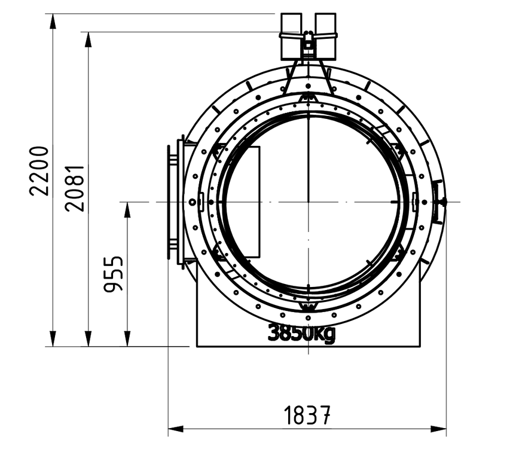
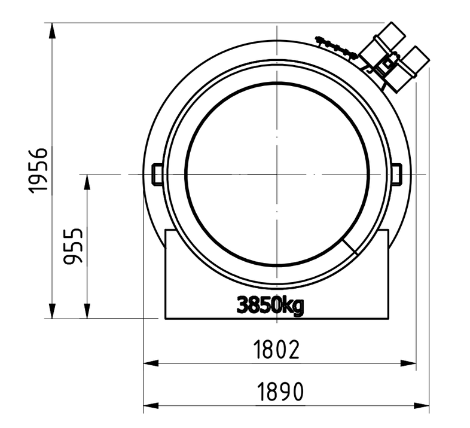
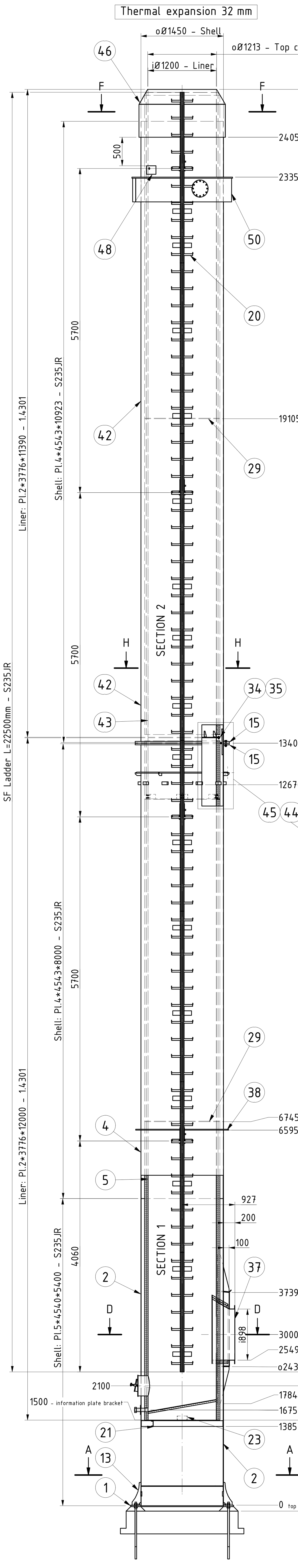
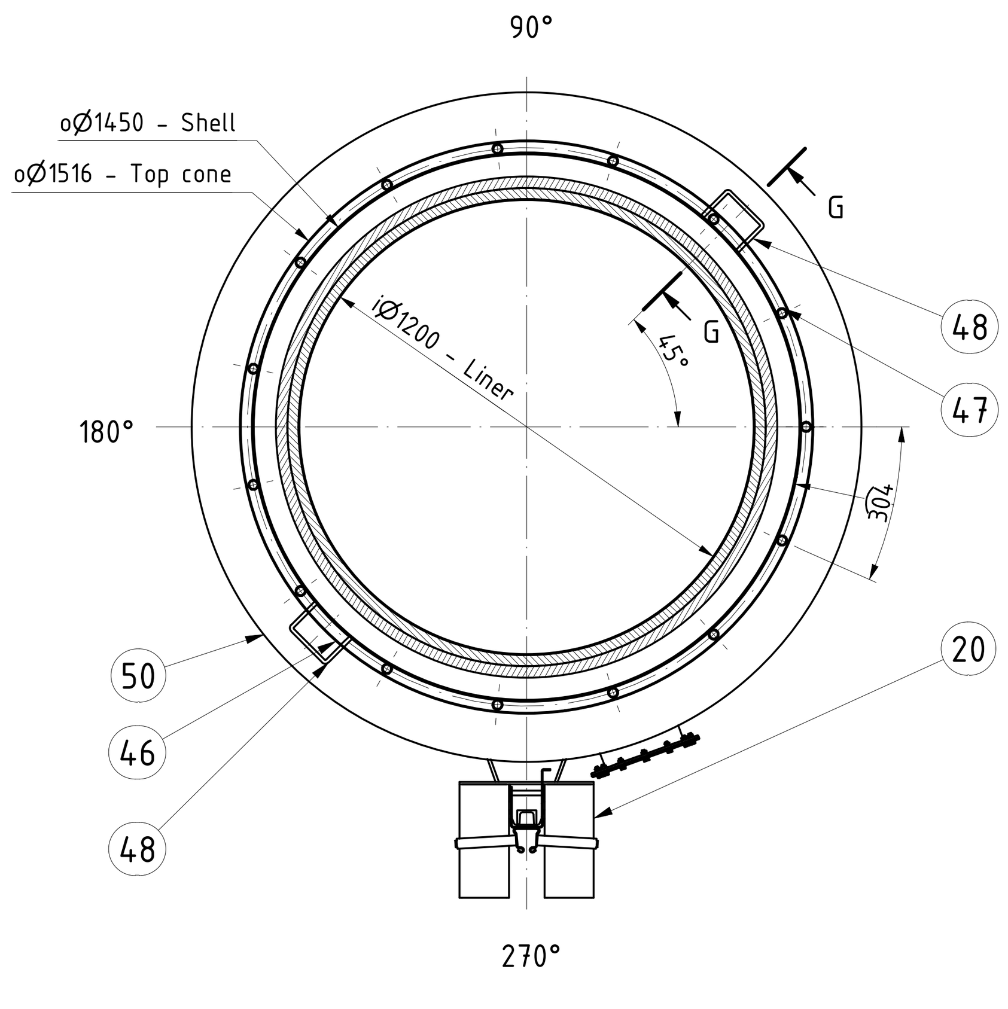


