



FIBC Filling Systems



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FIBC Filling Systems

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 FILLED

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

Outlet height of the upstream equipment [mm]: _____
Compressed air supply [bar]: _____ Electricity: _____ [Volt] _____ [ph] _____ [Hz]
Explosive area: ☐ yes ☐ no Explosion protection?: _____ Protection class: IP _____
Sand blasting SA 2,5? ☐ yes ☐ no
Is a dedusting unit available? ☐ yes ☐ no



FIBC Filling Systems

Check list for quotation

CHECK
LIST

FIBC

SUSPENSION SYSTEM

- ☐ 4 individual loops ☐ 2 sleeve loops

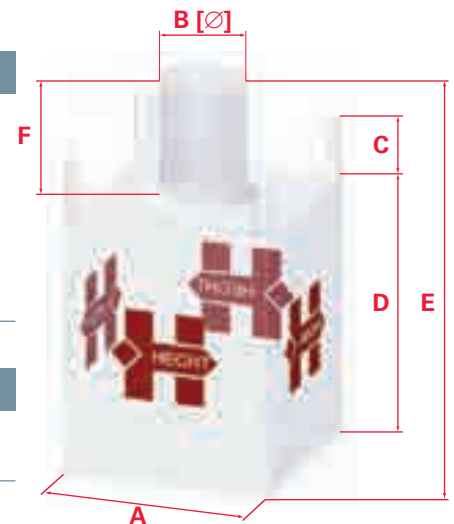
INNER LINER

- ☐ Without inner liner
- ☐ Inner liner fixed in outer bag: ☐ yes ☐ no
- ☐ Customized inner liner: ☐ yes ☐ no
- ☐ Outlet length [mm]: _____

WEIGHT/CAPACITY/DIMENSIONS

Max. weight of FIBC [kg]: _____ Filling capacity [FIBCs/h]: _____

Dimensions [mm]: **A** **B** **C** **D** **E** **F**



TECHNICAL DATA

upstream metering: ☐ yes ☐ no

Metering device: _____

Product compaction necessary?: ☐ yes ☐ no

Cone reduction necessary?: ☐ yes ☐ no

Calibratable version?: ☐ yes ☐ no

Weighing range: _____

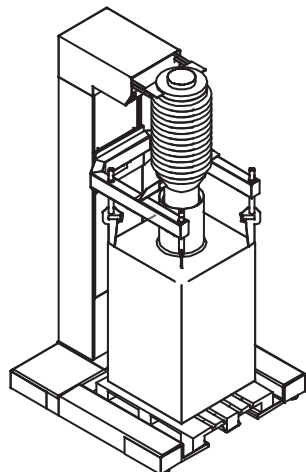
Resolution: _____

Material: _____

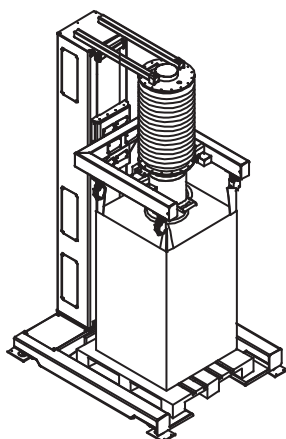
Material-parts with product contact: _____

Material-other parts: _____

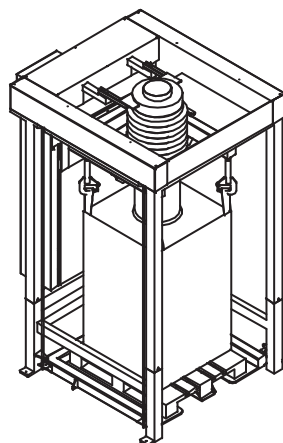
HS 1500



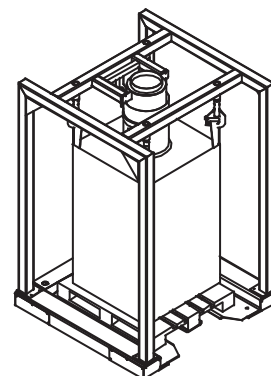
HS 750



BG 1500



BG Basic



TYPE	HS 1500	HS 750	BG 1500	BG Basic
Brief description	Lifting column with electrical spindle stroke	Lifting column with hand winch or pneumatic stroke	Frame version with overhead scales	Frame version
freely accessible from 3 sides	yes	yes	no	no
Adjustment to different FIBC sizes	automatic	automatic	automatic	-
Scales	E-shaped scales U-shaped scales	E-shaped scales U-shaped scales	Overhead scales	Platform scales or E-shaped scales
Loading using fork-lift truck ¹⁾	only with E-shaped scales	only with E-shaped scales	yes	only with E-shaped scales
Product compaction	Vibration table ¹⁾ Stroke	Vibration table ¹⁾	Stroke	Vibration table ¹⁾
Lifting force	1500 kg	750 kg	1500 kg	-

1) When using a vibration table, loading is not possible using a fork-lift truck.

High containment filling of Big Bags with liner.

The use of protective liner ensures contamination-free exchange of the Big Bag.

When no Big Bag is connected, the connecting system and the hand-access hole are closed by a protective liner.

The operator and the product are protected against contamination.



For filling receptacles without inliner (e.g. Container), an adapter with a protective liner is attached to the receptacle.



Adapter for
receptacles
without inliner.



Big Bag



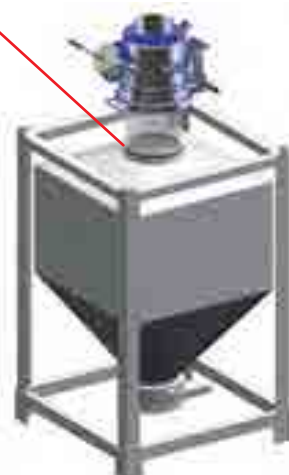
Mini Bag



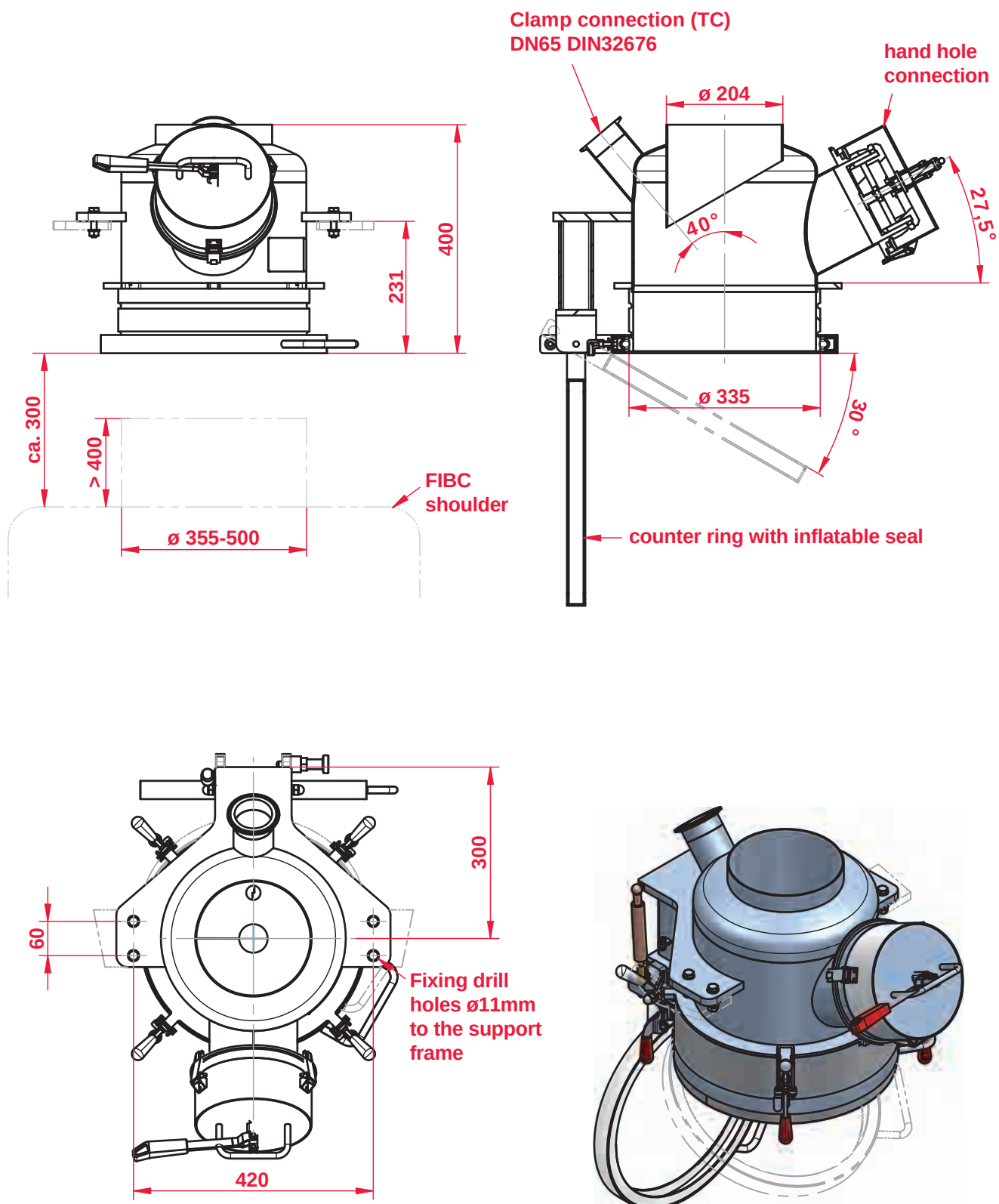
Small amounts



Drum

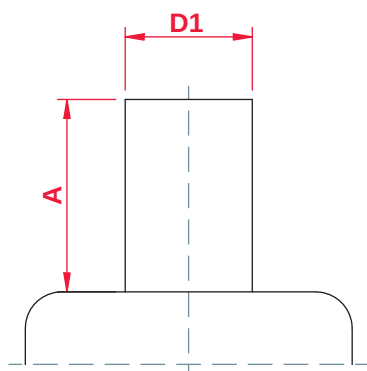


Container

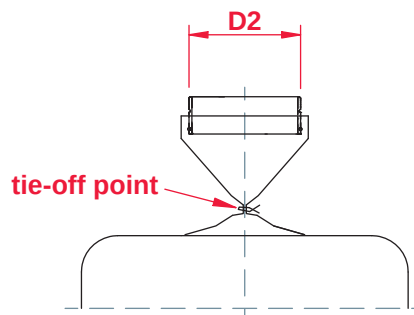


DIMENSIONS OF THE CONTAINER INLET

For secure connection and sealing of the inlet, a minimum free length of the inlet is required.
The inlet diameter recommended also depends on the material properties of the inner liner.



