

WE CARE.



PNEUMATIC CONVEYING





Conveying - ProClean Conveyor PCC

Check list for quotation

CHECK
LIST

PERSONAL DATA

Company: _____
Street: _____
Postal Code / City: _____
Project: _____
Contact person: _____
E-mail: _____
Phone: _____
Fax: _____



RANGE OF APPLICATION

☐ Chemical industry ☐ Food industry ☐ Pharmaceutical industry
☐ API manufacturer ☐ _____

PRODUCT TO BE CONVEYED

PRODUCT DATA

Product designation: _____ Temperature [°C]: _____
Bulk density [kg/l]: _____ Particle size [mm or "]: _____
Moisture content [% H₂O]: _____ Angle of repose: _____

PRODUCT CHARACTERISTICS

☐ powdery ☐ sticky ☐ hardened ☐ flushing ☐ conductive
☐ flaked ☐ caking ☐ flammable (MIE _____) ☐ poor-flowing ☐ fragile
☐ free-flowing ☐ hygroscopic ☐ reacts with moisture ☐ pellet-shaped ☐ needle-shaped
☐ dusty ☐ lumpy (big) ☐ reacts with oxygen ☐ crumbly (small)
☐ fluidizing ☐ corrosive ☐ electrostatic charging ☐ graining: _____
☐ abrasive ☐ bridging ☐ toxic (OEL _____) ☐ _____

AMBIENT CONDITIONS

Available height above existing processing system [mm]: _____
Compressed air supply [bar]: _____ Power supply: _____ [Volt] _____ [ph] _____ [Hz]
Explosion protection?: _____ Protection class: IP _____
Explosive area: ☐ yes ☐ no Inside: _____ Outside: _____
Material of product touching parts: _____
Material of non-product touching parts: _____
Surfaces: _____



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GENERAL CONDITIONS - CONVEYING

Conveying path [m]: horizontal: _____ vertical: _____

Capacity: [kg/charge]: _____ [kg/h]: _____

Operating time: [h/day]: _____

Conveying line: ☐ fixed ☐ flexible ☐ ext. Start/Stop

Control: ☐ pneumatic ☐ electric

Conveying gas: ☐ air ☐ nitrogen ☐ _____

Type: ☐ non pressure; -1/+0,49 bar ☐ Pressure; -1/+6 bar

PRODUCT DISCHARGE

TYPE OF BIN

☐ FIBC ☐ Sack ☐ Drum ☐ Container ☐ _____

DISCHARGE WITH

☐ Suction lance ☐ Suction shoe

Volume [l]: _____ Weight [kg]: _____

Operating pressure [bar]: _____ Operating temperature [°C]: _____

DOWNSTREAM SYSTEM

☐ non pressure ☐ Pressure

TYPE OF BIN

☐ Drum ☐ FIBC ☐ Container ☐ Silo

☐ Reactor ☐ Dryer ☐ Glove box ☐ _____

Volume [l]: _____ Weight [kg]: _____

Operating pressure [bar]: _____ Operating temperature [°C]: _____

OPTIONS

Filter type: ☐ PTFE Filter felt ☐ PTFE sintered filter

☐ screwed ☐ Stainless steel filter

WIP solution: ☐ yes ☐ no

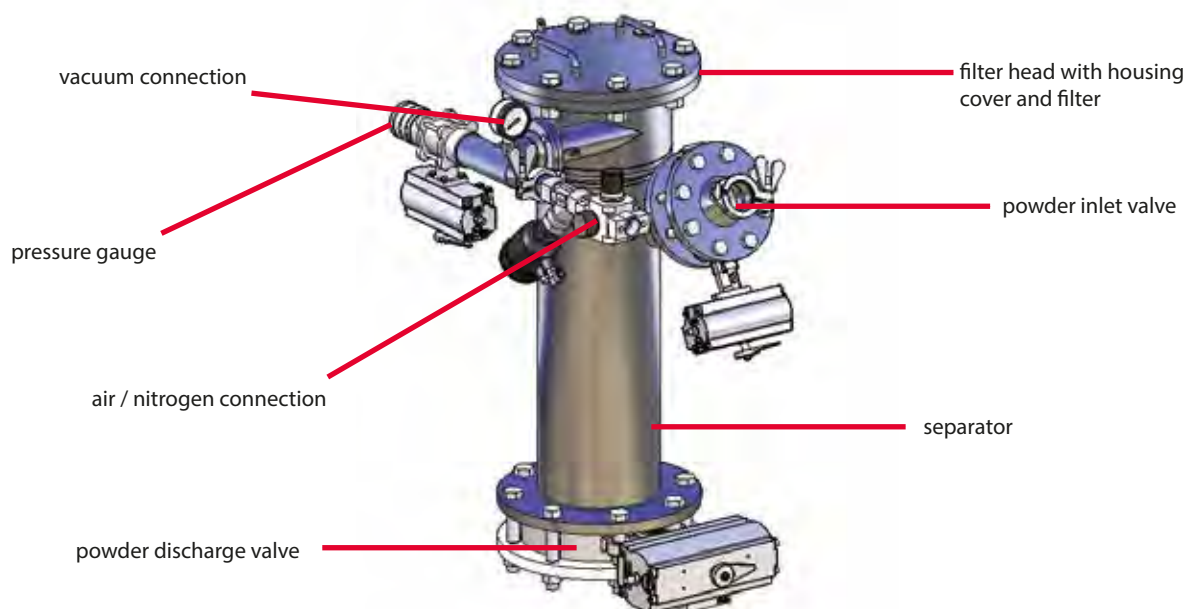
Covers: ☐ eye bolts ☐ sight glass ☐ Triclamp nozzle

Valves/fixtures: _____



DESCRIPTION AND CONSTRUCTION

The HECHT „ProClean Conveyor“ (PCC) is intended for the safe and gentle conveying of powders and granules in the pharmaceutical, chemical and food industry. Its special filter head improves your efficiency and offers various possibilities for a more flexible configuration of your system.



FUNCTIONAL DESCRIPTION

What does the ProClean Conveyor do?