Transport view sec.1
from top
Weight - 3806kg
Length - 13500mm

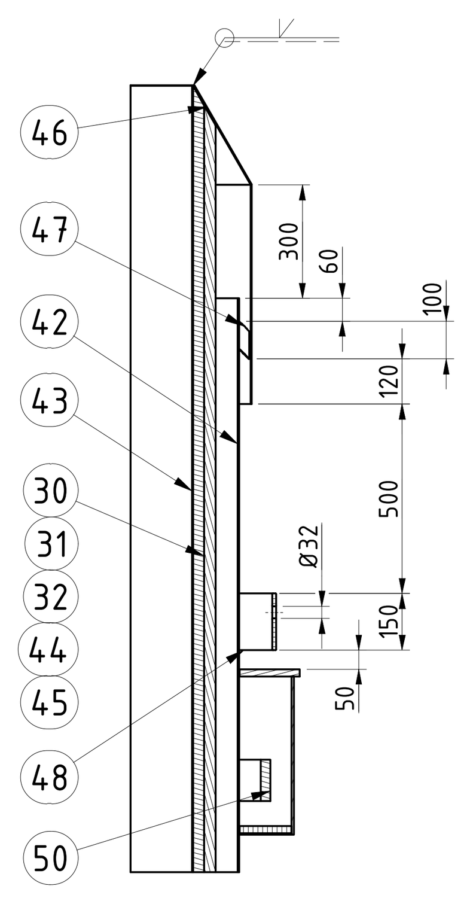


Transport view top sec.
from top
Weight - 3791kg
Length - 11500mm

