

WEIGHT 77 000 kg

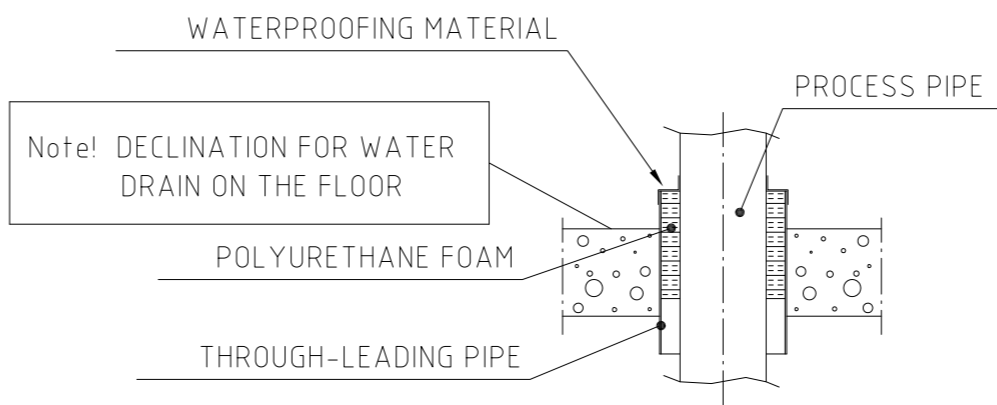
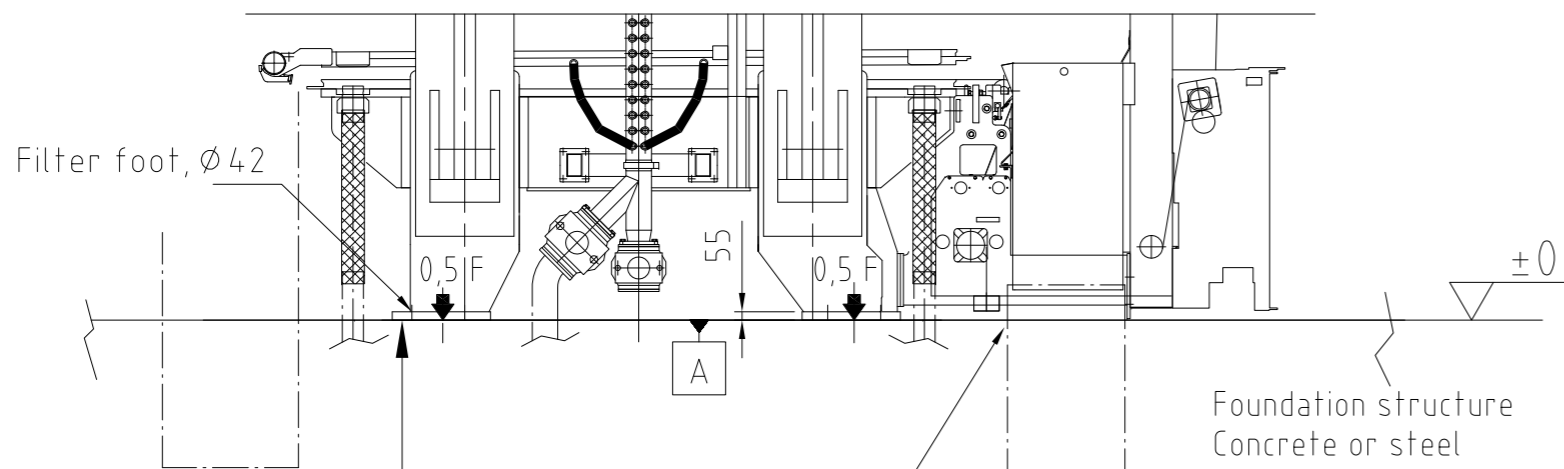
22	Muffler
21	Packing
20	Cloth
19	Maintenance tools
18	Electricity
17	Lubrication
16	Side shields; Maintenance platforms
15	Hydraulic unit
14	Hydraulic connections between hydraulic unit and filter
13	Hydraulic piping
12	Process valves
11	Process pipelines
10	Quick action cylinders
9	Guide bars
8	Rollers
7	Plate pack
6	Top frame
5	Upper pressing plate
4	Columns
3	Cloth drive unit
2	Cloth wash unit
1	Lower frame

Pos	Description			Pcs	Mark
27.03.2014	GAZGUO	As-built.			C
13.06.2013	HNU	CERTIFIED			B
12.03.2013	MKY				A

PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>	AS-BUILT	<input checked="" type="checkbox"/>
Date:	15.4.2013	Signature:	HNU				

Customer:	Sulvaris / Pöyry (Appleton) LLC	Ref No.	
Supplier ref. No.	B200178FI	Supplier work No.	Serial No. 1125

<b>Outotec</b>	GENERAL ARRANGEMENT DRAWING	12.03.2013	MKY
	PF1125	1:50 T-A2	
	PF 96/96 M48 2 60	F673031	C



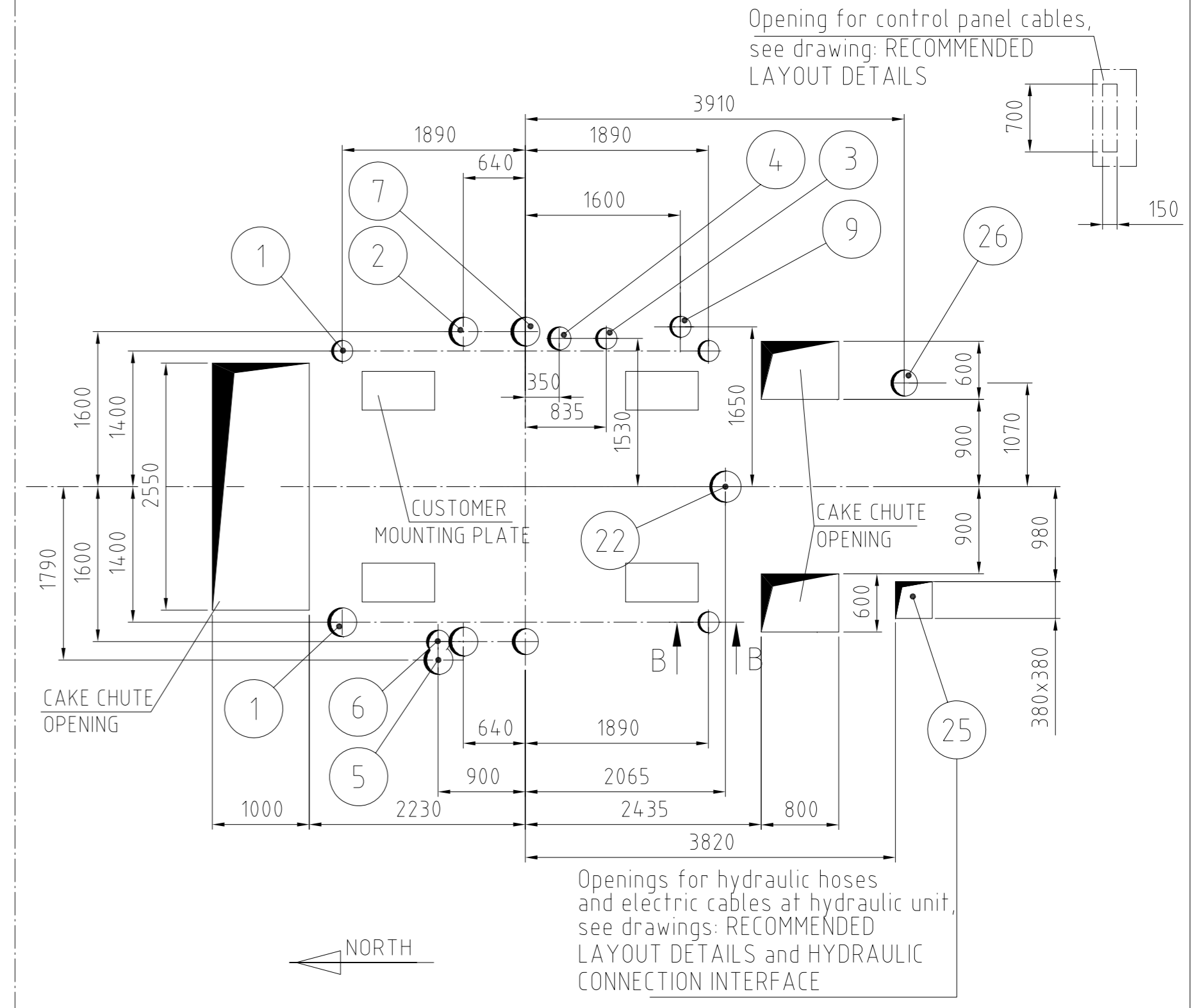
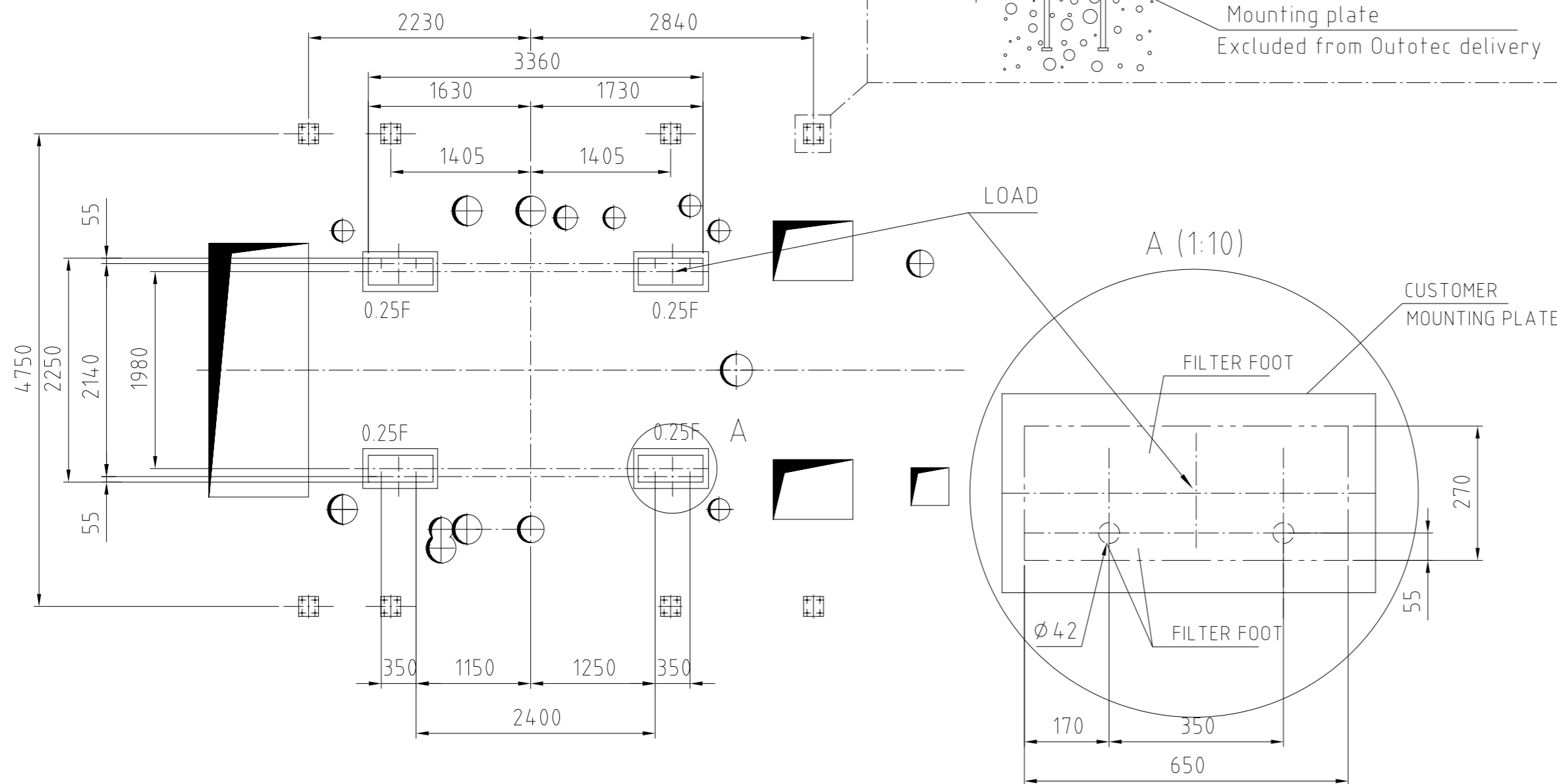
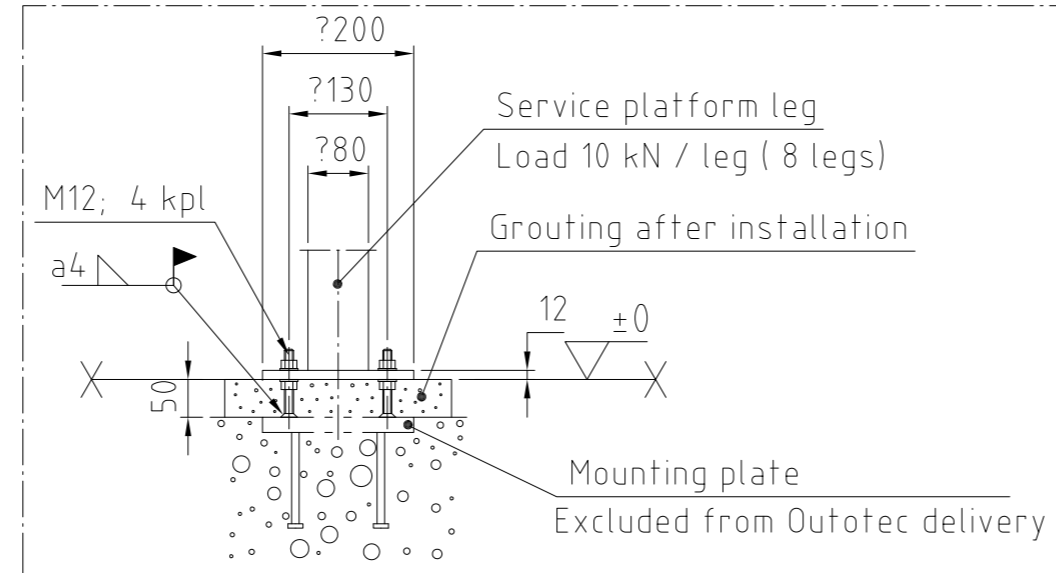
\*) PIPE OPENINGS ARE DIMENSIONED FOR ANSI B 16.5(150lbs) FLANGES, APART FROM 1 AND 22

OPENING NO	APPLICATION	PIPE MIN. SIZE	x) OPENING FOR PIPE DIA	pcs
1	FILTRATE	6"(DN150)	290	4
2	SLURRY FEED	6"(DN150)	290	2
3	PRESSING AIR IN	3"(DN80)	220	1
4	PRESSING AIR OUT	4"(DN100)	264	1
5	WASH WATER	6"(DN150)	290	1
6	DRYING AIR	4"(DN100)	239	1
7	DISTRIBUTOR DRAINING	6"(DN150)	290	2
9	CLOTH WASHING	2"(DN50)	162	1
22	CLOTH WASHING LIQUID DRAIN	10"(DN250)	324	1
25	HYDR. HOSES	-	□ 380x380	1
26	CABLES	-	273	1

A 5 \\ (ALL PLATES DIFFERENCE IN LEVELS)

Note! SEALED LEADING THROUGH. DECLINATION FOR WATER DRAIN ON THE FLOOR

Excluded from Outotec delivery EXAMPLES IN SECTION B - B



Openings for hydraulic hoses and electric cables at hydraulic unit, see drawings: RECOMMENDED LAYOUT DETAILS and HYDRAULIC CONNECTION INTERFACE

$F_{dyn} = 1,2 \times (F + \text{cake/slurry})$

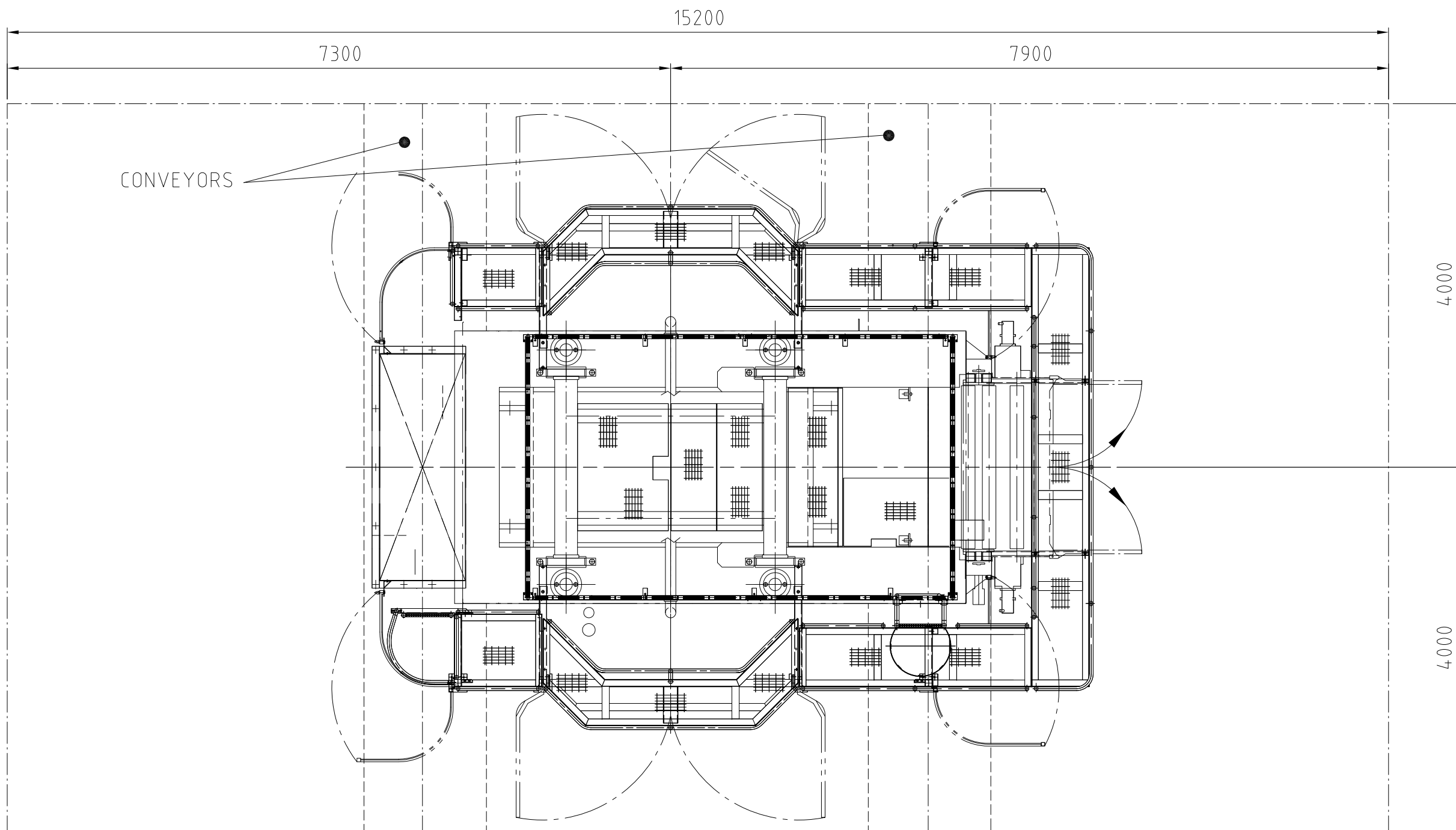
$F_{dyn}$  is implying the maximum dynamic vertical force downwards. Caused by the cloth and the plate pack movements. Should be used in strength calculations of supporting constructions.

MOUNTING PARTS EXCLUDED FROM OUTOTEC DELIVERY SEE DRAWING: INSTRUCTIONS FOR FILTER INSTALLATION (ON THE CONCRETE FOUNDATION).

Load F kN 770

NOTE ! CAKE/SLURRY WEIGHT MUST BE ADDED

27.03.2014	GAZGUO	As-built.			D		
28.06.2013	ALLI	Certified.			C		
30.05.2013	ALLI	Pipe 1,5&7 size changed.			B		
12.03.2013	MKY				A		
Date	Handler	Change		Pcs	Mark		
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>	AS-BUILT	<input checked="" type="checkbox"/>
Date:	15.4.2013	Signature:	HNU				
Customer:	Sulvaris / Pöyry (Appleton) LLC		Ref No.				
Supplier ref. No.	B200178FI	Supplier work No.		Serial No.	1125		
<b>Outotec</b>		FOUNDATION		12.03.2013	MKY		
		PF1125		1:50 T-A2			
		PF 96/96 M48 2 60		F673032			D



27.03.2014	GAZGUO	As-built.		D
28.06.2013	ALLI	Certified.		C
30.05.2013	ALLI	Delete the needless filters' layout.		B
12.03.2013	MKY			A
Date	Handler	Change	Pcs	Mark

PRELIMINARY  For APPROVAL  CERTIFIED  AS-BUILT

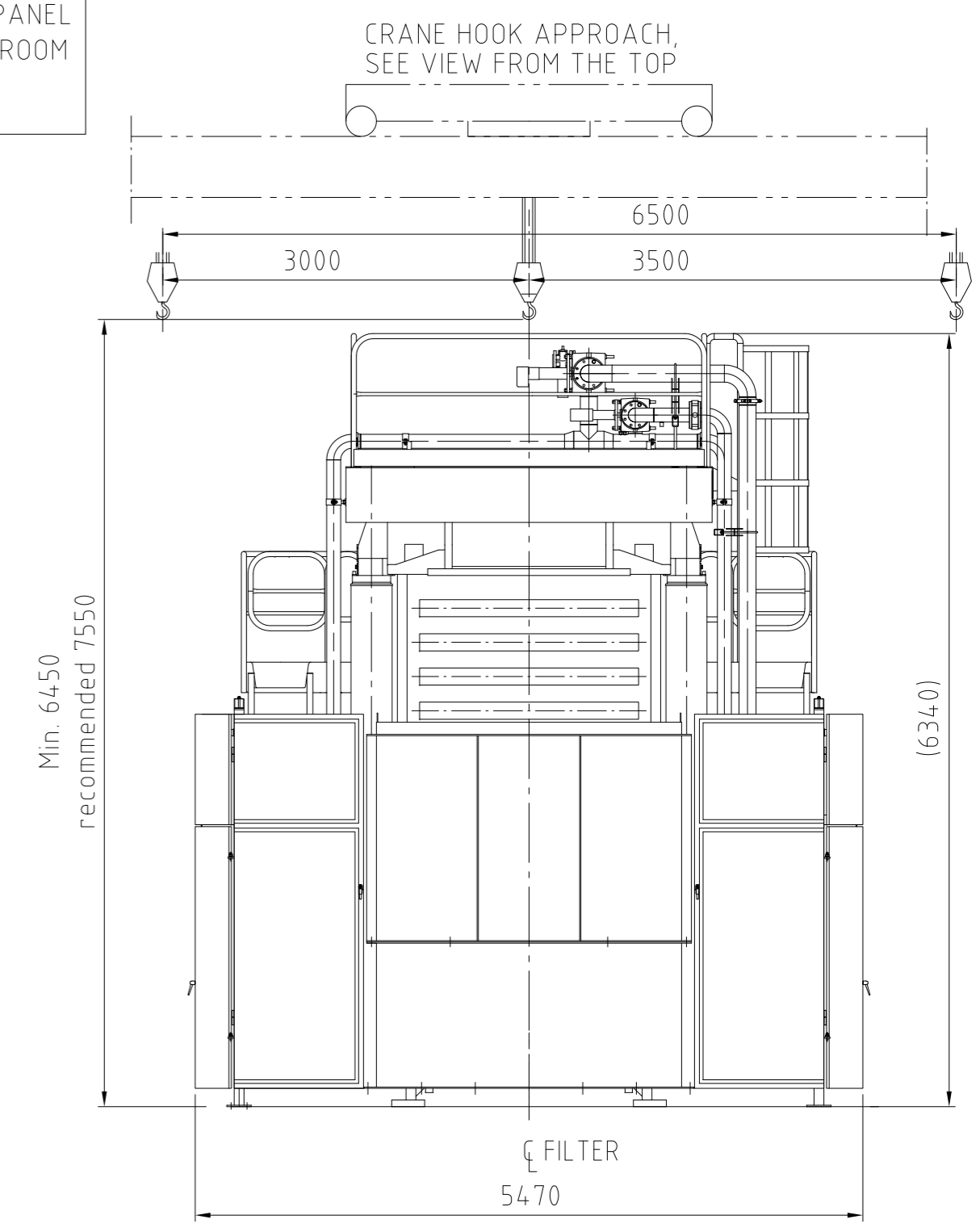
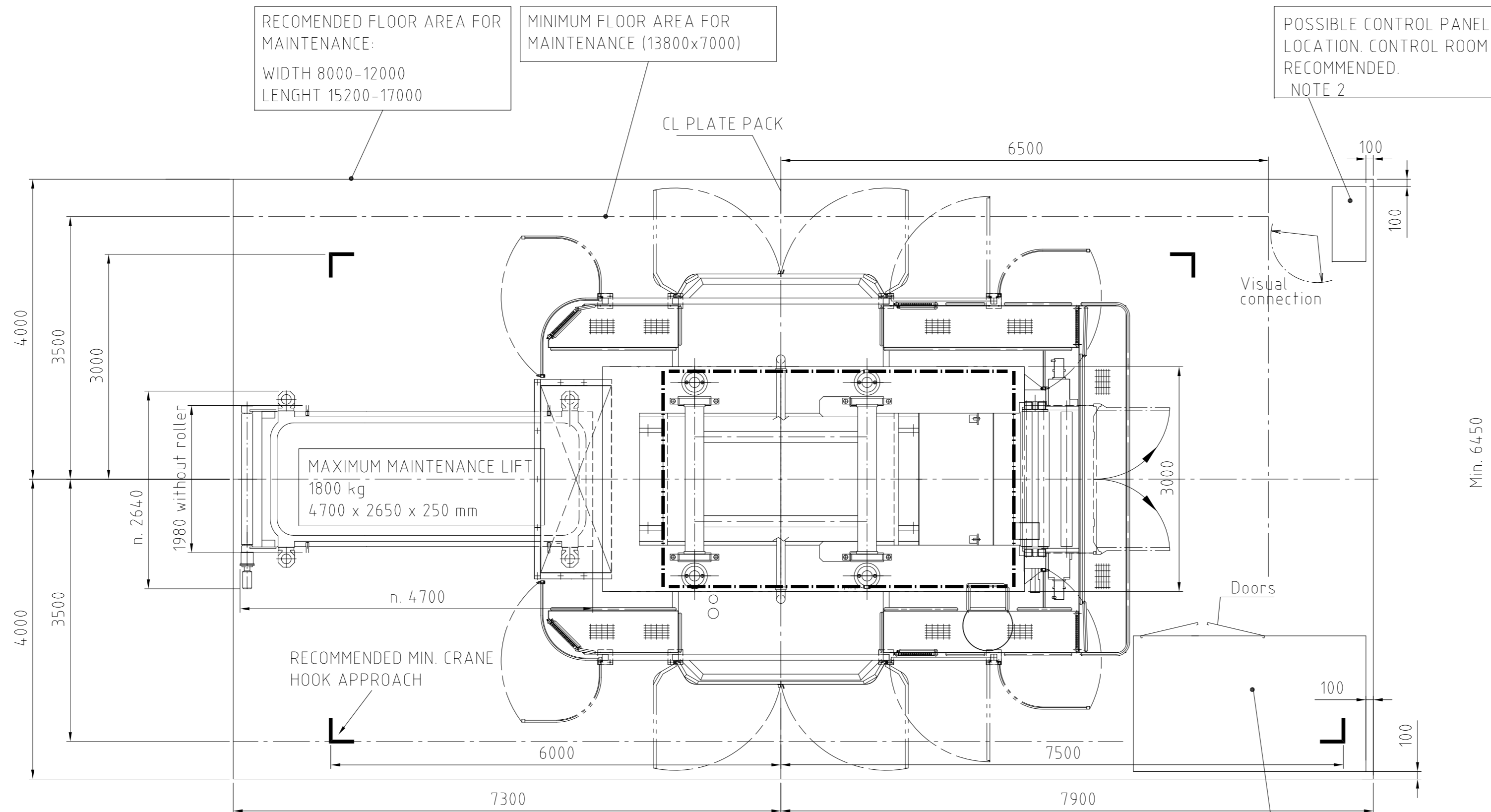
Date: 15.4.2013 Signature: HNU

Customer: Sulvaris / Pöyry (Appleton) LLC Ref N:o.