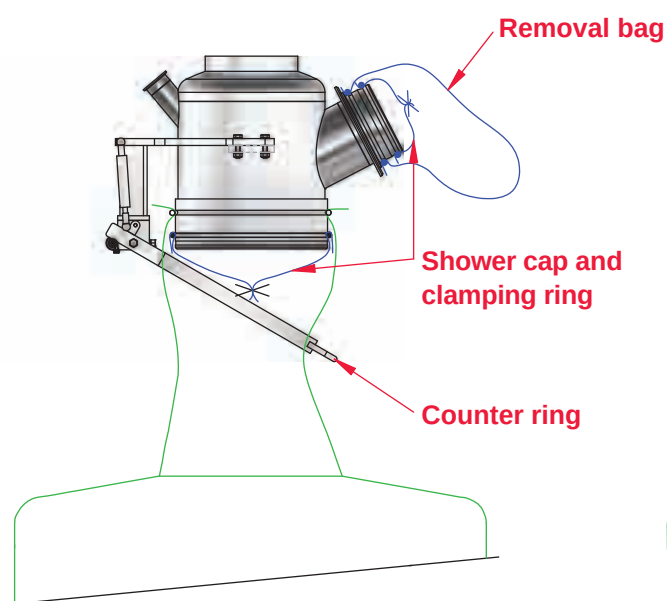
empty big bag



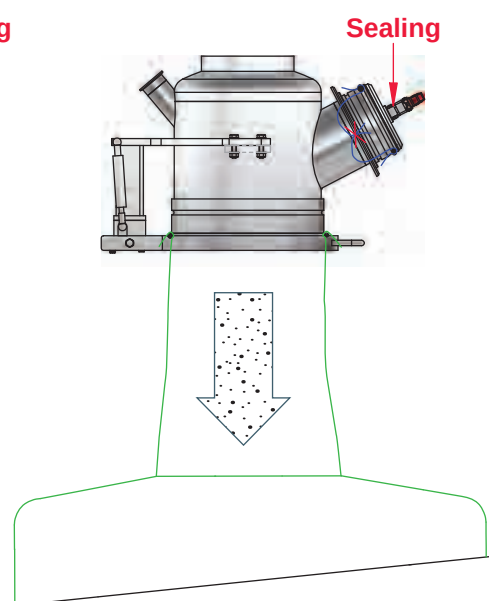
full and closed big bag

DIMENSIONS AND SIZES

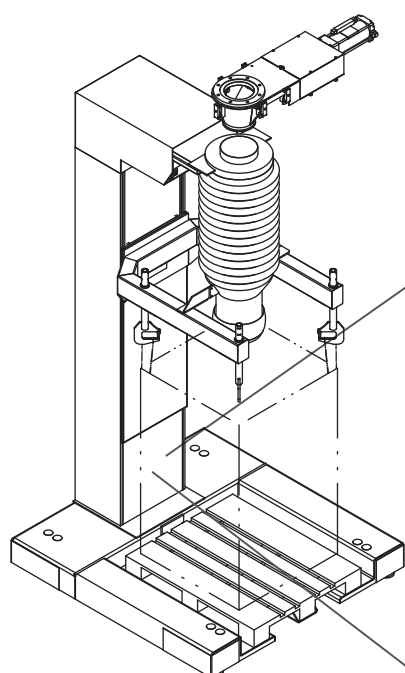
Type LBK [Ø]	150	320
Inlet diameter D1 [mm]	185-300	355-500
Connecting ring diameter D2 [mm]	165	335
Minimum inlet length A [mm]	550	550
Recommended inlet length A [mm]	600	650



Initial position

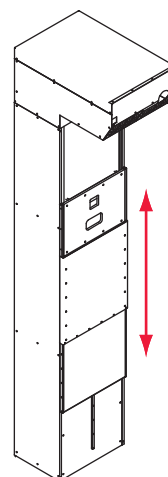


Filling the liner



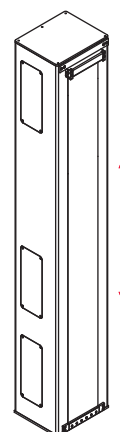
HS 1500-E

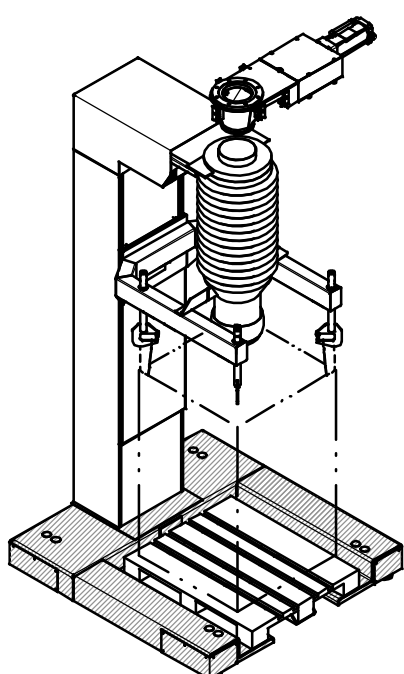
Drive via spindle,
electrical



HS 750/1300

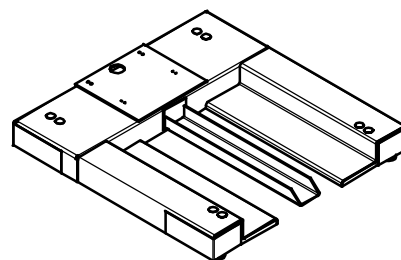
Hydraulic drive





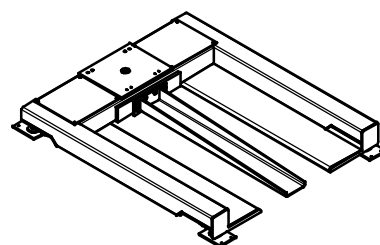
E-shaped scales with DMS load cells

suitable for loading using fork-lift truck



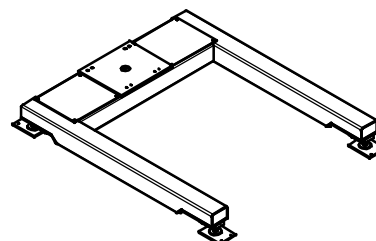
E-shaped scales with DMS load cells

suitable for loading using fork-lift truck



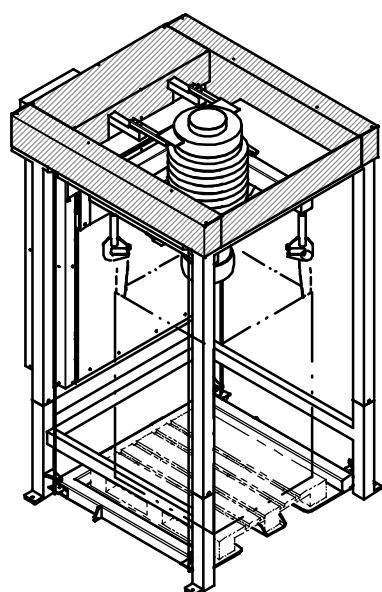
U-shaped scales with DMS load cells

suitable for the setup of automatic transport equipment and installation of a vibration table.

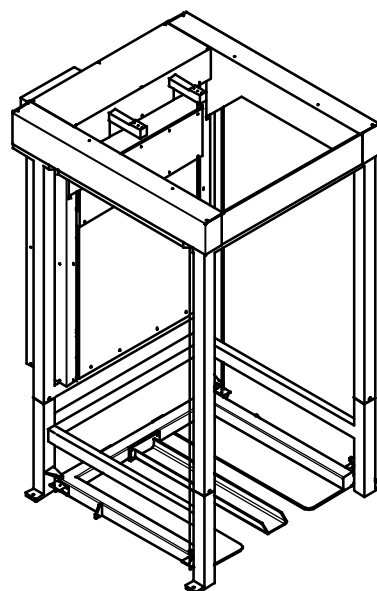


Special feature:

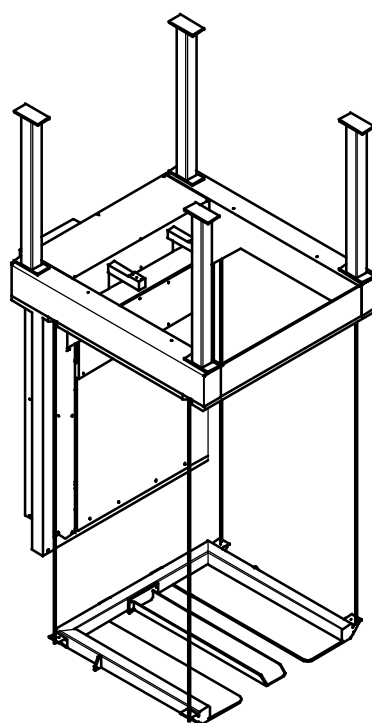
Load cells are freely accessible without disassembling the scales assembly.



Overhead scales with
base frame
BG 1500



Overhead scales with
ceiling suspension
BG 1500

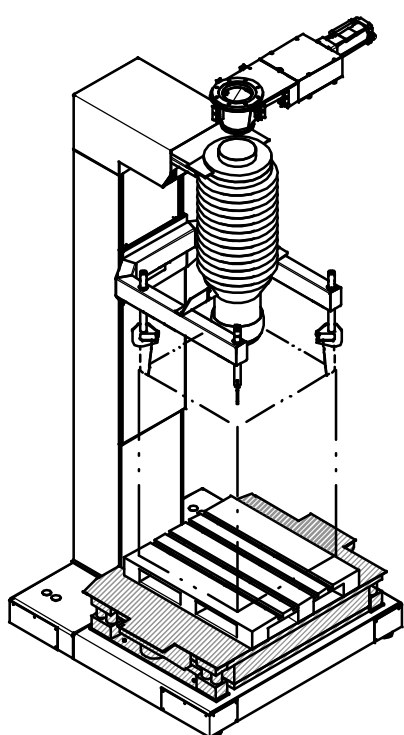


Special features:

Load cells are freely accessible without
disassembling the scales assembly.

