

Virtual zero tilting moment point
Moment resultant M_t
Vertical load resultant F_y
Equal compression from F_y
Load from Moment M_t
Combined load

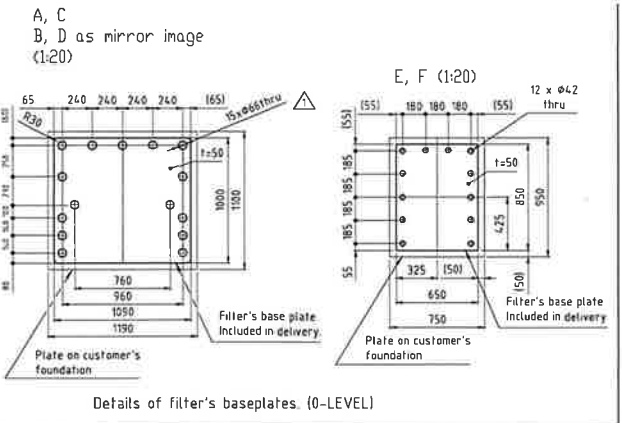
Load distribution on foundation of filter unit
Take values from table for foundation engineering
Distribution is symmetric and similarly formed in columns A, B, C and D.

Foundation position	Open plate pack		Closed plate pack		Closed plate pack		Max load difference		X-direction	
	Fy [kN]	Mt [kNm]	Fy [kN]	Mt [kNm]	Fy [kN]	Mt [kNm]	Fy [kN]	Mt [kNm]	+1	+2
A, B	330	86	439	124	651	198	321	112	52	-4.60
C, D	459	102	573	142	748	204	298	101	50	-4.80
E, F	315	-	91	-	91	-4	223	-	16	-150

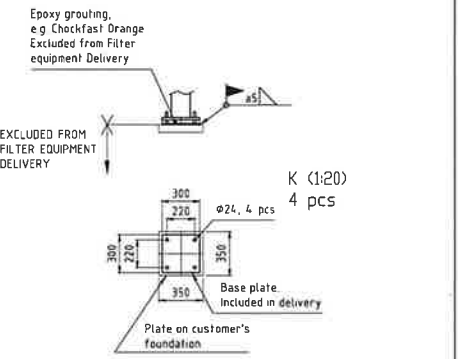
Loads are calculated for plate pack open and closed. Maximum cake load is calculated with 45mm chambers full of non-compressed cake 3000kg/m³.

X-Direction loads
+1) Emergency stop pressed during plate opening/closing
+2) Plate pack closed with max speed (error situation)

Fz = negligible as long as foundation takes Mt without deformation
If separately agreed in definition of Outotec delivery scope, seismic loads can be provided for locations where those are required. Contact Outotec engineering.

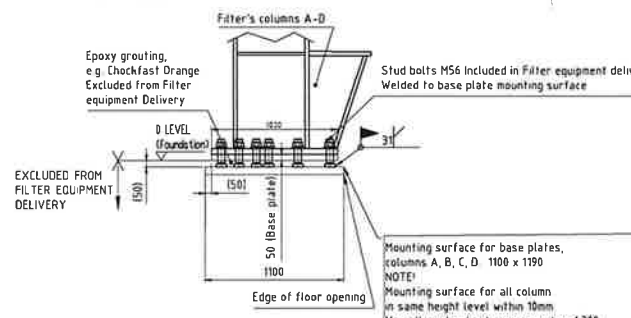


Details of filter's baseplates. (0-LEVEL)

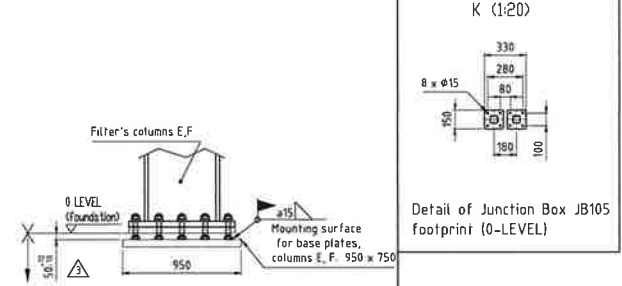


Details of baseplates of slurry piping support. (0-LEVEL)

Filter base plates will be fastened to foundation level with a nut and welded stud bolt connection and epoxy grouting. Earthing lugs will be welded to building structure beside each column (lugs and cables included in Filter equipment scope).