Supplier ref. N:o. B200178FI Supplier work N:o. Serial N:o. 1125

Outotec	COMMON LAYOUTS	12.03.2013	MKY
	PF1125	1:50 T-A3	
	PF 96/96 M48 2 60	F673058	D

CRANEAGE REQUIREMENTS  
 Crane for erection work min 84 t (total weight)  
 Crane for erection work min 14t  
 Crane for maintenance min 2t



RECOMENDED FLOOR AREA FOR MAINTENANCE:  
 WIDTH 8000-12000  
 LENGHT 15200-17000

MINIMUM FLOOR AREA FOR MAINTENANCE (13800x7000)

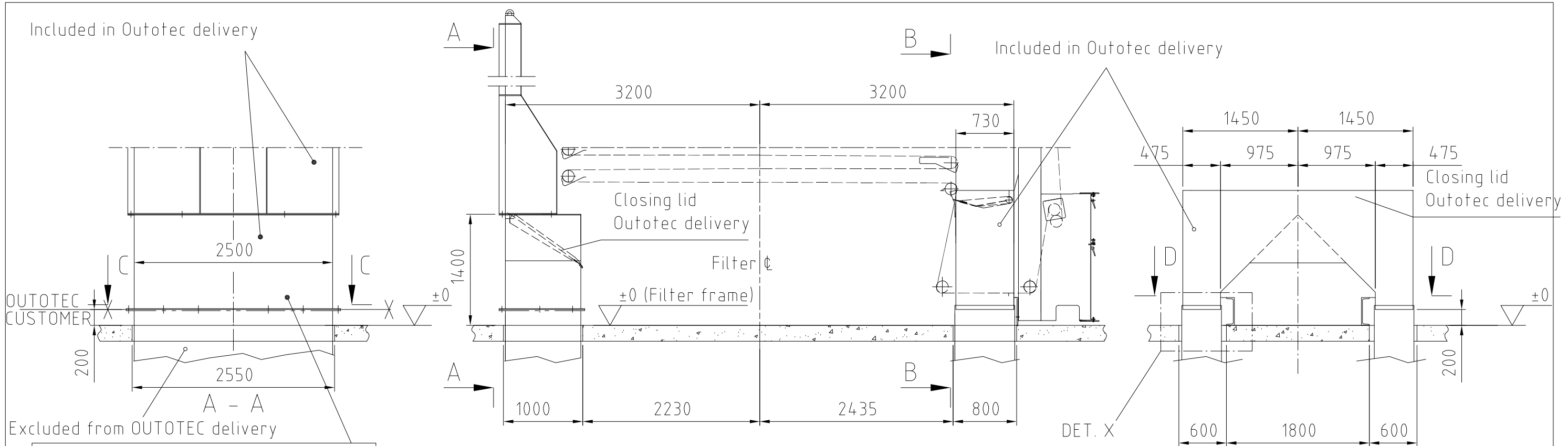
POSSIBLE CONTROL PANEL LOCATION. CONTROL ROOM RECOMMENDED. NOTE 2

POSSIBLE LOCATION FOR HYDRAULIC UNIT. NOTE 1  
 WILL BE LOCATED ON FLOOR BELOW BY CUSTOMER

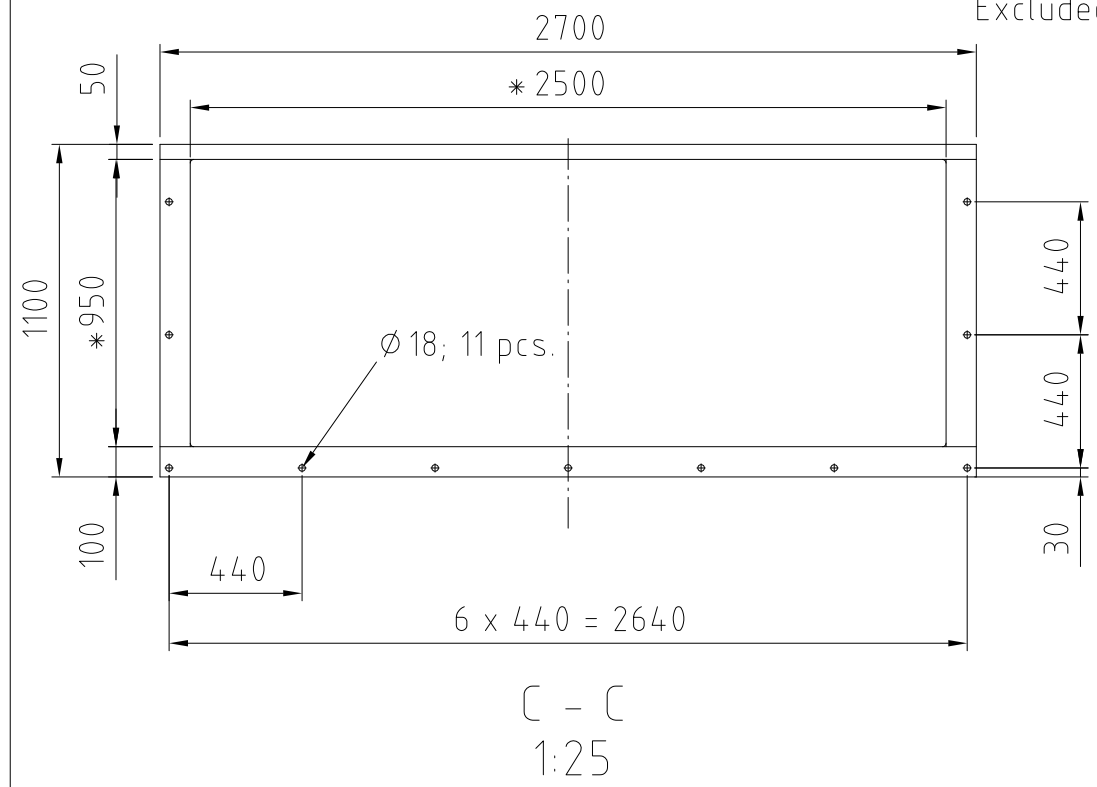
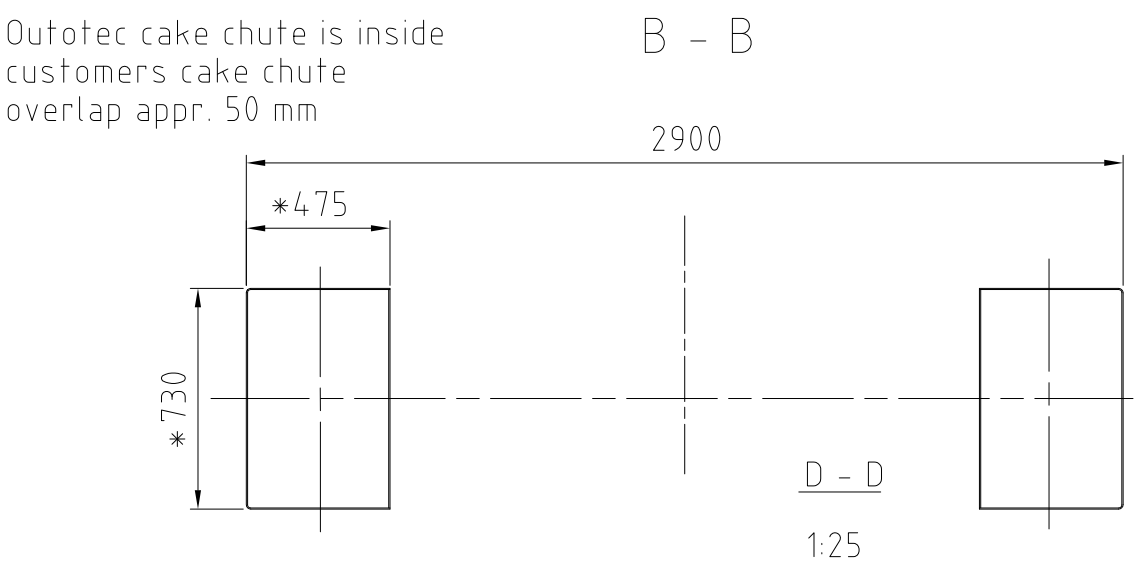
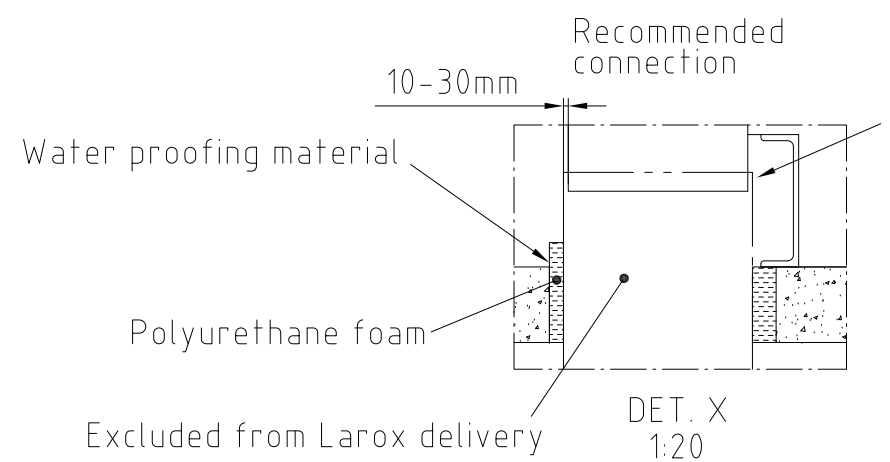
NOTE 1  
 1)THE HYDRAULIC UNIT LOCATION AS SHOWN IS NOT FIXED AND ALTERNATIVE POSITIONS CAN BE USED  
 VISUAL CONNECTION FROM THE HYDRAULIC UNIT TO THE FILTER IS USEFUL BUT NOT ESSENTIAL  
 WHERE PRACTICAL THE HYDRAULIC UNIT SHOULD BE PROTECTED FROM DUST, WEATHER AND SPILLS  
 THE LOCATION OF THE HYDRAULIC UNIT SHOULD BE SUCH THAT THE LENGTH OF HYDRAULIC HOSES IS LESS THAN 15m

NOTE 2  
 WHERE THERE IS A CONTROL ROOM CLOSE TO THE FILTER THE PANEL CAN BE LOCATED THERE  
 VISUAL CONNECTION FROM THE CONTROL PANEL TO THE FILTER IS USEFUL BUT NOT ESSENTIAL

27.03.2014	GAZGUO	As-built.			D		
28.06.2013	ALLI	Certified.			C		
30.05.2013	ALLI	Note about hydraulic unit location updated.			B		
12.03.2013	MKY				A		
Date	Handler	Change			Pcs Mark		
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>	AS-BUILT	<input checked="" type="checkbox"/>
Date:	15.4.2013	Signature:	HNU				
Customer:	Sulvaris / Pöyry (Appleton) LLC		Ref No.				
Supplier ref. No.	B200178FI	Supplier work No.		Serial No.	1125		
<b>Outotec</b>	RECOMMENDED LAYOUT		12.03.2013	MKY			
	PF1125		1:50 T-A2				
	PF 96/96 M48 2 60		F673059		D		

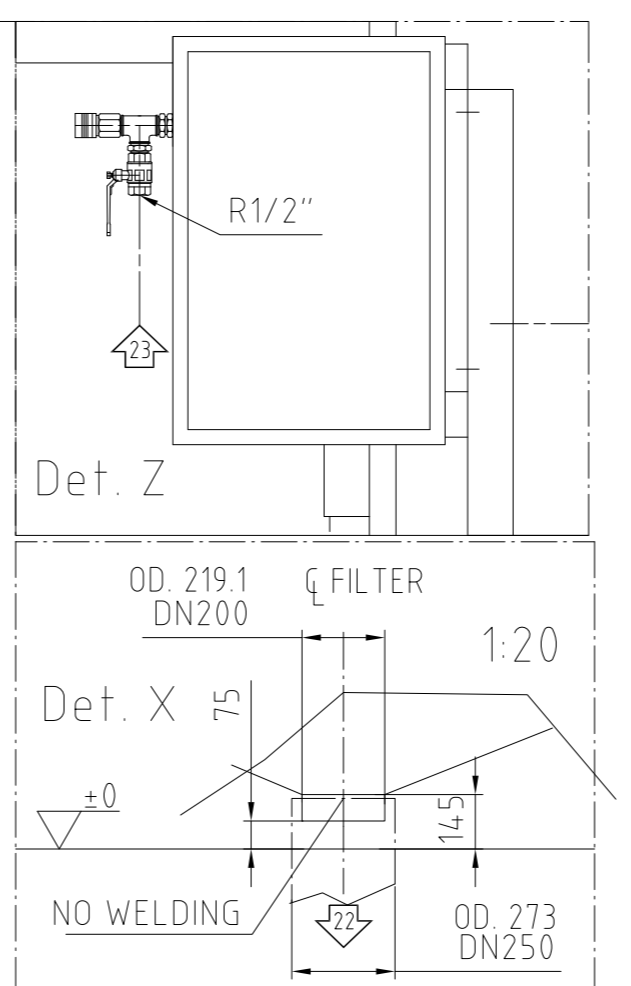
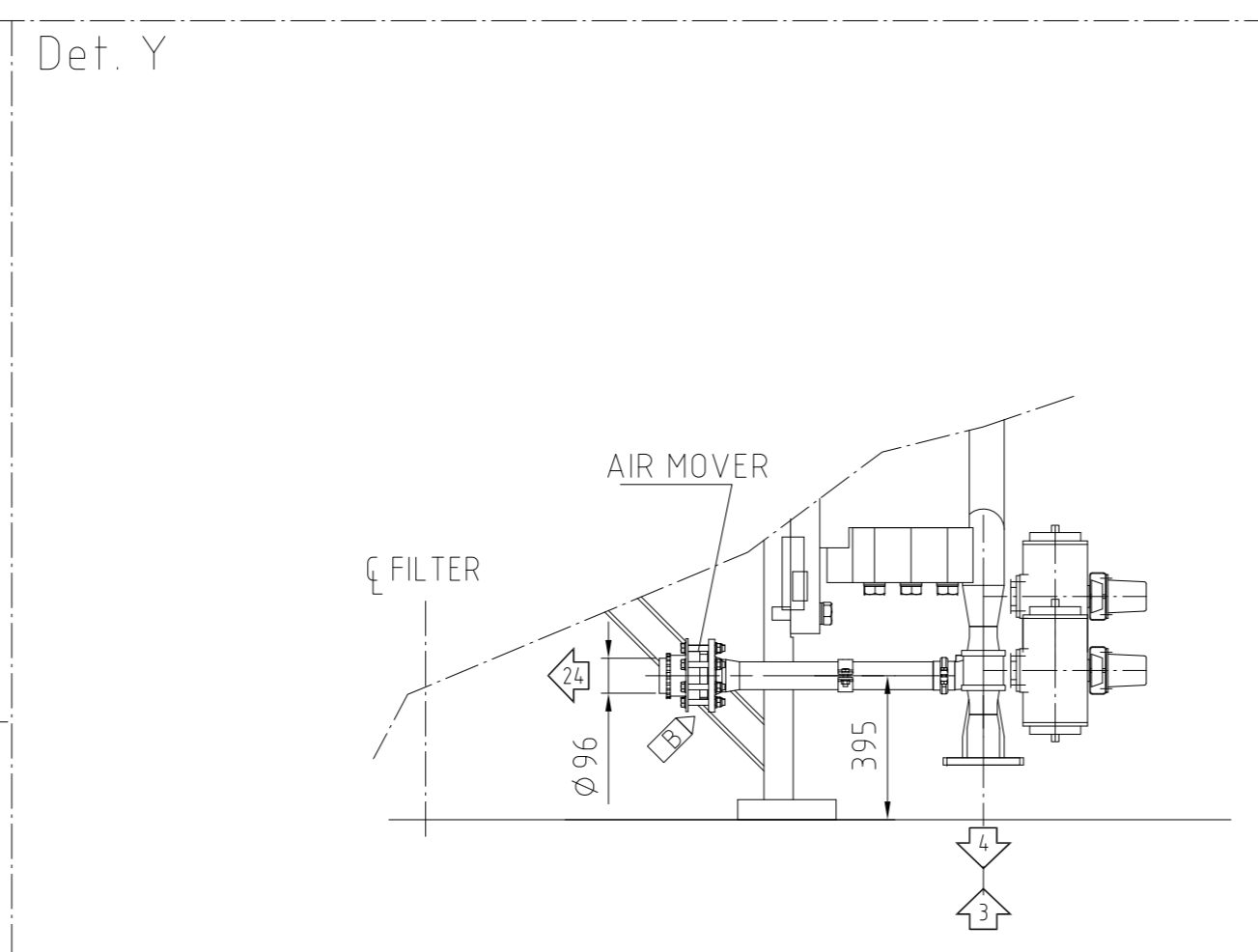
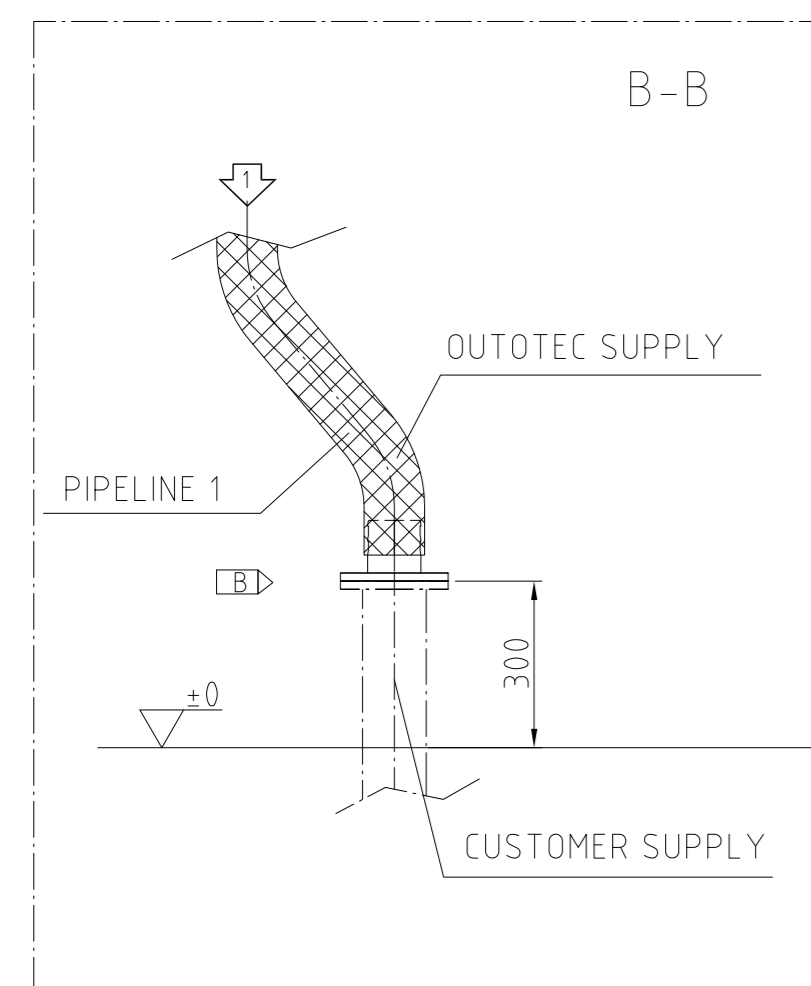
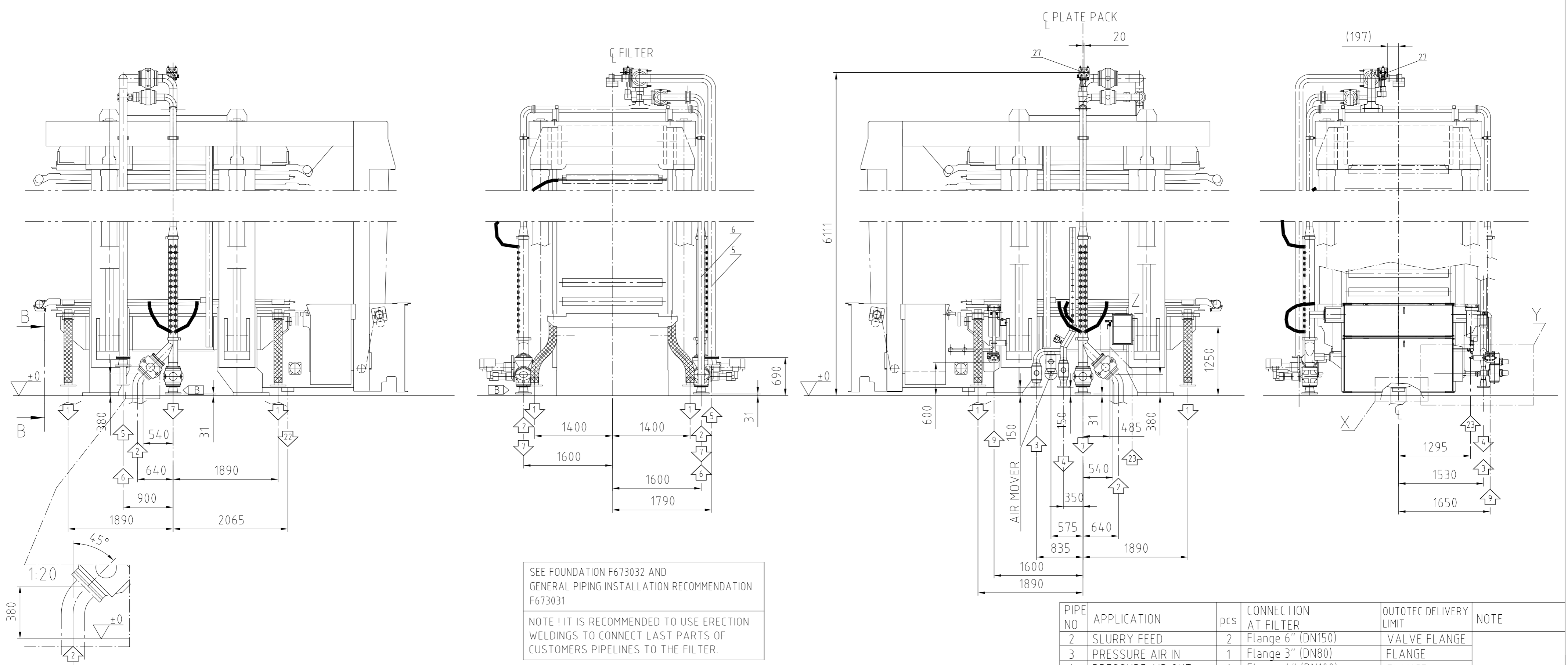


**Note:**  
 Upper part of cake chute (Larox delivery) is assembled on to the lower part by bolts.  
 The customer part of cake chute must carry the weight of upper chute including closing lid: 1200 kg (Larox delivery). Bolts are excluded from Larox delivery.



\* OUTSIDE DIMENSIONS OF OUTOTEC CAKE CHUTE

27.03.2014	GAZGUO	As-built.			C
13.06.2013	HNU	Certified.			B
12.03.2013	MKY				A
Date	Handler	Change		Pcs	Mark
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>
AS-BUILT	<input checked="" type="checkbox"/>				
Date: 15.4.2013	Signature: HNU				
Customer: Sulvaris / Pöyry (Appleton) LLC			Ref N:o.		
Supplier ref. N:o. B200178FI		Supplier work N:o.		Serial N:o. 1125	
<b>Outotec</b>			CAKE CHUTE INTERFACE		12.03.2013
			PF1125		MKY
			PF 96/96 M48 2 60		1:50 T-A3
			F673060		C



PIPE NO	APPLICATION	pcs	CONNECTION AT FILTER	OUTOTEC DELIVERY LIMIT	NOTE
2	SLURRY FEED	2	Flange 6" (DN150)	VALVE FLANGE	ONLY VALVES ARE CRN
3	PRESSURE AIR IN	1	Flange 3" (DN80)	FLANGE	
4	PRESSURE AIR OUT	1	Flange 4" (DN100)	FLANGE	
5	WASH WATER	1	Flange 6" (DN150) <B>	FLANGE	
6	DRYING AIR	1	Flange 4" (DN100)	FLANGE	
7	DISTRIBUTOR DRAINING	2	Flange 6" (DN150) <B>	VALVE FLANGE	
24	DIAPHRAGM LIFTING UP	1	Pipe od.96(3.77") <B>	PIPE END	
27	MANIFOLD VENTILATION	1	Flange 2" (DN50)	FLANGE	
1	FILTRATE	4	Flange 6" (DN150) <B>	FLANGE	
9	CLOTH WASHING	1	Flange 2" (DN50)	VALVE FLANGE	
22	CLOTH WASHING LIQUID DRAIN	1	Pipe od.219.1(8.63")	PIPE END	
23	INSTRUMENT AIR	1	R 1/2" Female	AT CONNECTOR	

FLANGES ACCORDING TO ANSI B 16.5 (150 lbs)

27.03.2014	GAZGUO	As-built.			D		
28.06.2013	ALLI	Certified.			C		
30.05.2013	ALLI	Filtrate connection changed to flanged, and pipe 5&7 size changed.			B		
12.03.2013	MKY				A		
Date	Handler	Change			Pcs Mark		
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>	AS-BUILT	<input checked="" type="checkbox"/>
Date:	15.4.2013	Signature:	HNU				
Customer:	Sulvaris / Pöyry (Appleton) LLC		Ref No.				
Supplier ref. No.	B200178FI	Supplier work No.		Serial No.	1125		
<b>Outotec</b>		PIPING INTERFACES		12.03.2013	MKY		
		PF1125		1:50 T-A2			
		PF 96/96 M48 2 60		F673061		D	

## GENERAL PIPING RECOMMENDATIONS FOR PF48 SERIES

(COMPARE WITH PIPING INTERFACE, FLOW SHEET AND P&I -DRAWINGS)

-All valid general standards and instructions concerning piping designing and building have to be taken into consideration in designing.

-Possible pressure shocks caused by filter operation have to be taken into consideration in designing of piping supports.

### FILTRATE LINE 1, free drain line without valves (A-program)

-In the filtrate line it is recommended to have always 1/100 declining at the minimum.

-It is not allowed to install extra closing valves in the filtrate line.

-The pipes (DN125) from all four corners of the filter can be connected to one pipe (DN250) under the filter.

-Pipelines should be as short as possible to eliminate back pressure. The maximum length of the filtrate pipe should be approx. 10 m.

-The air release tank is strongly recommended to be installed in the filtrate line (in A-program unit), as close to the filter as possible. The air line upwards from the tank should have enough vertical piping (2 - 3 m at least) to optimize the air/liquid separation.

-The filtrate pipe must not be connected to the discharge lines of vat or distribution pipes. In case several filters are installed do not connect filtrate lines from separate filters together prior to air release tank.

### DISTRIBUTOR/SLURRY DRAIN LINE 7

-In the slurry drain line it is recommended to have a 1/100 declining at the minimum. The recommended maximum length is approx. 10 m.

-Distributor drain lines from valves V07 and V17 can be connected to one pipe (DN 200) under the filter.

-The slurry drain line should be directed back to the slurry tank or to the thickener. If the height difference between slurry tank and filter cannot be arranged it is recommended to use a separate tank to which the slurry discharge pipe can be emptied. The connection should be arranged to minimize possible splashing of drainage.

### HOSE FLUSHING (CAKE WASHING) AND AIR DRYING LINES 5, 6 (Valves V05 & V06)

-In V05 and V06 lines check valves are recommended prior to air and water valves. By installing these valves possible back flow through the air or water supply lines is prevented in case of failure or accidental opening of either valves. The pressure in the slurry feed pipe line can rise up to 16 bar.

-Lines under continuous pressure must also have manual shutoff valves prior to the filter to enable complete isolation of the filter. Easy access to those valves is vital.

-It is recommended to have a strainer,  $\varnothing$  5 mm, in the lines.

-Slurry feed pipe and slurry hoses are usually flushed with water. Flush water is led into the filter via cake wash water valve V05. Even if there is no cake washing in the program, the water line has always to be connected. Also filtrate can be used as flush water. Flush pressure should be at least 1 bar higher than the slurry infeed pressure.

27.03.2014	GAZGUO	As-built.		C
13.06.2013	HNU	CERTIFIED		B

### SLURRY INFEEED LINE 2 (Valve V02 & V12)

-A separate pumping tank with mixer should always be used in the slurry infeed line. The tank must be equipped with a strainer,  $\varnothing$  max. 5 mm, which prevents the access of foreign particles via tank to the filter.

-One pipe line (DN200) from pump can be divided under the filter to two lines (DN 150) to the valves V02 and V12.

-Filter's operation in cycles should be taken into consideration in designing. Especially in case of slurries with "settling" properties, vertical rises should be prevented. Recycling between tank and filter is sometimes needed.

-Pump's inlet line must equipped with manual shutoff valve for pump maintenance.

### PRESSING AIR LINE 3 (Valve V03)

-Mount the pressure relief valve after pressure reducing valve to protect the filter from overpressure. MAX. PRESSING PRESSURE IS 16 BAR.

### PRESSING AIR RELEASE LINE 4

-NO VALVES IS ALLOWED IN THE PRESSING AIR RELEASE LINE. Because of high noise level it is recommended to use muffler at the end pressing air discharge line. Max. length of pipe 15 m with DN 100 diameter.

### CLOTH WASHING LINE 9 (Valve V09)

-The pressure in the cloth washing line should be from 10 to 14 bar. to ensure the operation of spray nozzles.

-Cloth wash water has a purity requirement. The maximum particle size is 40  $\mu$ m and the maximum solids content 300 mg/l.

### DRAIN LINE 22

-In vat drain line there should always be a 1/100 declining at the minimum.

### MANIFOLD VENTILATION / (PRESSURE RELEASE) LINE 27

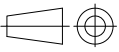
-If pressure release via V27 is used line must be connected to the air release tank or to the slurry tank. and possible after V27 situated check valve must be removed from structure.

