and material over a longer period of time.



System control HELIO®Clean Pro 20

5-stage dedusting process

Air-sifting in fountain with ion shower and dust extraction



Conveying

Pre-dedusting during filling at low speed vacuum conveying with dust removal.

Air-sifting 1 + 2

+ ion shower

Gentle air-sifting with ionized air. Fountain with laminar air flow and dust removal.

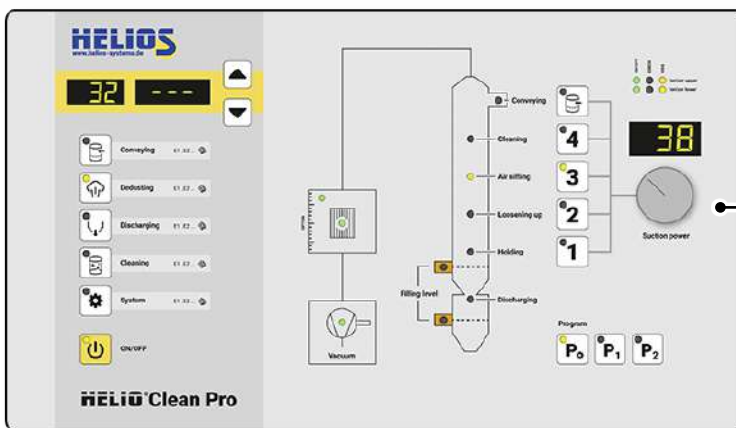
Discharging

Transfer of the dedusted portion of granulate.

Cleaning

with SUPERCLEAN

Automatic cleaning and neutralization of the sifter glass with ionized air after emptying carried out and that following dust removal.



HELIO® Clean Pro system control

Control stand with dust collecting container

- intuitive operating
- low energy consumption
- steplessly adjustable vacuum unit
- dust collector container
- automatic filter cleaning
- quick-release coupling for power supply line

System control
HELIO® Clean Pro 30

HELIO® Clean type overview

We will be happy to help you to select the right device for your requirements. Ideally, you are welcome to send us a material sample of the granulate or regrind material to be dedusted and we will carry out tests for you in our technical centre. In case of a positive result, we will make a recommendation for the ideal device and you can test the deduster at your site.



	HELIO® Clean 2 HELIO® Clean 2 MIX	HELIO® Clean 3 Plus	HELIO® Clean 5	HELIO® Clean Pro 20	HELIO® Clean Pro 30
material throughput*	up to 25 kg/h	up to 15 kg/h	up to 25 kg/h	max. 60 kg/h	max. 150 kg/h
dedusting portion	max. 0.25 litre	max. 0.5 litre	max. 0.5 litre	max. 0,5 – 1,0 litre	max. 0,5 – 2,0 litres
conveying technology	Venturi suction lance(s)	Venturi suction lance	Venturi suction lance	Suction blower in the control stand	Suction blower in the control stand
process	Whirling up by compressed air jet from above	DKM process Air sifting with ion shower by circulating in the fountain	DKM process Air sifting with ion shower by circulating in the fountain	Air sifting with ion shower by circulating in the fountain	Air sifting with ion shower by circulating in the fountain
ioniser	No ionisation	1 ioniser	1 ioniser	2 ionisers	2 ionisers
degree of dedusting	sufficient	good	perfect	very good	very good
dust removal	Separate dust collection container	Separate dust collection container	Separate dust collector with automatic filter cleaning	Dust collector integrated in control stand with automatic filter cleaning	Dust collector integrated in control stand with automatic filter cleaning
features	■ Compact construction ■ 1- or 2-components version (MIX) ■ Special glass construction	■ Compact construction ■ Cleaning of the sifting glass by rinsing with ions ■ Special glass construction	■ Compact construction ■ Cleaning of the sifting glass by rinsing with ions ■ Special glass construction ■ Superclean function ■ Interface: MODBUS RTU	■ Separate control stand combined with 3-stage vacuum generator and dust collecting container ■ Cleaning of the sifting glass by rinsing with ions ■ lockable conveying line ■ Locking- / discharging flap ■ Swivel/tilt dedusting chamber for cleaning ■ Conveying speed and air sifting power adjustable. ■ Power consumption max. 1.1 kW	■ separate sifter and control stand ■ Cleaning of the sifting glass by rinsing with ions ■ Superclean function ■ Hinged sifter for cleaning ■ intuitive user guidance ■ Energy consumption 0,5 kW – 1,3 kW
operation site	■ on processing machine ■ on drying container ■ on dedusting adapter	■ on processing machine ■ on drying container ■ on dedusting adapter	■ on processing machine ■ on drying container ■ on dedusting adapter	■ on processing machine ■ on drying container ■ on dedusting adapter	■ directly on processing machine ■ on dedusting adapter ■ as a stationary dedusting unit