- ◆ Conveying and metering of intermediate and end products in powder and granular form
- ◆ Discharging and filling of rigid and flexible bulk containers
 - ◆ Container
 - ◆ Big Bags
 - ◆ Dryers
 - ◆ Drums
 - ◆ Sacks
 - ◆ Mixers

INTENDED USE

What is the ProClean Conveyor particularly suited for?

- ◆ When working in a dust / contamination-free atmosphere
- ◆ When the product requires conveying without oxygen (inert)
- ◆ When transporting toxic, moist and other products with critical and difficult material properties
- ◆ Containers can be charged with low pressure or overpressure
- ◆ In areas with high requirements on cleanliness and hygiene



OPTIMIZE YOUR EFFICIENCY

AT A GLANCE



Ring filter with big filter surface
for a high conveying capacity



Easy filter replacement without
much effort



Sight glass for visual inspection



Doppelfilter, der mehr kann

High conveying capacity

The filter is the heart and at the same time the essential distinctive feature of each vacuum conveyor. In the case of the ProClean Conveyor (PCC), a powerful ring filter is used. The filter unit rests on the tubular separator like a head. Due to its cylindrical shape, the filter features a large surface and thus causes only little air resistance while at the same time requiring only little space.

This enables a high conveying capacity of up to 9600 litres/h.

Reduce the time needed for filter replacement

The filter can be replaced without much effort. This is due to the fact that, contrary to other systems, the filter does not close the separator at the top like a cover, nor does it extend into the vessel. This is why the vacuum / purge air unit could be mounted laterally to the filter head so that the cover can be opened easily without loosening additional connections. This is even easier in the case of the PCC version with hinged screws and hinge in the cover. Filter replacement has never been so easy.

Optimal setting of the operating parameters

Have you ever seen what happens in a vacuum conveyor during the conveying cycles or during cleaning? Using a sight glass optionally mounted into the cover, this is possible at any time and any place. Check the product flow and perform fine adjustments, if considered applicable as a result of your observations. Thus, it is possible to optimally set the operating parameters in order to achieve the best possible conveying capacity. Besides, you can check the efficiency of cleaning without having to dismantle the cover.

One ring filter is good, two are better

Special requirements implicate special applications. The free filter head permits to add another filter to the ProClean Conveyor. While product is being sucked in by one of the two filters, the other one can be cleaned. Thus, the double filter system enables permanent conveying and feeding of the product to the following process step. In addition, the cleaning gas is directly extracted via the double filter to prevent it from getting into the following vessel and to make sure that the product can be passed on in low-dust mode. In this way, no additional dedusting unit is required there.



BECOME MORE FLEXIBLE

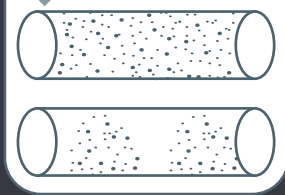
AT A GLANCE



Adding small quantities



Possible options:
Various filters and covers



From dilute-phase to
plug conveying



Installable where the
PCC is needed

Addition

In addition to the main amount of powder or granule to be conveyed, small quantities of one or several other products must sometimes be added to the process of further process steps.

A nozzle mounted in the cover permits to extend the PCC by a liner connection system (Mini-LAS¹) and add small quantities to the system easily and safely.

¹ The Mini-LAS is a containment system for closed discharging of pouches filled with product.

The agony of choice

Powder and powder are not the same thing. The manifold and different product attributes are the biggest challenge in pneumatic conveying. So much the better if you can respond variably and choose the appropriate type of filter depending on the product.

A PE sintered filter universal, a PTFE non-woven filter and a stainless steel felt filter for hygienic requirements are available.

When it comes to ease of use, most people tend to be very choosy. In this case, flexibility is the most important thing. Fortunately, the PCC offers such a large number of possibilities. Addition of small quantities and hinged cover are only two examples. You can also install an additional CIP spray nozzle into the free housing cover in order to clean even obstinate dirt. Various possibilities of inspection are provided with the optional sight glass, the level indicator or a vacuum / pressure display.

Fast or gentle

For pneumatic conveying of powders and granules, there are different modes of conveying depending on the gas velocity. From dilute-phase to gentle plug conveying, they can all be implemented. Contrary to the conventional vacuum conveyors that in most cases use dilute-phase conveying, or membrane filter system that are predominantly used in the dense flow area, the PCC handles the whole range. Thus, it is extremely variable in its use and can therefore meet challenges like decomposition of products, abrasion, cohesion, etc. and be adapted accordingly.

Integratable in many applications

Due to its compact design and the standardized connections, the ProClean Conveyor can be easily integrated into your existing system. Furthermore, a mobile unit is available, so that you are not bound to a fixed place, but can convey at different places.

If you need the pneumatic conveying system only for a short period of time, a rental device will give you the necessary flexibility to react e.g. to peaks in production.



FUNCTION DESCRIPTION

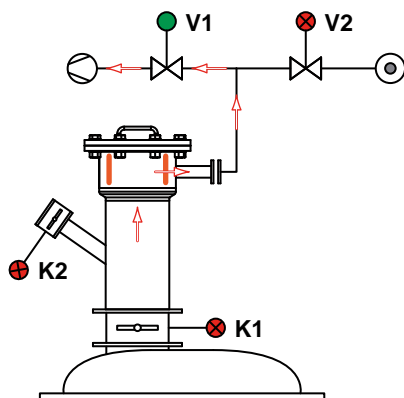
Pneumatic conveying with sack discharging & blender feeding.



KEY

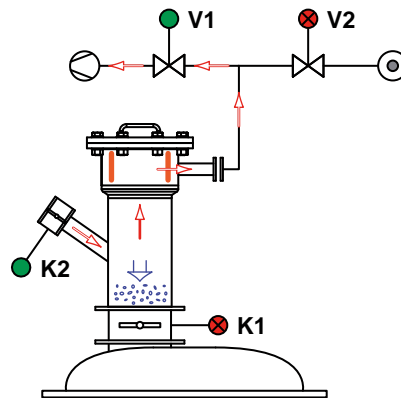
- V1: Vacuum valve
- V2: Cleaning valve
- K1: Product outlet valve
- K2: Product inlet valve
- ⊗ Closed
- ⊙ Open

1. INITIAL PHASE



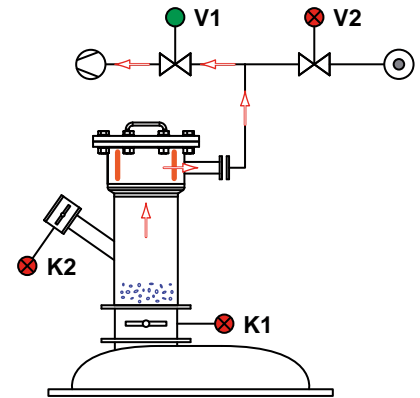
The vacuum pump generates low pressure in the separator.