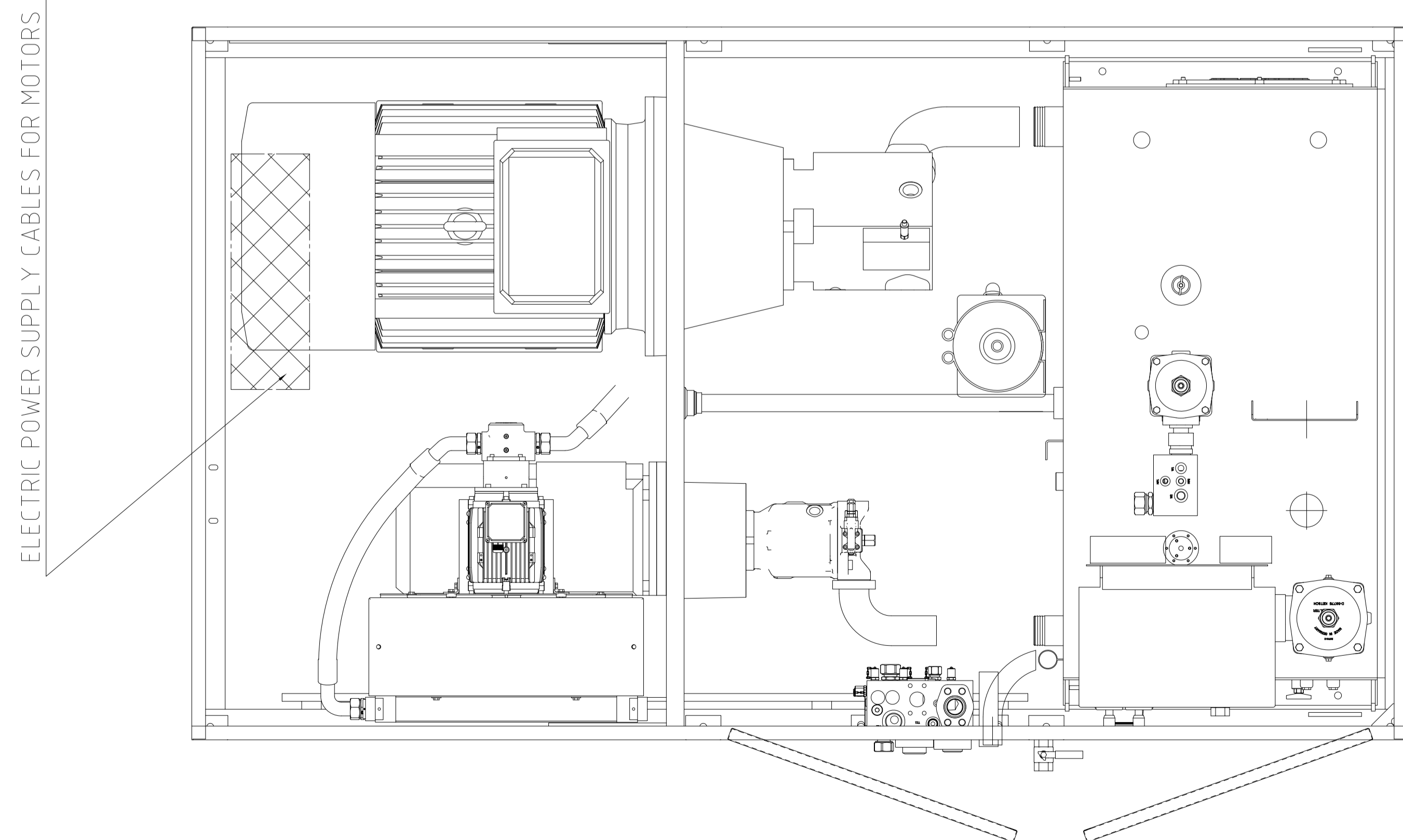
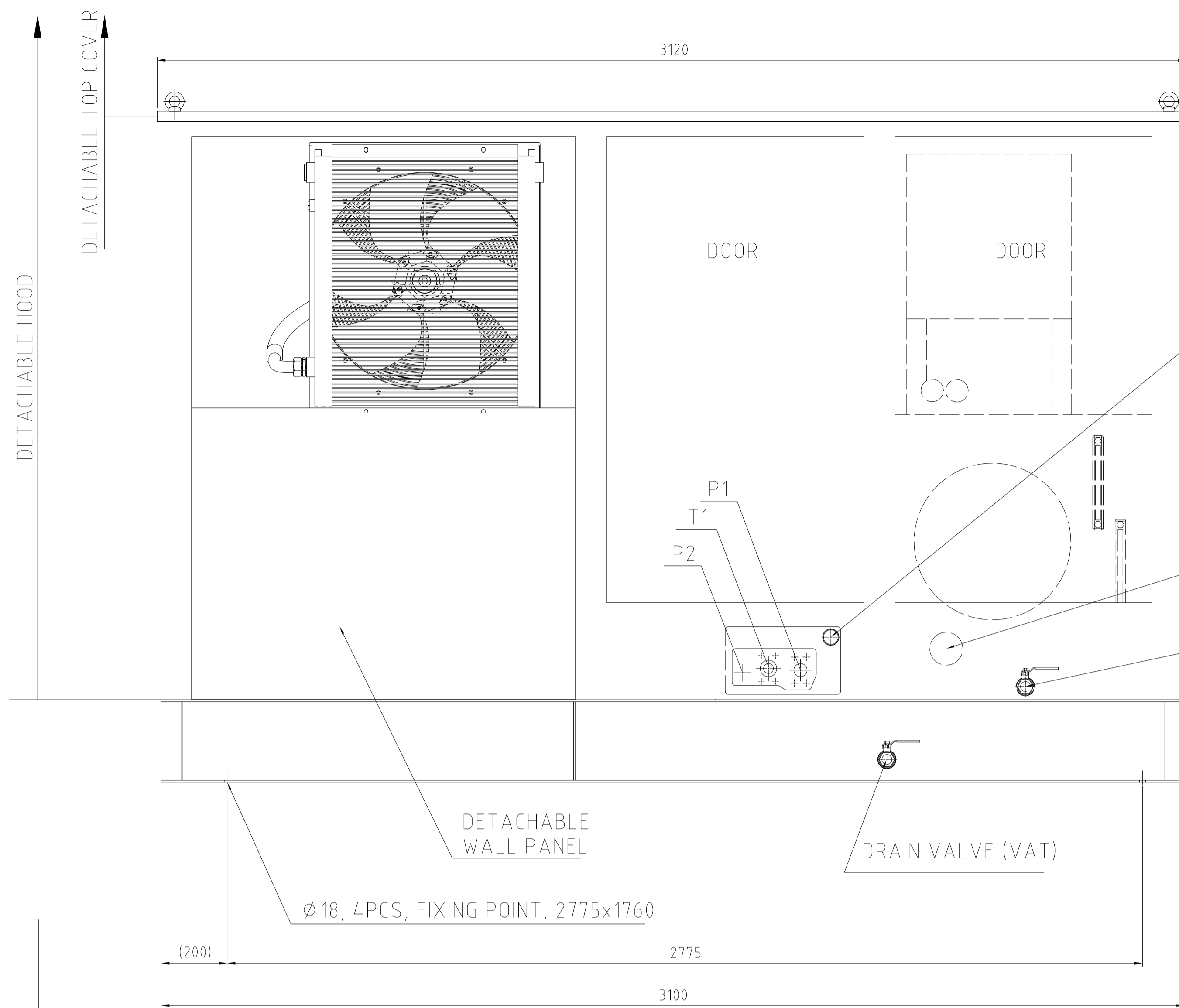
### MANUAL WASHING HOSE

-Filter outside washing time to time is strongly recommended. Washing hose close to the filter is needed and wash water drain around the filter to be considered when designing the installation.

## NOTE:

THIS DRAWING IS FOR INFORMATION USE ONLY

12.03.2013	MKY			A			
Date	Handler	Change		Pcs Mark			
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>	AS-BUILT	<input checked="" type="checkbox"/>
Date:	15.4.2013	Signature:	HNU				
Customer:	Sulvaris / Pöyry (Appleton) LLC			Ref N:o.			
Supplier ref. N:o.	B200178FI	Supplier work N:o.	Serial N:o. 1125				
<b>Outotec</b>	DESIGN INSTRUCTIONS FOR PIPE INSTALLATION			12.03.2013	MKY		
	PF1125	1:1 T-A3					
	PF 96/96 M48 2 60	F673062	C				



THIS SIDE UNCOVERED

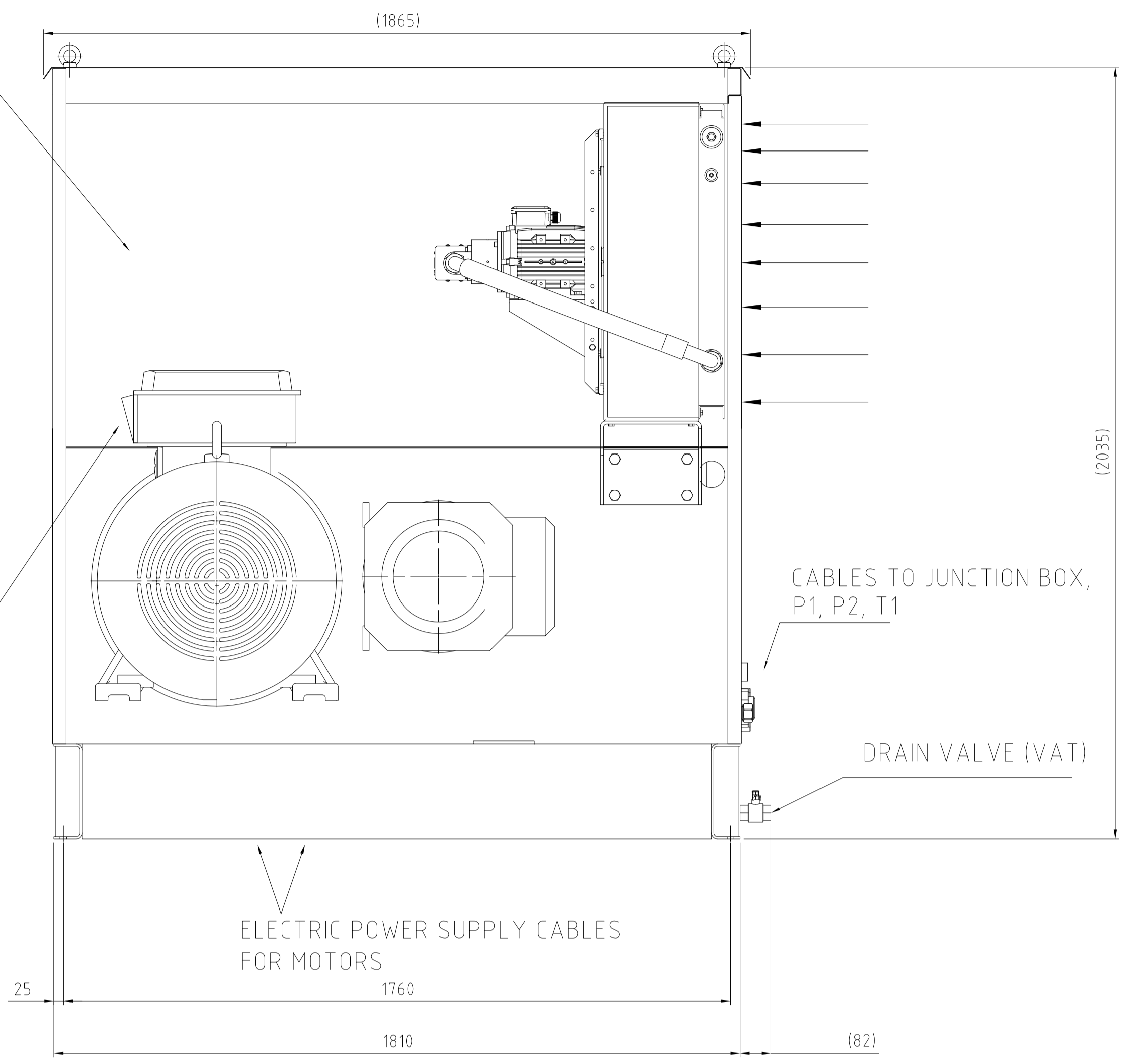
DETACHABLE WALL PANEL

CABLES TO JUNCTION BOX

OIL HEATER BEHIND COVER

DRAIN VALVE (OIL TANK) BEHIND COVER

SUBLY CABLE OF ELECTRIC MOTOR



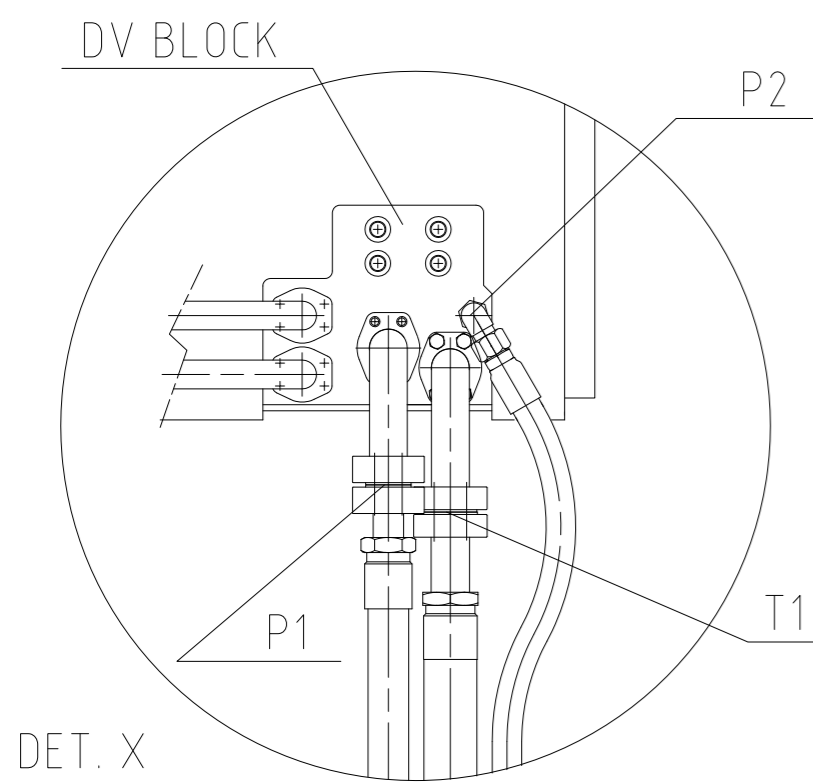
WEIGHT: APPROX. 2600 KG WITHOUT OIL  
MAX. OIL CAPACITY: 800 L

OIL RECOMMENDATIONS:  
 - HIGH QUALITY OIL EQUIVALENT TO SAE J183 CLASSIFICATION SC, SD OR SE  
 - CLEANLINESS CLASSIFICATION 16/13 (ISO4406) OR CLASS 7 (NAS1639)  
 - VISCOSITY 46 cSt AT 30 C  
 THE FILLING OF THE HYDRAULIC POWER UNIT:  
 - WITH FILTRATION UNIT (FILTRATION RATE 6u ABS) OR  
 - THROUGH RETURN OIL FILTER

CONNECTIONS  
 P1= 1 1/2" 6000Psi (ISO 6162-2)  
 T1= 2" 3000Psi (ISO 6162-1)  
 P2= R1", (ISO 228 G 1)  
 SEE DRAWING: HYDRAULIC CONNECTION INTERFACE

27.03.2014	GAZGUO	As-built.			B
12.03.2013	MKY				A
Date	Handler	Change			Pcs Mark
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>
Date: 15.4.2013	Signature: HNU		AS-BUILT	<input checked="" type="checkbox"/>	
Customer: Sulvaris / Pöyry (Appleton) LLC			Ref No.		
Supplier ref. No. B200178F1	Supplier work No.	Serial No. 1125			
<b>Outotec</b>		HYDRAULIC UNIT	12.03.2013	MKY	
		PF1125	1:10 T-A1		
		PE 96/96 M48 2 60	F673063		B





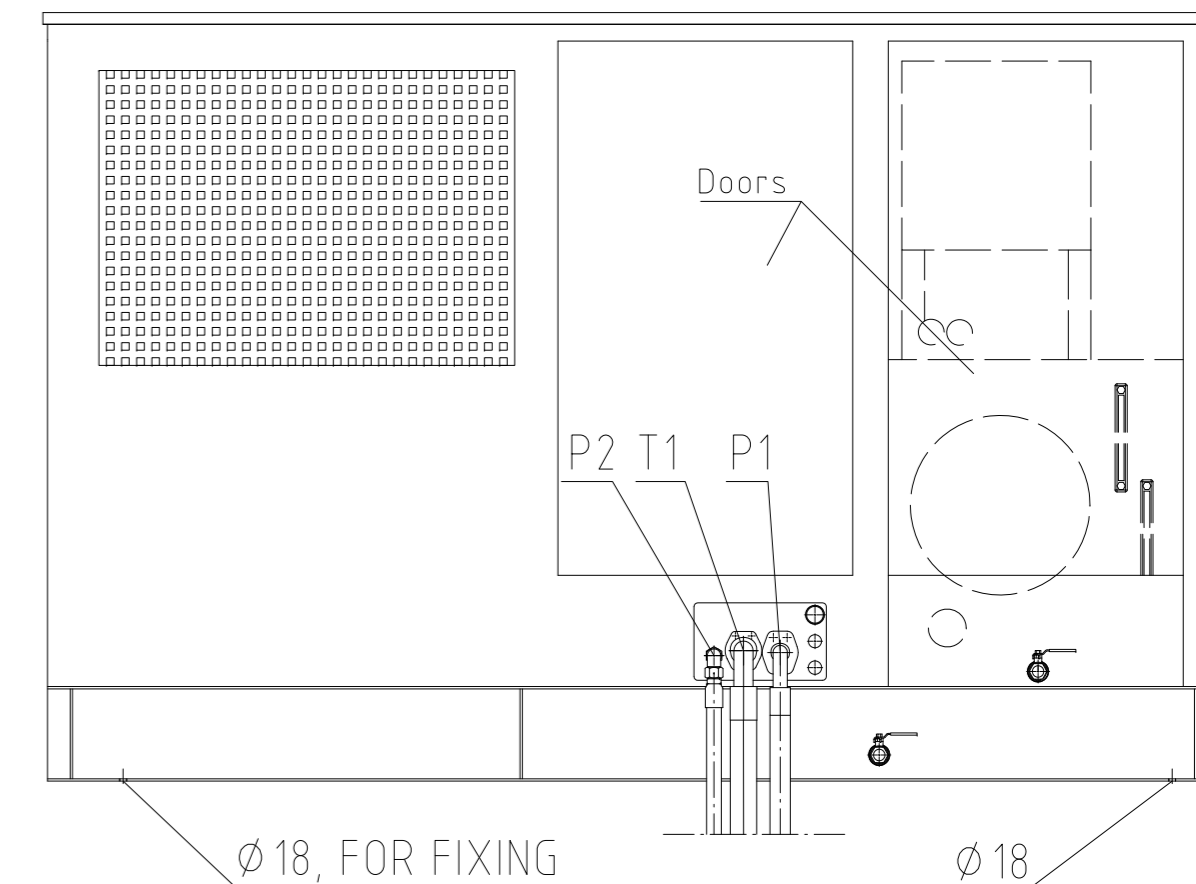
DET. X  
1:10

CONNECTIONS FOR THE FILTER

- P2= R 3/4", (ISO 228 G 3/4)
- T1= FLANGE CONNECTOR: 2", SAE J518 code 61, (ISO 6162-1)  
O-ring sealing, SAE J515, (ISO 3601-1)  
the ends of the hose have a groove for a O-ring
- P1= FLANGE CONNECTOR: 1 1/2", SAE J518 code 62, (ISO 6162-2)  
O-ring sealing, SAE J515, (ISO 3601-1)  
the ends of the hose have a groove for a O-ring

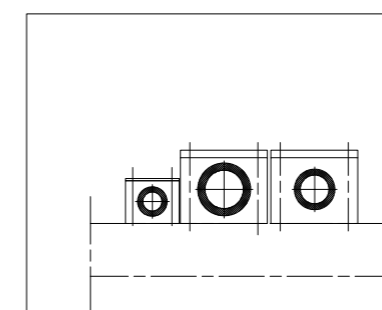
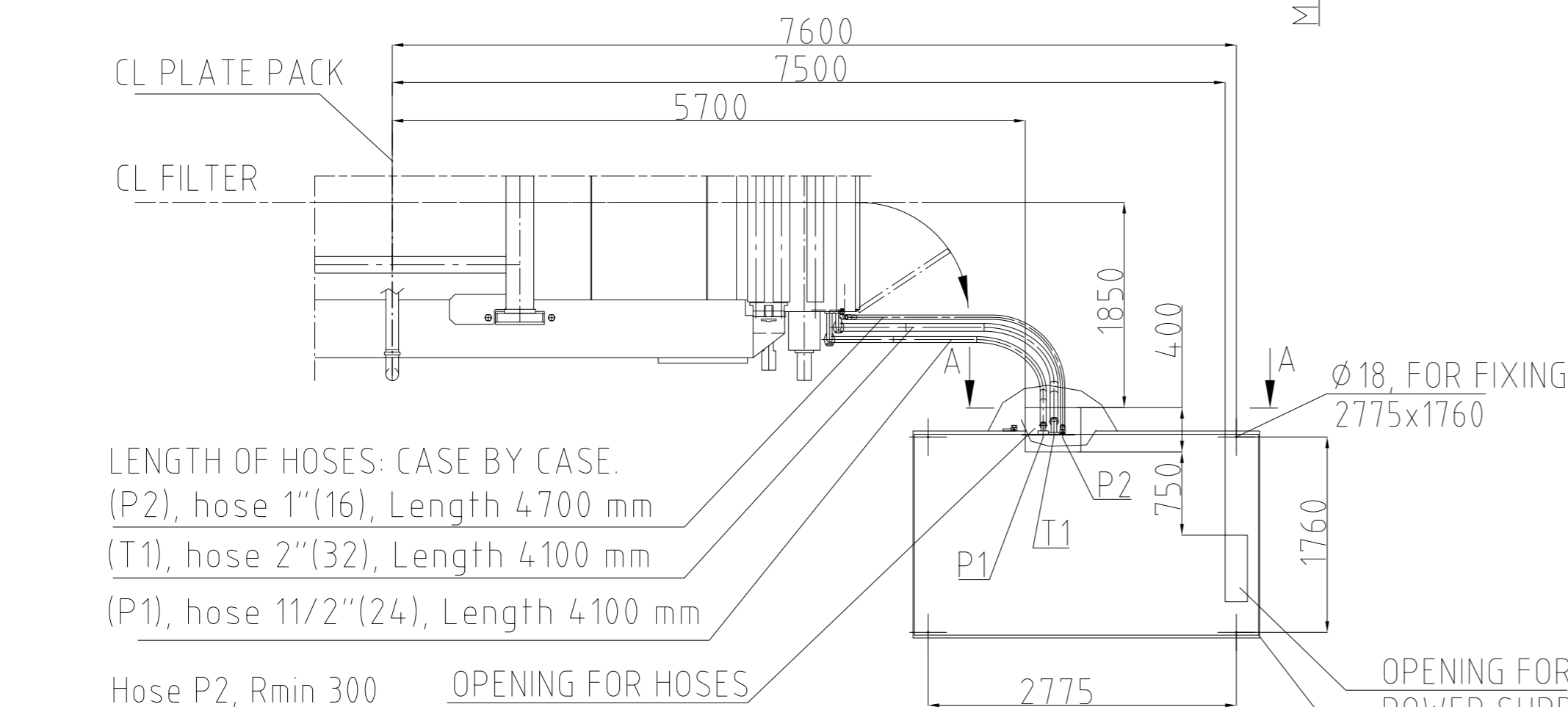
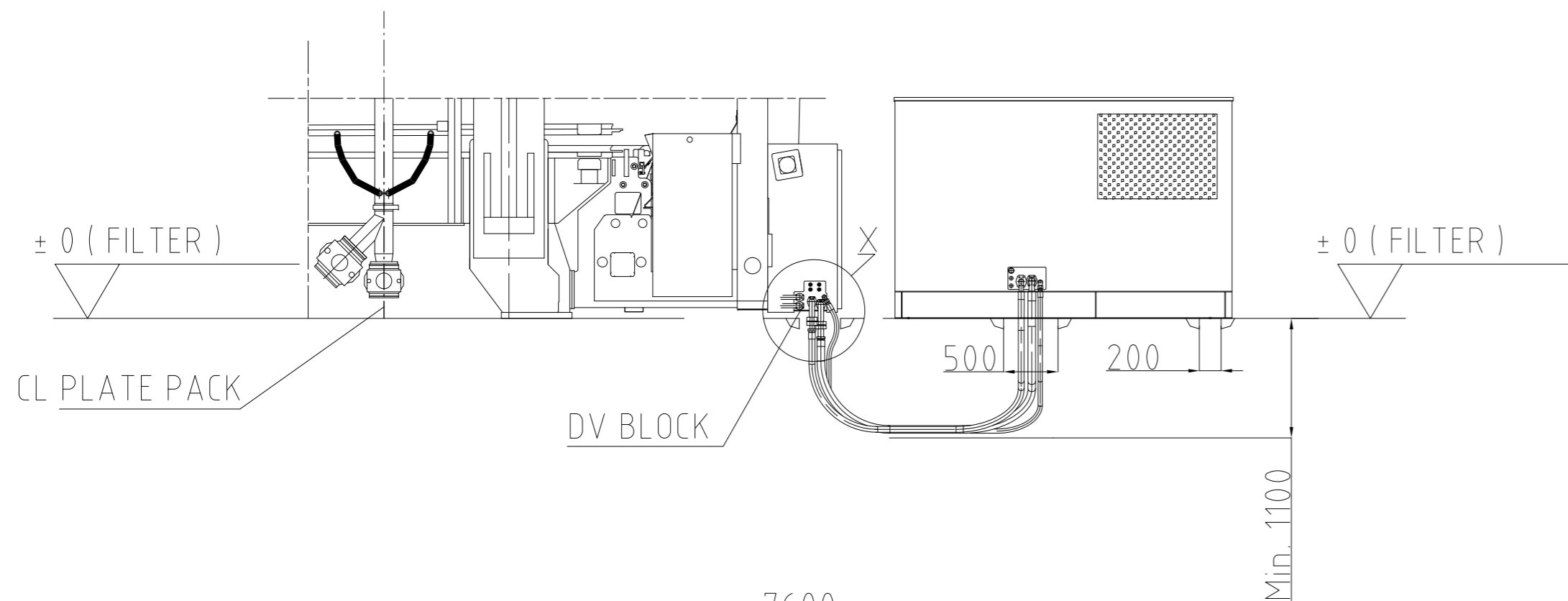
CONNECTIONS FOR THE HYDRAULIC UNIT:

- P2= R1", (ISO 228 G 1)
- T1 = 2", SAE J518 code 61, (ISO 6162-1)
- P1= 1 1/2", SAE J518 code 62, (ISO 6162-2)



A - A  
1:20

SEE ALSO: HYDRAULIC UNIT DIMENSIONAL DRAWING



Hoses have to be supported properly to avoid scratching each other or other surfaces during operation.

Connection hoses and fittings are included in delivery.  
The support parts and installation work are excluded from delivery.

In case there is a need for longer than 15m hoses, please contact to supplier.

LENGTH OF HOSES: CASE BY CASE.  
(P2), hose 1"(16), Length 4700 mm  
(T1), hose 2"(32), Length 4100 mm  
(P1), hose 1 1/2"(24), Length 4100 mm

Hose P2, Rmin 300  
Hose T1, Rmin 630  
Hose P1, Rmin 560

OPENING FOR HOSES  
500 x 400

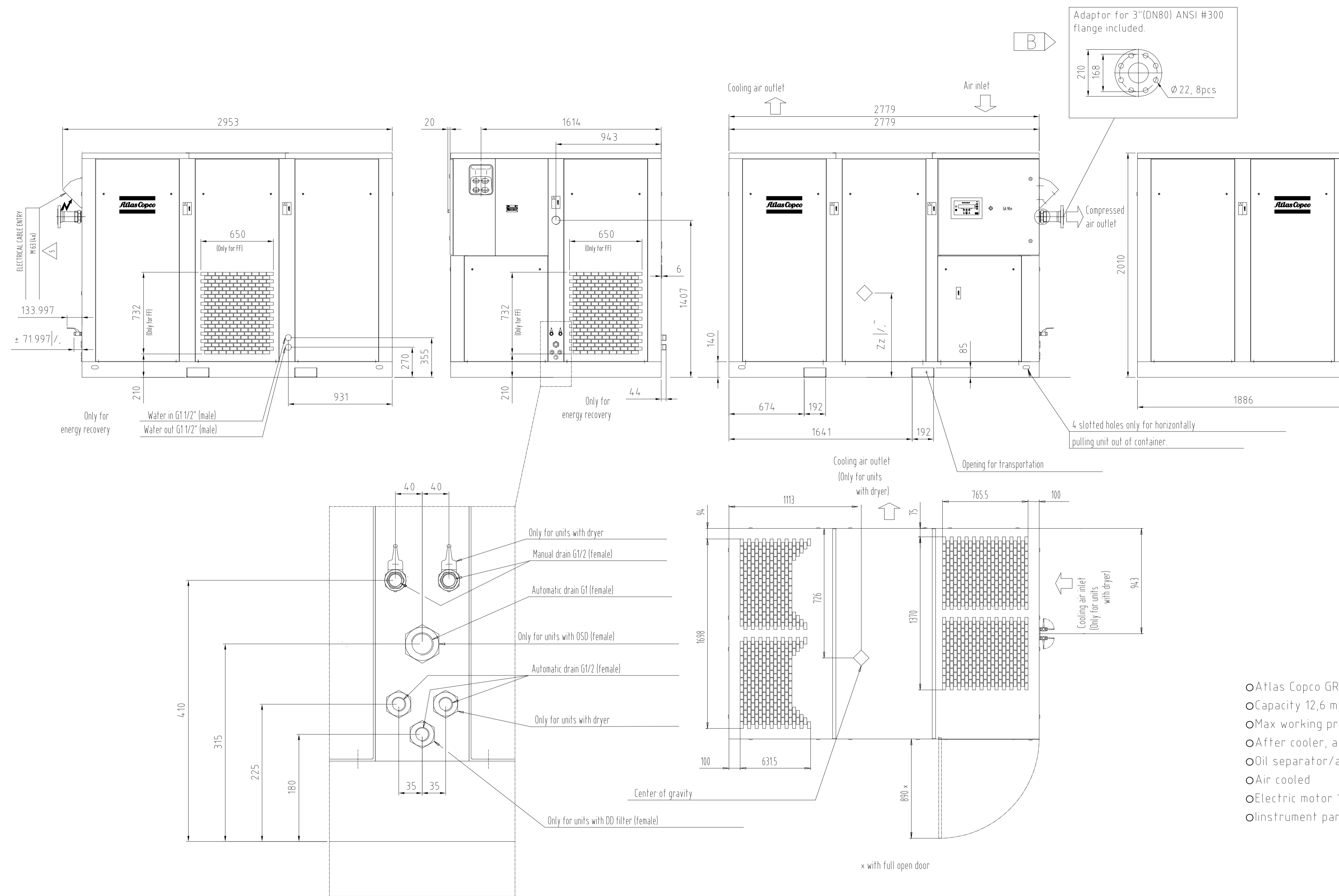
OPENING FOR ELECTRIC  
POWER SUPPLY CABLES  
200 x 600

LOCATION OF THE HYDRAULIC UNIT AS ON  
RECOMMENDED LAYOUT DETAILS DRAWING.