* depending on material and required degree of dedusting;
example based on PMMA/PC/COC/COP

Dedusting adapter for conveying systems

Integration of all HELIO®Clean dedusting devices in existing conveying systems

Suitable for existing conveying systems of any make

The HELIOS dedusting adapter is a truly superb new development, which can be used to upgrade existing conveyor systems – regardless of make. Depending on the length of the conveying section and the number of deflections, abrasion occurs during material supply. This abrasion can lead to serious problems in the form of dust or angel hair in the feed zone of the processing machine or the end product. The innovative HELIOS dedusting adapter intervenes precisely where there are real problems and therefore a need for action.

The existing on-site conveying unit remains in use - it is simply moved sideways on a sliding rail. At this new position, a suction device is located under the rail, from which the conveyed material is sucked into the HELIOS dedusting device, dedusted in portions and transferred to the processing machine (type A).

If the operator temporarily does not require dedusting at this conveying point, the HELIOS deduster can be moved to the 'parking position' and the conveying device can be moved back to its original position above the feed zone (type B). The conveyed material then flows directly back into the processing machine.

Adapter

The HELIOS dedusting adapter can be used with all 4 series for throughputs of up to **15 | 25** or up to **50 kg/h** per conveying point.*



HELIO®Clean Pro 30 on dedusting adapter

■ the adapter is suitable for any conveying equipment

■ for product series:
HELIO®Clean-2 | HELIO®Clean-3 Plus | HELIO®Clean-5 and
HELIO®Clean-Pro

■ plug-and-play compatible

■ material throughput **up to 50 kg/h***

* depending on material and required degree of dedusting;
example based on PMMA/PC/COC/COP

The adaptation consists of a **sliding rail with adapter** for mounting on the processing machine and a **suction device** for HELIOS dedusters of the following series:

■ HELIO®Clean 2

■ HELIO®Clean 3 Plus

■ HELIO®Clean 5

■ HELIO®Clean Pro

■ Fits for any available conveying device.

■ **OPTION**
5-litres intermediate container for on-site conveyor.

* depending on material and required degree of dedusting;
example based on PMMA/PC/COC/COP

JETBOXX[®] SYSTEM



Dry-air dryers for plastic granulate

By combining system basic components you can implement optimal solutions for every setting of task.
With modified tasks the components can be easily recombined.

JETBOXX[®] System Variations



Top-mounted dryers



Stand-alone dryers



Deduster dryer



Variable dryer station

JETBOXX[®] System Components



Controls



Drying containers



Conveying techniques



Accessories

JETBOXX® Top-mounted dryer

Mounting directly on the feeding zone of the processing machine

minimal space requirement



JETBOXX® 3 liters with manual filling



JETBOXX® set 20 liters with option C



JETBOXX® set 3 liters



JETBOXX® set 12 liters with option C



JETBOXX® set 50 liters with option CE



Refit for all JETBOXX® drying control units manufactured from 2000 onwards

JETBOXX® Stand-alone dryer

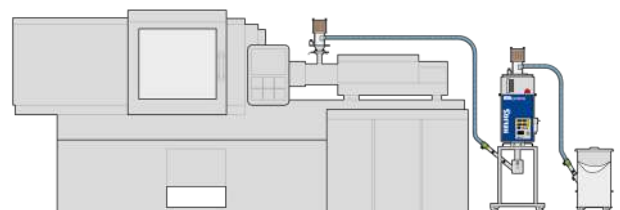
Placement next to the processing machine and conveying to the feeding zone