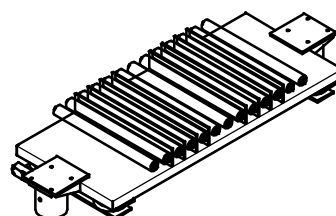
Easy-to-clean floor area.

Support frame can be used for setup of upstream
bins and dosing equipment.



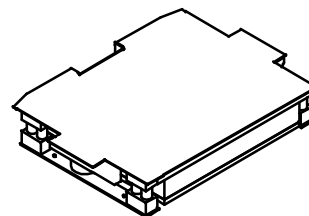
Vibration table

with pneumatic lifting device
suitable for operation with roller
conveyor systems



Vibration table

Height 400 mm

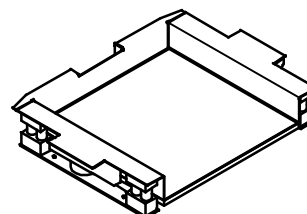


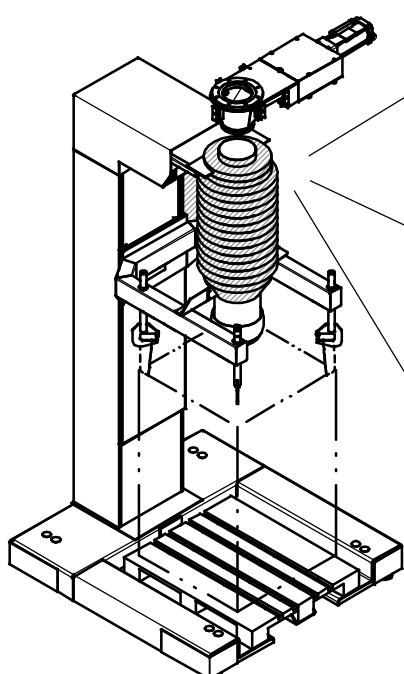
Automatic compacting HS 1500 / BG 1500

Compacting by lifting
and lowering of the
big bag.

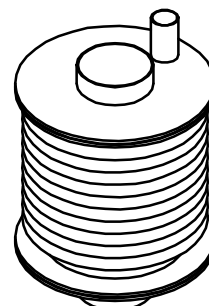
Vibration table low height

Height 80 mm



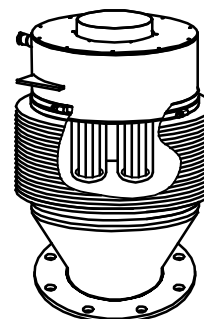


Gaiter



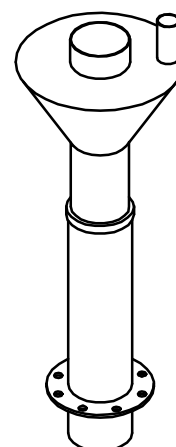
with aspiration connection

Gaiter with filter (option)



Adapter tube

Little product deposits due to
smooth inner surfaces



QUICK-ACTION CLAMP



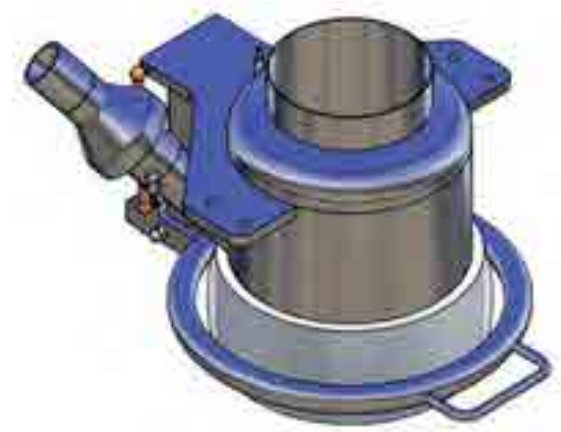
- ◆ Filling head for low demands on dust prevention and for opened sacks with mechanical bag clamp.
- ◆ Used for sack inlets with slightly different diameters.

PNEUMATIC SEAL

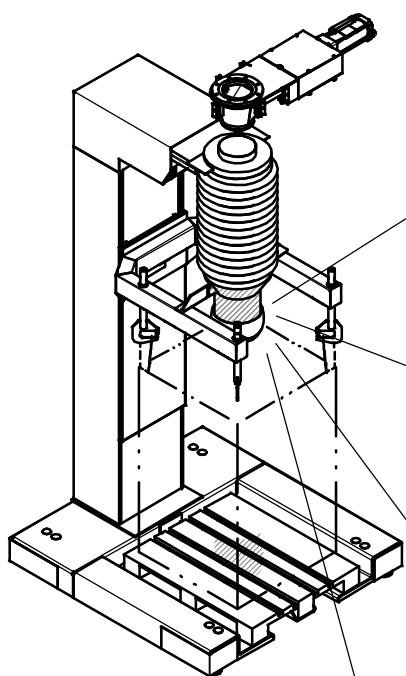


- ◆ Filling head for higher demands on dust prevention and for opened sacks with pneumatic seal.
- ◆ Used for sack inlets with constant diameters.

PNEUMATIC SEAL WITH HINGED COUNTER RING

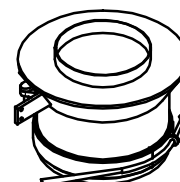


- ◆ Filling head for higher demands on dust prevention and for opened sacks with pneumatic seal and counter ring.
- ◆ Used for sack inlets with different diameters.



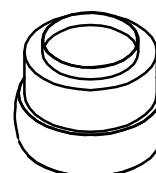
Mechanical bag clamp

Basic configuration

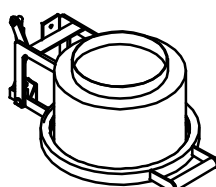


Pneumatic seal

Used in the case of uniform big bag inlet diameters

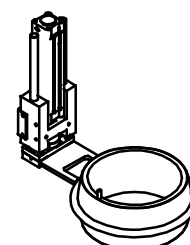


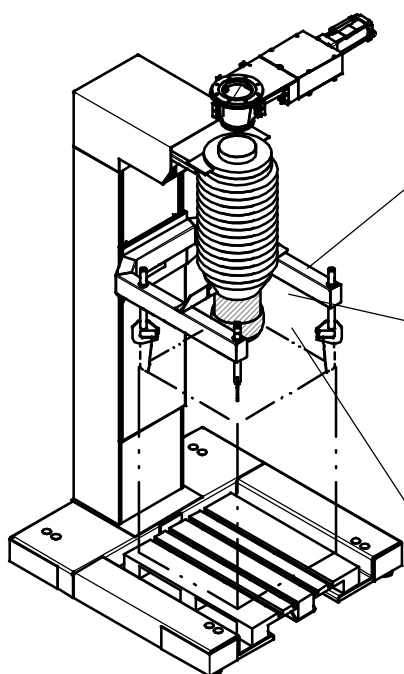
Manual counter ring with integrated pneumatic seal



Pneumatic seal with counter ring

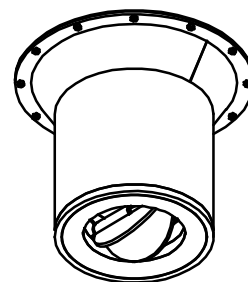
Used in the case of different big bag inlet diameters and automated systems



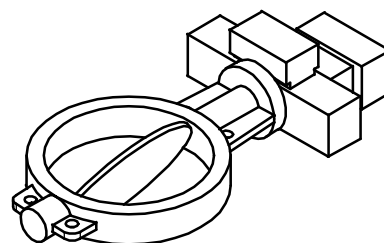


Pro Clean[®] Trickle protection

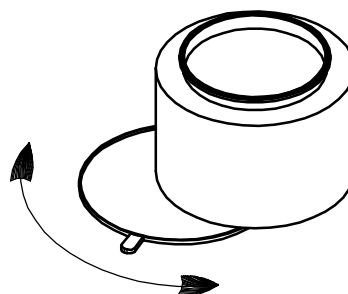
Closes the filling head directly at the outlet. Bottom side of valve remains free from product due to a special construction.



Butterfly valve



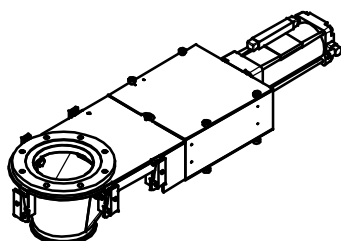
Manual swing disc





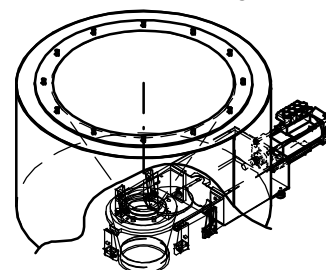
Metering slider

for free-flowing products

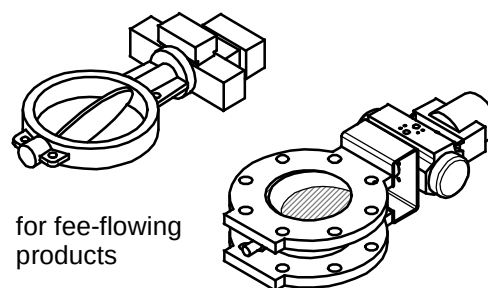


Flexkon with metering slider

for universal metering tasks



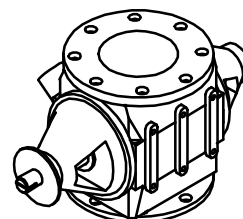
Dosing valve/ roto-disc ball segment valve