2. FILLING



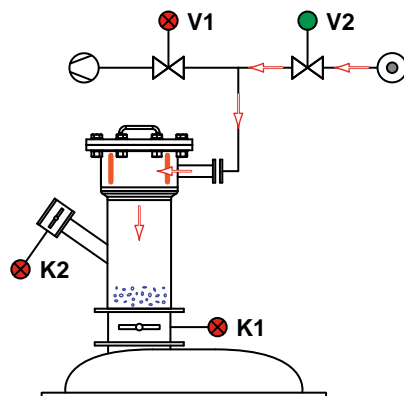
The product is transported to the separator.

3. EVACUATING *



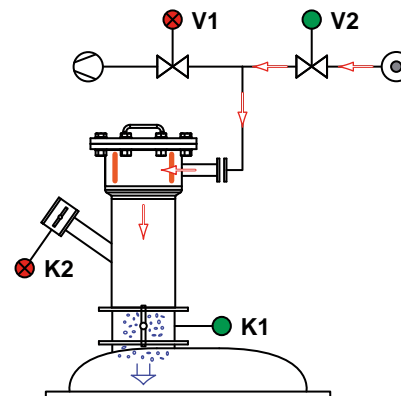
Evacuation of the residual air so that the product can be discharged in an oxygen-free atmosphere.

4. OVERPRESSURE **



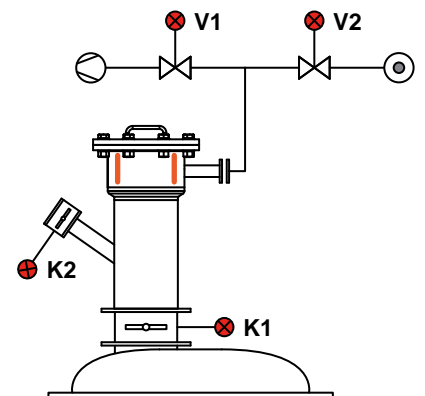
Overpressure is generated (if overpressure prevails in the reactor).

5. DISCHARGING



The separator is emptied. The filter is cleaned.

6. INITIAL POSITION



All valves and flaps are closed.

* with inert conveying

**when discharging into a pressure vessel



SPECIFICATION

PCC100

PCC150

PCC200

PCC300


STANDARD-SPECIFICATION	PCC100	PCC150	PCC200	PCC300
capacity (from-to) [liter/h*]	300 - 1200	700 - 2600	1500 - 5800	2600 - 9600
volume [liter]	5	11	24	44
recommended volume [liter]	4	10	19	38
filter surface [cm ²]	471	471	942	942
required suction capacity [m ³ /h]	160	200	200	300
typical cycle time [sek.]	15	15	20	20
inlet valve diameter [mm]	50	65	80	80
convey tube diameter [mm]	40	50	50	65
outlet valve diameter [mm]	100	150	200	300
vacuum valve diameter [mm]	40	40	50	50
clean gas valve diameter [mm]	25	25	25	25
air consumption for pneum. control 5 - 6 barg [m ³ /h]	6 - 8	7 - 9	9 - 11	15 - 17
weight [kg]	42	50	80	105

* theoretically based on 10m conveying lengths (5m conveying height) and 80% fullness of the powder chamber (conveying capacity may vary depending on the material characters)

SHUT-OFF VALVES	PRODUCT INLET / OUTLET			VACUUM & PRESSURE	
	Valve disk	Seal	Body	Seal	Body
①	AISI 316 polished	EPDM anitstatic	GGG 40.3	PTFE	stainless steel
②	AISI 316 polished	EPDM antistatic	stainless steel	PTFE	stainless steel
③	AISI 316 polished	PTFE conductive	GGG 40.3	PTFE	stainless steel
④	AISI 316 polished	PTFE conductive	stainless steel	PTFE	stainless steel



INCREASE YOUR QUALITY AND SAFETY

AT A GLANCE



Washing and cleaning with
the WIP or CIP version



PROCLEAN®

Highest requirements on
hygiene and safety



Approved and useable



Know-how and
additional services

Neat and clean

Where product change and cleanliness play a role, cleaning must also be possible. During the normal conveying cycles, only extremely little product residues remain in the separator due to the continuously smooth, cylindrical inner shape. Besides, the ProClean Conveyor can be equipped with a self-cleaning CIP (cleaning in place) or WIP (washing in place) function. In addition to efficient and gentle cleaning of the filter, the tangentially arranged cleaning nozzle also allows for optimal cleaning of the separator and the conveying hose.

The ProClean® principle

ProClean® is more than just a name. Highest requirements placed on hygiene and personnel and product safety rank first. ProClean® is a registered trademark and thus a reliable evidence for quality. Quickly dismantlable version, optimal cleaning, high-quality materials, product protection against cross contamination and contamination, protection of the operator against contact with the product as well as professional documentation and validation are the main features of the ProClean® principle and are used in particular with high-quality versions in the pharmaceutical, food and chemical industries.

Standards, rules and directives

The areas of solids handling and / or pneumatic conveyors are subject to standards and directives. The PCC has been designed taking into consideration these conditions and meets all requirements of the Pressure Equipment Directive 97 / 23 / EC. On request, the PCC is also available as ASME version for pressure vessels ("U-Stamp"). Dust explosions are also an important issue. The ProClean Conveyor does not have its own ignition source and can be used in all Ex zones, the appropriate safety measures being taken into consideration. In this connection, conveying and product infeed are also possible in an inert atmosphere.

More service by HECHT

In addition to excellent products, HECHT also stands for comprehensive competence in process technology and engineering. Together, we will find the best solution for your requirements. With our large experience and the know-how of our employees in sales and engineering, we will assist you on your way to the desired results.