JETBOXX® 50 liters



JETBOXX® 200 liters



JETBOXX® Control

perfect drying result by **throughput-/ material dependent dryer settings**

	WINneo®-2
quick dial buttons	drying program ✓
	filling level calculator ✓
	week timer ✓
	system settings ✓
	conveying ON/OFF ✓
conveying points	conveying point 1 (drying container filling) - 1 component with dedusting ○
	conveying point 1 (drying container filling) - 2 components with dedusting ○
	Discharge aid at the dryer outlet ○
	conveying point 2 (processing machine feeding) - 1 component with dedusting ○
functions	Dew point measurement and dew point monitoring ✓
	dew point alarm ✓
	overdrying protection ✓
	drying temperature limitation with adjustable tolerance ✓
system interfaces	interface for Modbus-RTU ✓
	NEW WINneo®-2.com (TCP/IP) Remote control via W-LAN OPC UA via LAN (OPC UA 40082-6 / EUROMAP 82.6) ○
	as standard ✓ optionally ○



NEW: WINneo®-2.com package for Smart Factory with two applications: .pro und .net

- With **WINneo®-2.pro**, the integrated OPC UA server connects the dryer to the digital production network via the standardised OPC UA interface (OPC UA 40082-6 / EUROMAP 82.6) as a plug-and-play solution via **LAN**. This enables granulate drying to be integrated into a Smart Factory environment.



Haitian Sigmatek-Control



Sumitomo Demag MC5+ Control



Fanuc Roboshot-Control



Dr. Boy Procan-ALPHA-6®-Control

Application example for Smart Factory



ARBURG GESTICA-Control



ENGEL CC330-plus-Control



Technology
1. Modbus
2. OPC-UA

Features
1. ready
2. WINneo.com

The WINneo®-2.com package consists of a high-performance hardware module.



■ WINneo®-2.net

Remote control of the drying process via **WiFi**.

JETBOXX® Variable dryer station

HELIOS top-mounted dryers are placed on a base frame with docking plates. The drying containers can be removed and carried to the processing device.

When changing the setting of task, the components can be easily combined or used as top-mounted dryers again.



JETBOXX® Docking plate



2/3/4-fold base frame

Suction devices with dry air conveying

3 new types of suction devices allow a 100 percent avoidance of post-humidifying of the dried material anew in the waiting or conveying mode.



XT-1 mini



XT-1



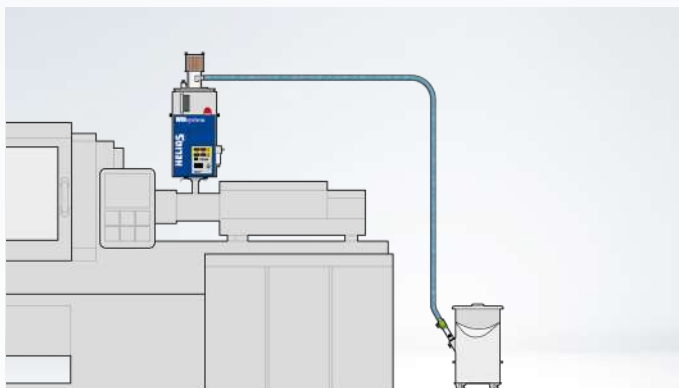
XT-2

Conveying with dry air Zero post humidification



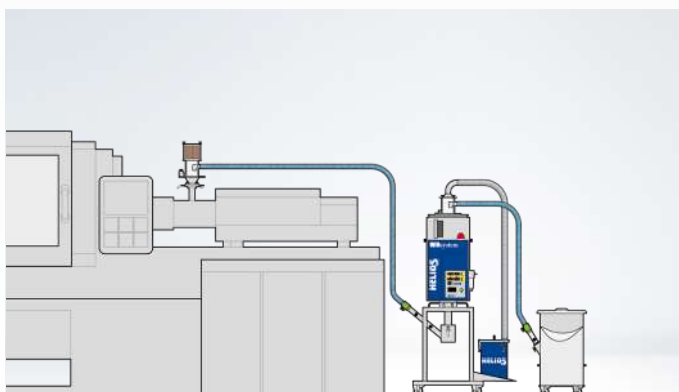
Closed conveying system.
Venturi principle without suction of ambient air.