for free-flowing products

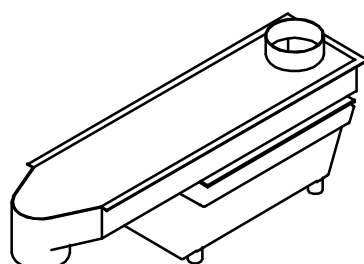
Rotary valve

for use in the case of pressure differences



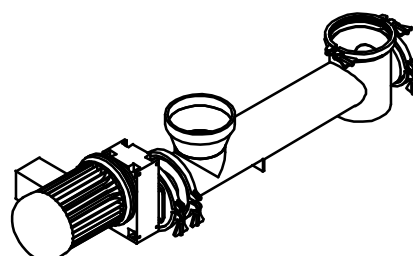
Vibrating chute

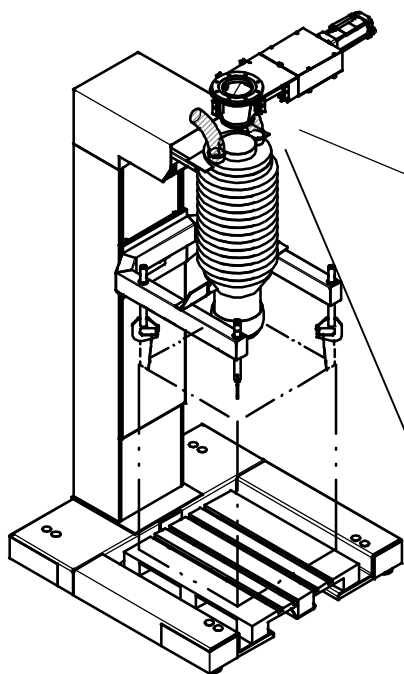
for gentle dosing of product



Metering screw

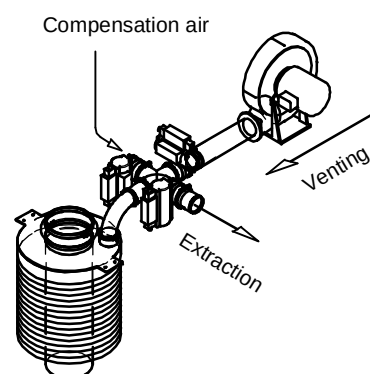
Dosing with horizontal offset





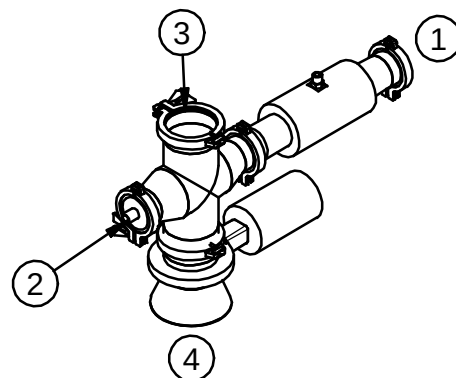
- ① System connection
- ② Venting: Compressed air or inert gas
- ③ Connection for extraction
- ④ Compensation air

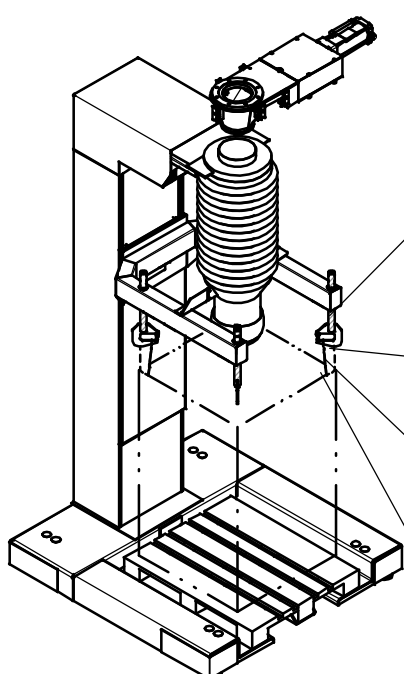
Module with low-pressure ventilator



Module for venting w. integr. overpressure protection

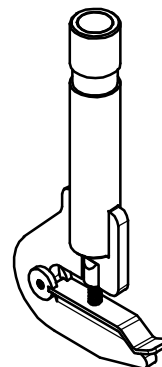
with regulated compensation air supply



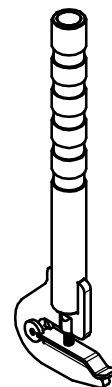


Loop holder with loop protection

Basic configuration



Loop holder adjustable in height with loop protection

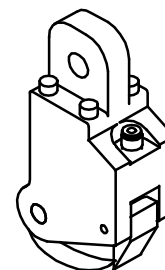


Shifting of loop holder

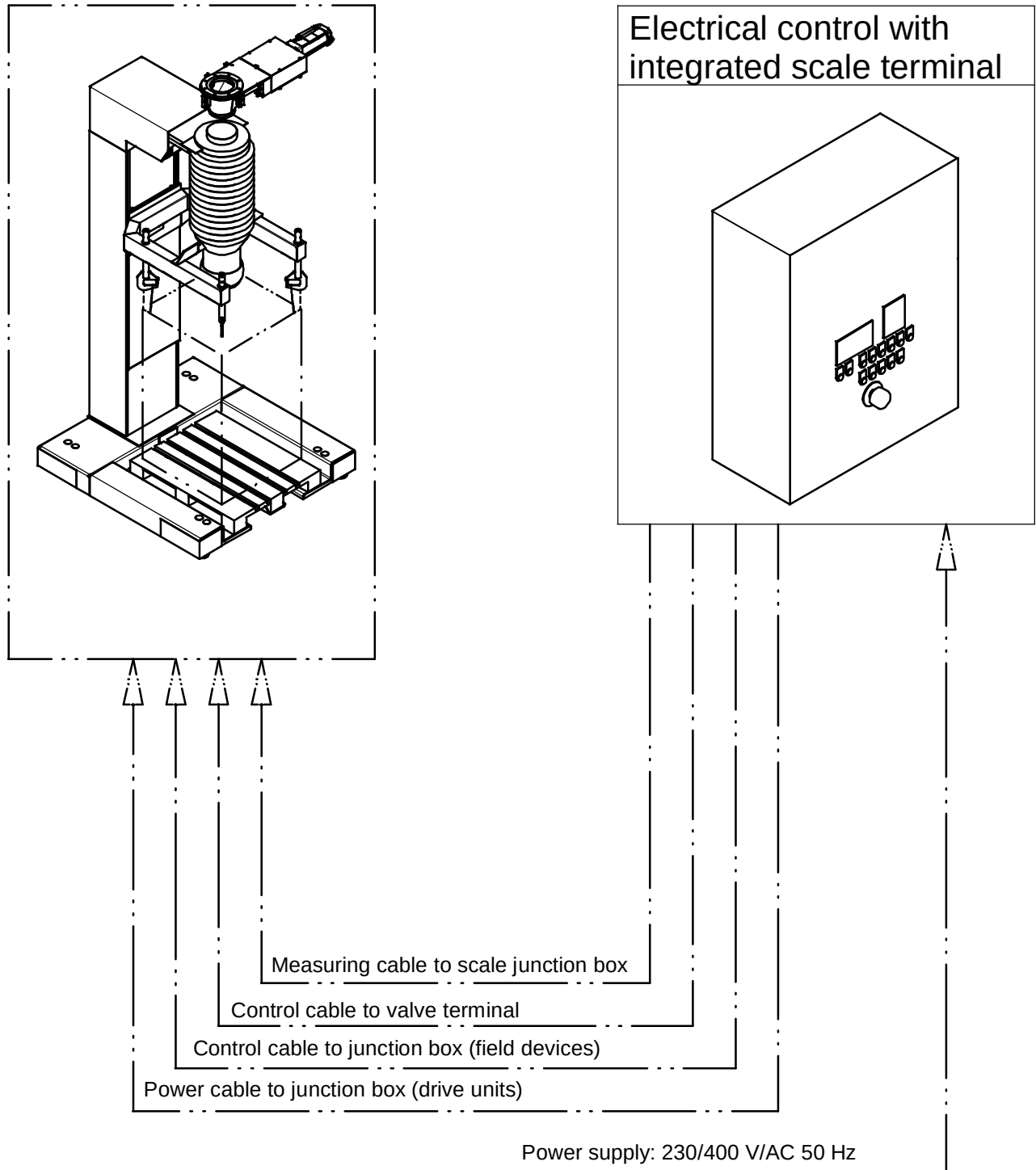
The loop holders opposite to the operator are shifted by 500 mm towards the operator via a pneumatic linear unit integrated in the support frame.