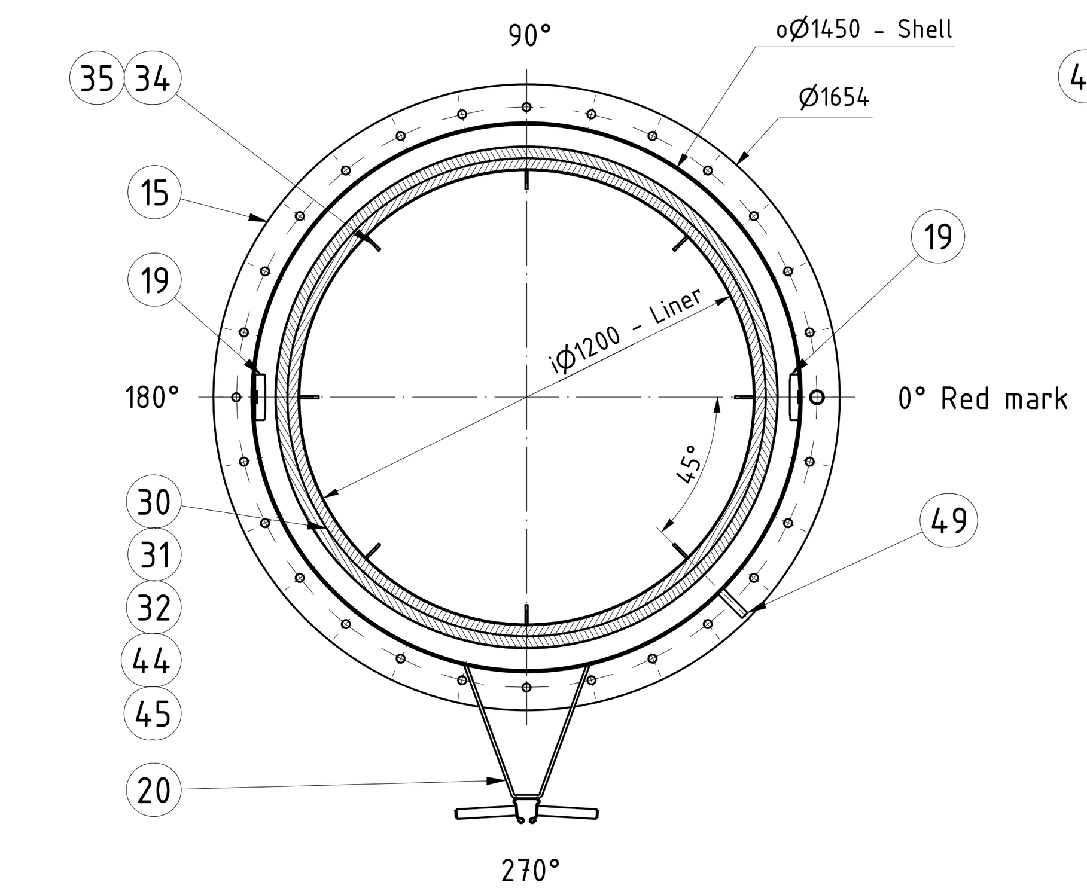




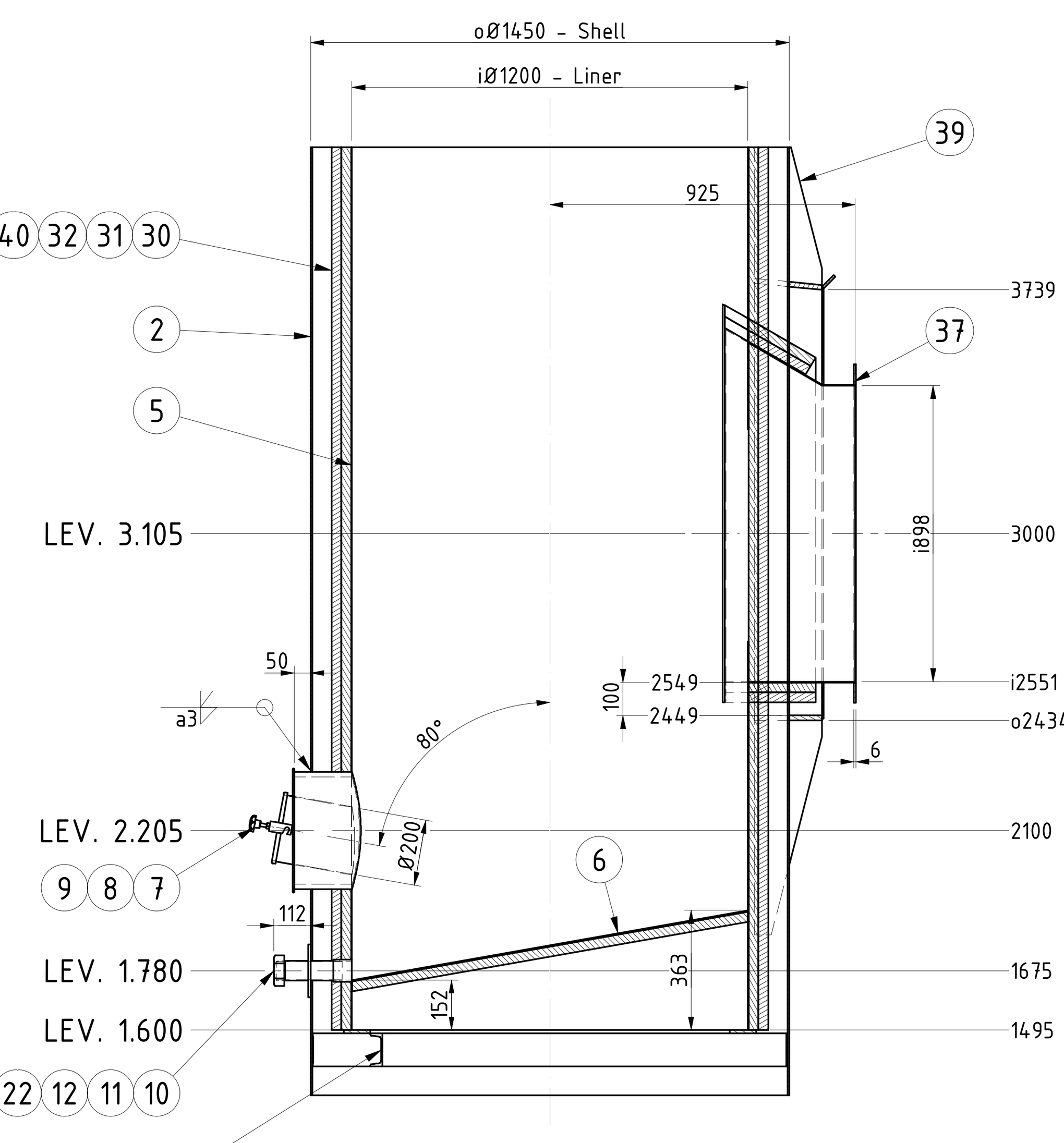
F-F (1 : 20)



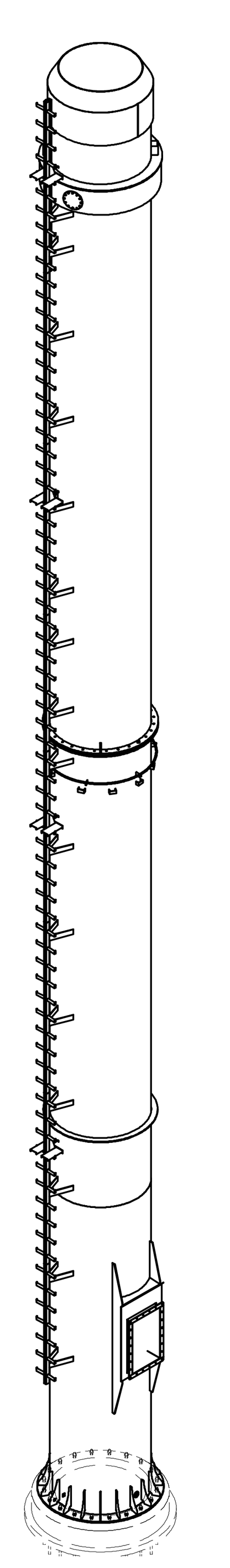
G-G (1 : 20)