Examples of use



A variant

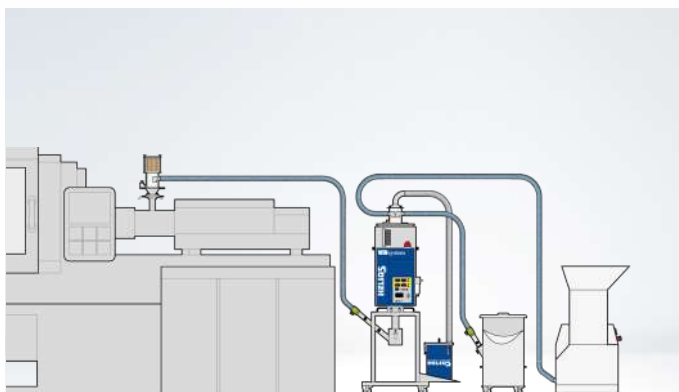
Conveying and drying of one component on the feeding zone.



B variant

Conveying, dedusting and drying of one component next to the injection molding machine. Conveying of the dried material onto the feeding zone.

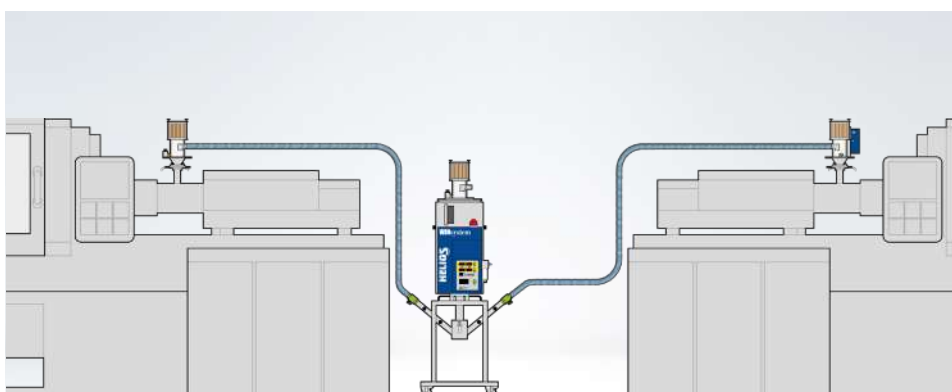
Selectable with/without dry air conveying.



C variant

Conveying, dedusting and drying of two components (virgin/regrind material) next to the injection molding machine.

Conveying of the dried material onto the feeding zone.
Selectable with/without dry air conveying.



D variant

Example:
Feeding of two machines
with dried material.

Selectable with / without
dry air conveying.

JETBOXX® System Components

1 - Component conveyors with exhaust air filter



Conveying hose set

- DN 32
- PUR conveying hose set
- Suction lance Venturi long/short



1 - or 2 - Component conveyors with dedusting



Conveying set

- DN 32
- PUR-H conveying hose set
- Venturi suction lance long/short

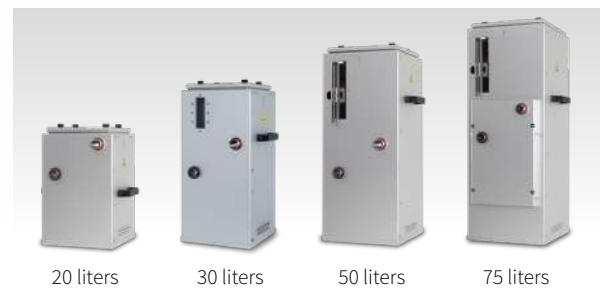
Dust removal container



Mini drying containers



Drying containers



Options, accessories



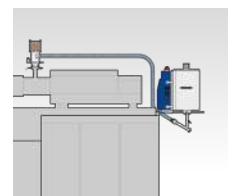
Machine adapters



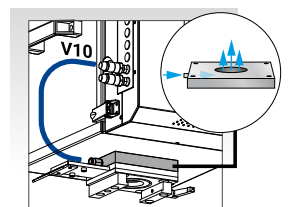
Crane bracket



Docking plate



Docking place



Loosening aid



Split version



Mobile base frame



UP2000



Dry air conveying



HCA Conveyors

OKTOMAT® SYSTEM



The problem

The discharging of Octabins and Big Bags using suction pipes is often difficult and not always practical. The conveying is interrupted too often and leads to production disruptions. Often, the film bag is sucked or the material does not flow continuously, which is particularly problematic at the end of the discharging process. Frequently an operator has to guide the suction pipe by hand for a longer period of time in order to discharge a bulk bag.