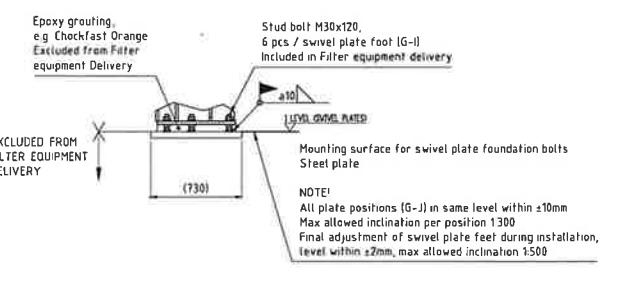
NOTE!
FINAL SETTLEMENT LIMITS:
X-Direction: 1:1000
Z-Direction: 1:500



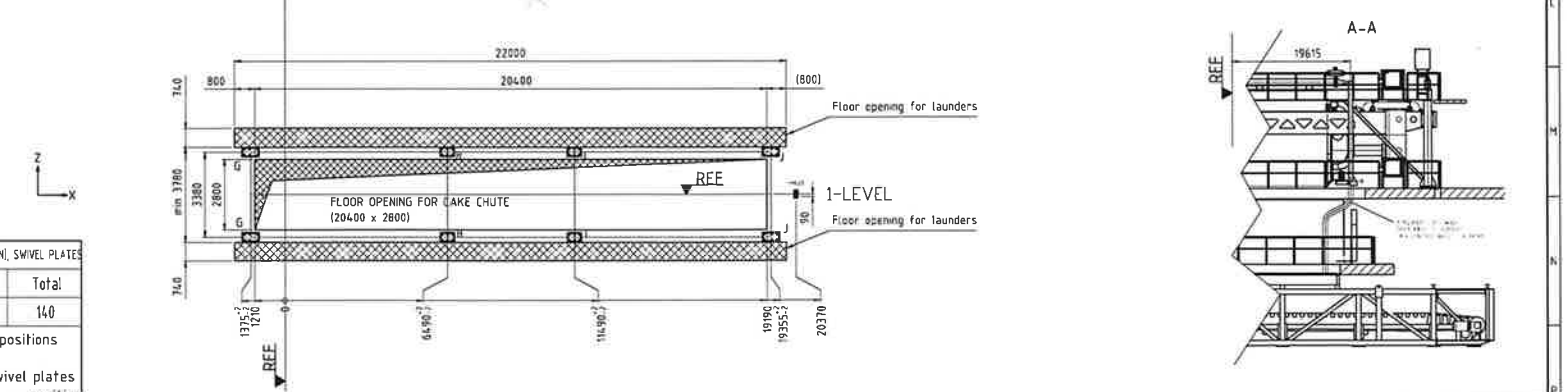
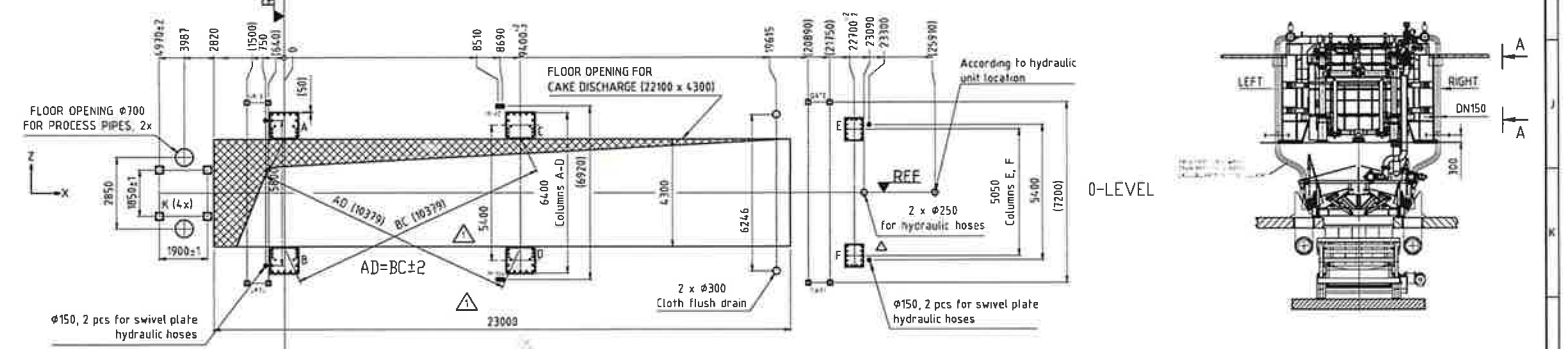
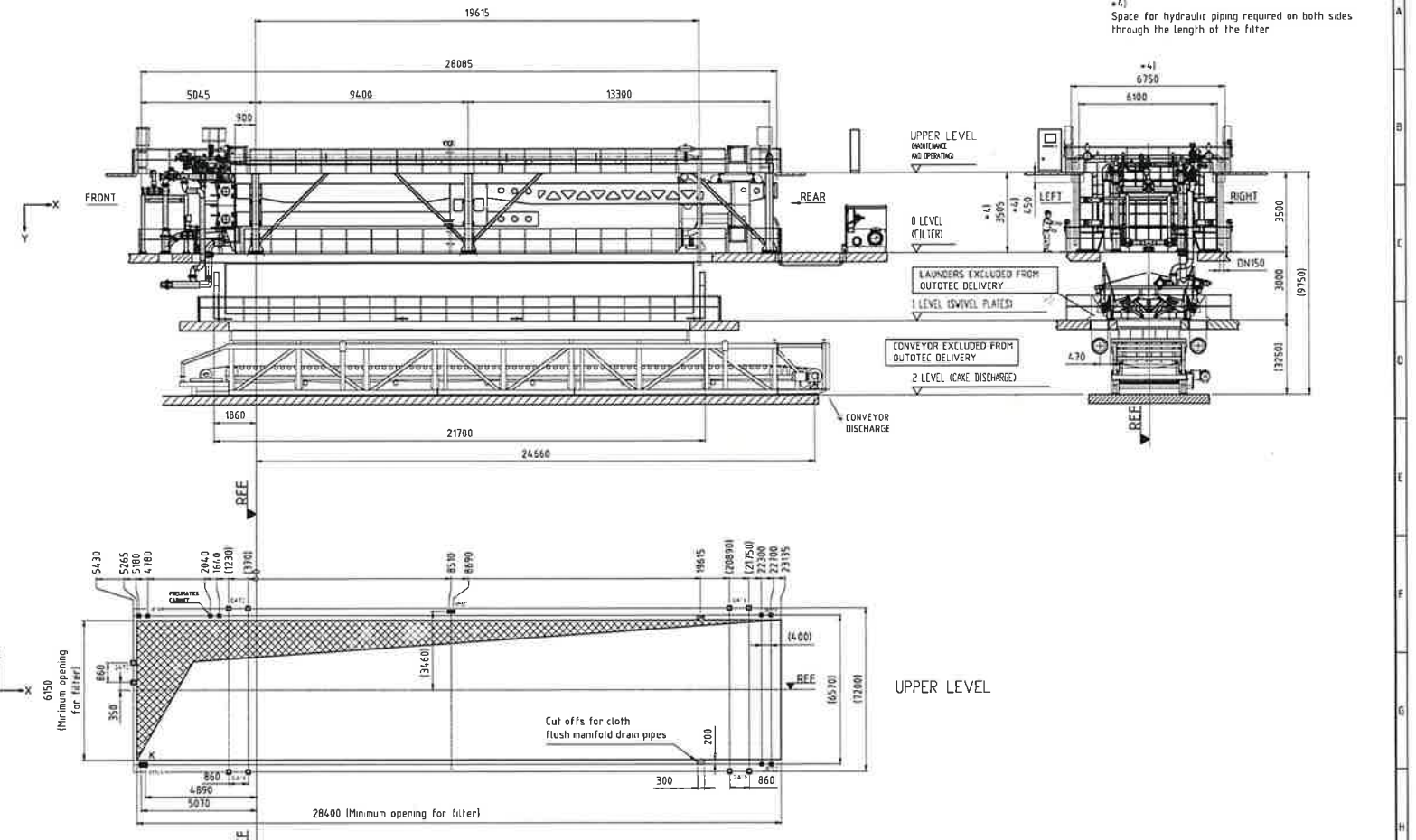
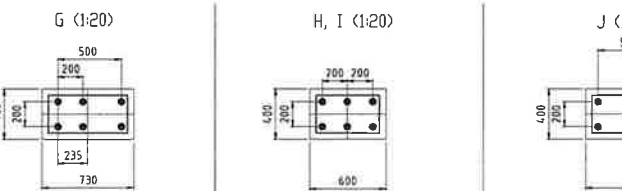
Detail of Junction Box JB105 footprint (0-LEVEL)