P1= Pressure line, Pmax 280 bar.  
P2 = Control line pressure, Pmax 200 bar.  
T1= Tank line.

27.03.2014	GAZGUO	As-built.			C
13.06.2013	HNU	CERTIFIED			B
12.03.2013	MKY				A
Date	Handler	Change		Pcs	Mark
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>
Date:	15.4.2013	Signature:	HNU	AS-BUILT	<input checked="" type="checkbox"/>
Customer:	Sulvaris / Pöyry (Appleton) LLC		Ref No.		
Supplier ref. No.	B200178FI	Supplier work No.	Serial No.	1125	
<b>Outotec</b>	HYDRAULIC CONNECTION INTERFACE	12.03.2013	MKY		
	PF1125	1:50 T-A2			
	PF 96/96 M48 2 60	F673064		C	



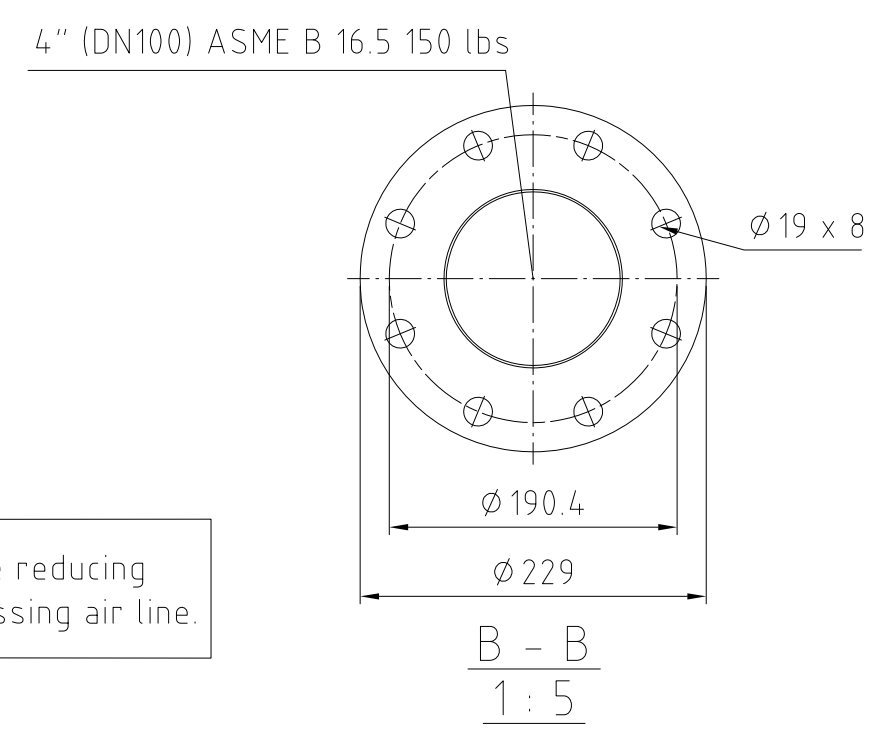
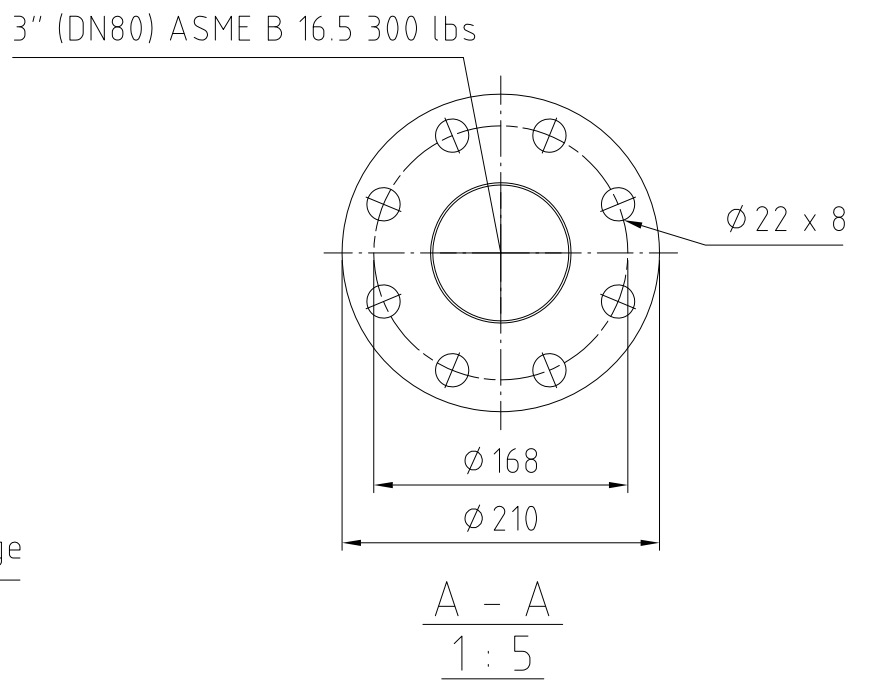
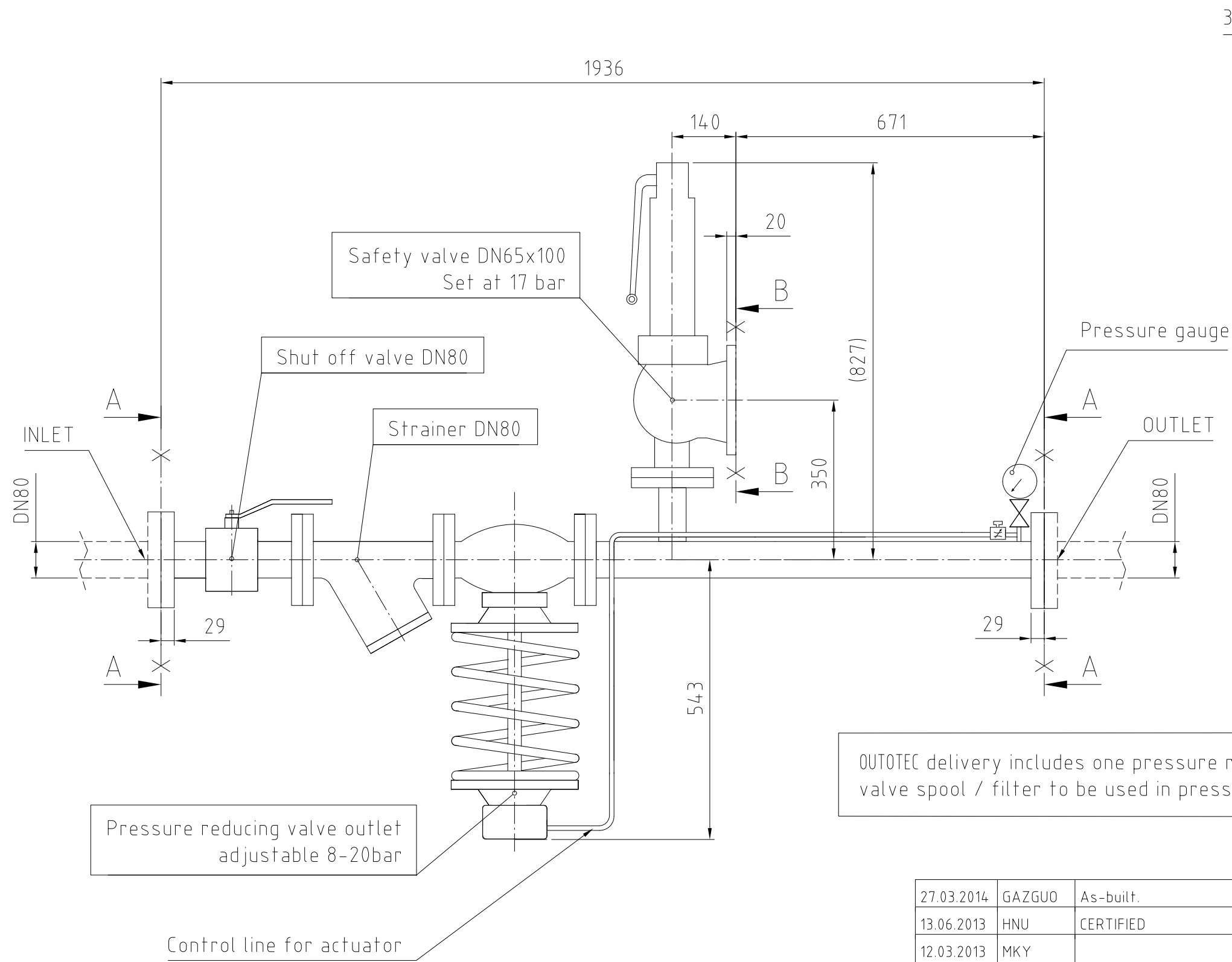


- Atlas Copco GR110-20 or equal
- Capacity 12,6 m<sup>3</sup>/min FAD
- Max working pressure 17,1 bar
- After cooler, air intake filter and silencer
- Oil separator/air filters included
- Air cooled
- Electric motor 110 kW / 575 V / 60 Hz / 3 phases
- Instrument panel with symbols

GR 110(A) WITH DRYER	3470	726	1113	...	27.03.2014	GAZGUO	As-built		c	
Tolerances, unless noted, according to ISO 2768					30.05.2013	ALLI	An adaptor flange added		B	
ATLAS COPCO STANDARD/Klasse/Class	1350K / Z	1350 01K	1355K / C	1356K / B	12.03.2013	MKY			A	
Benaming Name	DIMENSION DRWG				Date		Handler	Change	Pcs	Mark
Material	NOT APPLICABLE				Date		19.4.2013	Signature: HNU		
Behandeling Treatment					Date		19.4.2013	Signature: HNU		
Schaal Scale	1:1	Familie Family	A1	Vergelijk Compare	982390700	Customer: Sulvaris / Pöyry (Appleton) LLC		Ref No.		
Getekend Drawn by	ARMTS	Blauw nr. Blank nr.		Vervangt Replaces		Supplier ref. No. B200178F1		Supplier work No.		
Sld gez./chd		Row gew. Blank wt.	0 Kg	Afg gew. Fini wt.	0 Kg	Serial No. 1125				
Des gez./chd		Gegevs/Appd.		Datum/Date	2013-07-22	9823 9008 00				
Bijzondere tekeningen en documenten Appurtenant drawings and documents										
APPROVED										

**Outotec** PRESSING AIR COMPRESSOR  
PF1125  
PE 96/96 M48.2.60

12.03.2013 MKY  
1:20 T-A1  
F673068 C



OUTOTEC delivery includes one pressure reducing valve spool / filter to be used in pressing air line.

Pressure reducing valve outlet adjustable 8-20bar

Control line for actuator

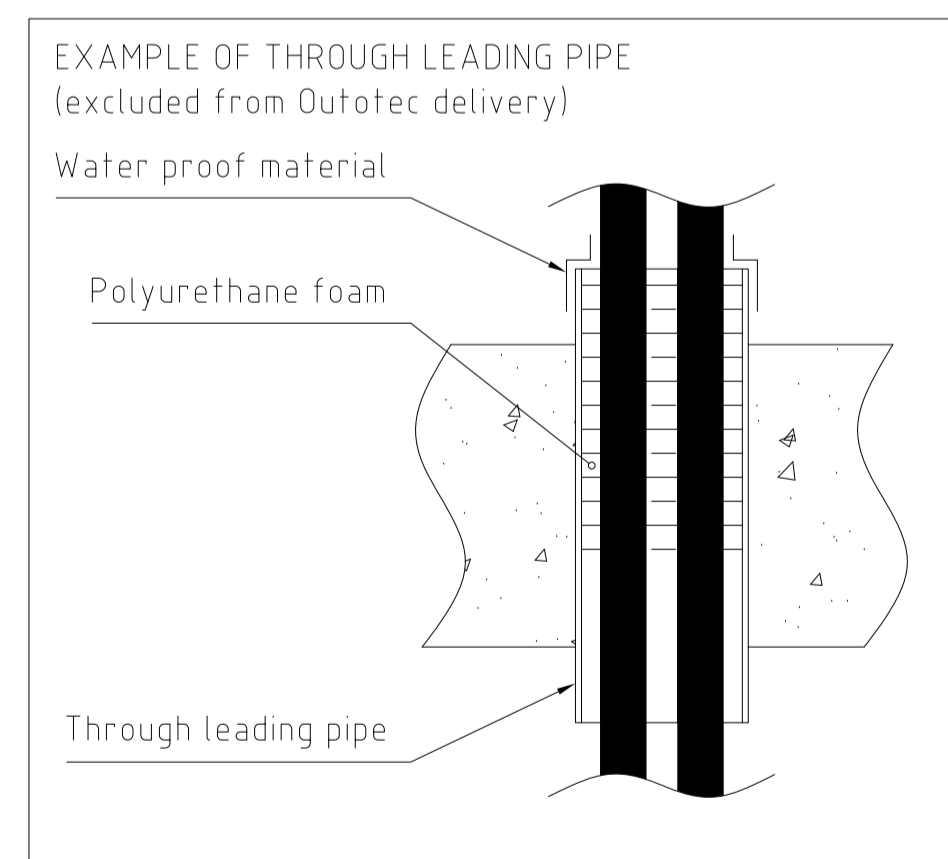
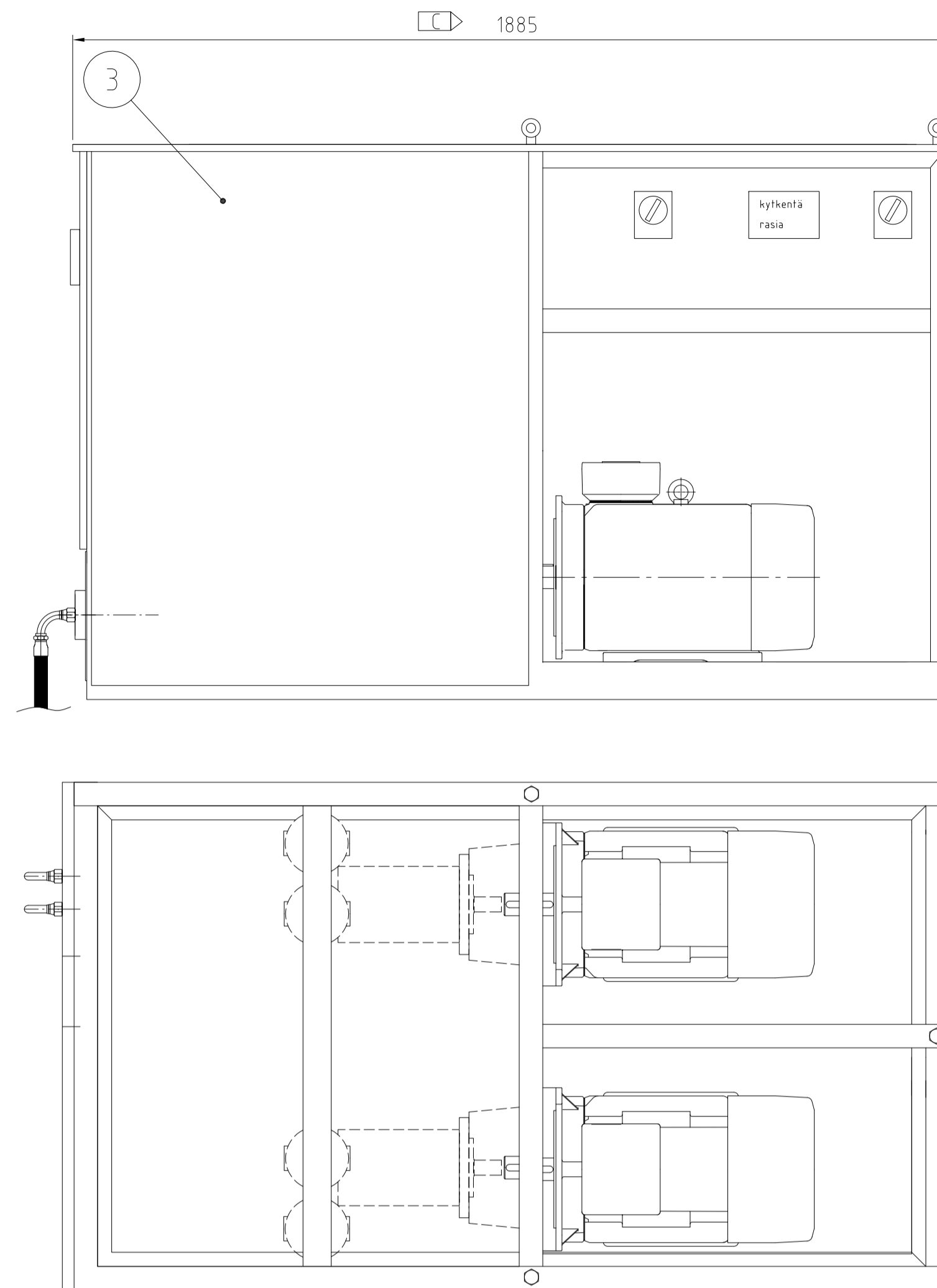
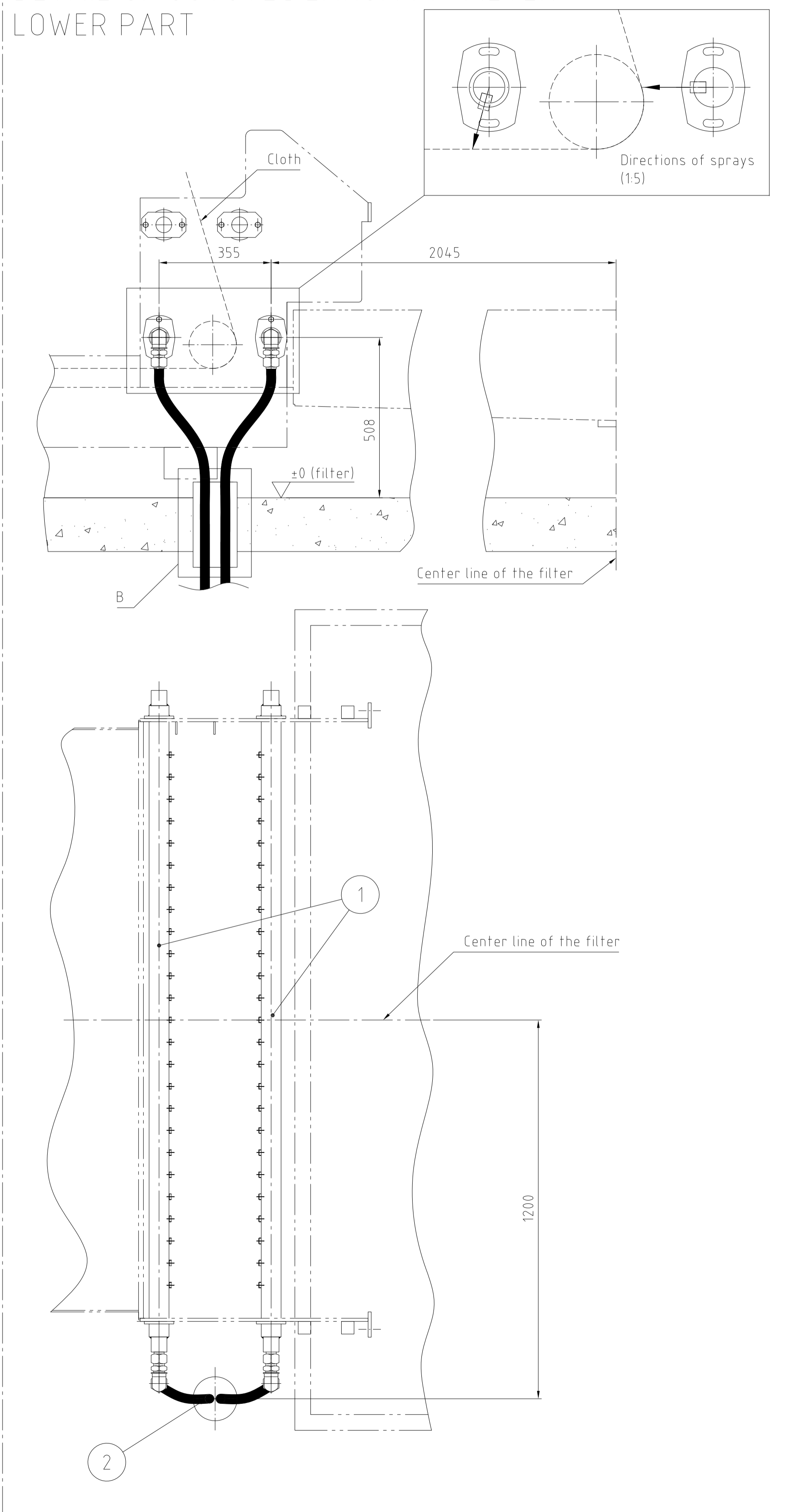
OUTOTEC DELIVERY LIMIT

27.03.2014	GAZGUO	As-built.			C
13.06.2013	HNU	CERTIFIED			B
12.03.2013	MKY				A
Date	Handler	Change		Pcs	Mark
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>
AS-BUILT					<input checked="" type="checkbox"/>
Date:	22.10.2012	Signature:	H.Nuutinen		
Customer:	Sulvaris / Pöyry (Appleton) LLC			Ref N:o.	
Supplier ref. N:o.	B200178FI	Supplier work N:o.	Serial N:o.	1125	

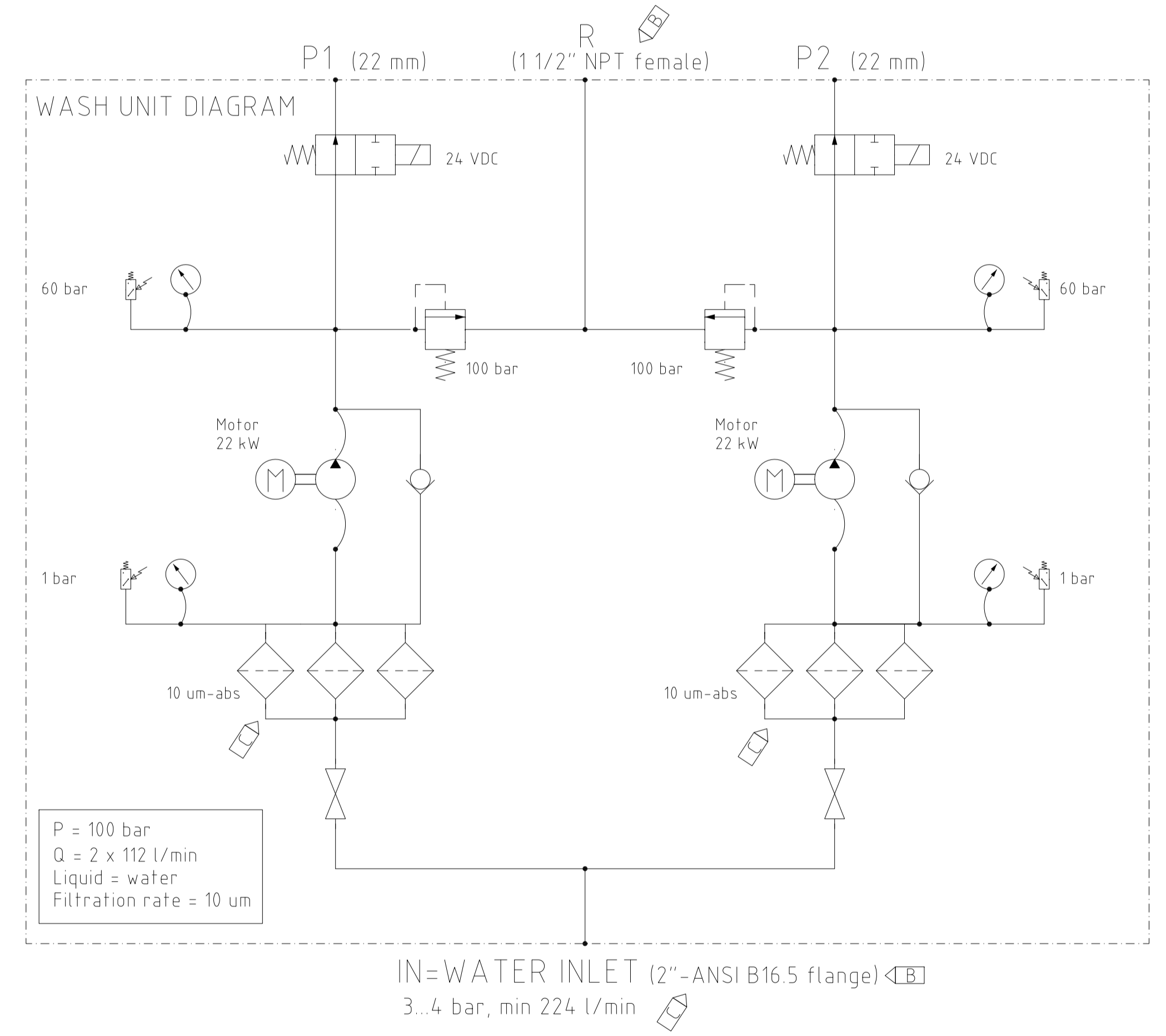
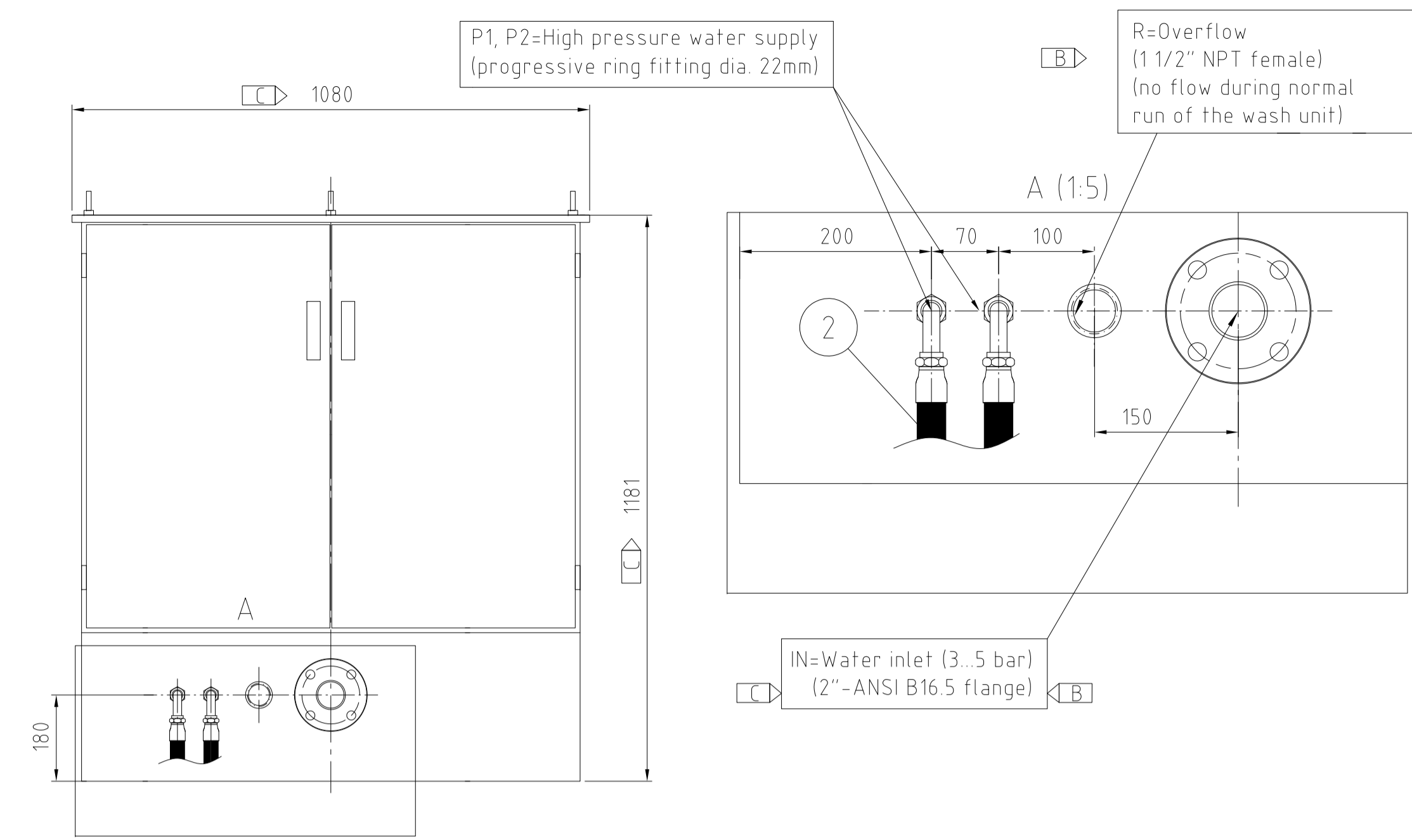
<h1>Outotec</h1>	PRESSURE REDUCING VALVE SPOOL		12.03.2013	MKY
	PF1125		1:10 T-A3	
	PF 96/96 M48 2 60		F673069	C

Copyright (C) 2013 - 2014, Outotec Oyj  
All rights reserved.