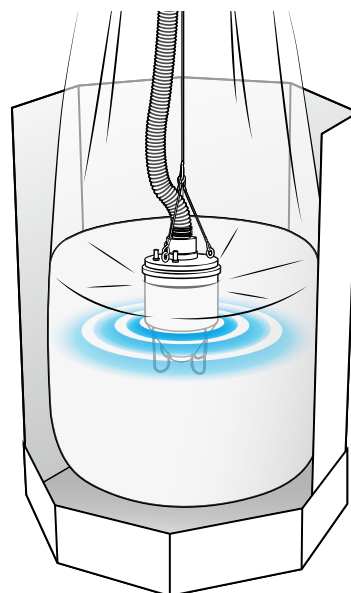
The solution

OKTOMAT® Emptying stations

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



Vibrating suction heads



Operating principle

Video at www.helios-systems.com



1 During the suction process, the flexible bulk bag wall is pulled upwards and inwards via the automatic bag tightening mechanism.



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



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

For all bulk bags with foil inlet or loops



Octabin

bulk bags with foil inlets



Big Bag

bulk bags with loops



Lattice boxes

with foil inlets

Just pallet jack will do



OKTOMAT® Type overview



Type	SOS	SOS INOX	SOS Classic
	SOS series		
	Controlled automatic lifting and lowering of the suction head for optimum suction conditions in the bulk bag Oscillation of the foil / Big Bag tightener as a flow aid for the bulk material in border areas to achieve a max. emptying capacity		
Stroke	Bag tightening stroke 1000 mm	Bag tightening stroke 1000 mm	Bag tightening stroke 1000/1500 mm
Tension force	Bag tightening force 1500 N	Bag tightening force 1500 N	Bag tightening force 2400 N
Equipment	Full equipment	Full equipment	Full equipment
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
Operation	Operation sideways	Operation sideways	Operation on the front
Application	Suitable for almost all tasks	Suitable for all tasks, additional corrosion protection possible	Regrind, punch scrap waste, almost all applications. Bulk bags with large base area.

Material-related solutions

Oscillating suction head

SOS - series

Optimum material flow.

Oscillating bulk bag tightener

SOS - series

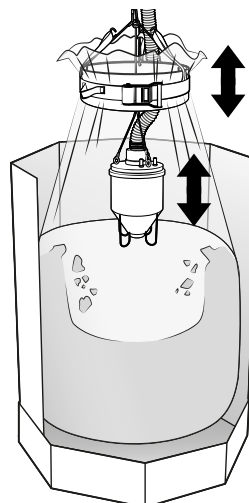
Brings bridged material and remaining border areas to collapse.

Fluidization

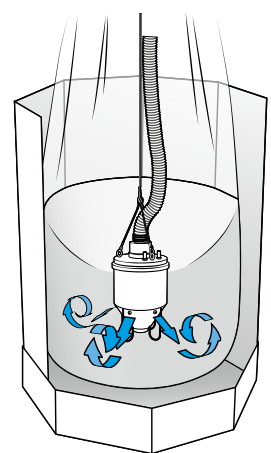
The material is fluidized additionally, the loosening takes place through compressed air nozzles.

Special suction head

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



Oscillating suction head and bulk bag tightener



Fluidization



SOS Classic INOX	
Bag tightening stroke 1400 mm	
Bag tightening force 2500 N	
Fully equipped high-end type	
Especially space-saving in depth, installation on hall wall, several stations next to each other	
Operation on the front or sideways	
Foodstuff, chemical, corrosion-protected, suitable for high-pressure cleaners	

ECO		ECO Classic
ECO series		
Automatic lowering the suction head with sinking filling level via counterweight, foil / Big Bag tightener steplessly adjustable		
Bag tightening stroke 1000 mm		Bag tightening stroke 1000/1500 mm
Bag tightening force 1500 N		Bag tightening force 2400 N
Basic equipment		Basic equipment, expandable to full equipment
Especially space-saving in width		Especially space-saving in depth, installation on hall wall, several stations next to each other
Operation sideways		Operation on the front
Free-flowing bulk materials		Free-flowing bulk materials with high density. Bulk bags with large base area.