As the conveying capacity significantly depends on the product to be transported, a detailed and realistic conveying test may assure you even prior to purchase that you have made the right decision.

As an alternative, the PCC can also be leased.



GENERAL INFORMATION

The new PCC 700 series is, up to now, the most powerful of the pneumatic conveying systems from HECHT. As an addition to the compact PCC-series (100 - 300) the PCC 700 has got more conveying power and the ability to transport your bulk solid long distances and heights.



Fig.: PCC 700 with horizontal filter unit

Filter unit (incl. Cleaning)

Product inlet valve

Separator vessel

Product outlet valve



Fig.: PCC 700 with vertical filter unit

HANDLING AND TECHNICAL FEATURES

From an application side as e. g. a Big Bag discharging station, the product goes via hoses and the product inlet valve into the separator vessel and fills it. Then, the product gas mixture is separated in the filter units. When the PCC 700 is fully filled, the suction-cycle stops and the product outlet valve opens. Now the product is going to be discharged into the different onside applications.

The reasons for the powerful performance of the PCC 700 series are mainly the flour huge filter units and the big volume of the separator vessel. Due to the suction of the product via vacuum and the alternate sequence of filter cleaning (two are cleaned and two are used for conveying), it is possible to convey the bulk solid over long distances and heights. Because of that, the complete volume of the separator vessel can be filled with only one suction cycle.

A supporting fact is the impressive filter-area (up to 3,6 m²) and through that less filter stress for less pressure difference. So a more effective transport of very fine granined products (< 1μ) can be achieved.

The low filter stress has also a very positive effect on the life time of the filter units. If there is a filter change, the change can be done within a few minutes very quick and completely by hand without any tools.

Important to know: The PCC 700 series are no pressure vessels and so the have not to be checked separately. They are working with a pressure of maximum 0,49 bar as a standard.

AT A GLANCE



Impressing conveying power up to 10 000 kg/h



Conveying over long distances and heights

SCOPE OF SUPPLY

- ◆ Product inlet- and outlet valve
- ◆ Several filter types e.g. antistatic
- ◆ Hoses
- ◆ Vacuum pumps
- ◆ Separator vessel in stainless steel e.g. in 1.4404 (AISI 316L)
- ◆ Automatic filter cleaning

GENERAL TECHNICAL FEATURES

- ◆ Vacuum resist up to -1 bar
- ◆ Pressure resist up to +0,49 bar
- ◆ Explosive-Zones (Dust): inside 20, outside 22
- ◆ Filter area: up to 3,6 m²
- ◆ Full compliance with FDA-standards
- ◆ Conveying power: up to 10000kg/h based on the product and the conveying distance



FILTER COVER WITH EYE BOLTS



- ◆ For quick access to the filter
- ◆ The captive parts are attached to the housing via the hinge
- ◆ The cup nuts need only be loosened slightly to be able to open the eye bolts

FILTER COVER WITH SIGHT GLASS DIA. 100



- ◆ Similar to DIN 11851
- ◆ For inspection of the product chamber
- ◆ Enables optimal setting of the cycle times by visual inspection of the filling level

FILTER COVER WITH TRICLAMP NOZZLE



- ◆ Dia. NW50 DIN 32676
- ◆ For mounting a CIP spray nozzle or a level indicator

WIP-UNIT WITH FLOATER



- ◆ For washing the conveying tube and the powder chamber
- ◆ The liquid stop prevents the liquid from being transported towards the vacuum pump
- ◆ The vacuum power required for cleaning is set via a throttle valve at the bypass



Conveyor-Type	PCC100	PCC150	PCC200	PCC300
Dimensions Ø i x H [mm]	100 x 150	100 x 150	200 x 150	200 x 150
Filter area [cm²]	471	471	942	942

SINTERED PE FILTER



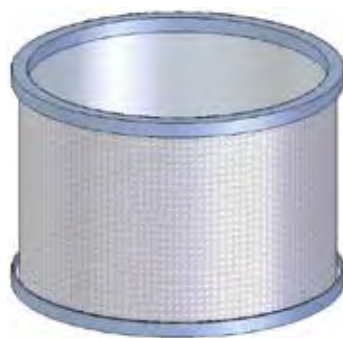
- ◆ With PTFE coating on all surfaces
- ◆ FDA-conform
- ◆ Separation grade > 0.5 µm
- ◆ Not static chargeable < 10 nC
- ◆ Operating temperature < 70 °C
- ◆ Acid resistance < pH 8
- ◆ Self supporting design

PTFE FELT FILTER



- ◆ Separation grade > 1.0 µm
- ◆ Antistatic
- ◆ Operating temperature < 260 °C
- ◆ Excellent Acid and Alkali resistance
- ◆ Filter cage required

STAINLESS STEEL FELT FILTER



- ◆ Stainless steel felt filter (1.4404) without coating
- ◆ FDA-conform
- ◆ Separation grade > 1.0 µm, > 2.0 µm oder > 5.0 µm
- ◆ Conductive, not static chargeable
- ◆ Operating temperature < 150 °C
- ◆ Excellent Acid and Alkali resistance
- ◆ Self supporting design



SUCTION LANCE



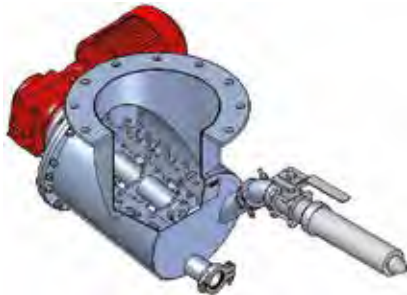
- ◆ For manual withdrawal of products from open bins
- ◆ Hose connection: TC 40/50 DIN 32676
- ◆ Dia. 40, 50 mm

SUCTION SHOE



- ◆ For automatic feeding of free-flowing products from bins
- ◆ Flange: DN250 / DN300300 PN 10 DIN 2576
- ◆ Dia. 250/300
- ◆ Hose connection: TC 40/50/65 DIN 32676
- ◆ Optional:
Additional equipment with pneumatic external vibrator

SUCTION SHOE WITH DELUMPER



- ◆ For automatic feeding of poor-flowing and lumped products from bins
- ◆ Motor drive with helical-bevel gear or flat gear unit
- ◆ Shaft feedthrough with PTFE radial sealing and purge-air bearing
- ◆ Flange: DN250 / DN300300 PN 10 DIN 2576
- ◆ Hose connection: TC 40/50/65 DIN 32676