DETAIL OF OUTOTEC LAROX PF-FILTER  
LOWER PART



B (1:10)



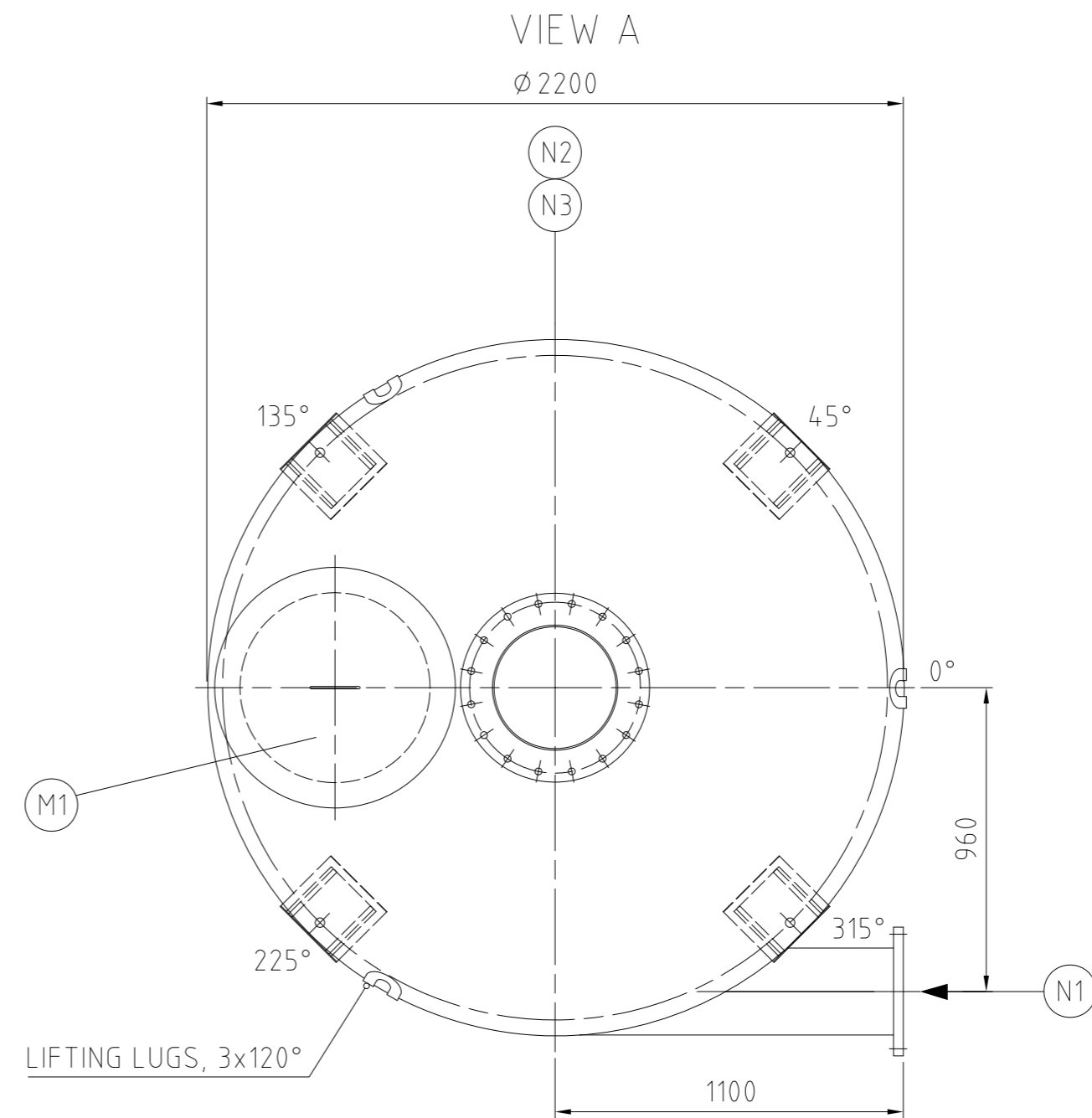
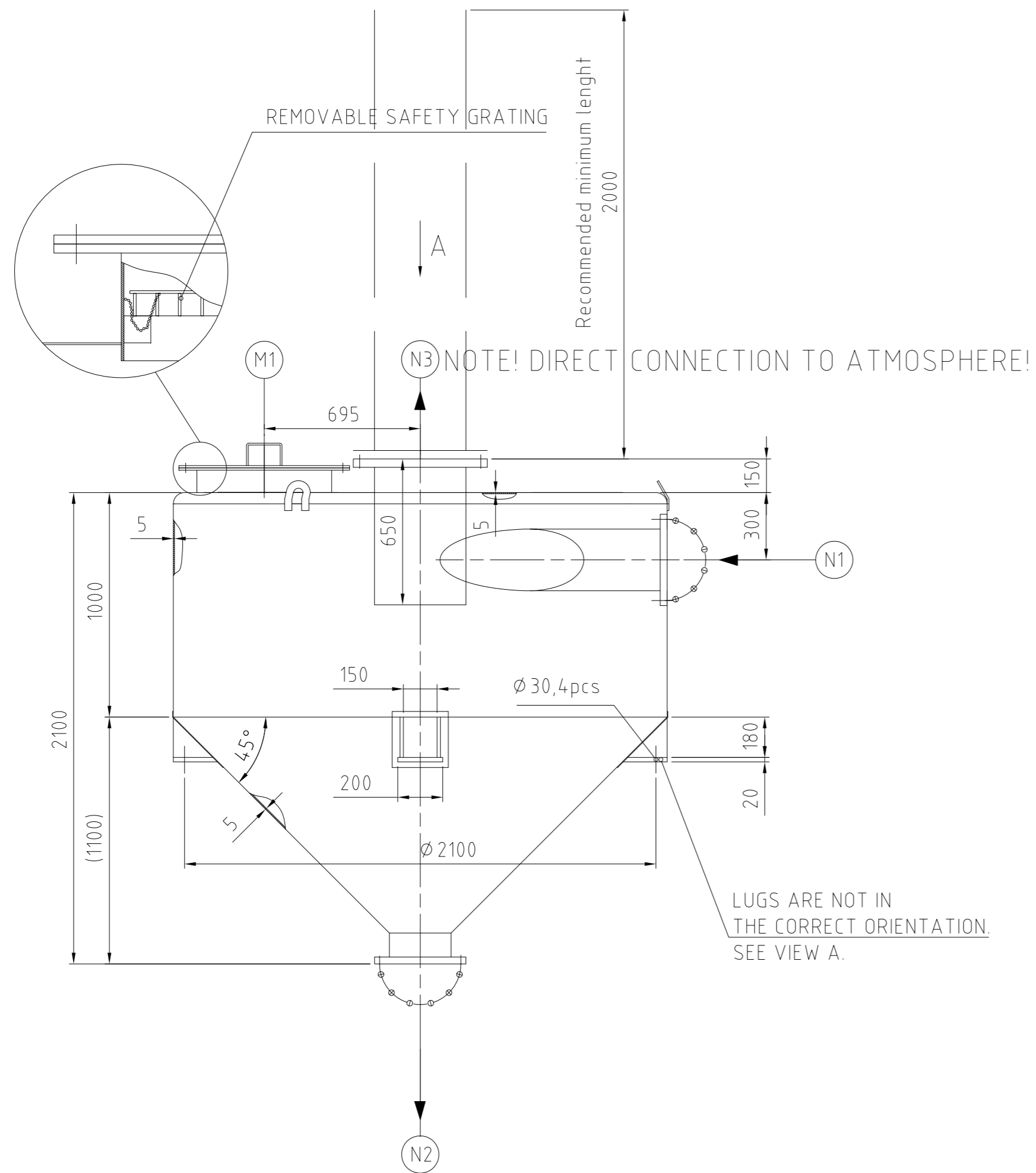
IN= WATER INLET (2"-ANSI B16.5 flange) 3..4 bar, min 224 l/min

ALL ITEMS 1-3 ARE INCLUDED IN OUTOTEC DELIVERY

3	High pressure washing unit				
2	Hose, length max. 15 m (2 pcs.)				
1	Cloth washing pipe with nozzles and connectors				
Pos	Description				
27.03.2014	GAZGUO	As-built			D
25.06.2013	ALLI	IN changed to 2"-ANSI B 16.5 flanged, frame size changed to 1885x1080x1181.			C
30.05.2013	ALLI	change connections to NPT and B16.5 flanges.			B
12.03.2013	MKY				A
Date	Handler	Change		Pcs	Mark
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>
Date:	28.3.2013	Signature:	HNU	AS-BUILT	<input checked="" type="checkbox"/>
Customer:	Sulvaris / Pöyry (Appleton) LLC		Ref No.		
Supplier ref. No.	B200178F1	Supplier work No.		Serial No.	1125
<b>Outotec</b>		CLOTH WASH UNIT	12.03.2013	MKY	
		PF1125	1:10 T-A1		
		PF 96/96 M48.2.60	F673075		D

NOZZLE	DESCRIPTION	SIZE
N1	FILTRATE AND DRYING AIR IN	10''(DN250)
N2	FILTRATE OUT	10''(DN250)
N3	AIR OUT	16''(DN400)
M1	MANHOLE	ID 24''(600MM)

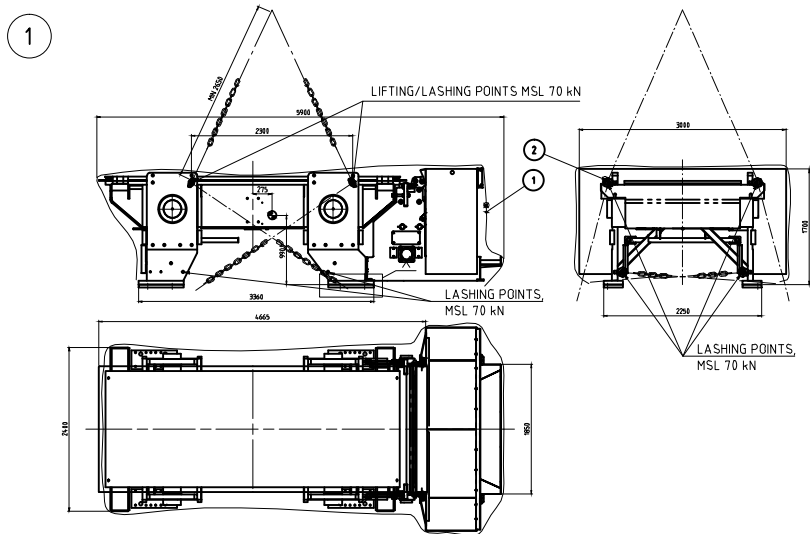
FLANGE DRILLING ACCORDING TO ANSI B16.5 150LB



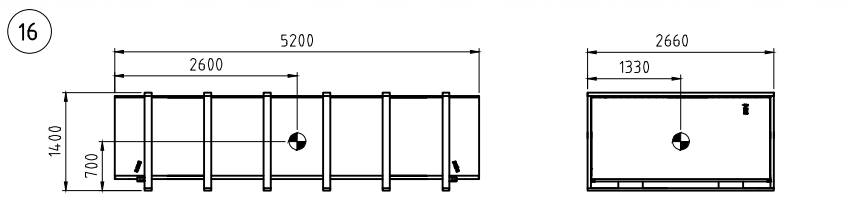
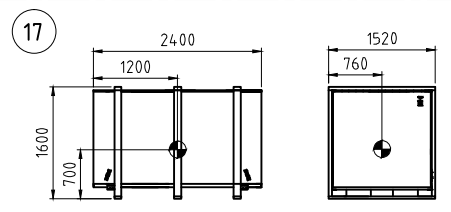
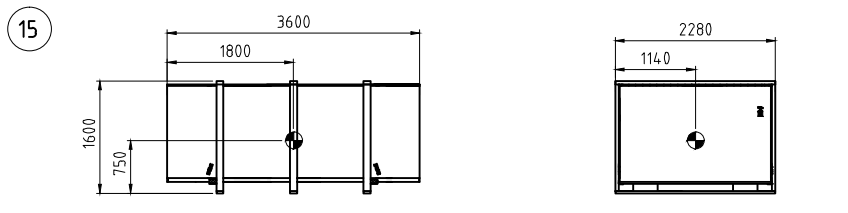
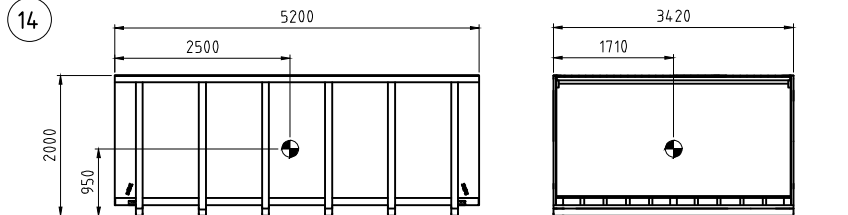
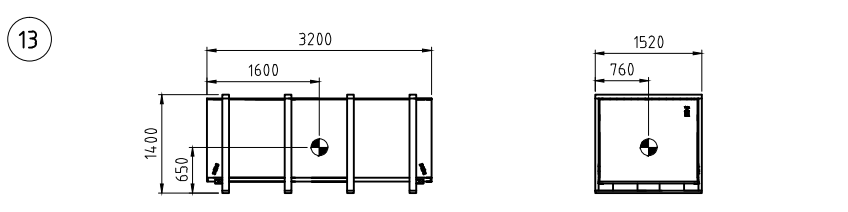
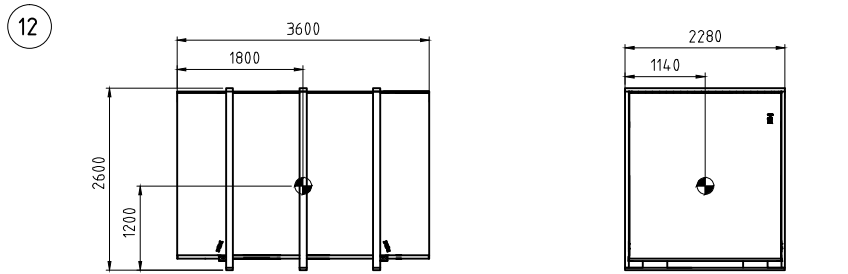
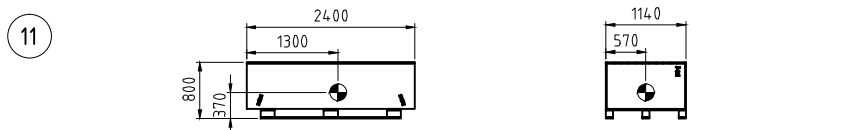
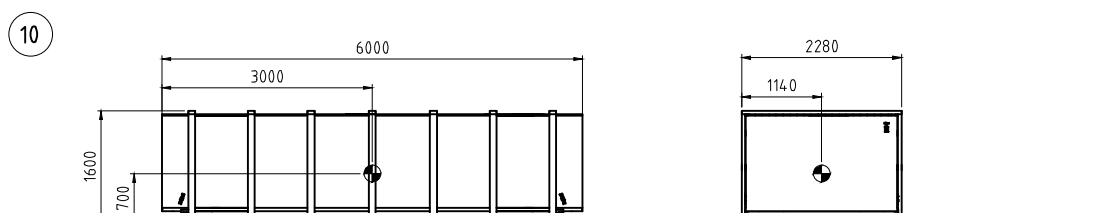
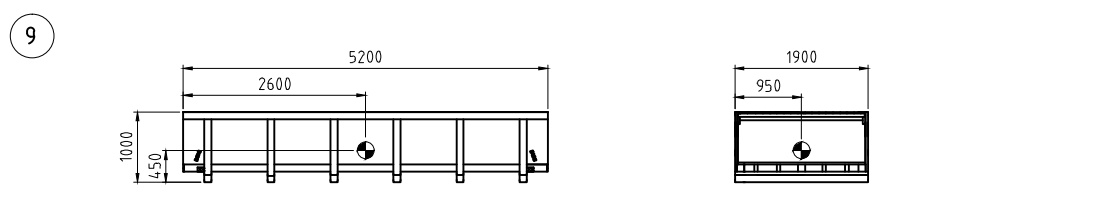
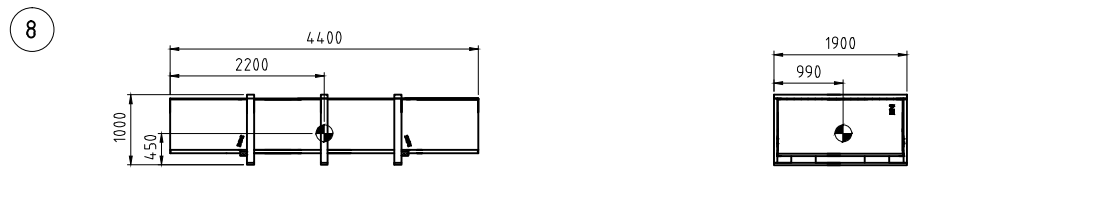
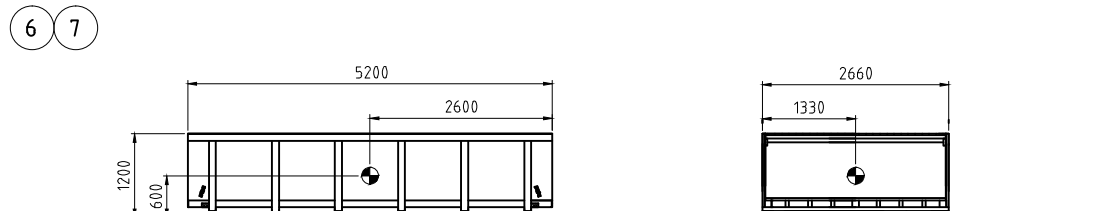
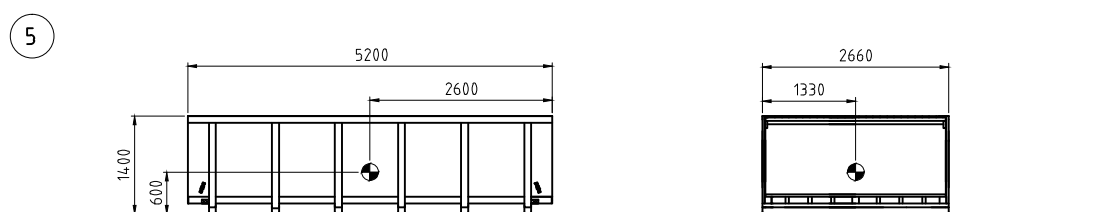
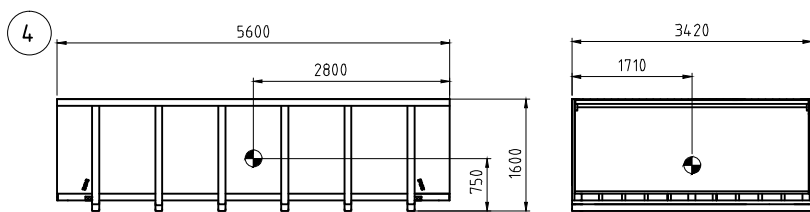
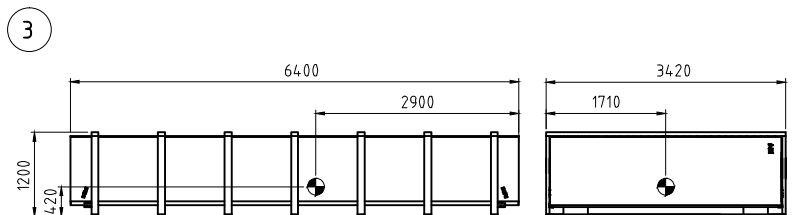
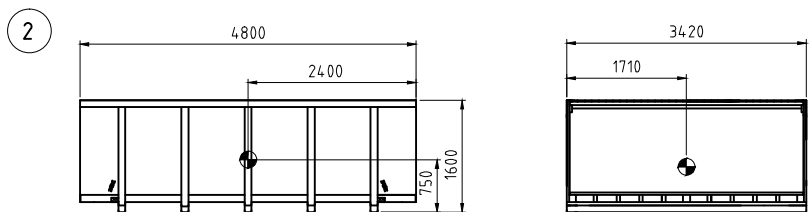
WEIGHT: 900 KG  
MATERIAL: AISI 316  
V=5.1m<sup>3</sup>

NOTE 1  
SOUND INSULATION MAY BE REQUIRED

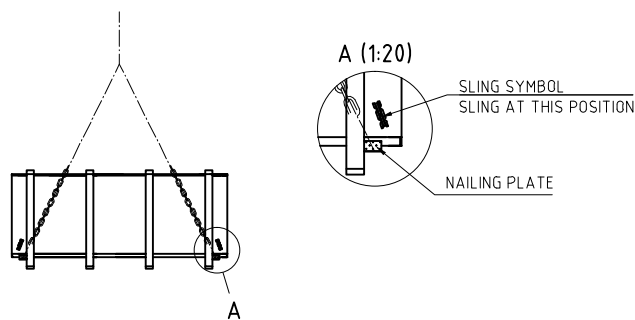
27.03.2014	GAZGUO	As-built.			C
13.06.2013	HNU	CERTIFIED			B
12.03.2013	MKY				A
Date	Handler	Change			Pcs Mark
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>
Date:	28.3.2013	Signature:	HNU		
Customer:	Sulvaris / Pöyry (Appleton) LLC		Ref No.		
Supplier ref. No.	B200178FI	Supplier work No.		Serial No.	1125
<b>Outotec</b>		AIR RELEASE TANK	12.03.2013	MKY	
		PF1125	1:20 T-A2		
		PF 96/96 M48 2 60	F673076	C	



Packing and lifting of Lower frame and Cloth wash unit (#1)

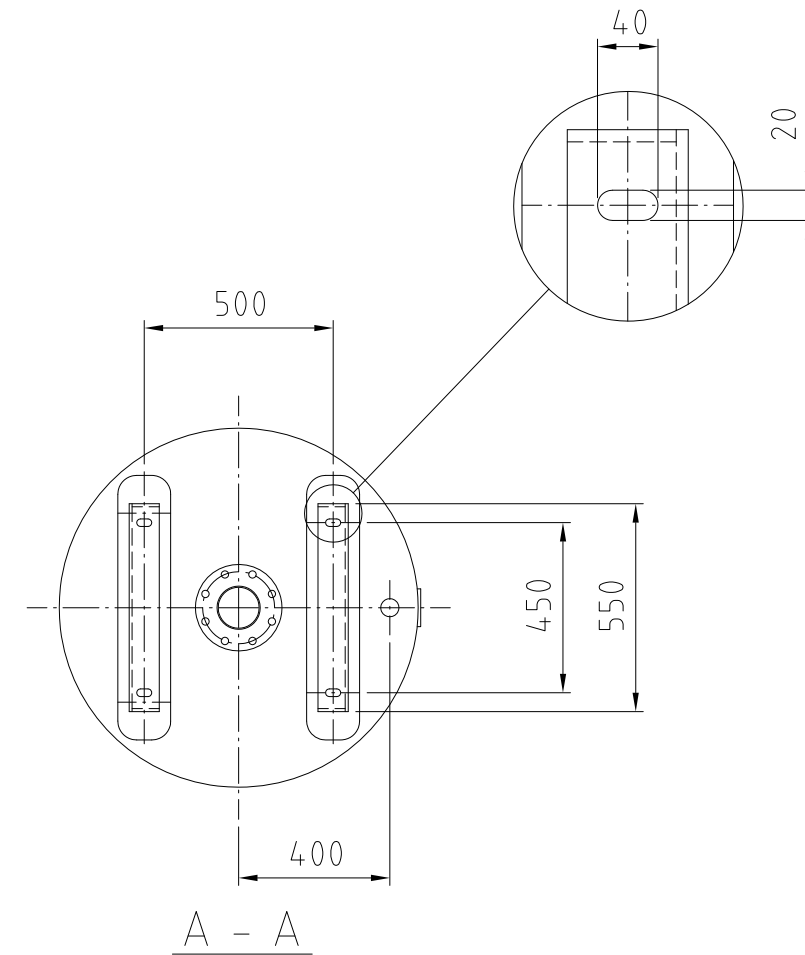
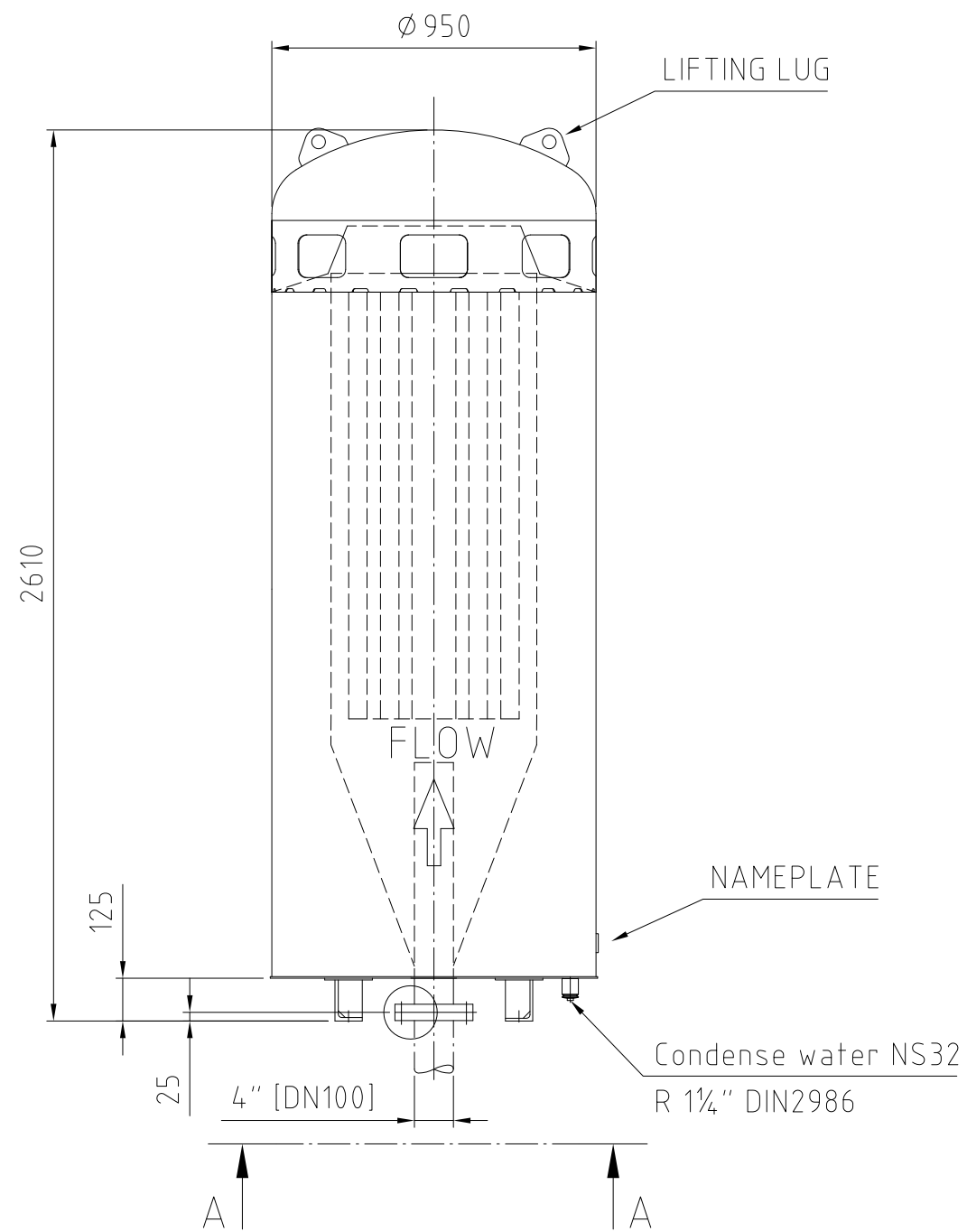


PACKAGE LIFTING EXAMPLE

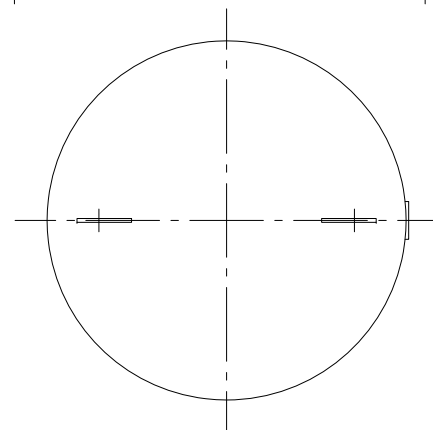


PF1125				
POS	EQUIPMENT	PACKAGE TYPE	NET WEIGHT KG	GROSS WEIGHT KG
1	Lower frame and Cloth wash unit	plastic tarpaulin	14000	14500
2	Upper pressing plate	wooden box	11900	13000
3	Top frame	wooden box	2000	3300
4	Cloth drive unit	wooden box	2650	3900
5	Filter plates (6 pcs)	wooden box	9700	10650
6	Filter plates (5 pcs)	wooden box	8100	9000
7	Filter plates (5 pcs + lowest plate)	wooden box	9300	10200
8	Lower parts of columns	wooden box	7600	8100
9	QA-cylinders & Top parts of columns	wooden box	5150	5700
10	Process pipelines and Guide bars	wooden box	2200	3050
11	Control panel	wooden box	200	330
12	Hydraulic unit	wooden box	2600	3200
13	Muffler	wooden box	520	620
14	Service platform frames & Free end cake chute	wooden box	2700	3900
15	Service platform shields	wooden box	800	1400
SPARE PARTS				
16	Spare parts (Start-up + 2 year)	wooden box	1000	1300
AUX DEVICE				
17	High pressure cloth wash unit	wooden box	165	511

31.03.2014	ALLI				A
Date	Handler	Change		Pcs	Mark
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input checked="" type="checkbox"/>	CERTIFIED	<input type="checkbox"/>
Date:	28.03.2011	Signature:	H.Nuutinen	AS-BUILT	<input type="checkbox"/>
Customer:	Sulvaris / Pöyry (Appleton) LLC		Ref No.		
Supplier ref. No.	B200178FI	Supplier work No.		Serial No.	1125
		<b>PACKING</b> PF1125 PF 96/96 M48 2 60	31.03.2014 ALLI 150 T-A1 F683526		A