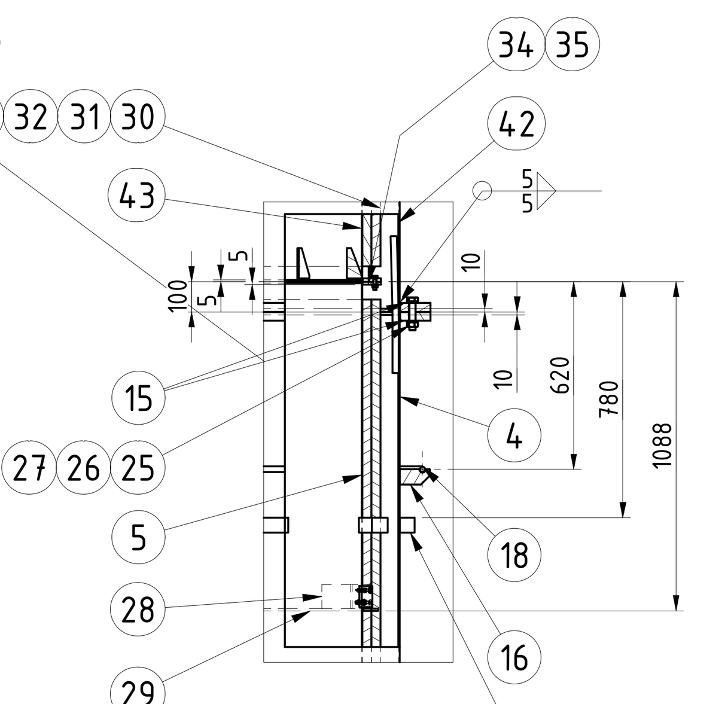


H-H (1 : 20)

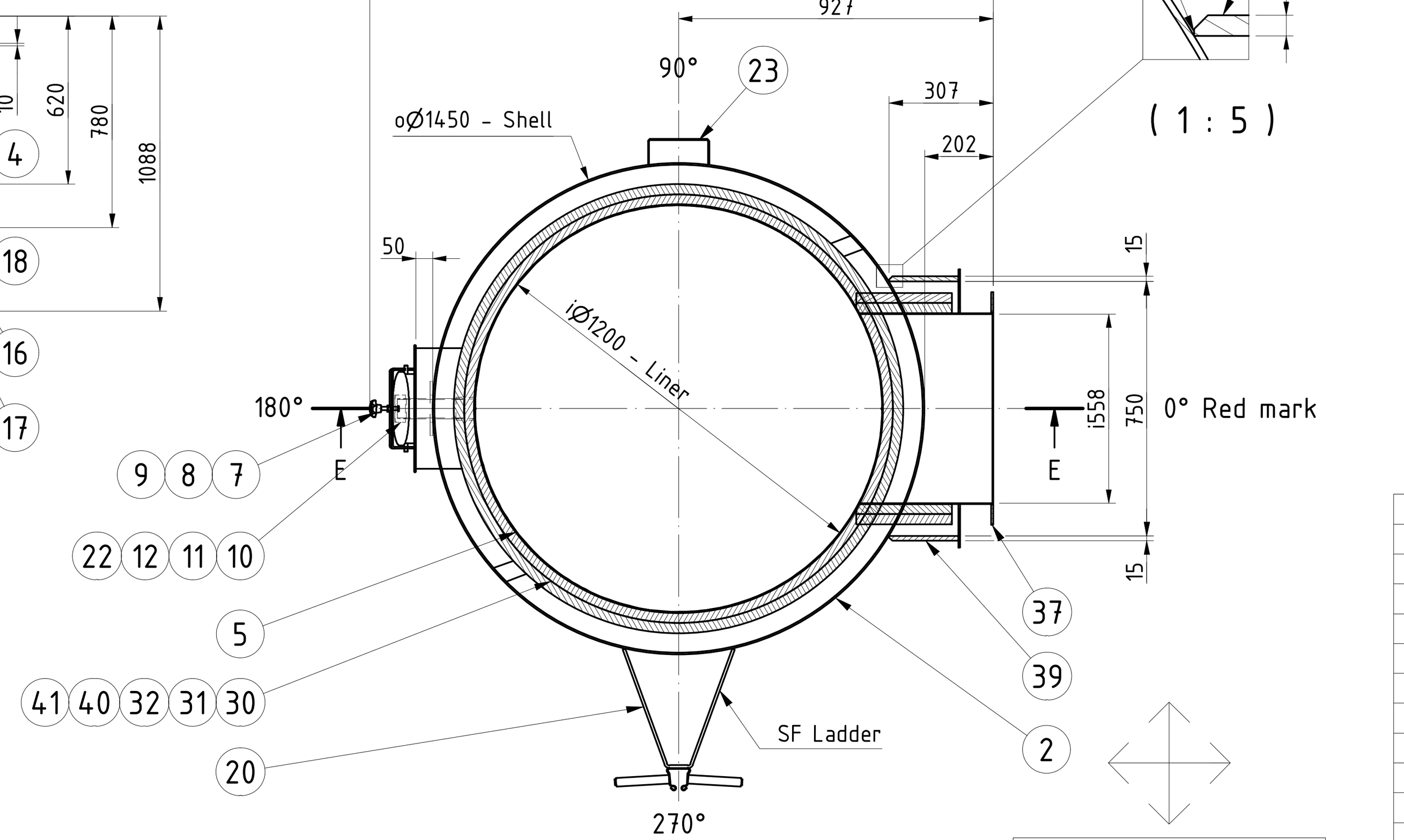


E-E (1 : 20)