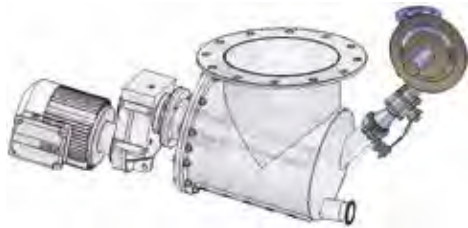
SUCTION SHOE IN SEMISPHERICAL SHAPE



- ◆ For automatic product task granulated products from container
- ◆ Flange: DN250 / DN300300 PN 10 DIN 2576
- ◆ Dia. 250/300
- ◆ Hose connection: TC 40/50/65 DIN 32676
- ◆ Different additional equipment, for example Ex- and WIP-execution, different surfaces



LOW PRESSURE REDUCING VALVE



- ◆ For inert powder conveying
- ◆ The pressure control valve opens at a low pressure of -5mbar and controls the gas feed into the conveyor line
- ◆ For conveying hygroscopic or hybrid products with a minimum ignition energy of $MIE \leq 3 \text{ mJ}$
- ◆ Manually adjustable bypass valve for setting the pressure conditions

MOBILE CART



- ◆ For mobile use of the conveyor at several places
- ◆ Designed for transporting the pneumatic unit, the conveyor and the vacuum pump
- ◆ Wheels in a non-marking version, electrically conductive

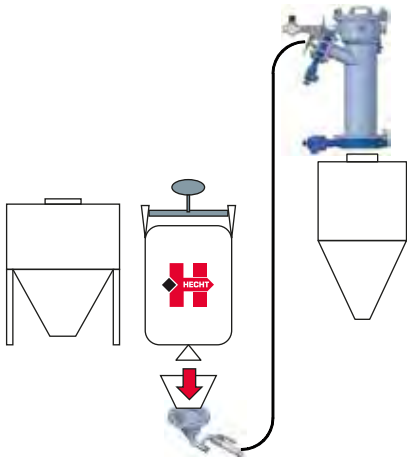
SECONDARY FILTER



- ◆ For mounting at the vacuum pump
- ◆ Stainless steel housing 1.4404
- ◆ Certified according to ATEX Zone 1, 2, 21, 22 (conductive)
- ◆ Replaceable filter cartridge
- ◆ Filter class F9 ($> 99,9 \%$ for $1 \mu\text{m}$)
- ◆ Optional filter class H13 HEPA ($99,97 \%$ for $0.3 \mu\text{m}$)
- ◆ Connection at raw-gas side: project-specific
- ◆ Connection at pump side:
Flange DN50 PN10 DIN 2501

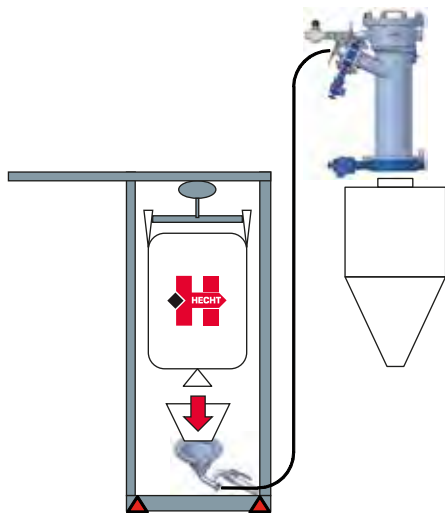


FEEDING FROM BIG BAGS / BULK CONTAINERS



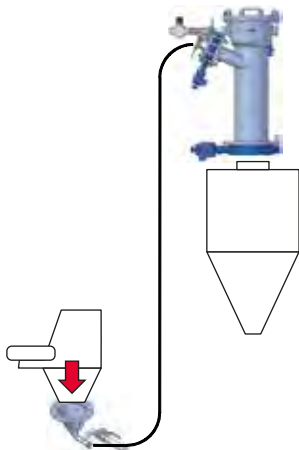
- ◆ Volumetric feeding from big bags or other bulk containers to a target container
- ◆ Gentle, dust-free and hygienic transport of raw materials from flexible or rigid bulk containers into a target container