Painting : According to painting instructions  
 Flange : ANSI B 16.5 -150lbs DN100 (4")



25.04.2014	ALLI				A
Date	Handler	Change		Pcs	Mark
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input checked="" type="checkbox"/>
Date: 7.8.2013	Signature: H.Nuutinen				
Customer: Sulvaris / Pöyry (Appleton) LLC	Ref N:o.				
Supplier ref. N:o. B200178FI	Supplier work N:o.	Serial N:o. 1125			
<b>Outotec</b>	MUFFLER	25.04.2014	ALLI		
	PF1125	1:20 T-A3			
	PF 96/96 M48 2 60	F684226	A		



## 10.9 Electrical drawings

Project ID: B200186FI	Plant Code: [ENH01]	Plant Unit Code: [DA01]	Document Type: [PFB02]	Running No: [00001]	Revision: B	Outotec Document ID: DOC36460-B
--------------------------	------------------------	----------------------------	---------------------------	------------------------	----------------	------------------------------------

# Table of contents

F06\_002 - Outotec

higher-level function	mounting location	Page	Page description	supplementary page field	Date	Edited by
PF1125	PF1125+F1	1	Electrification layout for filter		08.11.2013	CRF
	PF1125+F1	2	Cabling diagram		08.11.2013	CRF
	PF1125+F1	3	Bus cabling diagram,devicenet		09.04.2014	CRF
	PF1125+F1	4	Grounding diagram for filter		09.04.2014	CRF
	PF1125+F1	5	Labels		11.09.2013	CRF
	PF1125+F1	6	Labels		11.09.2013	CRF
	PF1125+F1	7	CSA Labels		08.11.2013	CRF
	PF1125+F1	8	HH Labels		05.11.2013	CRF
	PF1125+F1	9	Motors, single line diagram		08.11.2013	CRF
	PF1125+F1	10	Motors, single line diagram		08.11.2013	CRF
	PF1125+X1	1	Dimensional layout, control panel X1 with proface OIU		12.09.2013	CRF
	PF1125+X1	2	Control cabin layout, LOG-AB		09.04.2014	CRF
	PF1125+X1	3	Control cabin plate for cable clamps		07.11.2013	CRF
	PF1125+X1	4	Voltage distribution, 120VAC		09.04.2014	CRF
	PF1125+X1	5	Voltage distribution, 120VAC		09.04.2014	CRF
	PF1125+X1	6	Voltage distribution, 24VDC		09.04.2014	CRF
	PF1125+X1	7	Voltage distribution, 24VDC with emergency stop		09.04.2014	CRF
	PF1125+X1	8	Emergency stop relay KA100		09.04.2014	CRF
	PF1125+X1	9	Emergency stop circuit		25.09.2013	CRF
	PF1125+X1	10	Emergency stop relays KA130, KA100 and KA101		09.04.2014	CRF
	PF1125+X1	11	Emergency stop relays KA120, KA110, KA121 and KA111		09.04.2014	CRF
	PF1125+X1	12	Allen Bradley logic, Ethernet switch and operator interface		09.04.2014	CRF
	PF1125+X1	13	Bus coupler and I/O-modules voltage distribution		09.04.2014	CRF
	PF1125+X1	14	Input modules DI1 and DI2		11.09.2013	CRF
	PF1125+X1	15	Input modules DI3 and DI4		11.09.2013	CRF
	PF1125+X1	16	Input modules DI5 and DI6		11.09.2013	CRF
	PF1125+X1	17	Input modules DI7 and DI8		11.09.2013	CRF
	PF1125+X1	18	Input module DI9 and DI10		08.11.2013	CRF


Copyright (c) 2013 Outotec (Filters) Oy. All rights reserved

# Table of contents

F06\_002 - Outotec

Copyright (c) 2013 Outotec (Filters) Oy. All rights reserved

higher-level function	mounting location	Page	Page description	supplementary page field	Date	Edited by
PF1125	PF1125+X1	19	Input module DI11		08.11.2013	CRF
	PF1125+X1	20	Output modules DO1 and DO2		08.11.2013	CRF
	PF1125+X1	21	Output modules DO3, DO4, DO5 and DO6		11.09.2013	CRF
	PF1125+X1	22	Output modules DO7, DO8, DO9 and DO10		11.09.2013	CRF
	PF1125+X1	23	Input module AI1		19.11.2013	CRF
	PF1125+X1	24	Output module AO1		16.10.2013	CRF
	PF1125+X1	25	Emergency stop contacts for motors		08.11.2013	CRF
	PF1125+X1	26	Emergency stop contacts for motors		08.11.2013	CRF
	PF1125+X2	1	layout, terminal box X2		09.04.2014	CRF
	PF1125+X2	2	External cables		09.04.2014	CRF
	PF1125+X2	3	External cables		25.09.2013	CRF
	PF1125+X2	4	External cables		09.04.2014	CRF
	PF1125+X2	5	External cables		09.04.2014	CRF
	PF1125+X2	6	External cables		10.09.2013	CRF
	PF1125+X2	7	External cables		09.04.2014	CRF
	PF1125+X2	8	External cables		10.09.2013	CRF
	PF1125+X2	9	Power supply		09.04.2014	CRF
	PF1125+X2	10	Voltage distribution, 24VDC		09.04.2014	CRF
	PF1125+X2	11	Voltage distribution, 24VDC		09.04.2014	CRF
	PF1125+X2	12	Emergency stop relay KA102		09.04.2014	CRF
PF1125+X2	13	Bus coupler and I/O-modules voltage distribution		09.04.2014	CRF	
PF1125+X2	14	Input modules DI1 and DI2		10.09.2013	CRF	
PF1125+X2	15	Input modules DI3 and DI4		05.11.2013	CRF	
PF1125+X2	16	Input modules DI5 and DI6		10.09.2013	CRF	
PF1125+X2	17	Output modules DO1 and DO2		10.09.2013	CRF	
PF1125+X2	18	Output modules DO3 and DO4		10.09.2013	CRF	
PF1125+X2	19	Output module DO5		10.09.2013	CRF	
PF1125+X2	20	Analog input modules AI1 and AI2		19.11.2013	CRF	

REV. A		REV. E		PRELIMINARY	<input type="checkbox"/>	DATE	26.03.2013	Customer name		Page description	Filter type	PF 96/96 M48 2 60	Project number	Location	
REV. B		REV. F		FOR APPROVAL	<input type="checkbox"/>	DRN	CRF	SULVARIS / PÖYRY (APPLETON) LLC		Table of contents	Serial no	= PF1125	B200186FI	Page 2	
REV. C		REV. G		CERTIFIED	<input checked="" type="checkbox"/>	CHD	CSC				Location	+ PF1125+CONTENTS	Drawing number		F673035
REV. D		REV. H				APPR									

# Table of contents

F06\_002 - Outotec

Copyright (c) 2013 Outotec (Filters) Oy. All rights reserved

higher-level function	mounting location	Page	Page description	supplementary page field	Date	Edited by
PF1125	PF1125+X2	21	Slurry feed flow transmitter B924, Circuit diagram		16.10.2013	CRF
	PF1125+X12	1	Layout, terminal box X12		11.09.2013	CRF
	PF1125+X12	2	Voltage distribution, terminal box X12		25.09.2013	CRF
	PF1125+X12	3	Emergency stop relay KA112		10.09.2013	CRF
	PF1125+X12	4	Bus coupler and I/O-modules voltage distribution		10.09.2013	CRF
	PF1125+X12	5	Input modules DI1 and DI2		10.09.2013	CRF
	PF1125+X12	6	Input modules DI3 and DI4		10.09.2013	CRF
	PF1125+X12	7	Output modules DO1 and DO2		10.09.2013	CRF
	PF1125+X12	8	Output modules DO3 and DO4		10.09.2013	CRF
	PF1125+X12	9	Analog input modules AI1 and AI2		10.09.2013	CRF
	PF1125+X12	10	Analog input modules INC1		10.09.2013	CRF
	PF1125+X12	11	Analog output module AO1		10.09.2013	CRF
	PF1125+X12	12	Analog input module AI3		10.09.2013	CRF
	PF1125+X22	1	Layout, terminal box X22		11.09.2013	CRF
	PF1125+X22	2	Voltage distribution, terminal box X22		25.09.2013	CRF
	PF1125+X22	3	External cables		11.09.2013	CRF
	PF1125+X22	4	External cables		11.09.2013	CRF
	PF1125+X22	5	Safety relay KA103		10.09.2013	CRF
	PF1125+X22	6	Bus coupler and I/O-modules voltage distribution		10.09.2013	CRF
	PF1125+X22	7	Input modules DI1 and DI2		10.09.2013	CRF
	PF1125+X22	8	Input modules DI3 and DI4		11.09.2013	CRF
	PF1125+X22	9	Analog input module AI1		10.09.2013	CRF
	PF1125+X32	1	Layout, terminal box X32		09.04.2014	CRF
	PF1125+X32	2	Voltage distribution, terminal box X32		09.04.2014	CRF
	PF1125+X32	3	External cables		25.09.2013	CRF
	PF1125+X32	4	External cables		10.09.2013	CRF
	PF1125+X32	5	External cables		10.09.2013	CRF
	PF1125+X32	6	External cables		10.09.2013	CRF


REV. A		REV. E		PRELIMINARY	<input type="checkbox"/>	DATE	26.03.2013	Customer name	<b>Outotec</b>	Page description	Filter type	PF 96/96 M48 2 60	Project number	B200186FI	Location
REV. B		REV. F		FOR APPROVAL	<input type="checkbox"/>	DRN	CRF	SULVARIS / PÖYRY (APPLETON) LLC		Table of contents	Serial no	= PF1125	Drawing number	F673035	Page 3
REV. C		REV. G		CERTIFIED	<input checked="" type="checkbox"/>	CHD	CSC				Location	+ PF1125+CONTENTS			
REV. D		REV. H				APPR									

# Table of contents

F06\_002 - Outotec

higher-level function	mounting location	Page	Page description	supplementary page field	Date	Edited by
PF1125	PF1125+X32	7	External cables		10.09.2013	CRF
	PF1125+X32	8	Bus coupler and I/O-modules voltage distribution		09.04.2014	CRF
	PF1125+X32	9	Input modules DI1 and DI2		10.09.2013	CRF
	PF1125+X32	10	Input modules DI3 and DI4		25.09.2013	CRF
	PF1125+X32	11	Input modules DI5 and DI6		10.09.2013	CRF
	PF1125+X32	12	Input modules DI7 and DI8		25.09.2013	CRF
	PF1125+X32	14	Output modules DO1 and DO2		25.09.2013	CRF
	PF1125+X32	15	Output module DO3		25.09.2013	CRF
	PF1125+X32	16	Analog input module AI1		09.04.2014	CRF
	PF1125+X13	1	External cables		10.09.2013	CRF
	PF1125+X13	2	Solenoids V03, V04, V14 and V24		25.09.2013	CRF
	PF1125+X5	1	Layout, terminal box X5		10.09.2013	CRF
	PF1125+X5	2	Voltage distribution, terminal box X5		09.04.2014	CRF
	PF1125+X5	3	Bus coupler and I/O-modules voltage distribution		10.09.2013	CRF
	PF1125+X5	4	Input modules DI1 and DI2		05.11.2013	CRF
	PF1125+X5	5	Output module DO1		10.09.2013	CRF
	PF1125+X5	6	Analog input modules AI1 and AI2		10.09.2013	CRF
	PF1125+X5	7	Analog input module AI3		10.09.2013	CRF
	PF1125+X5	8	Analog output module AO1		05.11.2013	CRF

Copyright (c) 2013 Outotec (Filters) Oy. All rights reserved

REV. A		REV. E		PRELIMINARY	<input type="checkbox"/>	DATE	26.03.2013	Customer name			Page description	Filter type	PF 96/96 M48 2 60	Project number	B200186FI	Location	
REV. B		REV. F		FOR APPROVAL	<input type="checkbox"/>	DRN	CRF	SULVARIS / PÖYRY (APPLETON) LLC	Table of contents		Serial no	= PF1125	Drawing number	F673035	Page	4	
REV. C		REV. G		CERTIFIED	<input checked="" type="checkbox"/>	CHD	CSC				Location	+ PF1125+CONTENTS					
REV. D		REV. H				APPR											



CUSTOMER ← OUTOTEC → FILTER

- DCS CONNECTION : ETHERNET 4) -W550 1)
- SUPPLY FOR FILTER 120VAC, 16A, 60Hz -W010 1)
- FEEDBACK LOOP FROM HYDRAULIC UNIT MOTOR CONTACTORS -W003 1) 2)
- FEEDBACK LOOP FROM PROCESS MOTOR CONTACTORS -W004 1) 2)

- 1) CABLES IN CUSTOMER'S DELIVERY
- 2) EMERGENCY-STOP CONTACT FROM CONTROL CABIN X1 TO CUSTOMER'S MCC: FOR MOTOR CONTROLS
- 3) SAFETY SWITCH IN OUTOTEC'S DELIVERY. INSTALLED BY CUSTOMER N/O AUXILIARY CONTACT TO THE MOTOR CONTROL SYSTEM
- 4) SEE SEPERATE DCS LINK LIST FOR MORE INFORMATION
- 5) HIGH PRESSURE STATION IN ADWANTEC'S DELIVERY

STANDARD CABLE LENGTHS:

- CONTROL PANEL - FILTER 15m
- CONTROL PANEL - HYDRAULIC UNIT 15m
- HYDRAULIC UNIT - FILTER 15m

MOTOR CONTROL 575VAC, 60Hz (MOTORS IN FILTER)		-WU119.1
		-WU119.2 1)
HIGH PRE. CLOTH WASH PUMP, M119.1	22 kW	-W1119.1 1)
FREQUENCY CONVERTER, U119.1		
HIGH PRE. CLOTH WASH PUMP, M119.2	22 kW	-W1119.2 1)
FREQUENCY CONVERTER, U119.2		
HYDRAULIC UNIT, M1HU	110kW 1800r/min	-WM1HU 1)
HYDRAULIC UNIT, M2HU	15kW 1800r/min	-WM2HU 1)
OIL HEATER, R1HU	3 kW	-WR1HU 1)
OIL COOLER FAN, M3HU	3 kW 1800r/min	-WM3HU 1)
CAKE POPPING DEVICE, M24	6,3kW	-W124 1)

**CONTROL CABIN X1**

S780  
S708  
S710  
S700  
S733  
S755  
S701

LOGIC: Allen Bradley Control Logix  
I/O: Beckhoff  
OIU: Allen Bradley Panel View 1000 ALL.2711P-T10C4D8

**HH-UNIT**

S702  
S714  
S723  
S725

**HIGH PRESSURE STATION 5)**

**JUNCTION BOX JBI**

U119.1 Q119.1 M119.1 3~ S429 S449  
U119.2 Q119.2 M119.2 3~ S439 Y49 S459 B492

**HYDRAULIC UNIT**

PS1HU PS2HU PT1HU PT2HU TS1HU LT1HU TT1HU PCV1HU FCV1HU

M1HU 3~ M2HU 3~ M3HU 3~ R1HU 3~

Q1HU 3~ Q2HU 3~ Q3HU 3~

**TERMINAL BOX X5**

B525 1)  
B524 1)  
B924 1)  
S705

**TERMINAL BOX X2**

-W202  
-W802  
-W811  
-W814  
-W815  
-W207 X207 X209 -W209  
-W505  
-W405  
-WJB1 1)  
-WJB1.1 1)

**TERMINAL BOX X12**

-W412  
-W816  
-W208 X208 (X790)  
-W790 S790  
Y51  
Y52  
Y81  
Y82  
Y91  
Y92  
S707  
-W715  
Y101  
Y102  
Y34  
S141  
S142  
S134  
S234  
S741  
S742

**TERMINAL BOX X12**

-W422  
-W522  
Y05 S332  
Y06 S532  
CV16 S838A  
Y27 S839A  
Y41 B331  
Y42 B415  
Y61 B503  
Y62 B504  
Y511 B505  
S105  
S205  
S106  
S206  
S127  
S227

**TERMINAL BOX X22**

S161  
S162  
S163  
S164  
S261  
S262  
S263  
S264  
S865  
B534

**TERMINAL BOX X32**

-W432  
-W532  
-W832  
-W813  
-W822  
Y02 S801  
Y07 S802  
Y09 S803  
Y12 S804  
Y17  
S102 S806  
S202 S807  
S107 S808  
S207 S809  
S109 S143  
S209 S144  
S112  
S212  
S117  
S217  
S531  
B419  
B491  
S103 S124  
S203 S224

**JUNCTION BOX JB2**

-WJB2 1)  
Y10  
S110  
S210

**PNEUMATIC BOX X13**

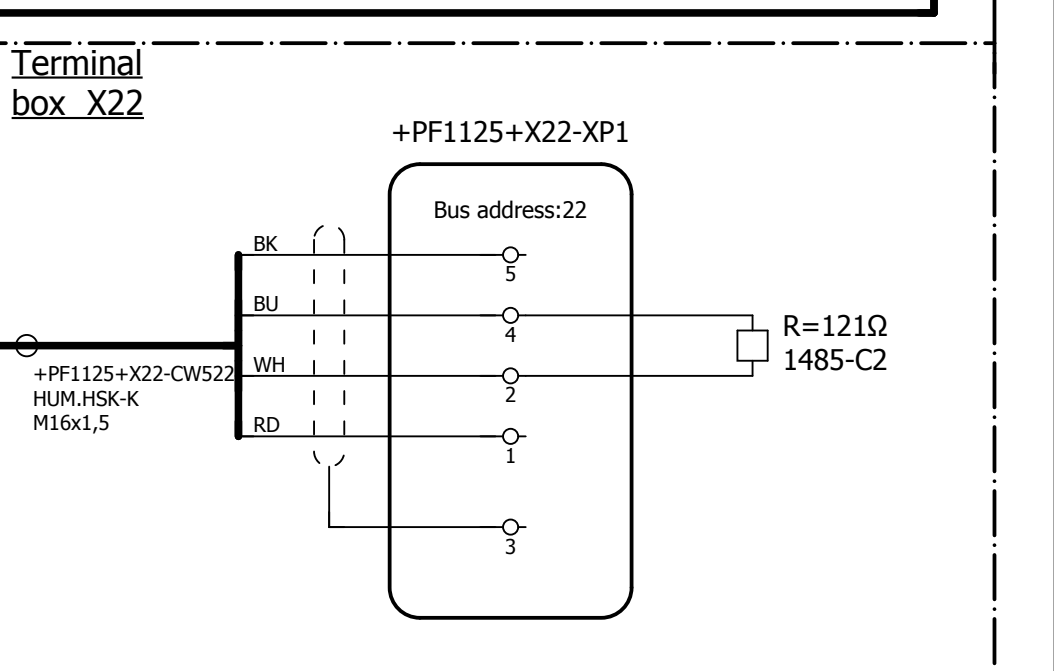
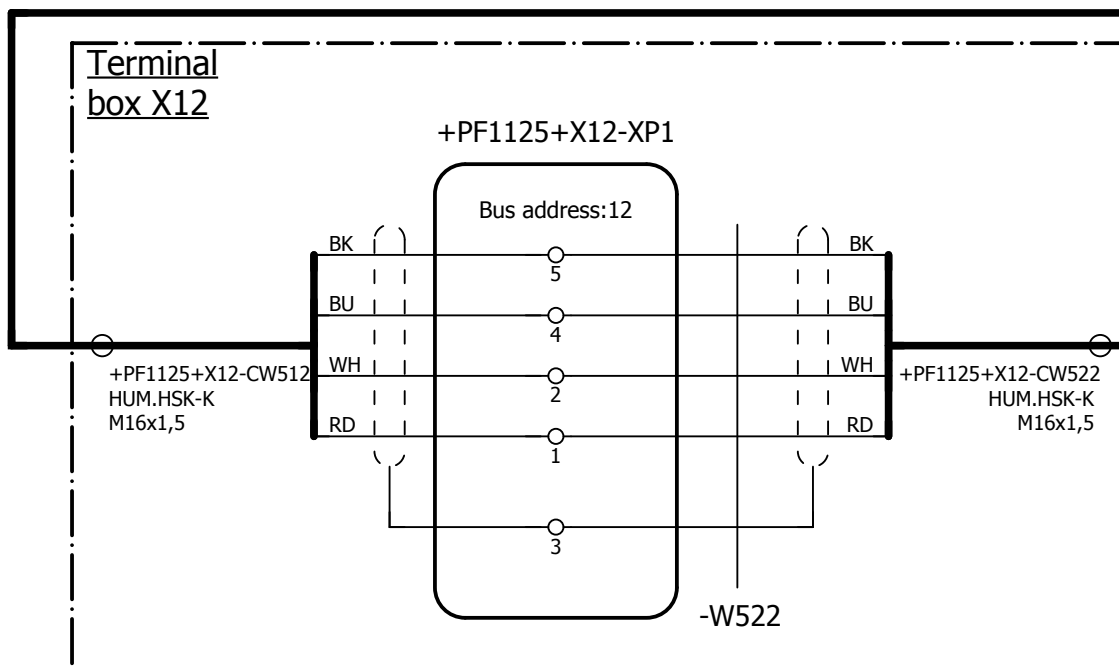
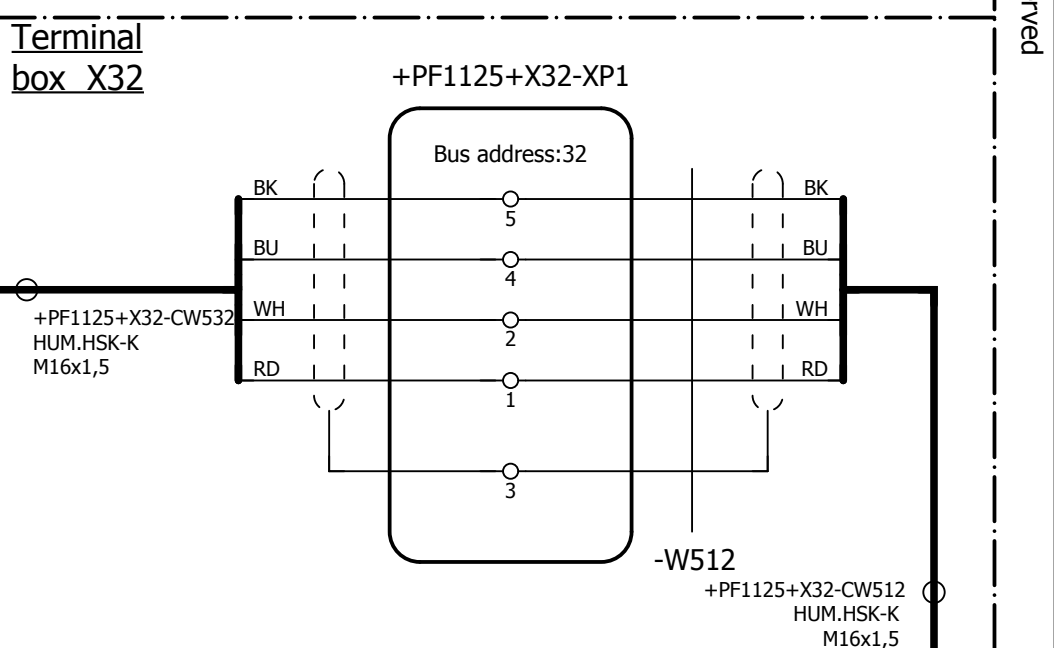
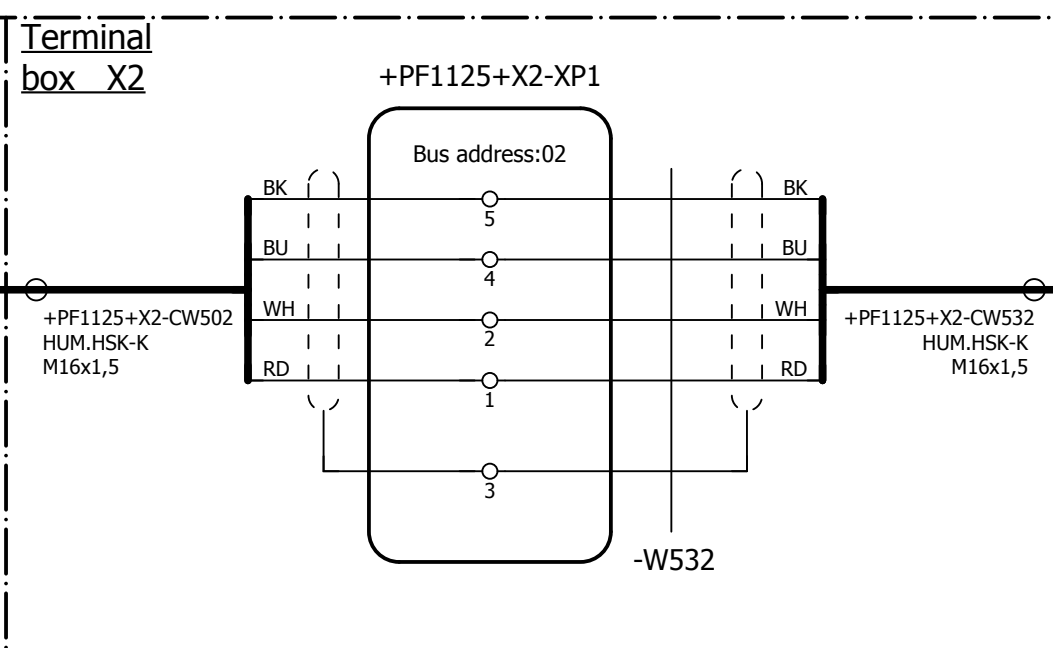
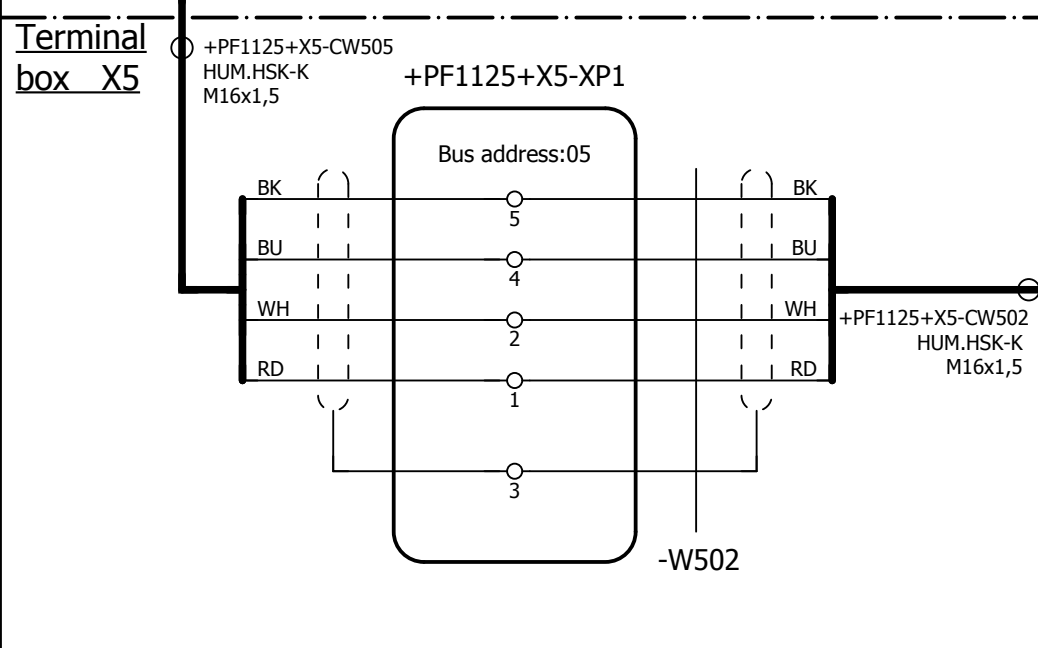
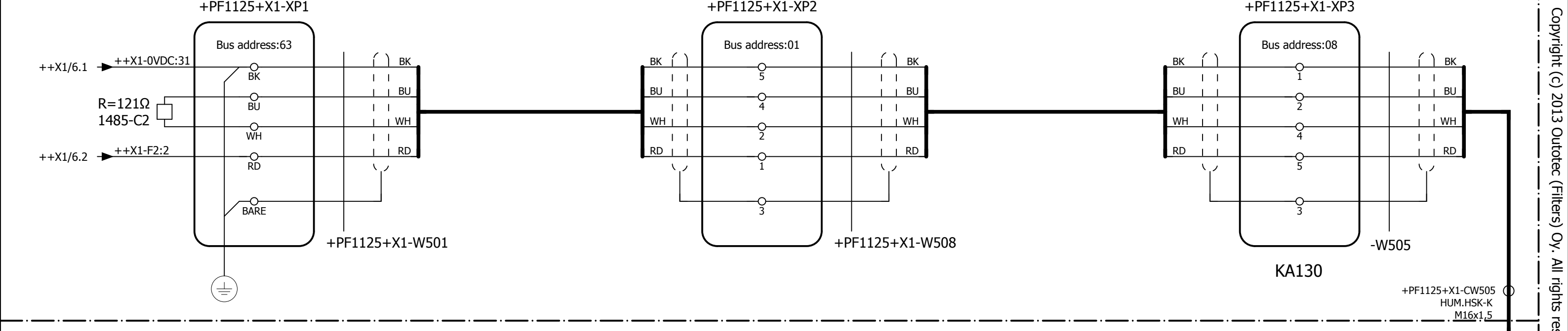
S418  
Y03  
Y04  
Y14  
Y24

B\*\*/S\*\*/Y\*\* =24VDC  
-W202=120VAC POWER SUPPLY  
-W4\*\*=24VDC POWER SUPPLY  
-W5\*\*=BUS CABLING  
-W7\*\*/W8\*\*=EMERGENCY STOP CABLING