Automatic loop holder

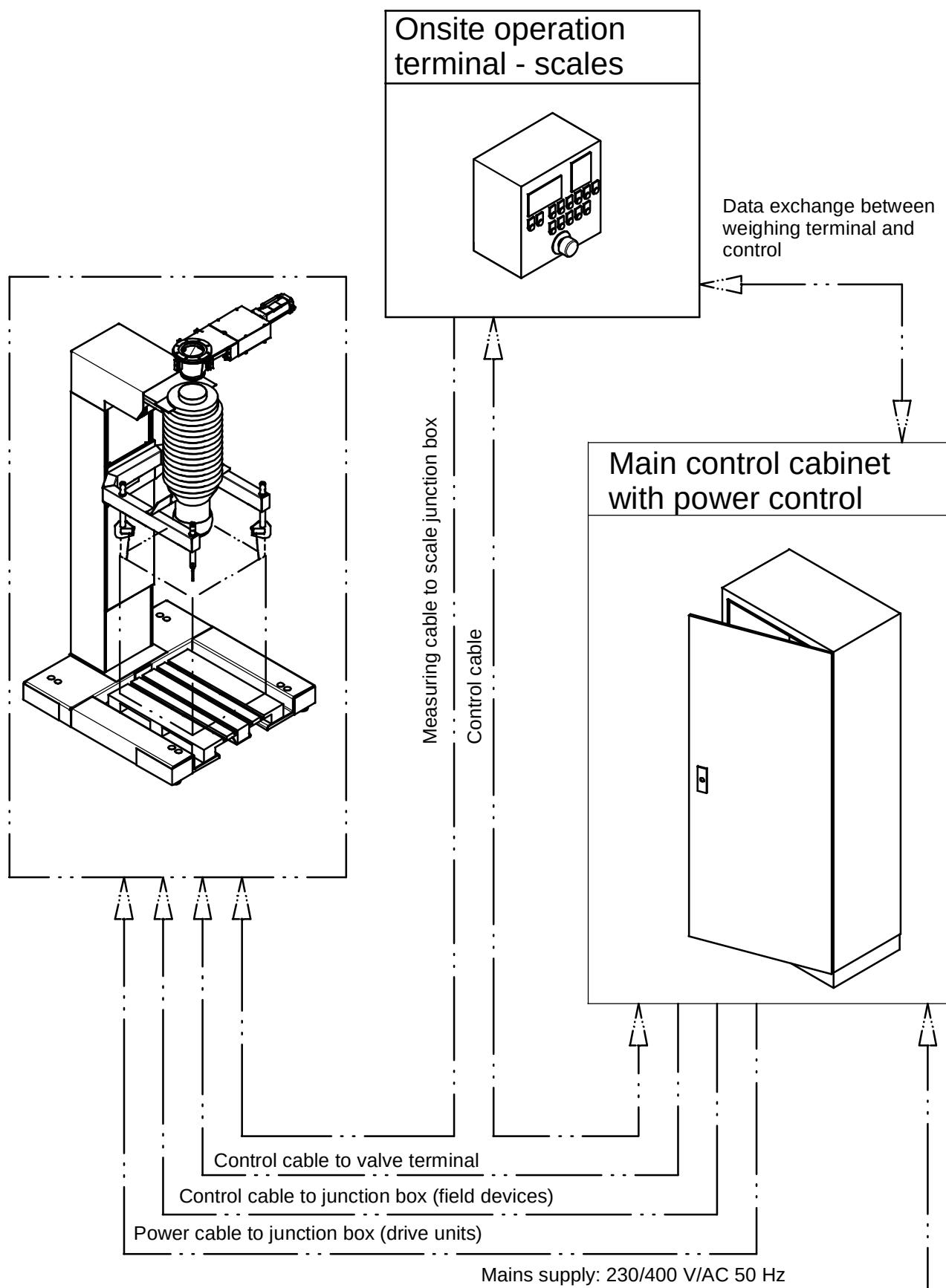
Used in automated plants

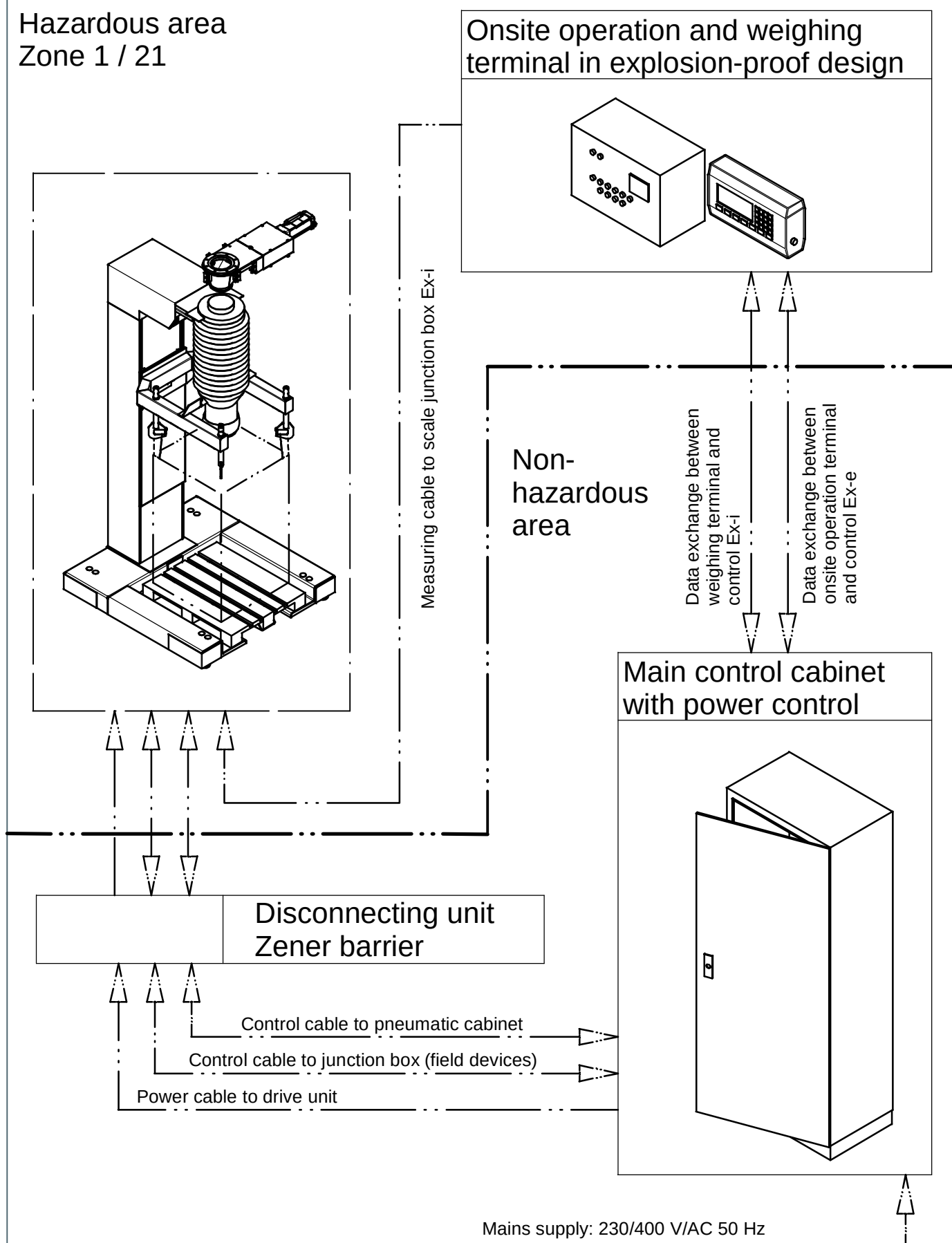


Control cabinet with integrated scale terminal



Control cabinet with separate operation and weighing terminal

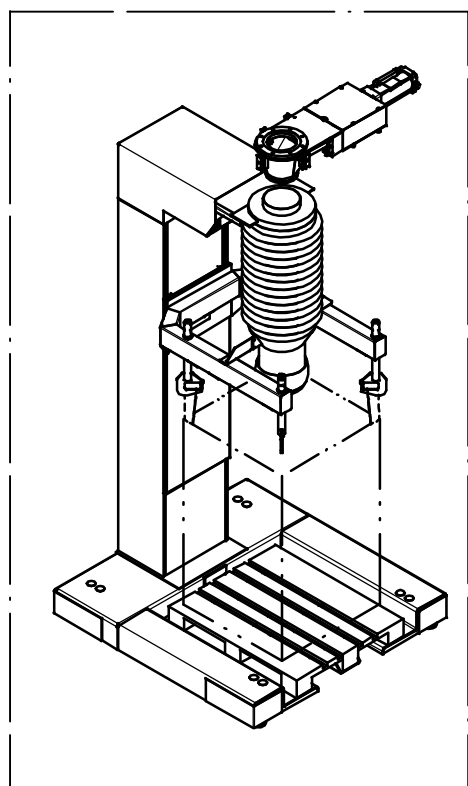
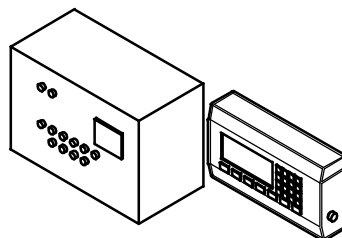






Hazardous area
Zone 2 / 22

Onsite operation and weighing
terminal in explosion-proof design



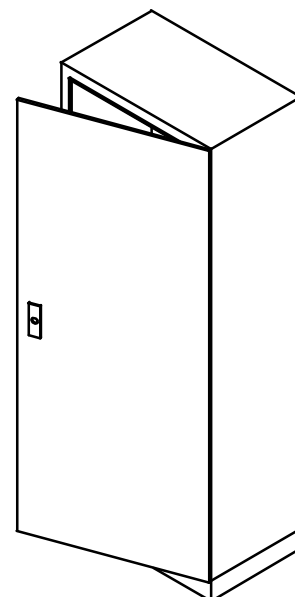
Measuring cable to scale junction box Ex-i