FEEDING FROM BIG BAGS WITH DOSING



- ◆ Gravimetric feeding from big bags with dosing

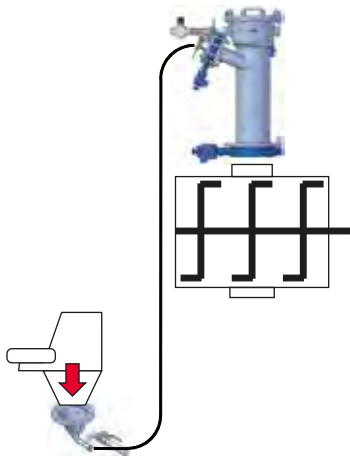
FEEDING FROM SACKS



- ◆ Volumetric feeding from sacks to a target container

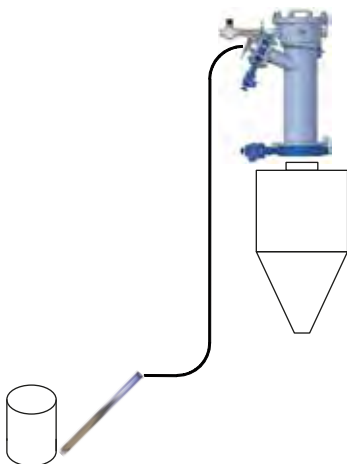


FEEDING FROM SACKS



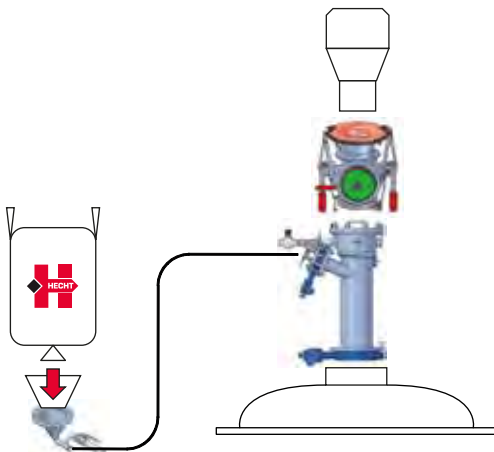
- ◆ Feeding from sacks to a mixer

FEEDING FROM SMALL BINS WITH SUCTION LANCE



- ◆ Manual feeding from small bins to a target container using a suction lance

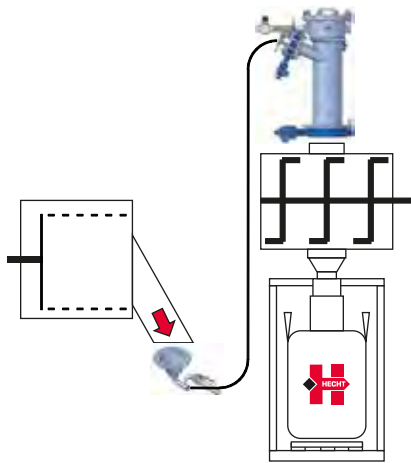
FEEDING FROM BIG BAGS AND INFEED BAGS



- ◆ Feeding from big bags and small-quantity infeed bags to a target container

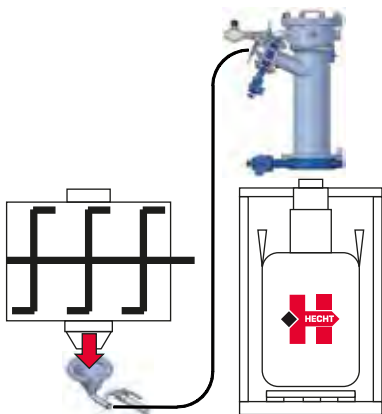


DISCHARGE FROM CENTRIFUGE INTO DRYER



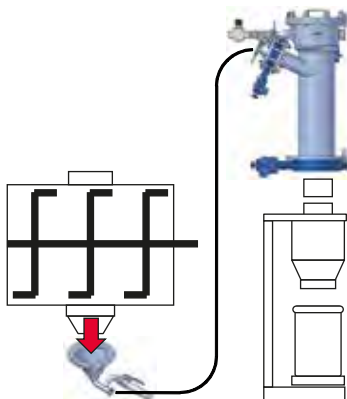
- ◆ Discharging an intermediate product from centrifuge into dryer

DISCHARGE FROM MIXER / DRYER



- ◆ Discharging from mixer / dryer into bulk containers (big bags, containers)

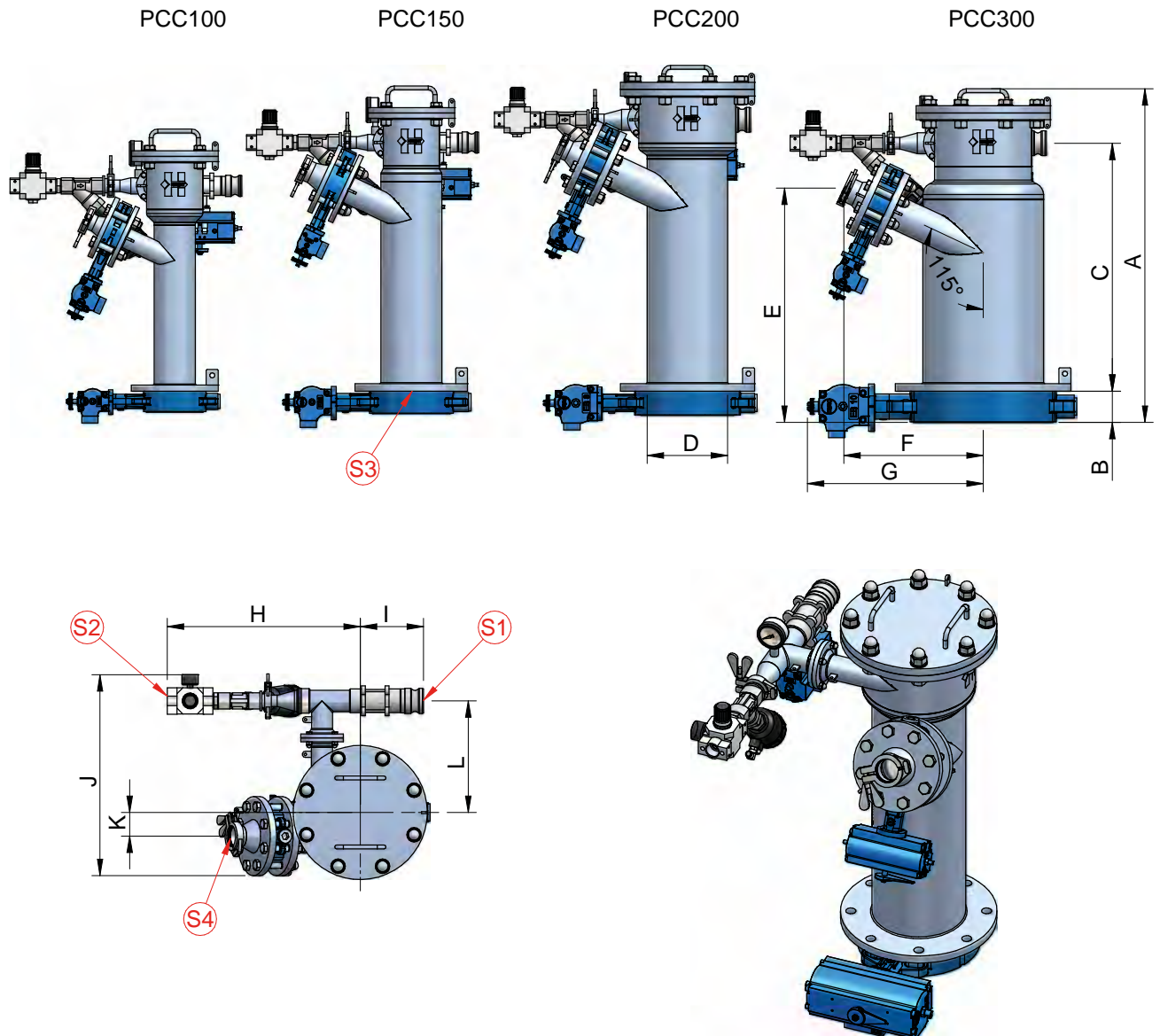
DISCHARGE FROM MIXER / DRYER



- ◆ Discharging from mixer / dryer into bins (drums, minibags, sacks or endless liner)