CUSTOMER ← OUTOTEC →

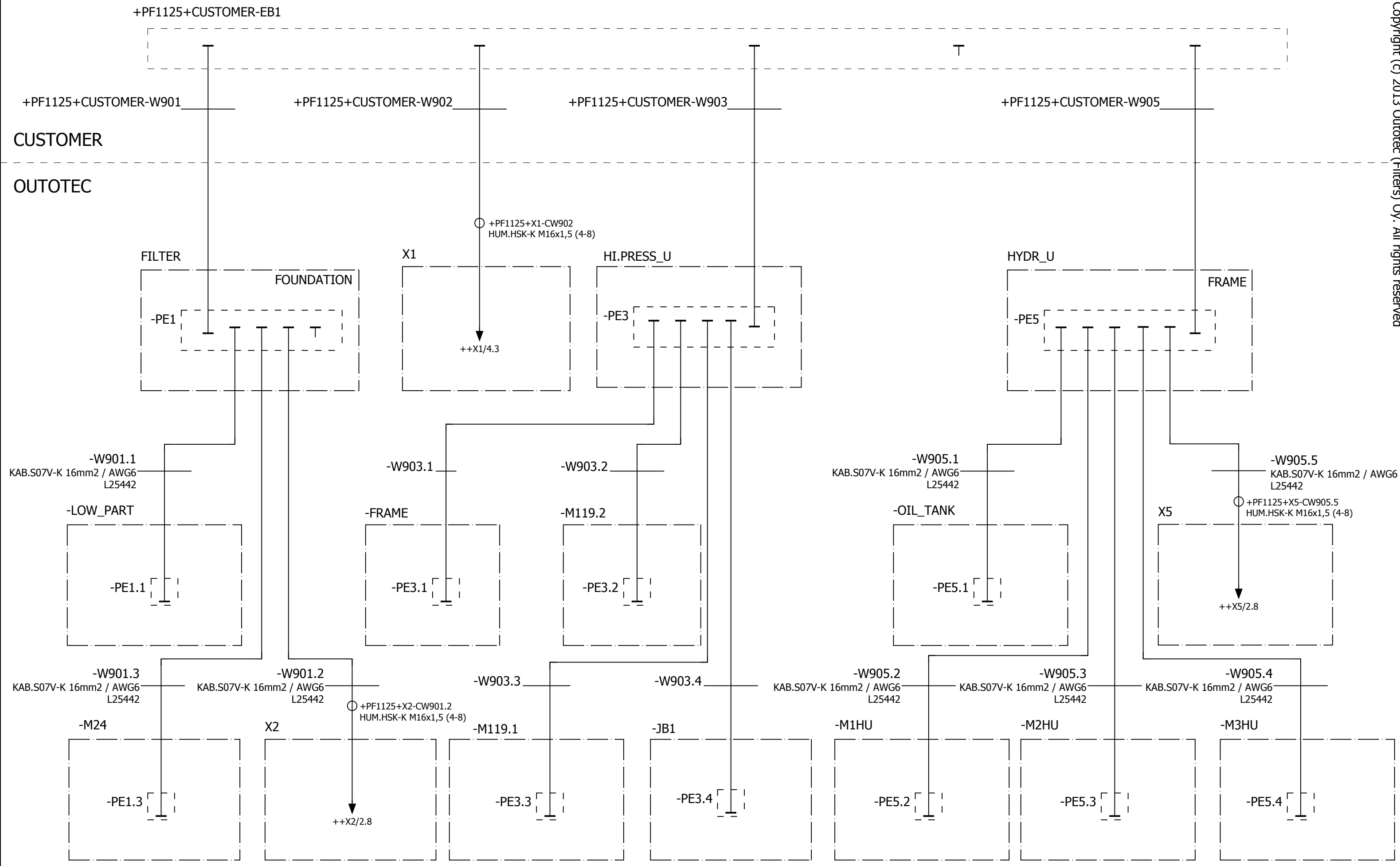


Control cabinet X1



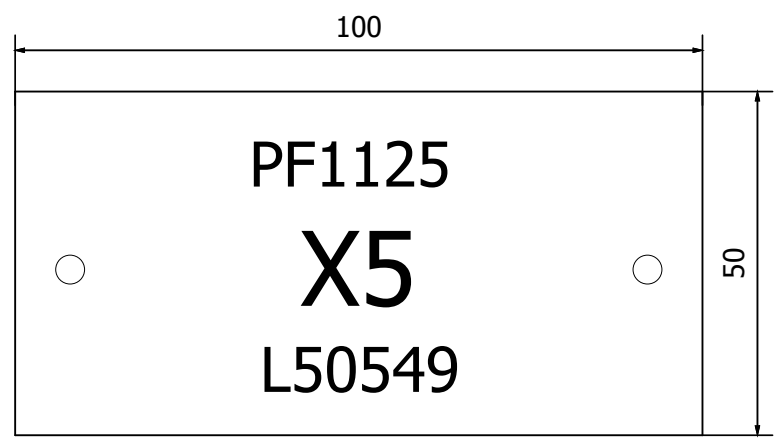
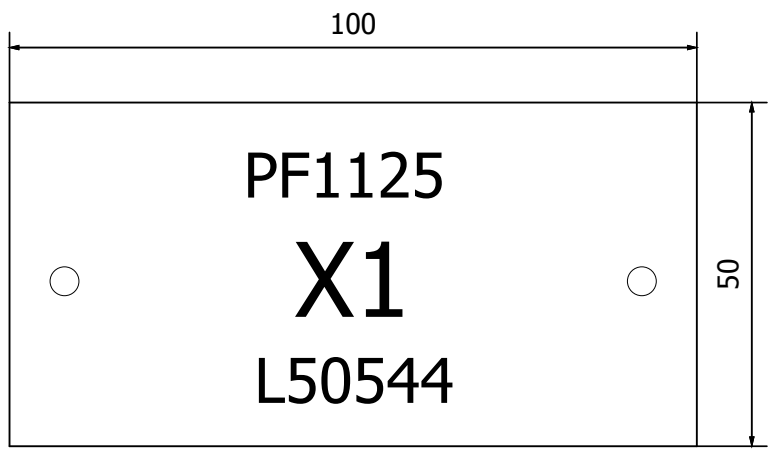
Copyright (c) 2013 Outotec (Filters) Oy. All rights reserved





REV. A		REV. E		PRELIMINARY	<input type="checkbox"/>	DATE	26.03.2013	Customer name		<b>Outotec</b>	Page description	Filter type	PF 96/96 M48 2 60	Project number	B200186FI	Location	F1
REV. B		REV. F		FOR APPROVAL	<input type="checkbox"/>	DRN	CRF	SULVARIS / PÖYRY (APPLETON) LLC	Grounding diagram for filter		Serial no	= PF1125	Drawing number	F673035	Page	4	
REV. C		REV. G		CERTIFIED	<input checked="" type="checkbox"/>	CHD	CSC				Location	+ PF1125+F1					
REV. D		REV. H				APPR											

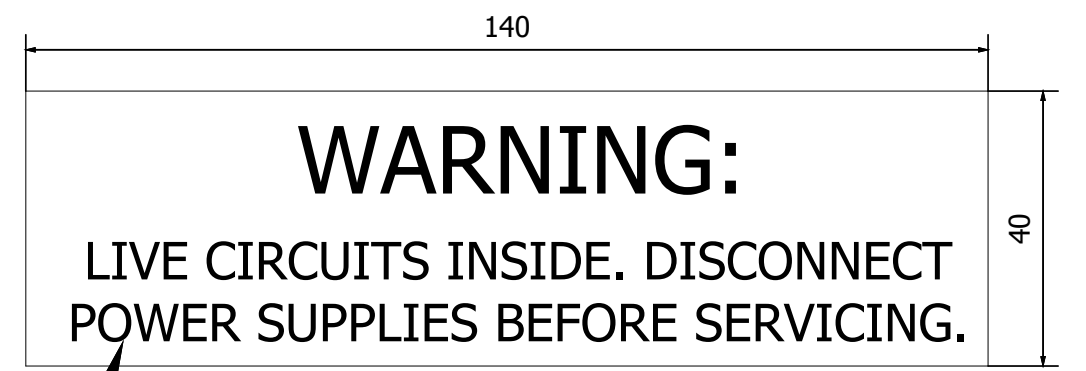
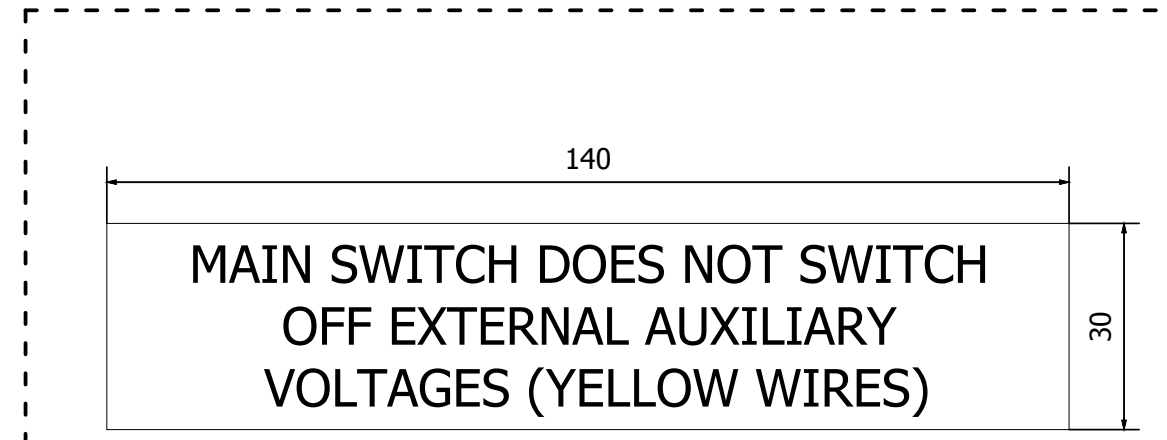
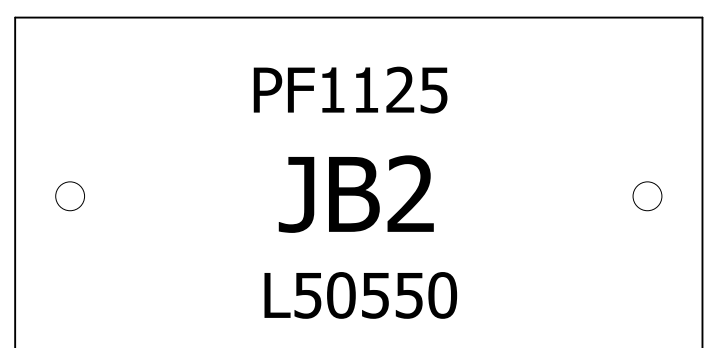
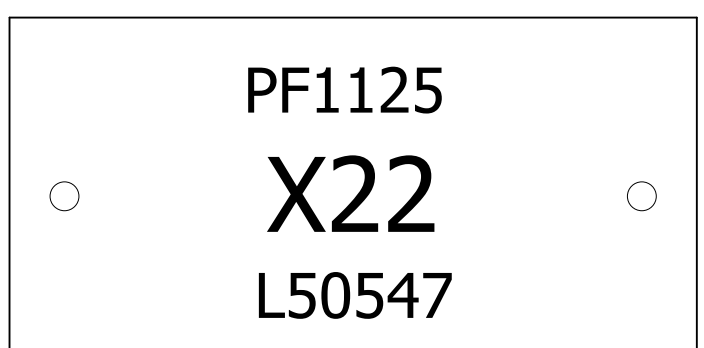
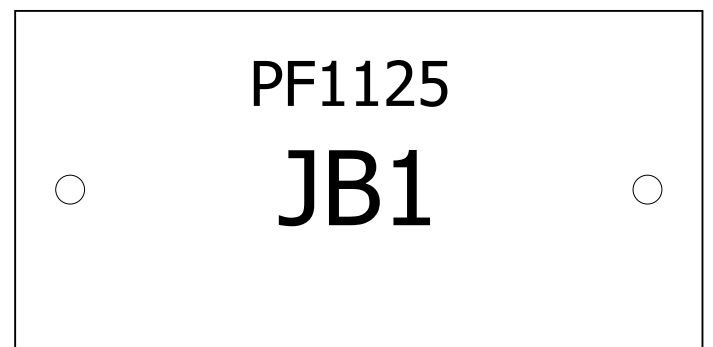
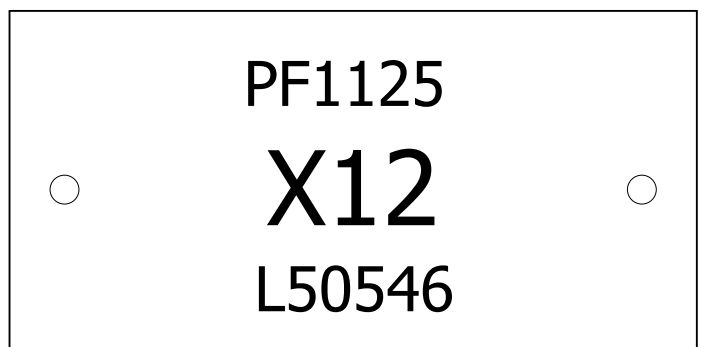
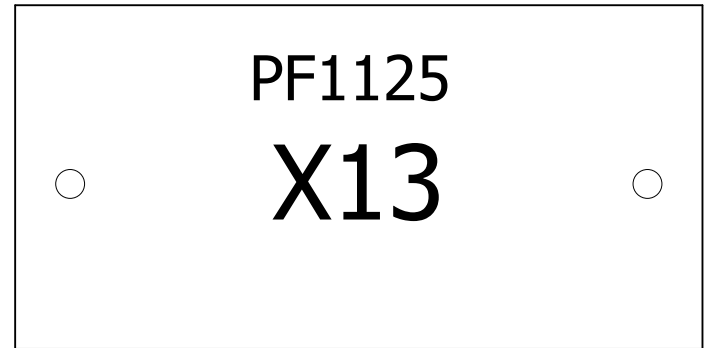
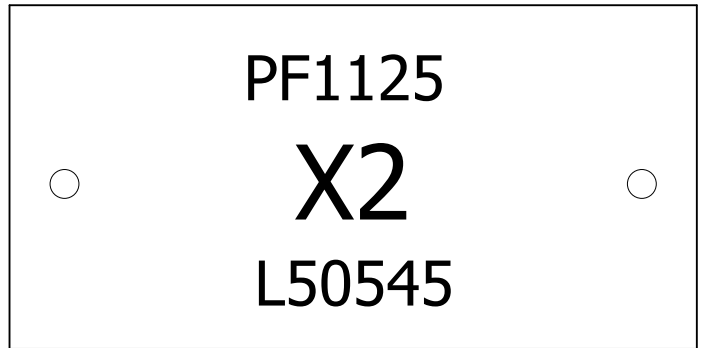




**ENGLISH**

TEXT FONTS: 4mm 6mm **10mm**  
 TEXT STYLE: WHITE LABEL, BLACK TEXT  
 EMERGENCY STOP: RED TEXT

Copyright (c) 2013 Outotec (Filters) Oy. All rights reserved



BACKGROUND: YELLOW RAL 1003  
TEXT: BLACK

Note :  
Labels material: Stainless Steel  
Fixing hole: ø4.2mm  
Text color: black  
Text: etched or burned by laser  
Fixing: by rivets or screws

Note :  
Labels material: Plastic

REV. A		REV. E		PRELIMINARY	<input type="checkbox"/>	DATE	26.03.2013	Customer name		<b>Outotec</b>	Page description	Filter type	PF 96/96 M48 2 60	Project number	B200186FI	Location	F1
REV. B		REV. F		FOR APPROVAL	<input type="checkbox"/>	DRN	CRF	SULVARIS / PÖYRY (APPLETON) LLC	<b>Labels</b>		Serial no	= PF1125	Drawing number	F673035	Page	6	
REV. C		REV. G		CERTIFIED	<input checked="" type="checkbox"/>	CHD	CSC				Location	+ PF1125+F1					
REV. D		REV. H				APPR											

# ENGLISH

STICKERS:

TEXT FONTS: 3mm **4mm**

TEXT STYLE: WHITE LABEL, BLACK TEXT

Copyright (c) 2013 Outotec (Filters) Oy. All rights reserved

X1

MFG: **Outotec Oy**  
 Model PF 96/96 M48 2 60 S/N 1125  
 120VAC 16/- A/W 1 Ph.  
 Short Circuit Rating 10 kAmps

1pce

X1

**SUPPLY FUSE  
 MAX  
 15 A**

1pce

X2

MFG: **Outotec Oy**  
 Model PF 96/96 M48 2 60 S/N 1125  
 120VAC 6/- A/W 1 Ph.  
 Short Circuit Rating 10 kAmps

1pce

X5

MFG: **Outotec Oy**  
 Model PF 96/96 M48 2 60 S/N 1125  
 24VDC 6/- A/W Ph.  
 Short Circuit Rating 10 kAmps

1pce

X12

MFG: **Outotec Oy**  
 Model PF 96/96 M48 2 60 S/N 1125  
 24VDC 6/- A/W Ph.  
 Short Circuit Rating 10 kAmps

1pce

JB1

MFG: **Outotec Oy**  
 Model PF 96/96 M48 2 60 S/N 1125  
 24VDC 6/- A/W Ph.  
 Short Circuit Rating 10 kAmps

1pce

X22

MFG: **Outotec Oy**  
 Model PF 96/96 M48 2 60 S/N 1125  
 24VDC 6/- A/W Ph.  
 Short Circuit Rating 10 kAmps

1pce

JB2

MFG: **Outotec Oy**  
 Model PF 96/96 M48 2 60 S/N 1125  
 24VDC 6/- A/W Ph.  
 Short Circuit Rating 10 kAmps

1pce

X32

MFG: **Outotec Oy**  
 Model PF 96/96 M48 2 60 S/N 1125  
 24VDC 6/- A/W Ph.  
 Short Circuit Rating 10 kAmps

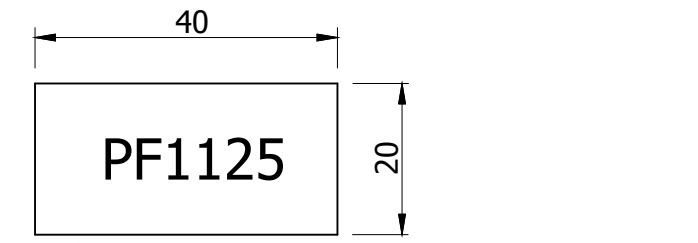
1pce

REV. A		REV. E		PRELIMINARY	<input type="checkbox"/>	DATE	26.03.2013	Customer name		<b>Outotec</b>	Page description	Filter type	PF 96/96 M48 2 60	Project number	B200186FI	Location	F1
REV. B		REV. F		FOR APPROVAL	<input type="checkbox"/>	DRN	CRF	SULVARIS / PÖYRY (APPLETON) LLC	<b>CSA Labels</b>		Serial no	= PF1125	Drawing number	F673035	Page	7	
REV. C		REV. G		CERTIFIED	<input checked="" type="checkbox"/>	CHD	CSC				Location	+ PF1125+F1					
REV. D		REV. H				APPR											

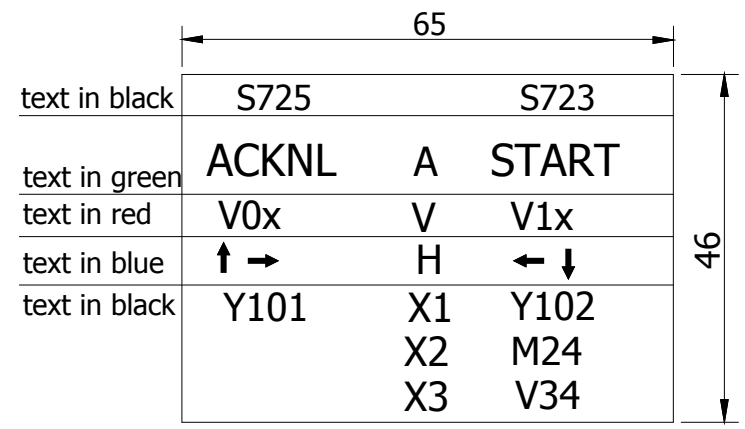
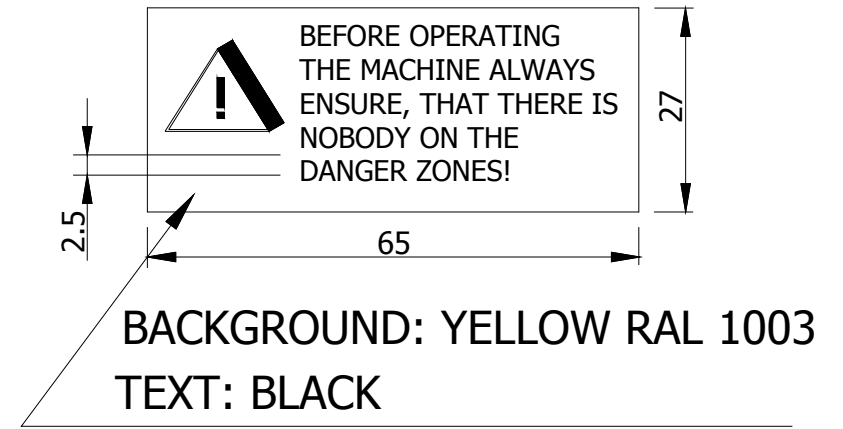
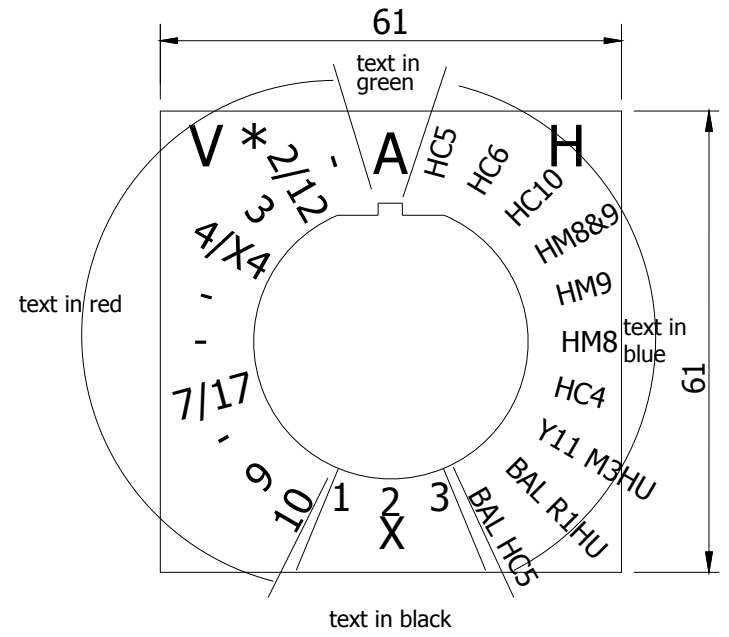
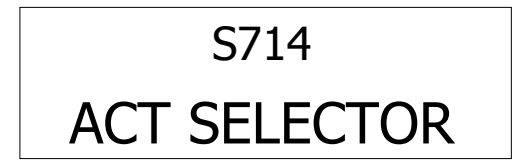
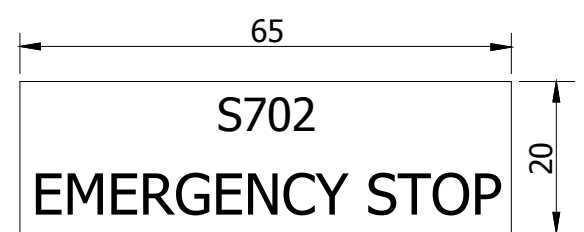
**ENGLISH**

TEXT FONTS: 4mm 6mm **10mm**

TEXT STYLE: WHITE LABEL, BLACK TEXT  
EMERGENCY STOP: RED TEXT



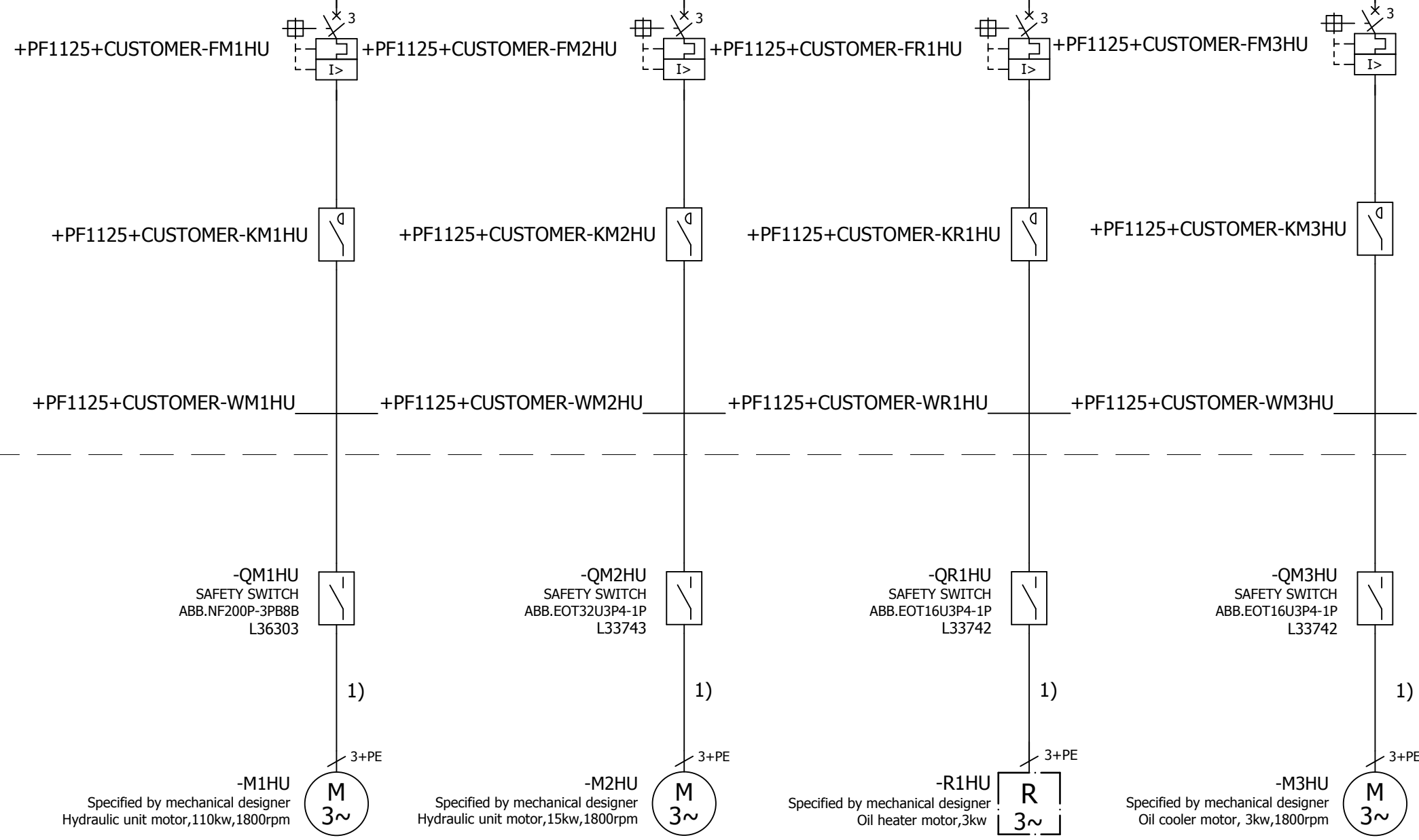
TO HANDHELD UNIT (HANDLE)



Note :  
Labels material: Plastic

**CUSTOMER'S DISTRIBUTION BOARD (CUSTOMER'S MAIN VOLTAGE, 3-PHASE)**

575VAC, 60Hz



CUSTOMER

OUTOTEC

**NOTE: CABLING DETAIL SPECIFIED BY CUSTOMER**

1) CABLES IN CUSTOMER'S DELIVERY

REV. A		REV. E		PRELIMINARY	<input type="checkbox"/>	DATE	26.03.2013	Customer name	<b>Outotec</b>	Page description Motors, single line diagram	Filter type	PF 96/96 M48 2 60	Project number	B200186FI	Location	F1
REV. B		REV. F		FOR APPROVAL	<input type="checkbox"/>	DRN	CRF	SULVARIS / PÖYRY (APPLETON) LLC			Serial no	= PF1125	Drawing number	F673035	Page	9
REV. C		REV. G		CERTIFIED	<input checked="" type="checkbox"/>	CHD	CSC				Location	+ PF1125+F1				
REV. D		REV. H				APPR										

**CUSTOMER'S DISTRIBUTION BOARD (CUSTOMER'S MAIN VOLTAGE, 3-PHASE)**

575VAC, 60Hz

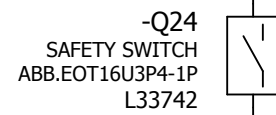
CUSTOMER  
-----  
OUTOTEC



+PF1125+CUSTOMER-W124

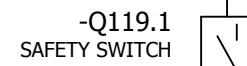
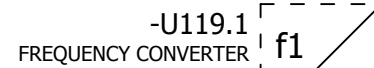
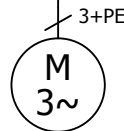
+PF1125+CUSTOMER-W1119.1

+PF1125+CUSTOMER-W1119.2

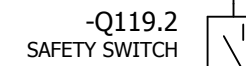
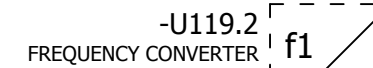
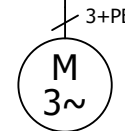


1)

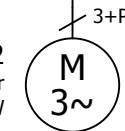
-M24  
Specified by mechanical designer  
Cake popping device, M24, 6,3kW



-M119.1  
Specified by mechanical designer  
High pre. cloth wash pump 1, M119.1, 22kW



-M119.2  
Specified by mechanical designer  
High pre. cloth wash pump 2, M119.2, 22kW