Non-
hazardous
area

Data exchange between
weighing terminal and
control Ex-i

Data exchange between
onsite operation terminal
and control Ex-e

Main control cabinet
with power control

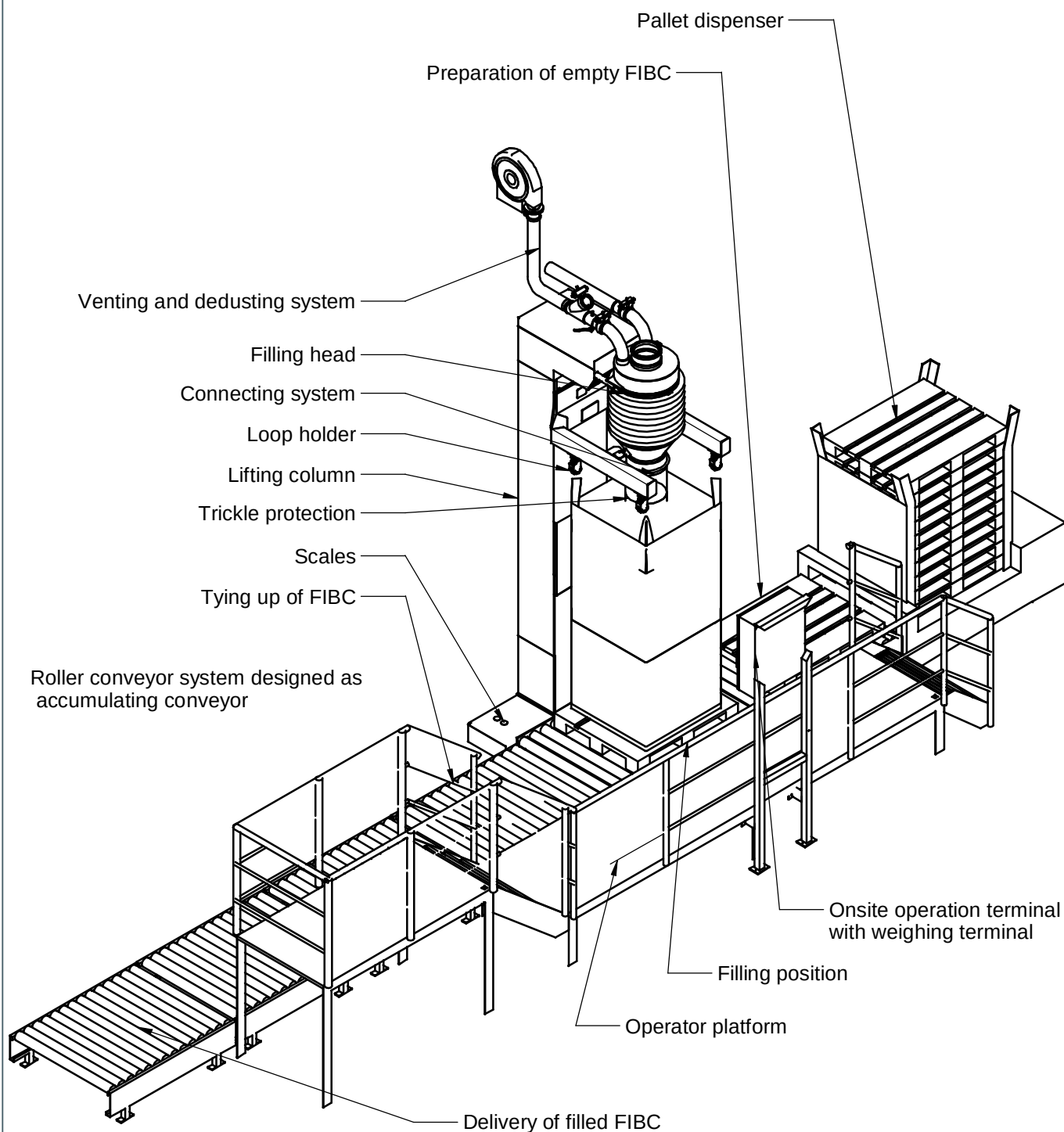


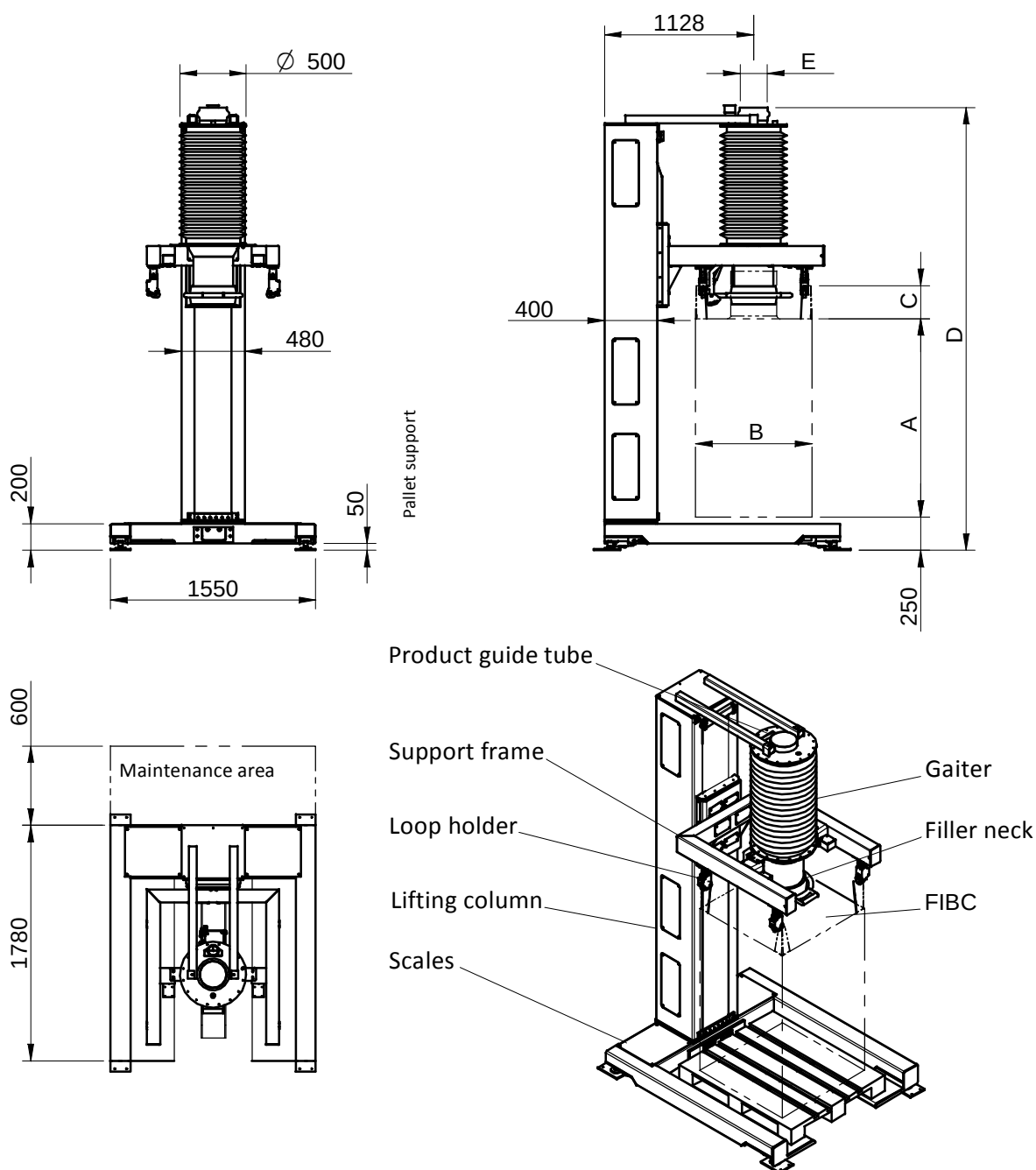
Control cable to pneumatic cabinet

Control cable to junction box (field devices)