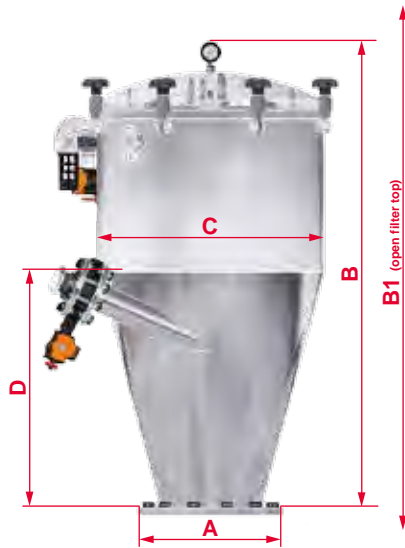
STANDARD DIMENSIONS



Type	A	B	C	ØD	E	F	G	H	I	J	K	L
	mm											
PCC100	720	53,5	520	104	490	230	275	420	170	395	26	218
PCC150	830	57,5	630	154	625	280	325	420	170	430	43	218
PCC200	890	61,5	690	204	690	320	365	490	160	520	60	283
PCC300	850	79,5	630	306	595	350	445	490	160	570	111	283
	Anschlüsse											
	S1		S2		S3				S4			
	vacuum connection		scavenging air connection		Produktaustrittsflansch				Förderschlauch			
	Hebelarmkupplung		Druckregelventil Innengewinde		Flansch				Clampstutzen			
	DIN 2828				DIN EN 1092-1 PN10		ASME B 16.5 150lb/sq.in.					
PCC100	DN 40		G1"		DN 100		4"		DN 32		ISO 1127	
PCC150	DN 40		G1"		DN 150		6"		DN 50		DIN 32676	
PCC200	DN 50		G1"		DN 200		8"		DN 50		DIN 32676	
PCC300	DN 50		G1"		DN 300		12"		2 ½"		ISO 2852	



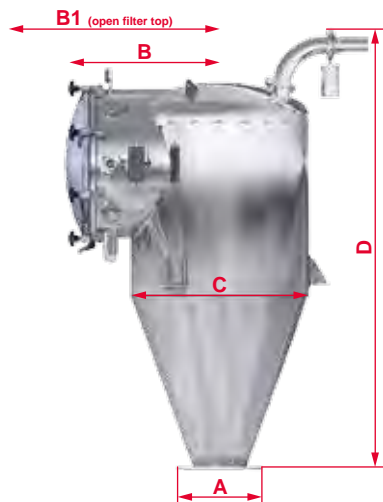
PCC - 700 V - VERTICAL VERSION



The perfect entry into the PCC-700 series, the compact and slim PCC-700 V

Volumina	100 l		
Output e.g. Soya and fructose	Distance: 20 m; Height: 8 m	continuous	discontinuous
	Bulk density: 0,35 kg/dm ³	8500 kg/h	5500 kg/h
	Bulk density: 0,70 kg/dm ³	7500 kg/h	5000 kg/h
Compressed air	ca. 80 l/min		
Weight	ca. 250 kg		
Dimensions: A	Flange DN 300 (EN 1092-1 PN 10)		
B / B1	1555 mm / 2180 mm		
C	Ø 708 mm		
D	815 mm		

PCC - 700 H - HORIZONTAL VERSION



The horizontal version is optimal for filter changes within low rooms. Belonging to the separator vessel, various voluminas are possible.

Volumina (Standard)	300 l	650 l	800 l
Output e.g. Soya and fructose	Distance: 20 m Höhe: 8 m	continuous	diskontinuierlich
	Bulk density: 0,35 kg/dm ³	10000 kg/h	6000 kg/h
	Bulk density: 0,70 kg/dm ³	9000 kg/h	5500 kg/h
Compressed air	Consumption about 80 l/min		
Weight	about 250 kg	about 500 kg	about 550 kg
Dimensions: A	DN 300	DN 300	DN 300
B/B1	740 mm/1455 mm	895 mm/1580 mm	895 mm/1580 mm
C	Ø 850 mm	Ø 1200 mm	Ø 1200 mm
D	1845 mm	1990 mm	2435 mm

PCC - 700 FL - FLANGE VERSION



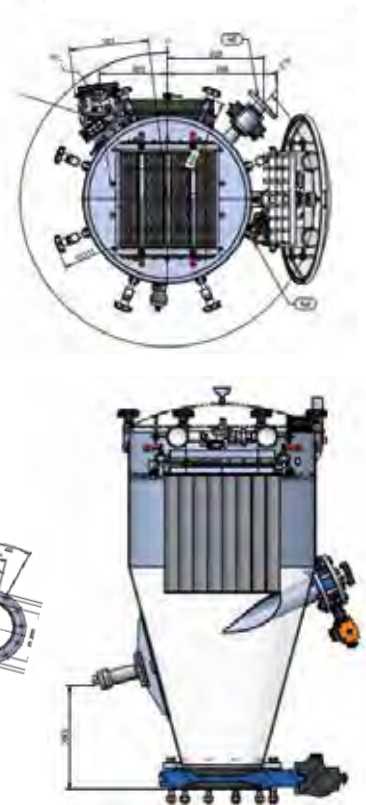
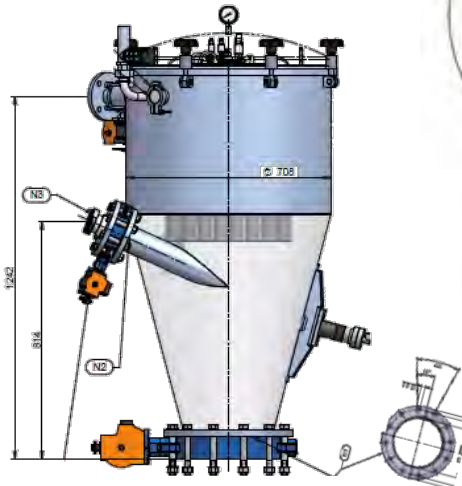
PCC-700 FL H

It is possible to install the PCC-700 FL version horizontal as well as vertical on an onist vessel.