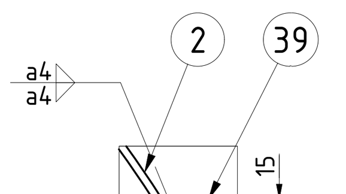




(1 : 25)

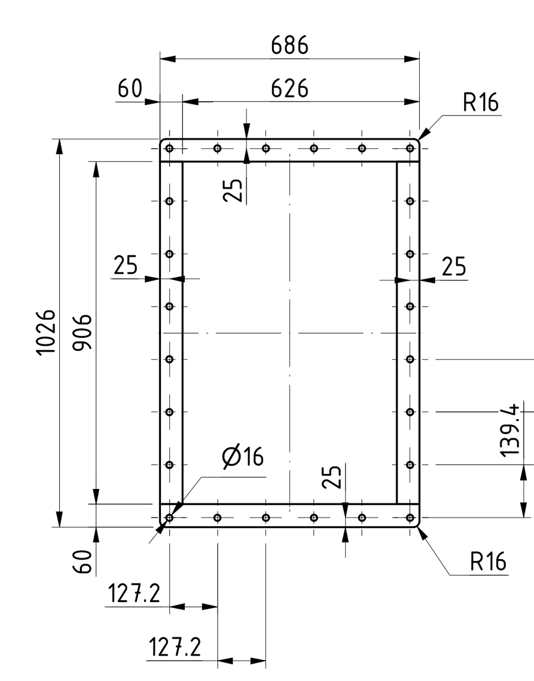


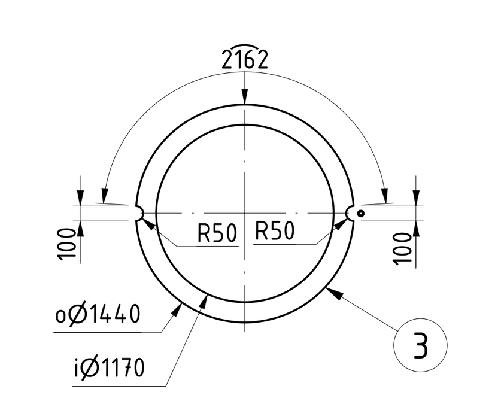
D-D (1 : 20)

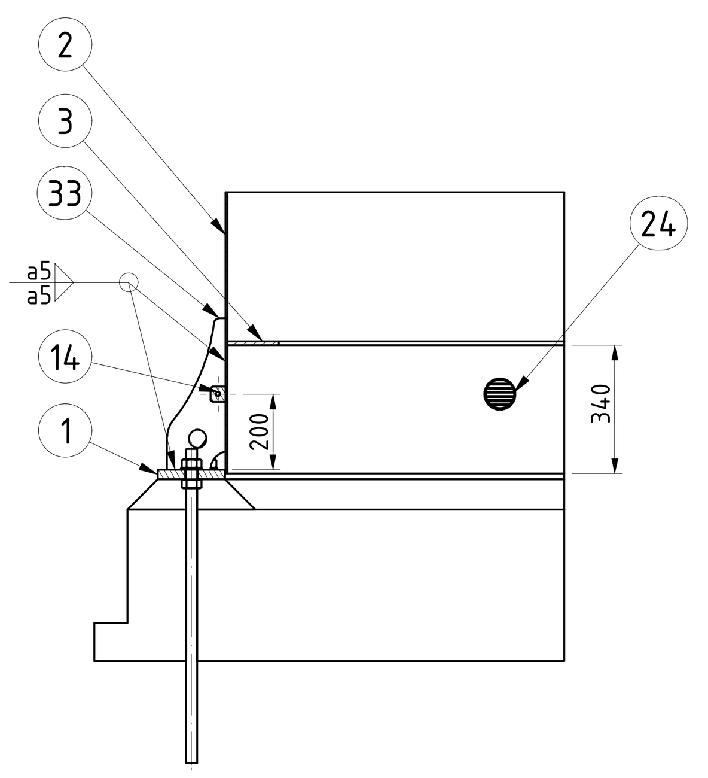


(1 : 5)