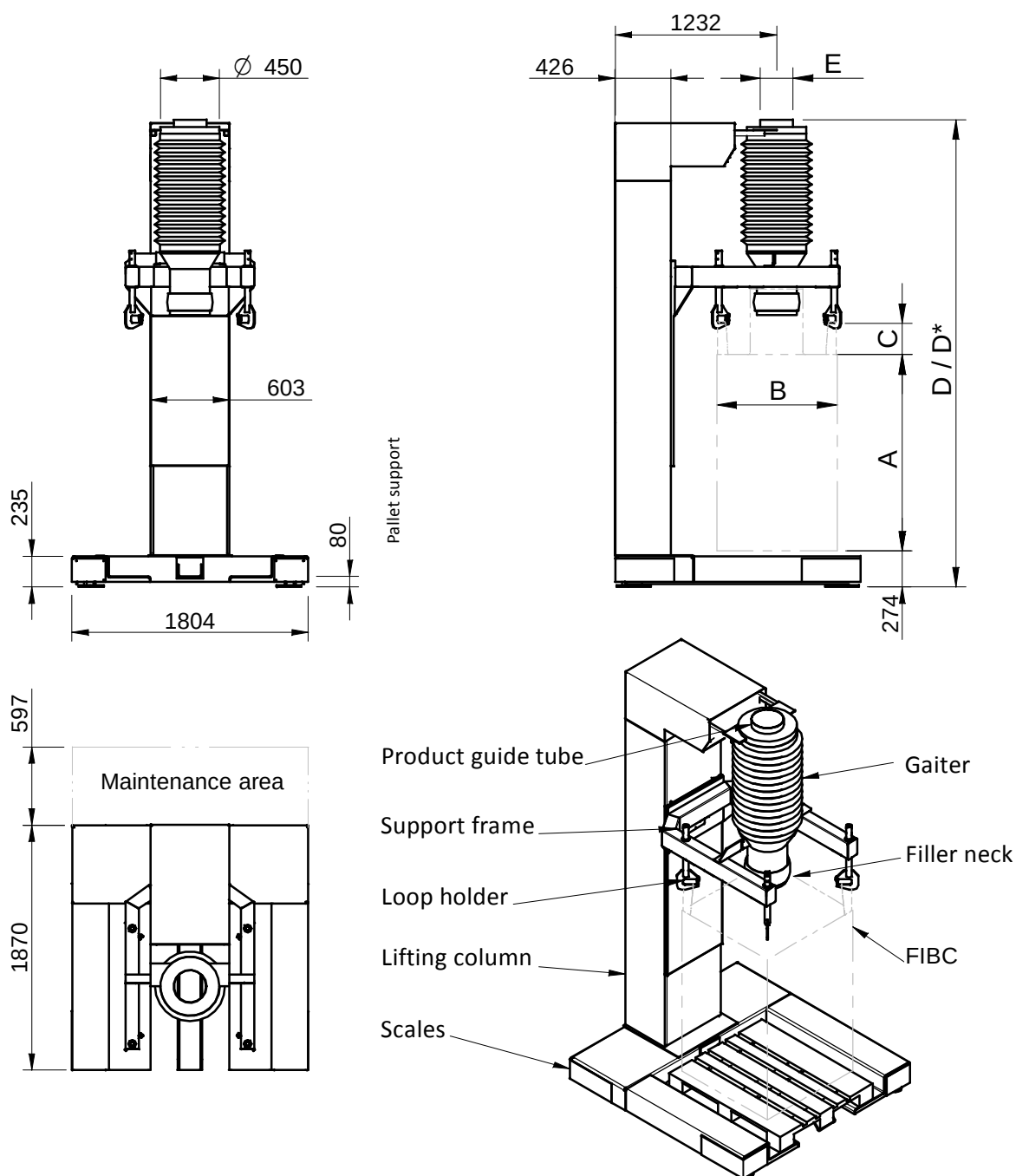
Power cable to drive unit

Mains supply: 230/400 V/AC 50 Hz

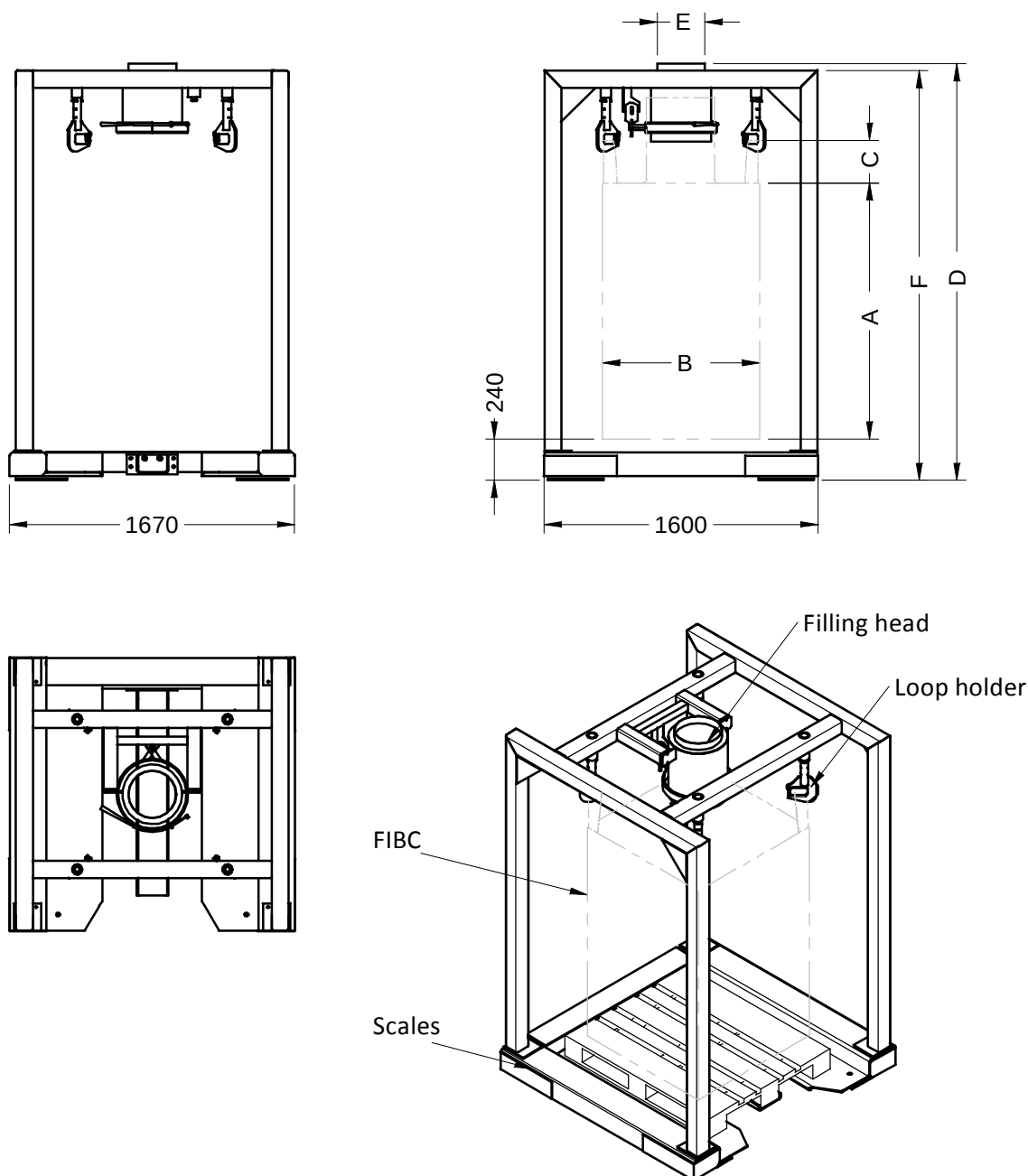




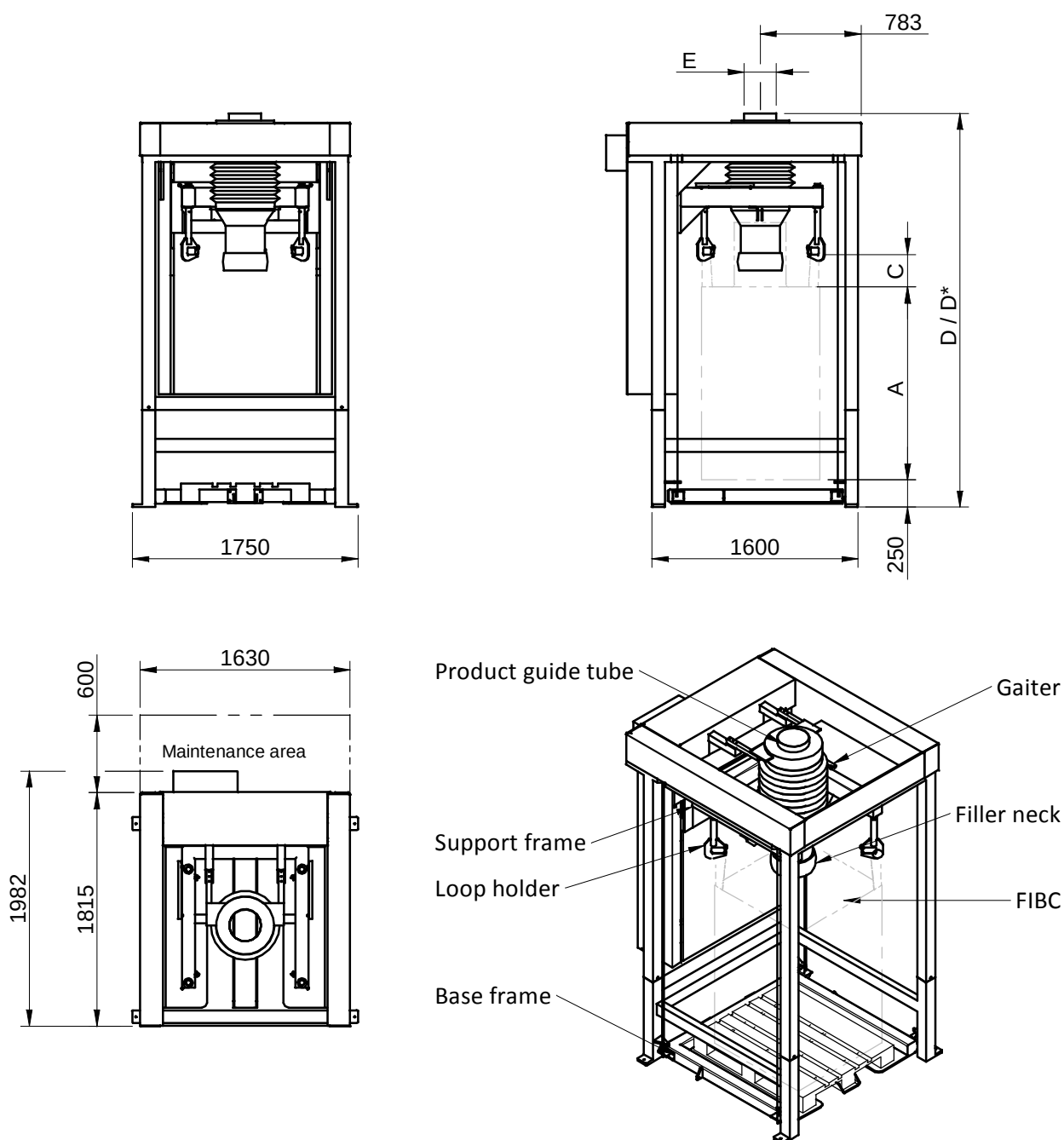
HS 750		Type 01	Type 02	Type 03
FIBC details:		mm		
FIBC height (shoulder height without loops)	A	400 – 1500	750 – 1900	1100 – 2250
Base area	B	□ 850 - □ 1000	□ 850 - □ 1000	□ 850 - □ 1000
Loop length	C	200 – 300	200 – 300	200 – 300
Pallet size (W x L)		800 – 1200 x 1200	800 – 1200 x 1200	800 – 1200 x 1200
Technical details:				
Inlet height	D	* 3400	* 3750	* 4150
Inlet ø	E	200/250/300	200/250/300	200/250/300
Weighing range		1500 / 3000 kg		
Different heights possible on request. Size alterations possible depending on configuration.				
*Height depending on filling head				



HS 1500		Type 01	Type 02
FIBC details:		mm	
FIBC height (shoulder height without loops)	A	800 – 1800	1200 – 2200
Base area	B	□ 800 - □ 1000	□ 800 - □ 1000
Loop length	C	200 – 300	200 – 300
Pallet size (W x L)		800 – 1200 x 1200	800 – 1200 x 1200
Technical details:			
Inlet height	D	3600	4000
Inlet ø	E	200/250/300	200/250/300
Weighing range		1500 / 3000 kg	
Different heights possible on request. Size alterations possible depending on configuration.			
Option compression troke	D*	3900	4300



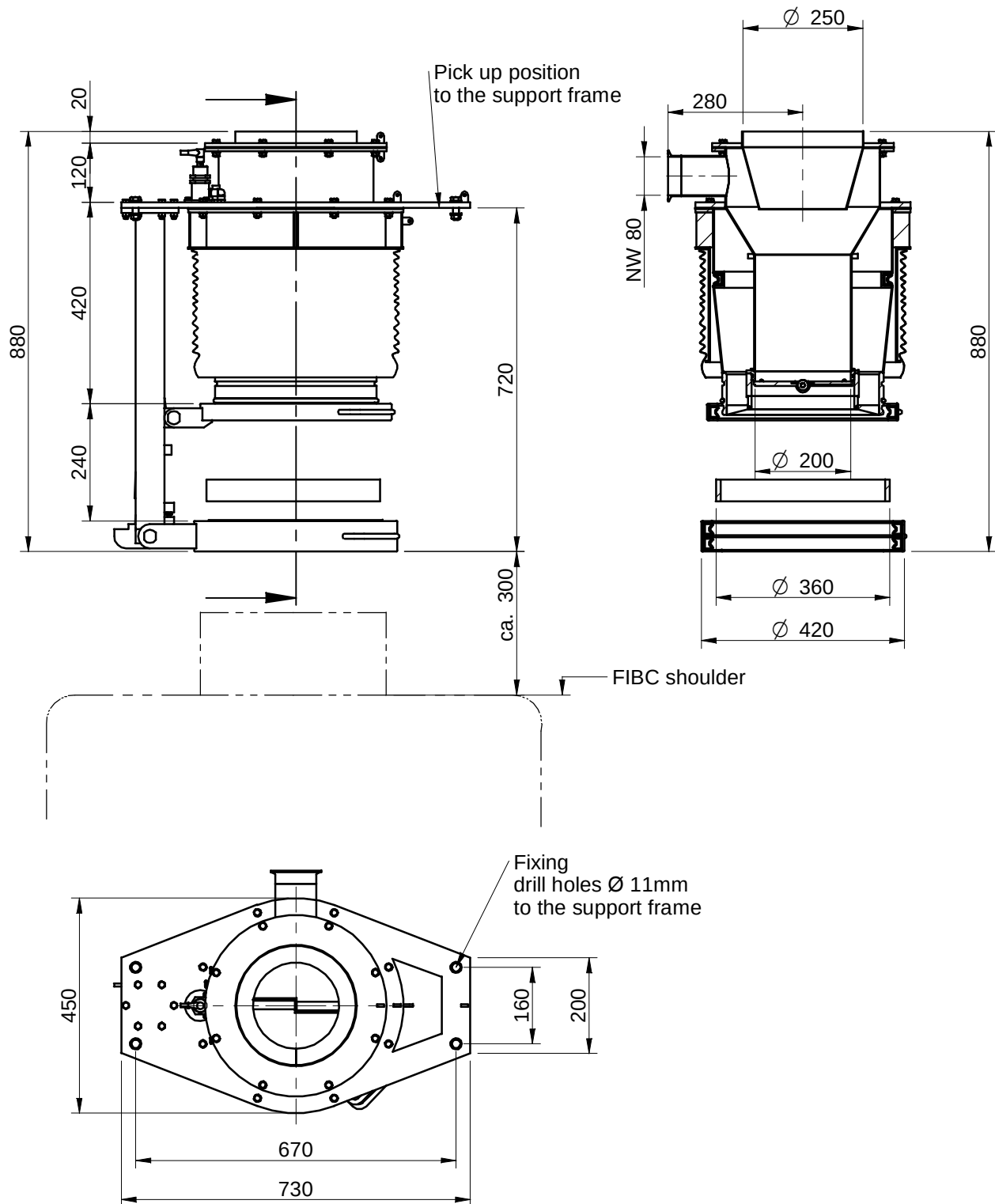
BG Basic		
FIBC details:		mm
FIBC height (shoulder height without loops)	A	800 – 2200
Base area	B	□ 800 - □ 1000
Loop length	C	200 – 300
Pallet size (W x L)		800 – 1200 x 1200
Technical details:		
Inlet height	D	FIBC height A + 955
Inlet ø	E	200/250/300
Frame height	F	FIBC height A +905
Weighing range		1500 / 3000 kg