FOUNDATION LOADS PER POSITION, Fy (kN), SWIVEL PLATES				
G	H, I	J	Total	
17,5	17,5	17,5	140	

Fz, Fx = Negligible for all positions
If max. cake dropped on swivel plates (error situation) max. load per position 150 kN.



Details of swivel plate footprints (1-LEVEL)



HHU1/HHU2 and HHU3/HHU4 = hand held unit terminal position
GATE = safety gate position
JB104, JB101, JB102, JB105 and Pneumatics cabinet = terminal box locations
See Safety Handrail Arrangement for footprint details

See hydraulic power unit and control panel for corresponding details

<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>NAME</th> <th>REASON</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2012-02-22</td> <td>...</td> <td>...</td> </tr> <tr> <td>2</td> <td>2012-03-01</td> <td>...</td> <td>...</td> </tr> <tr> <td>3</td> <td>2012-03-01</td> <td>...</td> <td>...</td> </tr> </tbody> </table>	NO.	DATE	NAME	REASON	1	2012-02-22	2	2012-03-01	3	2012-03-01	<p>ISSUED FOR APPROVAL</p> <p>UNITS: mm SCALE: 1:100 SHEET: 1 / 1</p>
NO.	DATE	NAME	REASON														
1	2012-02-22														
2	2012-03-01														
3	2012-03-01														

Outotec
 GENERAL ARRANGEMENT DRAWING
 TAILINGS FILTERS
 TAILING FILTER
 FOUNDATION
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