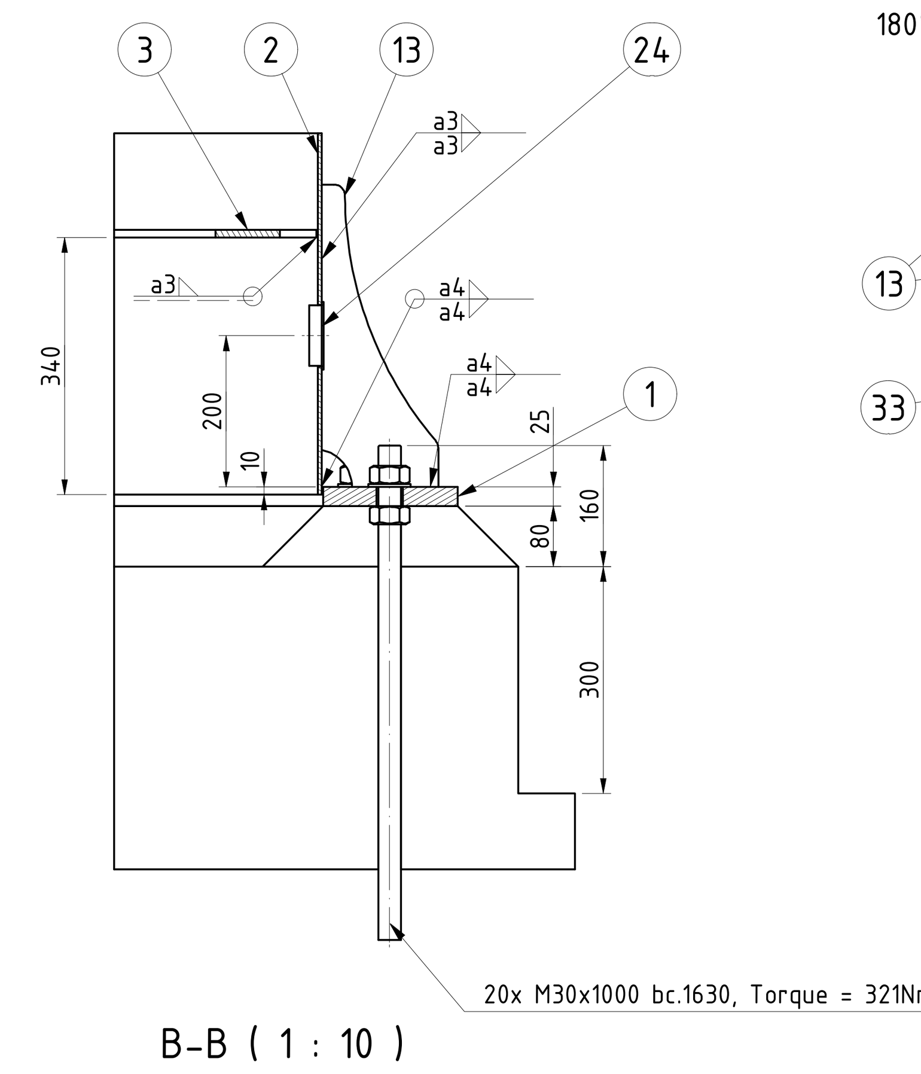
Deflection form static wind
2,2 mm



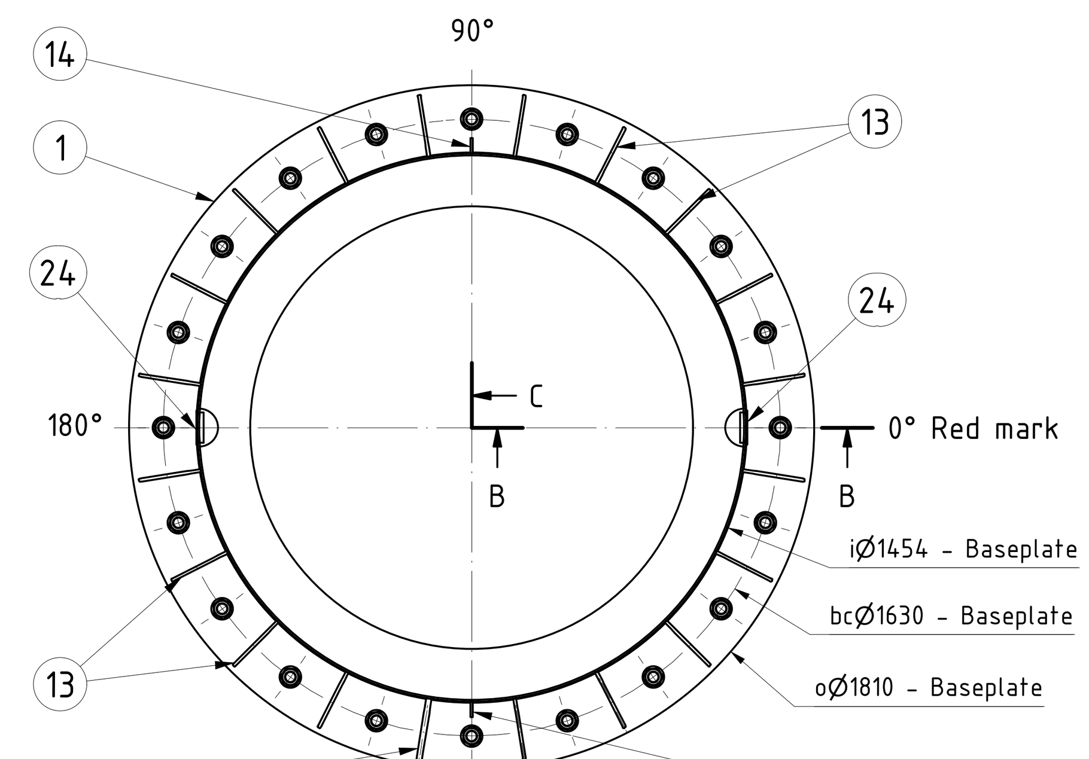




C-C (1 : 20)



B-B (1 : 10)



A-A (1 : 20)

STRUCTURAL STEEL
Material: S355J2-S235JR EN10025
Certificate: 3.1 EN10204 (min)
Welds:
Basic Norm of Production: EN1993-3-2/EN1090-2, EXC 2.
Welding class: EN/ISO 5817: C.
Note: Welding Spatter, slag etc. not accepted
Not shown welds: a = min. 3mm
Control:
Tolerances: EN/ISO 13920/EN1090-2 (Shop tolerances)

NON-STRUCTURAL STEEL FOR FLUEGAS CARRYING LINER
Material: Stainless Steel W.Nr. 1.4301
Certificate: 3.1 EN 10204 (min)
Filler Metal: W.Nr. 1.4576
Requirements of Weld Seam Quality:
Gas-tight. EN/ISO 5817: D.
Grade of Post-treatment: Mechanical.