HS 1500		Type 01	Type 02
FIBC details:		mm	
FIBC height (shoulder height without loops)	A	800 – 1800	1200 – 2200
Base area	B	□ 800 - □ 1000	[□ 800 - □ 1000]
Loop length	C	200 – 300	200 – 300
Pallet size (W x L)		800 – 1200 x 1200	800 – 1200 x 1200
Technical details:			
Inlet height	D	3600	4000
Inlet ø	E	200/250/300	200/250/300
Weighing range		max. 1500 kg	
Different heights possible on request. Size alterations possible depending on configuration.			
Option compression stroke	D*	3900	4300

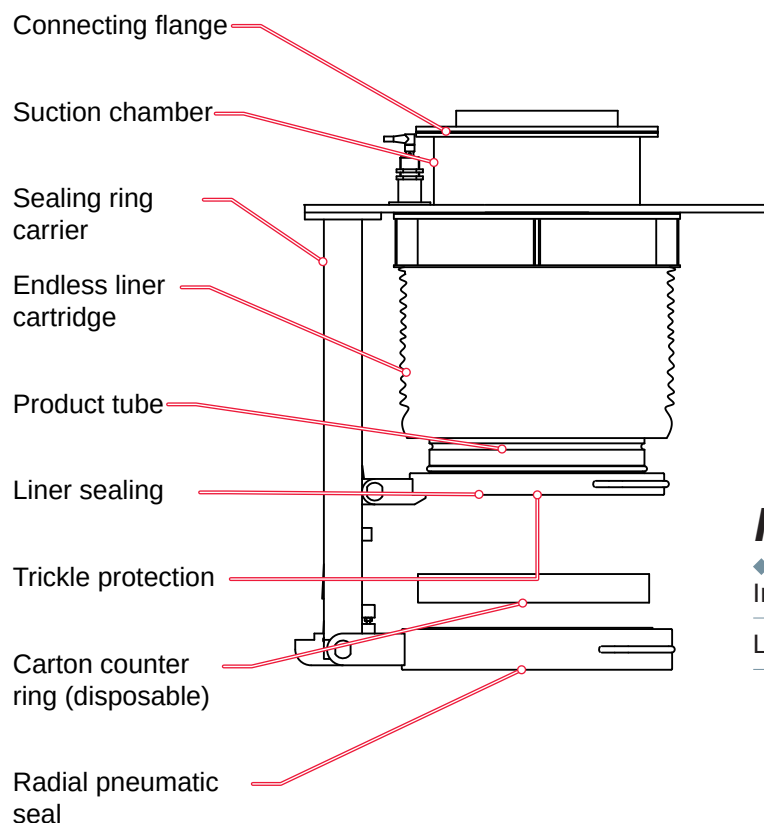


ProClean® continuous liner filling head
SBK 200/365/250



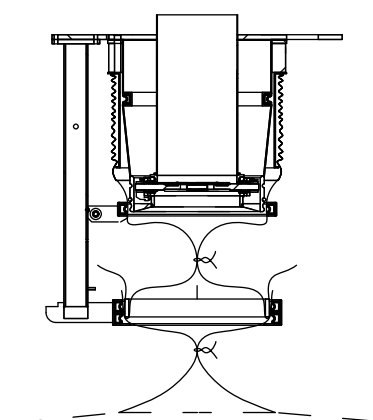
PROCLEAN® PROTECTIVE LINER FILLING HEAD CONTAMINATION-FREE

- System for low-contamination connection and filling of open sacks with inner liner.
Big Bag inlet and product tube are at no time open towards the environment.

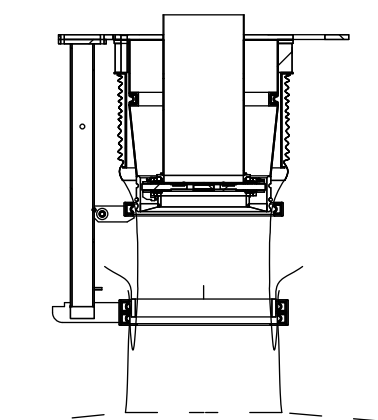


INLET DIMENSIONS		mm
Inlet diameter		380-500 mm
Length of inlet		> 900 mm

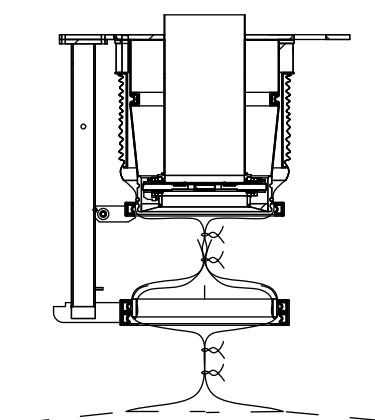
CONTAMINATION-FREE FILLING OF BIG BAGS AND DRUMS WITH INNER SACK



Protective liner inserted in counter ring and Big Bag inlet and sealed with radial seal ring.

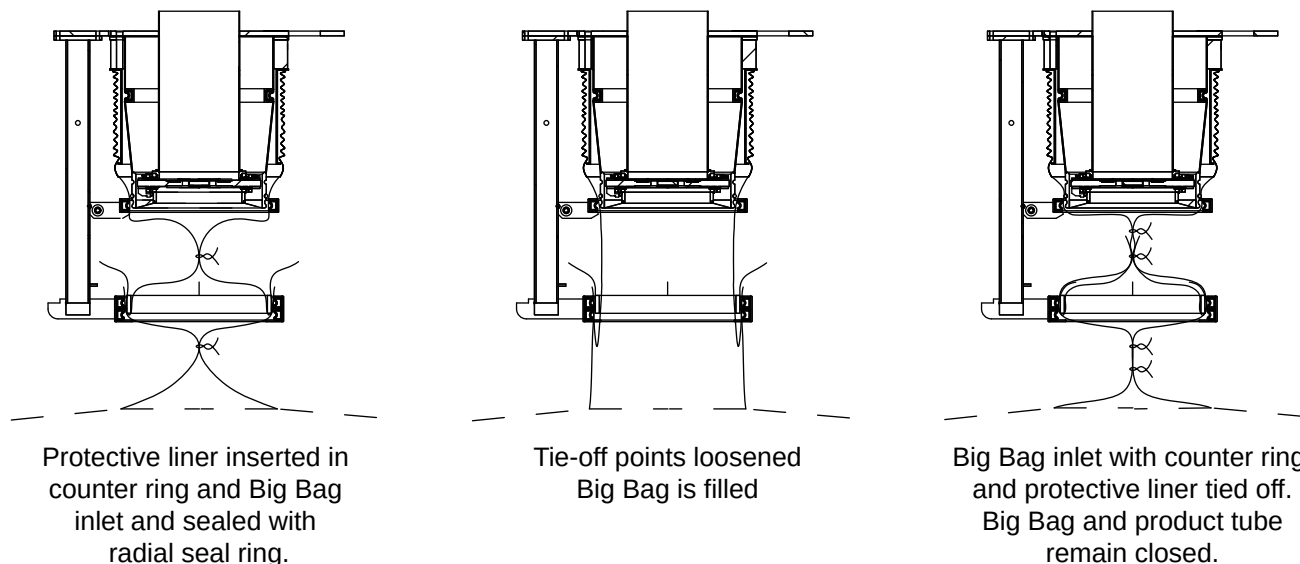


Closures loosened.
Big Bag is filled.



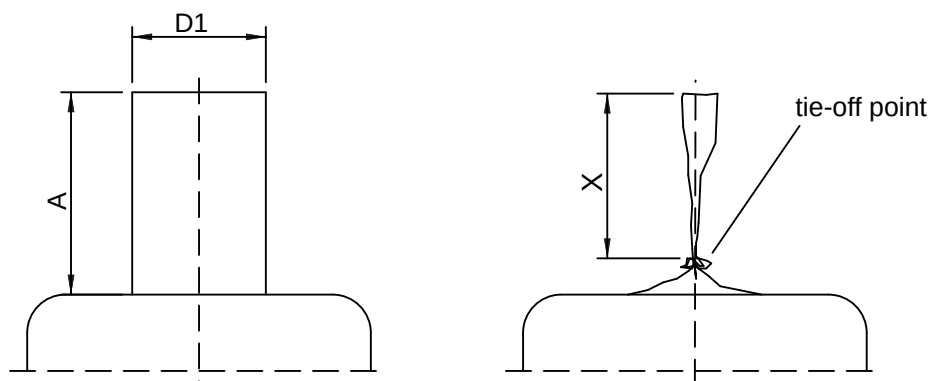
Big Bag inlet with counter ring and protective liner tied off.
Big Bag and product tube remain closed.

CONTAMINATION-FREE FILLING OF BIG BAGS AND DRUMS WITH INNER LINER



DIMENSIONING OF THE BIG BAG INLET

For secure insertion of the counter ring and sealing of the bag inlet, a minimum free length of the tied inner liner of the big bag is required. The recommended diameter range of the inlet also depends on the material quality of the inner liner to be connected.



SBK-TYPE

$D1$ = Inlet diameter

X = Minimum free length of tied inlet

A = Recommended inlet length

inch

15-20 in

28 in

36 in

mm

380-500 mm

700 mm

900 mm