System components

OKTOMAT® SYSTEM



basic frames



Controls



Vibrating suction heads



Foil / Big Bag tighteners

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® in practice

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.

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 / foil | ■ logistics | ■ automotive |
| ■ PVC processing | ■ paper finishing | ■ plug connectors |
| ■ recycling | ■ chemistry / raw materials | ■ packaging |
| ■ cable | ■ medical technology | ■ foil production |
| ■ optics | ■ food | |
| ■ lighting | ■ raw material handling | |
| ■ WPC | ■ technical parts | |



OKTOMAT® Conveying technology

The OKTOMAT® discharging stations are autarkic and matching for every suction conveying system for bulk materials. As soon as there is a minimum vacuum in the conveying pipeline or a relay signal is applied to the control unit, the OKTOMAT® switches on.

HELIOS vacuum conveying technology

HCA

compressed air driven
vacuum conveying
technology for max. 250 kg/h

of stainless steel

HCA-2 2 liters

HCA-5 5 liters*

*with enlarged filter



HFE

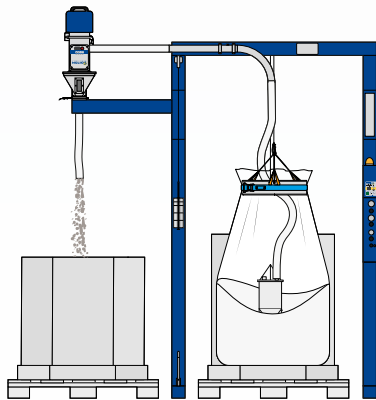
4 kW vacuum unit
with dust collecting container,
bypass valve and conveying control

stainless steel hopper loader

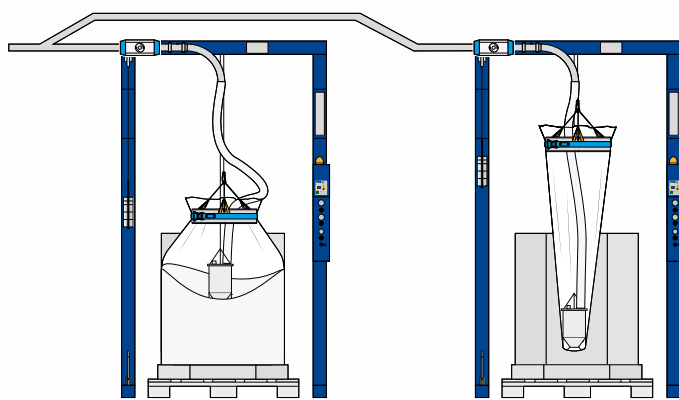
HFE INOX 20 liters*

HFE INOX 50 liters

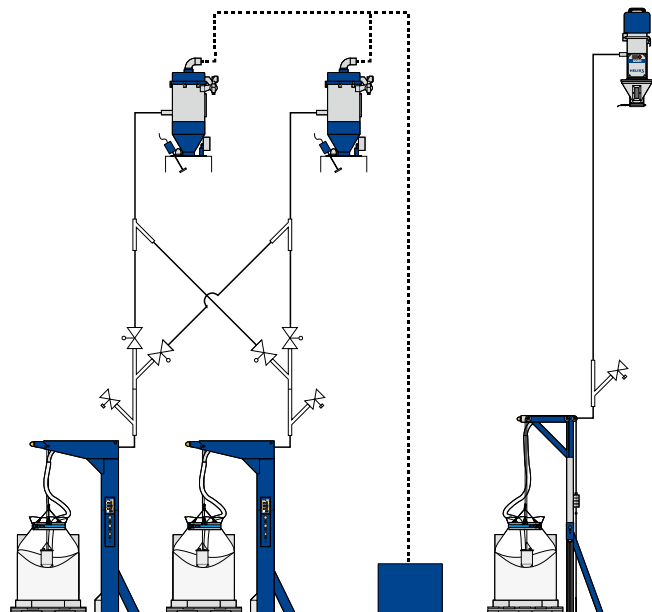
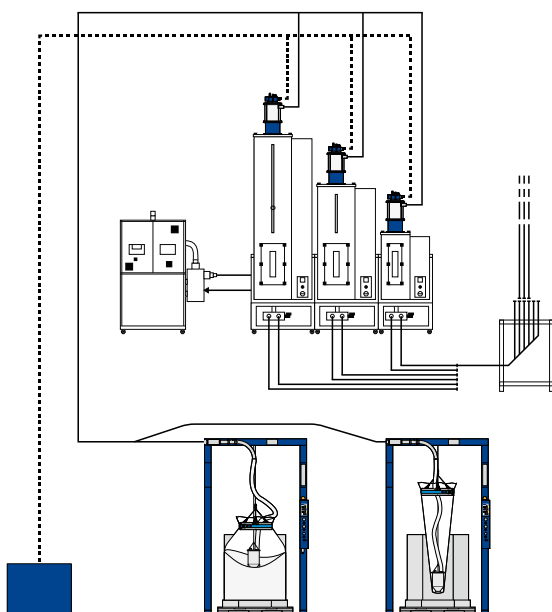
*with automatic filter cleaning