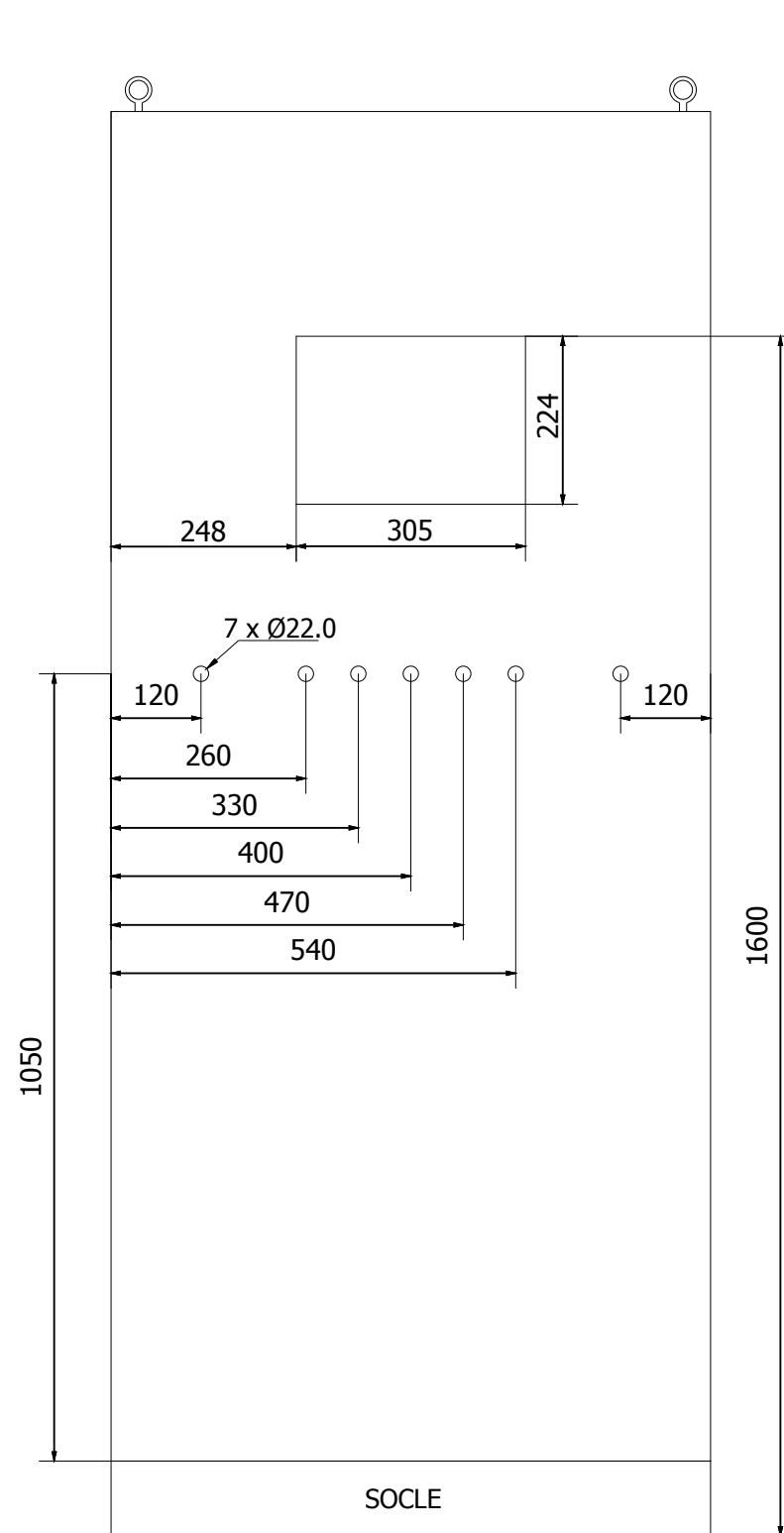
HIGH PRESSURE STATION 2)

NOTE: CABLING DETAIL  
SPECIFIED BY CUSTOMER

- 1) CABLES IN CUSTOMER'S DELIVERY
- 2) HIGH PRESSURE STATION IN ADWANTEC'S DELIVERY

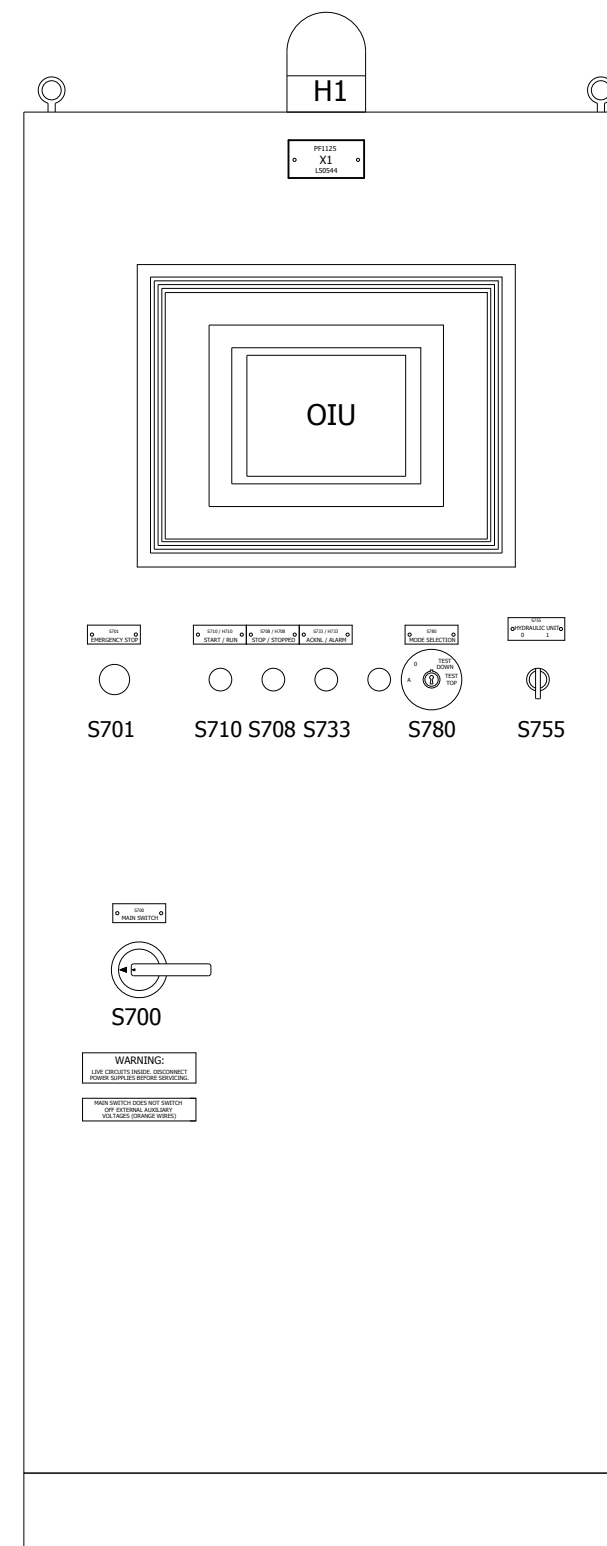
REV. A		REV. E		PRELIMINARY	<input type="checkbox"/>	DATE	26.03.2013	Customer name	<b>Outotec</b>	Page description	Filter type	PF 96/96 M48 2 60	Project number	B200186FI	Location	F1	
REV. B		REV. F		FOR APPROVAL	<input type="checkbox"/>	DRN	CRF	SULVARIS / PÖYRY (APPLETON) LLC			Motors, single line diagram	Serial no	= PF1125	Drawing number	F673035	Page	10
REV. C		REV. G		CERTIFIED	<input checked="" type="checkbox"/>	CHD	CSC					Location	+ PF1125+F1				
REV. D		REV. H				APPR											

CONTROL PANEL X1

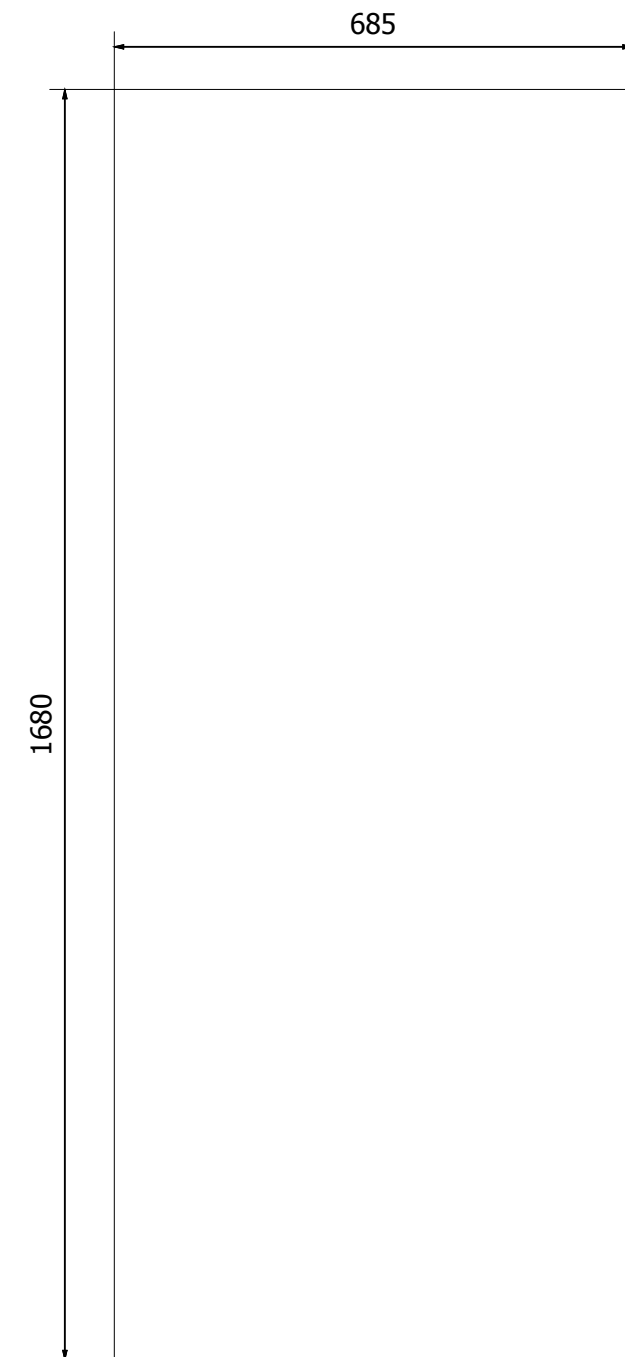


PANEL MEASURES: 1800x800x400mm

DOOR



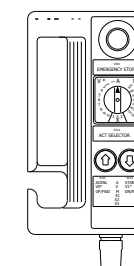
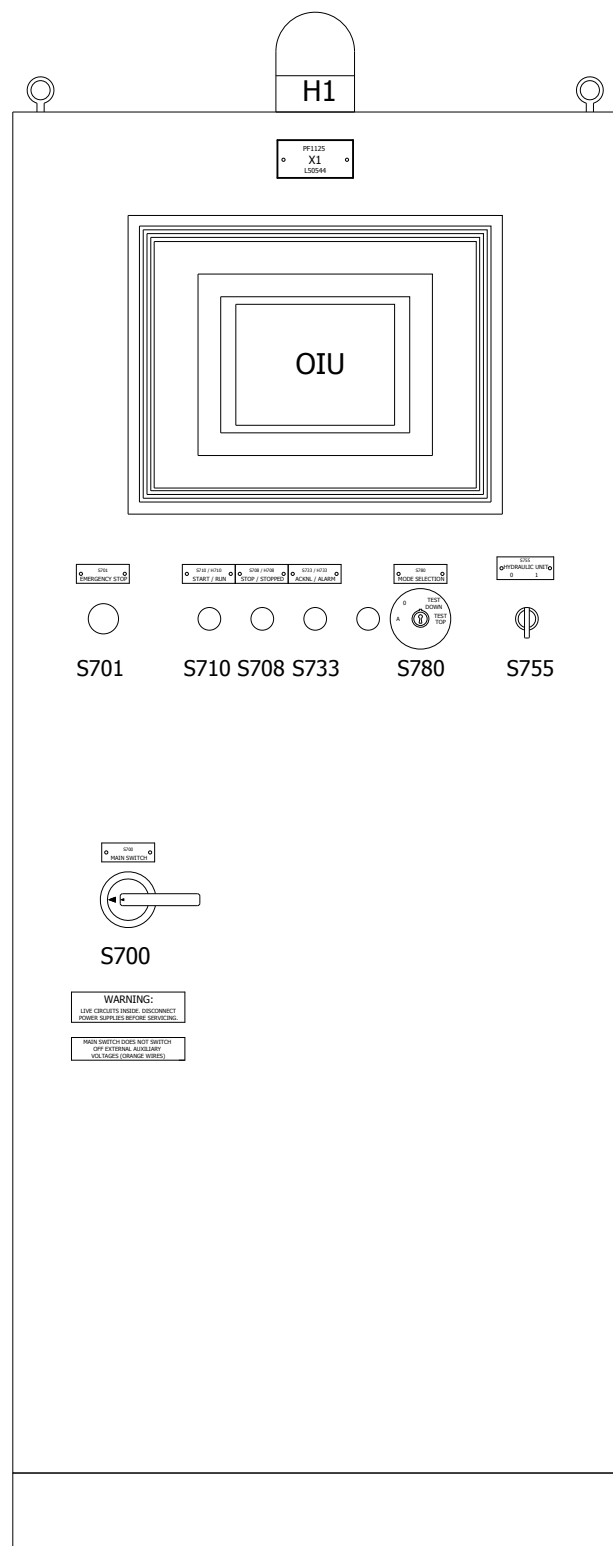
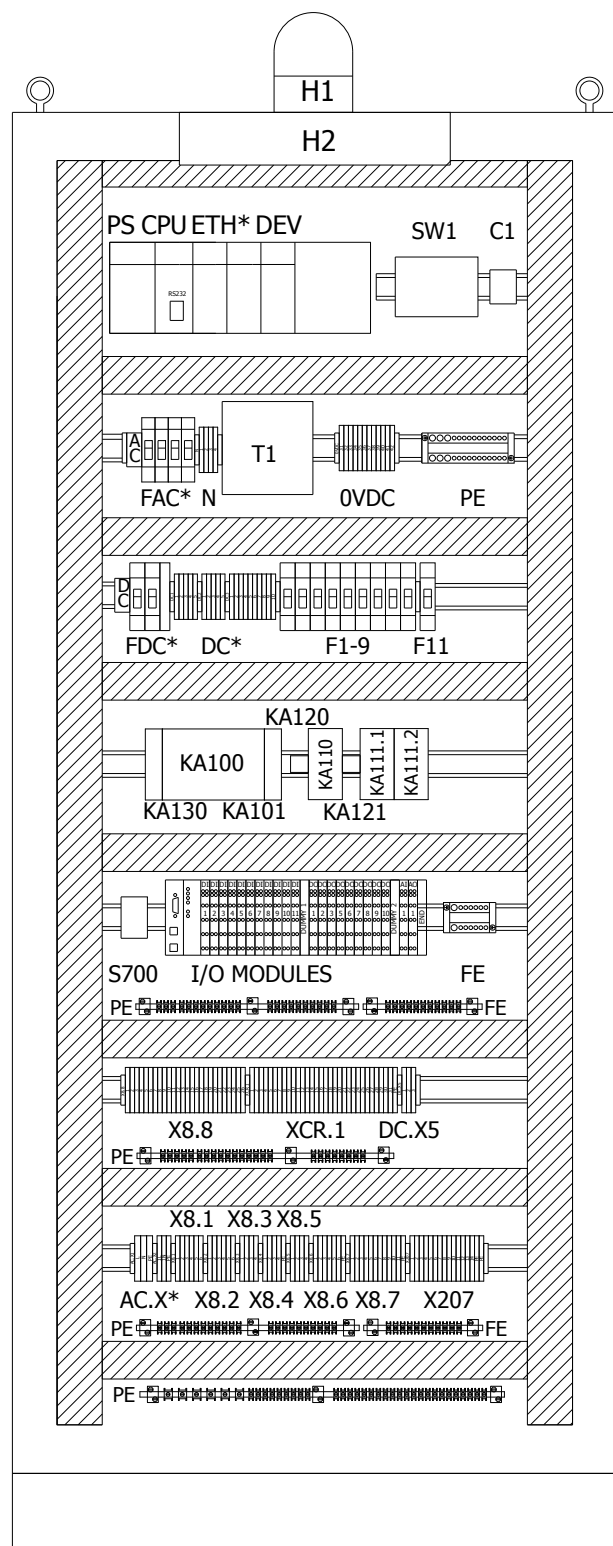
L22293 AISI 316L



MOUNTING PLATE

REV. A		REV. E		PRELIMINARY	<input type="checkbox"/>	DATE	26.03.2013	Customer name	SULVARIS / PÖYRY (APPLETON) LLC		Page description	Filter type	PF 96/96 M48 2 60	Project number	B200186FI	Location	X1
REV. B		REV. F		FOR APPROVAL	<input type="checkbox"/>	DRN	CRF	Dimensional layout, control panel X1 with proface OIU				Serial no	= PF1125	Drawing number	F673035	Page	1
REV. C		REV. G		CERTIFIED	<input checked="" type="checkbox"/>	CHD	CSC					Location	+ PF1125+X1				
REV. D		REV. H				APPR											





HANDHELD-UNIT

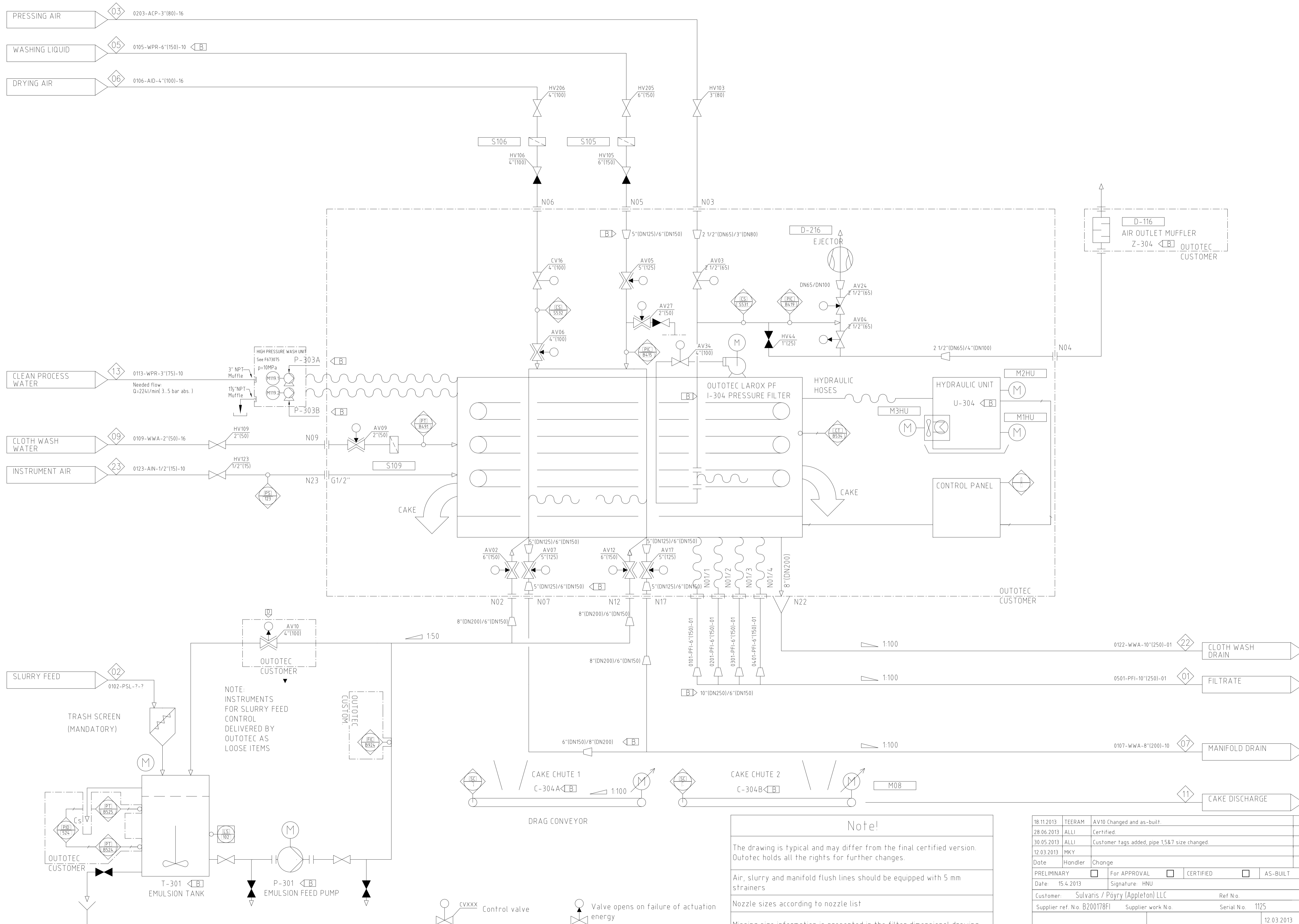
- PS = LOGIC POWER SUPPLY
- CPU = LOGIC CPU
- ETH\* = ETHERNET CARD
- DEV = DEVICENET CARD
- H1 = ALARM BEACON
- H2 = CABIN LIGHT / SOCKET
- OIU = OPERATOR INTERFACE UNIT
- SW1 = ETHERNET SWITCH
- FAC\* = 120VAC VOLTAGE DISTRIBUTION
- N = NEUTRAL FOR 120VAC
- C1 = COUNTER
- T1 = POWER SUPPLY 24 VDC
- FDC\* = 24VDC VOLTAGE DISTRIBUTION
- DC\* = VOLTAGE SUPPLY 24VDC TERMINALS
- DC.X5 = TERMINALS FOR X5 POWER SUPPLY
- OVDC = TERMINALS FOR 0VDC
- F1-9, 11 = VOLTAGE DISTRIBUTION 24VDC (AUTOMATIC FUSES)
- KA1\*\* = EMERGENCY STOP / SAFETY CIRCUITS RELAY
- AC.X\* = VOLTAGE SUPPLY
- X8.\* = TERMINALS FOR EMERGENCY STOP CIRCUITS
- X207 = TERMINALS FOR CONNECTORS
- PE/FE = GROUNDING TERMINAL
- I/O MODULES = I/O MODULES IN CONTROL CABIN
- XCR.1 = TERMINALS FOR CUSTOMER
- S700= MAIN SWITCH
- S701 = EMERGENCY STOP PUSH-BUTTON
- S708 = STOP PUSH-BUTTON
- S710 = START PUSH-BUTTON
- S733 = ALARM RESET PUSH-BUTTON
- S755 = HYDRAULIC UNIT MODE SWITCH
- S780 = MODE SELECTION (AUTOM. - TEST MODE)

PANEL MEASURES: (800x1800x400)mm+ SOCLE (800x100x400)mm  
 MATERIAL:AISI316, IP66, NEMA4X  
 SINGLE DOOR FLOOR STANDING CABINET  
 APPROVALS: CE, TÜV, (cUL, UL, Ex, RINA)

REV. A	09.04.2014	CRF	REV. E		PRELIMINARY	<input type="checkbox"/>	DATE	26.03.2013	Customer name	<b>Outotec</b>	Page description Control cabin layout, LOG-AB	Filter type	PF 96/96 M48 2 60	Project number	B200186FI	Location	X1
REV. B			REV. F		FOR APPROVAL	<input type="checkbox"/>	DRN	CRF	SULVARIS / PÖYRY (APPLETON) LLC			Serial no	= PF1125	Drawing number	F673035	Page	2
REV. C			REV. G		CERTIFIED	<input checked="" type="checkbox"/>	CHD	CSC				Location	+ PF1125+X1				
REV. D			REV. H				APPR										

## 10.10 Diagrams

Project ID: B200186FI	Plant Code: [ENH01]	Plant Unit Code: [DA01]	Document Type: [PFB02]	Running No: [00001]	Revision: B	Outotec Document ID: DOC36460-B
--------------------------	------------------------	----------------------------	---------------------------	------------------------	----------------	------------------------------------



NOTE:  
INSTRUMENTS  
FOR SLURRY FEED  
CONTROL  
DELIVERED BY  
OUTOTEC AS  
LOOSE ITEMS

**Note!**

The drawing is typical and may differ from the final certified version. Outotec holds all the rights for further changes.

Air, slurry and manifold flush lines should be equipped with 5 mm strainers

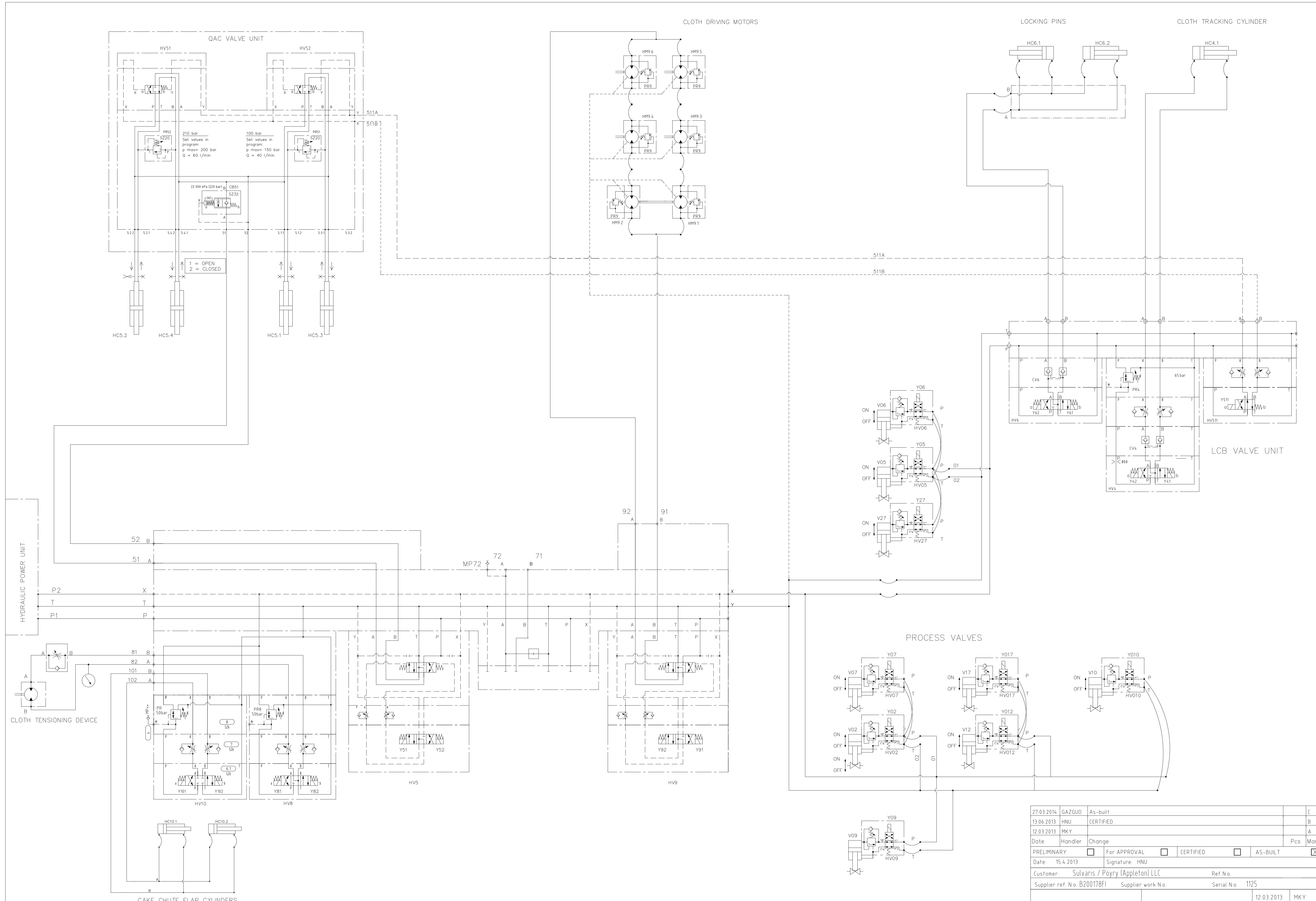
Nozzle sizes according to nozzle list

Missing size information is presented in the filter dimensional drawing

Pressing air line shall be equipped with a safety valve

18.11.2013	TEERAM	AV10 Changed and as-built.			D		
28.06.2013	ALLI	Certified.			C		
30.05.2013	ALLI	Customer tags added, pipe 1,5&7 size changed.			B		
12.03.2013	MKY				A		
Date	Handler	Change			Pcs Mark		
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>	AS-BUILT	<input checked="" type="checkbox"/>
Date:	15.4.2013	Signature:	HNU				
Customer:	Sulvaris / Pöyry (Appleton) LLC		Ref No.				
Supplier ref. No.	B200178F1	Supplier work No.		Serial No.	1125		
<b>Outotec</b>		PI-DIAGRAM	12.03.2013	MKY			
		PF1125	1:1	T-A1			
		PF 96/96 M48 2.60	F673033				

- CVXXX Control valve
- AVXXX Automatic On-Off valve
- Valve opens on failure of actuation energy
- Valve closes on failure of actuation energy



27.03.2014	GAZGUO	As-built		C			
13.06.2013	HNU	CERTIFIED		B			
12.03.2013	MKY			A			
Date	Handler	Change		Pcs Mark			
PRELIMINARY	<input type="checkbox"/>	For APPROVAL	<input type="checkbox"/>	CERTIFIED	<input type="checkbox"/>	AS-BUILT	<input checked="" type="checkbox"/>
Date:	15.4.2013	Signature:	HNU				
Customer:	Sulvaris / Pöyry (Appleton) LLC		Ref. No.				
Supplier ref. No.	B200178F1	Supplier work No.		Serial No.	1125		
<b>Outotec</b>		HYDRAULIC DIAGRAM	12.03.2013	MKY			
		PF1125	1:1	T-A1			
		PF 96/96 M48.2.60	F673065				