Furthermore it is possible to convey with suction or pressure modus.



PCC-700 FL V



Technical drawing of a vertical industrial tank, showing three views: side elevation, front elevation, and a detail of the top flange.

Side Elevation View (Top):

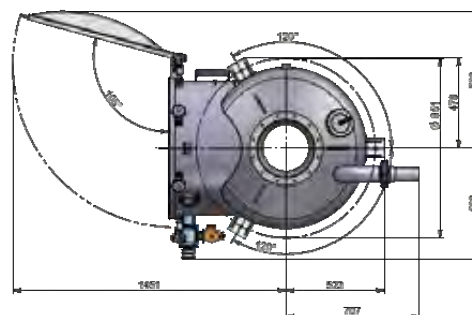
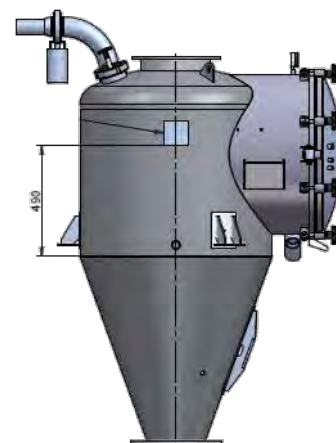
- Overall height: 1779
- Height to the top of the main body: 1280
- Height to the top of the conical bottom: 1713.2
- Height of the conical bottom: 880
- Top flange diameter: $\phi 750$
- Bottom diameter: $\phi 850$
- Top flange thickness: 1845
- Bottom flange thickness: 1816

Front Elevation View (Bottom):

- Overall height: 1779
- Height to the top of the main body: 1280
- Height to the top of the conical bottom: 1713.2
- Height of the conical bottom: 880
- Top flange diameter: $\phi 750$
- Bottom diameter: $\phi 850$
- Top flange thickness: 1845
- Bottom flange thickness: 1816

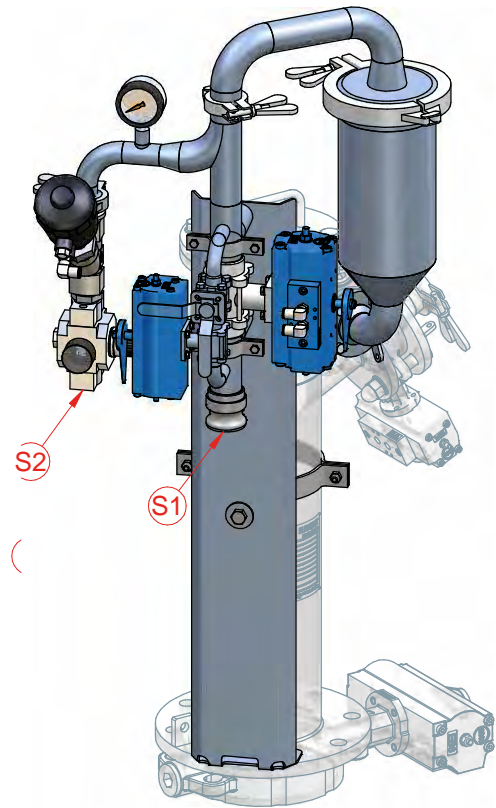
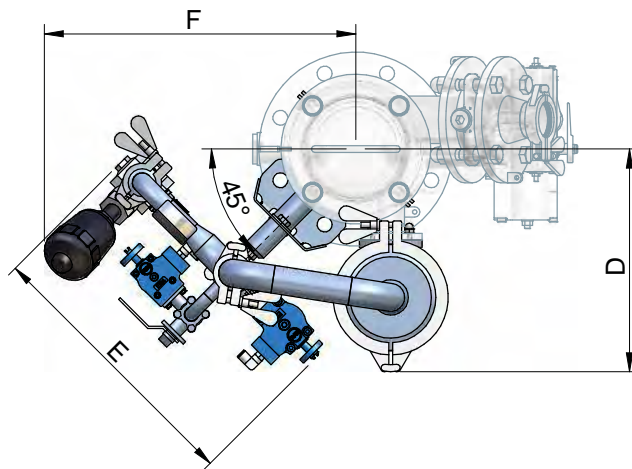
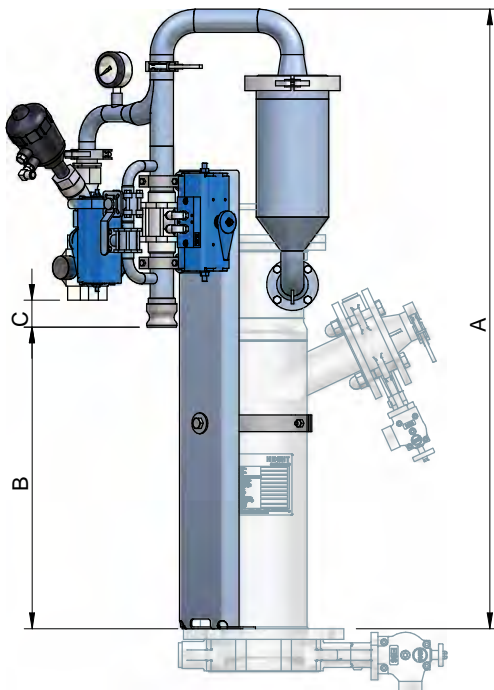
Detail of the Top Flange (Right):

- Top flange thickness: 1845
- Bottom flange thickness: 1816
- Top flange diameter: $\phi 750$
- Bottom diameter: $\phi 850$
- Top flange thickness: 1845
- Bottom flange thickness: 1816





STANDARD DIMENSIONS



Type	A	B	C	D	E	F
	mm					
PCC100	995	430	50	330	405	460
PCC150	1100	540	50	330	405	460
PCC200	1170	460	170	430	430	530
PCC300	1110	400	170	430	430	530
	Circuit points					
	S1			S2		
	Vacuum supply			Cleaning gas supply		
	Hebelarmkupplung			Druckregelventil		
	DIN 2828			Innengewinde		
PCC100	DN 40			G1"		
PCC150	DN 40			G1"		
PCC200	DN 50			G1"		
PCC300	DN 50			G1"		