Refilling station



Double station with switchover



Refit for OKTOMAT® manufactured from 1997 onwards

Replacing/adding components gives you the opportunity to bring your OKTOMAT® up to date:

- extended service life of your OKTOMAT®
- cost-effective upgrading
- increased production reliability for your entire production line
- replacement with little effort
- increased user-friendliness

Simply scan the QR code for full details on the Refit campaign.



Refit for JETBOXX® manufactured from 2000 onwards

Replacing/adding components gives you the opportunity to bring your JETBOXX® dryer-system up to date:

- extended service life
- cost-effective upgrading
- improved production
- easy replacement
- high-quality products

Simply scan the QR code for full details on the Refit campaign.



Consulting and quoting

The first step for a successful and long-lasting cooperation always starts with the personal contact to the customer. Our experienced sales representatives will be happy to advise you directly on site about the latest technical developments from HELIOS and their possible applications.

We carry out significant material tests in our in-house technology center and provide you with a detailed test protocol. We will show you the advantages of our products for the expansion or modernization of your machinery and will immediately prepare an individual quotation for you.

Short delivery times of 4 - 8 weeks are standard at HELIOS.

After Sales Service

Our service department will be at your disposal during the entire period of use with competent advice on all pending questions or carry out repairs, maintenance and calibrations on request even on site.

Commissioning

Only those who know their equipment and machinery can make the best use of them. For this reason, all HELIOS products have detailed installation and operating instructions to make the proper use of our equipment as easy as possible and therefore ensure safe and efficient operation. HELIO®Clean dedusters are largely prepared for „Plug&Play“.

Spare parts delivery within 48h

A missing spare part can lead to a complete shutdown of the entire plant and therefore cause considerable financial damage.

We keep the majority of the necessary components in our spare parts warehouse, which we can provide within the shortest possible time.

Test equipment

Test equipment is available for almost all HELIOS products on the basis of a rental contract.

used worldwide

More than 1000 dedusting system units have been delivered by HELIOS



Training

Of course we also offer specific training directly on site or in our technical center.

During the training, your employees will be supported by our competent service technicians and learn the concrete handling of the technology used.

The acquired knowledge about our products reduces operating errors significantly and avoids possible failures in your production.

Take advantage of our training courses and benefit from additional advantages:

- Increasing the qualification of your employees
- Effective use of machines and equipment
- No downtimes due to operating errors
- Follow-up training after approx. 6 months



JETBOXX® dryer calibration

Constant dryer performance for a perfect drying result

HELIOS dryers are maintenance-free except filters.

All the granulate dryers are tested for several hours before delivery.

Dryer calibration in standard

All HELIOS dryers are factory calibrated for two dew point values, two drying temperatures and three volume flow rates with a calibration certificate.

Repeat calibrations

are performed on site by a HELIOS service technician or at the HELIOS works. For this purpose, the dryer control is simply detachable by means of quick clamps, no tools are necessary. To avoid production stops during the service, there are interim devices available from HELIOS.

Long-term warranty for all* dryers regarding

- maintenance
- repeat calibration
- availability of interim devices

* for all JETBOXX® dryers built since 1999



The perfect partner for your material handling

ISO 9001 certified

Perfection knows no compromise.



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