Welded materials which are not influenced by flue gas will be made of 1.4301 or similar.

INSULATION
Liner:
Mineralwool : 2 x 30 mm galvanised wire backed mats. Density min. 100 kilos/m³. Retained by means of wire nails welded to the liner. Joints between layers staggered and sewn with galvanised wire. Furthermore straps all around.

Placing of nails:
The distance between the first- and the last nail on a circumference is approximately 300 mm. Distance between the other nails on a circumference is about 900- max. 1300 mm. This circumference placement of nails will be for each half meter in the longitudinal direction.

Insulation, cladding at flue gas inlets and tightning against coverplate at reinforcements are not included in the scope of delivery of chimney.

SURFACE TREATMENT
Outside shell
Sandblast to SA 2.5 acc. EN/ISO 8501-1.
Acc. EN/ISO 12944 (1-8):
1*60 microns zinc Epoxy
2*100 microns two pack epoxy primer
1*60 microns polyurethane enamel top coat
Total dry film thickness approximately 320 microns.
Color:
Code: RAL ???? - Name: ?????????

MISCELLANEOUS
Design temperature liner: 75°C

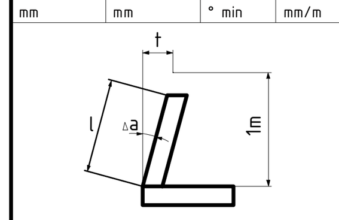
CE-marking of liner (Free-standing chimney product):
EN 13084-7 - T75 - H0 - D - L20 - 1.4301 - 0

General tolerances for welded constructions EN ISO 13920:1997

Tolerance class C applies unless other class is shown. See explanation in norm.

Angular dimensions - class C

Length over	to	Tol. ∠a	Tol. t
0	315	±1°	±18
315	1000	±45'	±13
1000	-	±30'	±9
mm	mm	° min	mm/m



Tolerance class C applies unless other class is shown. See explanation in norm.

Length dimensions - class C

Length over	to	Tol.
2	30	±1
30	120	±3
120	400	±4
400	1000	±6
1000	2000	±8
2000	4000	±11
4000	8000	±14
8000	12000	±18
12000	16000	±21
16000	20000	±24
20000		±27
mm	mm	mm

General tolerances: DS/ISO 2768-v

Tolerance class v applies unless other class is shown. See explanation in norm.

Linear dimensions, Table 1

Length over	to	Tol.
0.5	3	-
3	6	±0.5
6	30	±1
30	120	±1,5
120	400	±2,5
400	1000	±4
mm	mm	mm

Broken edges, Table 2 (external radii and chamfer heights)

Length over	to	Tol.
0.5	3	±0.4
3	6	±1
6	over	±2

Angular dimensions, Table 3

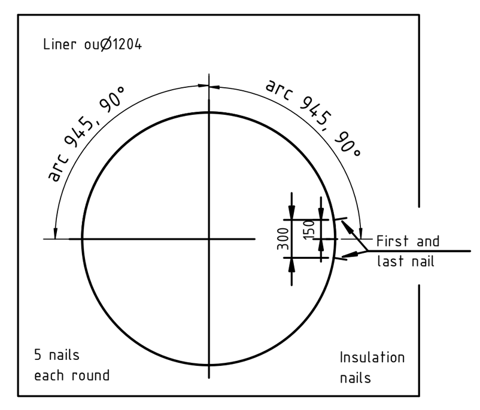
Length over	to	Tol.
0	10	±3°
10	50	±2°
50	120	±1°
120	400	±0°30'
400	-	±0°20'
mm	mm	° min

Torque settings for bolts (applies to structual flanges and oblong holes)

Quality \ Size	M12	M16	M20	M24	M30	M36	
10.9	100	250	450	800	1650	2800	Nm
8.8	70	193	376	651	1294	2262	Nm

10.9 EN 14399-4:2005 bolt sets has to be tightend as delivered without additional lubrication. Washers acc. EN 14399-6:2005
Bolt, nut and washer has to be from the same manufacturer. Washers has to be placed with faced facing bolt head and nut. Nut has to be placed with visible text.

8.8 bolt sets has to be coated with a light oil film. Washers are hardened min. HB200.



Annex E - Alignment
Execution Class
EN 1993-3-2:2006
The permitted horizontal deviation∆ from the vertical of the steel shell at any level h (in m) above the base of a selfsupporting chimney should be:

$$\Delta = \frac{h}{1000}\sqrt{1+\frac{50}{h}}$$

Qty	Title	Item	Part Number	Drawing Number	Material	Weight	Remarks
1	Damper HOD	50	6711-6-1	6711-6-1	S355J2	468.2	
1	Lifting lugs: 3 t	49		02-012-116	S235JR	1.4	AS
2	Lifting lugs: 3.15 t	48		02-012-110	S235JR	7.2	A
15	Top guide: ø26.9*2.6, L=100	47		02-009-104	1.4301	1.8	A
1	Cone Top	46	6711-4-1	6711-4-1	1.4301	98.1	
1	Insulation/wirenet.: 30*4065*11293	45	AA144954	6711-1-1	Mineral	137.4	A
1	Insulation/wirenet.: 30*3971*11345	44	AA144953	6711-1-1	Mineral	131.6	A
1	Liner: Pl.2*3776*11390 øi1200	43	AA144951	6711-1-1	1.4301	695.1	I
1	Shell: Pl. 4*4543*10923	42	AA144955	6711-1-1	S235JR	1558.1	I
1	Insulation/wirenet.:30*4065*11945	41	AA144948	6711-1-1	Mineral	145.7	~~A~~
1	Insulation/wirenet.:30*3877*11945	40	AA144937	6711-1-1	Mineral	138.9	A
1	Reinforcement frame: Pl.15 mm - W=750 mm	39	6711-5-1	6711-5-1	S355J2	148.1	
1	Flange Pl. 15*90 unf.4851, ø1634/ø1454	38	AA144928	6711-1-1	S235JR	51.4	AP
1	Flueinlet: Pl. 2 / 898x558	37	6711-3-1	6711-3-1	1.4301	36.9	
3	Fitting for errection (not shown)	36	AA144884	6711-9-5	Default	0.0	
1	SIKA: Sikaflex 221 (300ml)	35	X000	X000	Silicone	0.1	A
1	Liner flange connection:	34	6711-9-1	6711-9-1	1.4301	42.6	
1	Stiffening plate for lifting (Max. 8 ton): Pl.15*165*400	33	STD-000146	02-003-308	S355J2W	4.5	AS
1	Steel wire ø1	32	AA144878	6711-1-1	Galv.	0.0	A
240	Holding tack: ø3*90 (2*5/1000)	31	AA144877	6711-1-1	1.4301	0.0	A
48	Bindex band: 0,5*16 (2*1000)	30	AA144876	6711-1-1	Plastic	0.0	A
3	Flange Pl. 8*50 L=3952, ø1308/ø1208	29	AA144881	6711-1-1	1.4301	38.3	IP
6	Liner guide with Nylon	28	6711-9-2	6711-9-2	S235JR/Nylon	7.8	
28	Screw M20*95	27		EN 14399-4	10.9 hdg	9.1	A
28	Nut M20	26		EN 14399-4	10 hdg	2.2	A
56	Washer M20	25		EN 14399-6	hdg	1.2	A
2	Ventilation grate: NW 80, TYPE 1	24		02-007-101	Aluminium	0.7	A
1	Information plate with bracket: [H = 25m]	23	STD-000075	04-006-101	1.4301	0.6	A
1	Reinforcement for 2" drain: Pl.8* øo160/øi82	22		02-007-103	S235JR	0.9	A
1	Liner support	21	6711-9-3	6711-9-3	S235JR	51.0	
1	SF Ladder with equipment	20	6711-9-4	6711-9-4	S235JR/hdg	274.9	
2	Lifting lugs: 3.15 t	19		02-012-102	S355J2	16.3	AS
1	Safety ring: Round iron ø19, L=5027, øi=1581	18	AA144865	6711-1-1	S235JR	11.2	AP
10	Bracket for scaffold: UNP100, L=50	17		02-009-101	S235JR	5.3	A
6	Fitting for safety ring: Pl.8*50*100	16		02-009-102	S275JR	1.6	A
2	Flange: Pl.30*100 øi1454/øo1654 øbc1534	15	AA144863	6711-1-1	S355J2	224.9	AS
2	Fitting for lightning protection: Pl.6*40*40	14		02-005-101	1.4301	0.1	A
19	Stiffening plate: Pl.8*165*400	13	STD-000208	02-003-106	S235JR	40.6	AS
1	2" yellow cap:	12	2-Y	EN ISO 4144	Plastic	0.2	A
1	2" Nipple pipe: ø60.3, L=200	11		X3002101-7	1.4404	0.8	A
1	2" Socket: DN50	10		X007-4	1.4401	0.5	A
1	Cleaning pipe: øi200*2, L=250	9	STD-000089	03-003-103	1.4571	3.6	A
1	Reinforcement for cleaning door: Pl.15	8	STD-000083	03-003-102	S355J2	33.1	A
1	Cleaning door: NW200	7	STD-000069	03-003-101	1.4571	2.9	A
1	Ellipse: Pl.4*1199*1217	6	AA144866	6711-1-1	1.4301	37.1	IS
1	Liner: Pl.2*3776*12000 øi1200	5	AA144867	6711-1-1	1.4301	727.6	I
1	Shell: Pl. 4*4543*8000	4	AA144870	6711-1-1	S235JR	1141.1	I
1	Liner baseplate: Pl.10 øo1440 / øi1170	3	AA144872	6711-1-1	S235JR	42.8	AS
1	Shell: Pl. 5*4540*5400	2	AA144869	6711-1-1	S235JR	961.8	I
1	Baseplate: Pl.25* ø1810/ø1454 øbc1630	1	AA144871	6711-1-1	S355J2	175.3	

PARTS LIST

Rev.	Date	Initials Drawn by	Initials Checked by	Initials Approved by	Description of Revision
A	28.02.2020	PEFE		MARU	K1- Drawing

DOMINION STEELCON

Steel Chimney H=25m
D/d= 1450/1200

Total weight: 7476,3 kg

Scale (Main): 1:50	To be made (quantity): 1	Project Name: Uthaug	
Scale(s) (Secondary): 1:5,1:10,1:20,1:25		Project Order No: 6711	
Method of View:	Sheet Size: A1	Drawing No.: 6711-1-1	Revision: A