




DEHDASHT PETROCHEMICAL INDUSTRY COMPANY
DEHDASHT HIGH DENSITY POLYETHYLENE PROJECT



Contract No.: DPIC/98-12	DOCUMENT TITLE: K.O. DRUM Drawing	POI: IFA	Rev.: D0
	DOCUMENT No: DPIC9812-000-VD-1002-ME-DWG-0022	Sheet 1 of 3	

All comments on Calc, GA and datasheet shall be conformed and relevant comments shall be considered in all detail

K.O. Drum Drawing (D-PK6101-3)

PURCHASER'S COMMENT/APPROVAL STATUS						Purchaser: NARGAN
1	AP: Approved (Released for Manufacturing)					Requisition No.: DPIC98-12-001-000-ME-MR-4150-0001-D1 Item No. (Tag No.): PK-6101 Vendor Doc. No.: DPIC9812-000-VD-1002-ME-DWG-0022-D0
X	AN: Approved With Minor Comments (Fabrication may Proceed)					
3	NF: Approved With Comments (Fabrication not Proceed)					
4	RJ: Rejected					
5	NR: Not be Returned					
Date:	15.01.2022	Signature:	A.AB			
						
D0	23-DEC.-21	IFA	A.VOSOUGH	DR.A.NEJATI	DR.A.NEJATI	
REV.	DATE ISSUE	Purpose of Issue	PREPARED	CHECKED	APPROVED	



DEHDASHT PETROCHEMICAL INDUSTRY COMPANY
DEHDASHT HIGH DENSITY POLYETHYLENE PROJECT

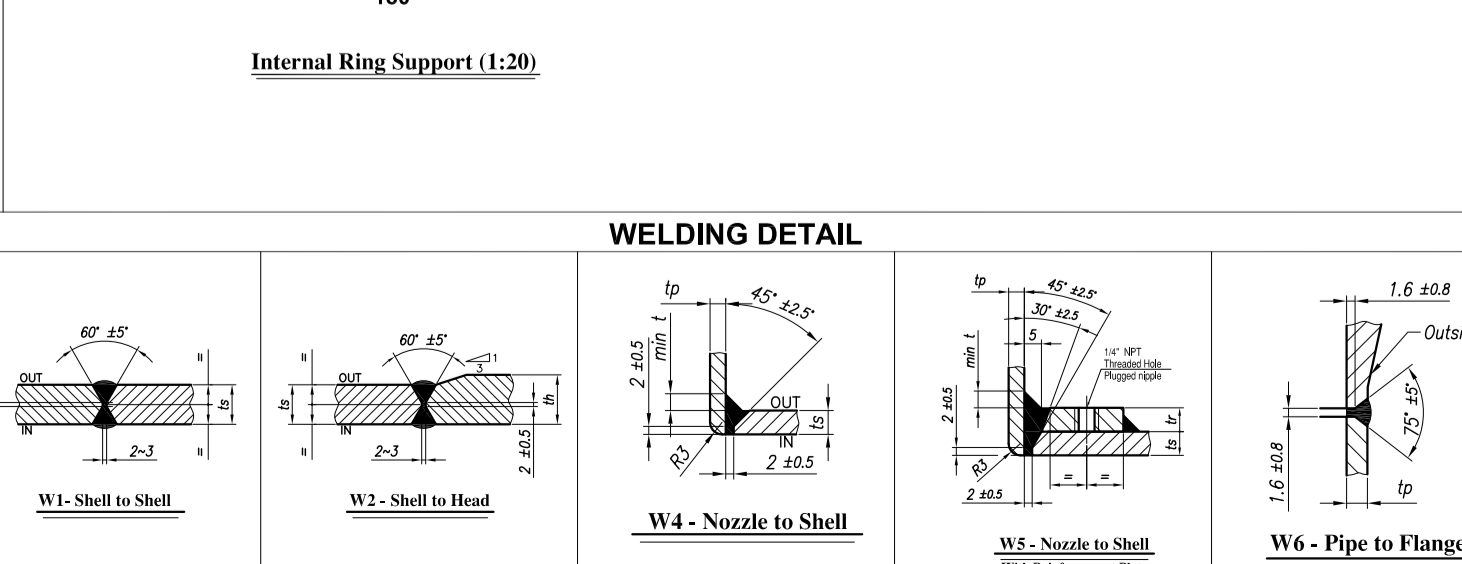
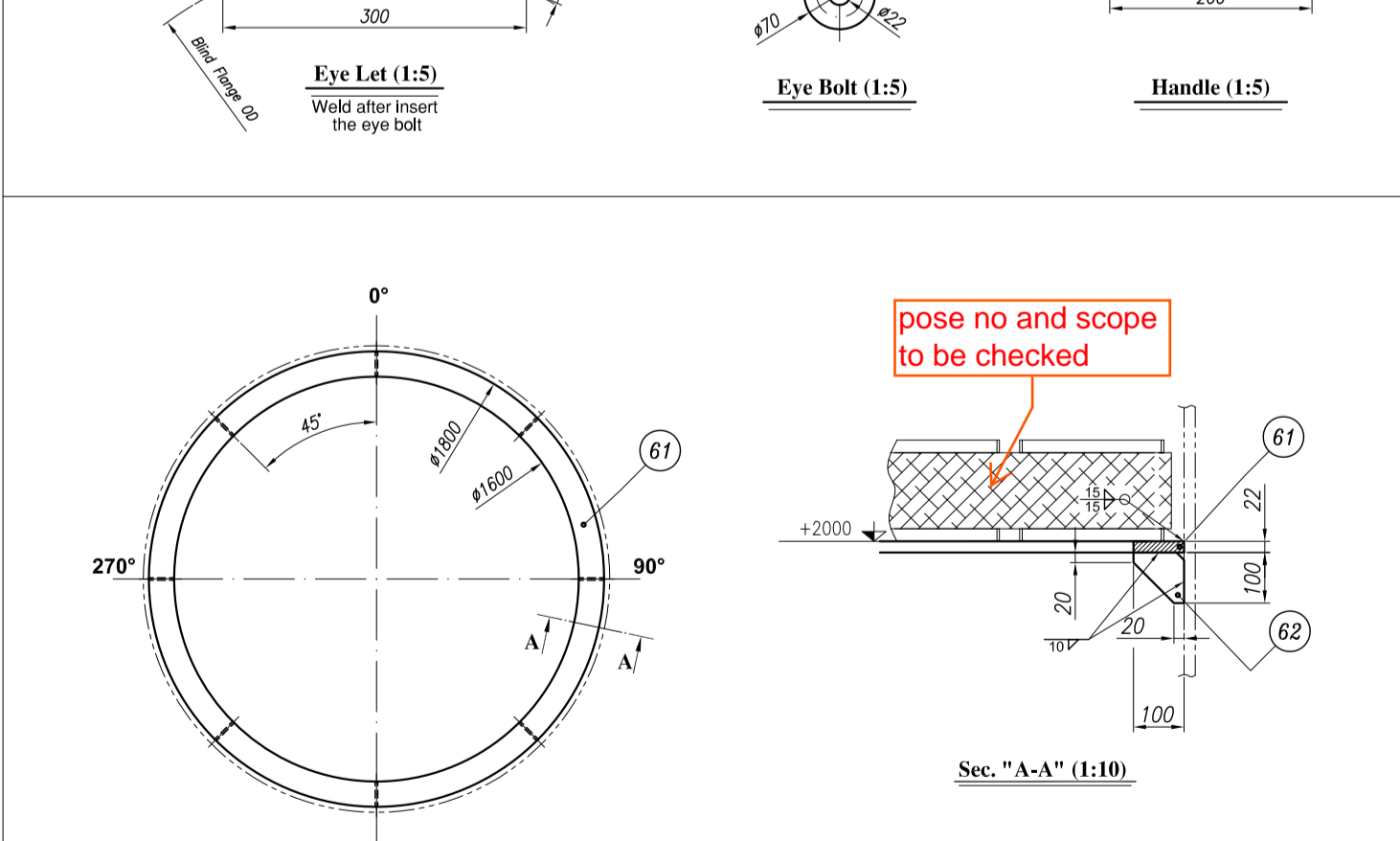
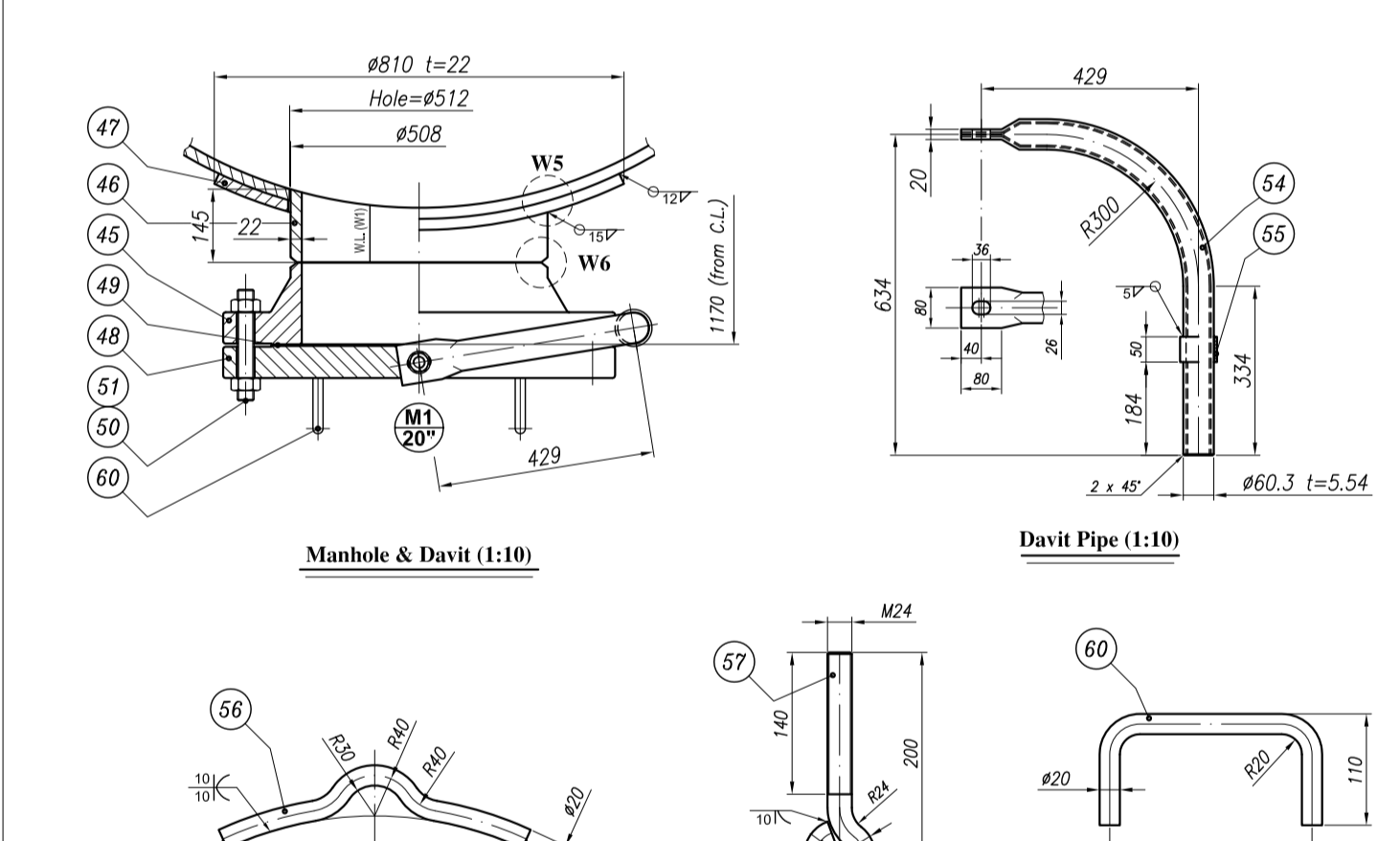
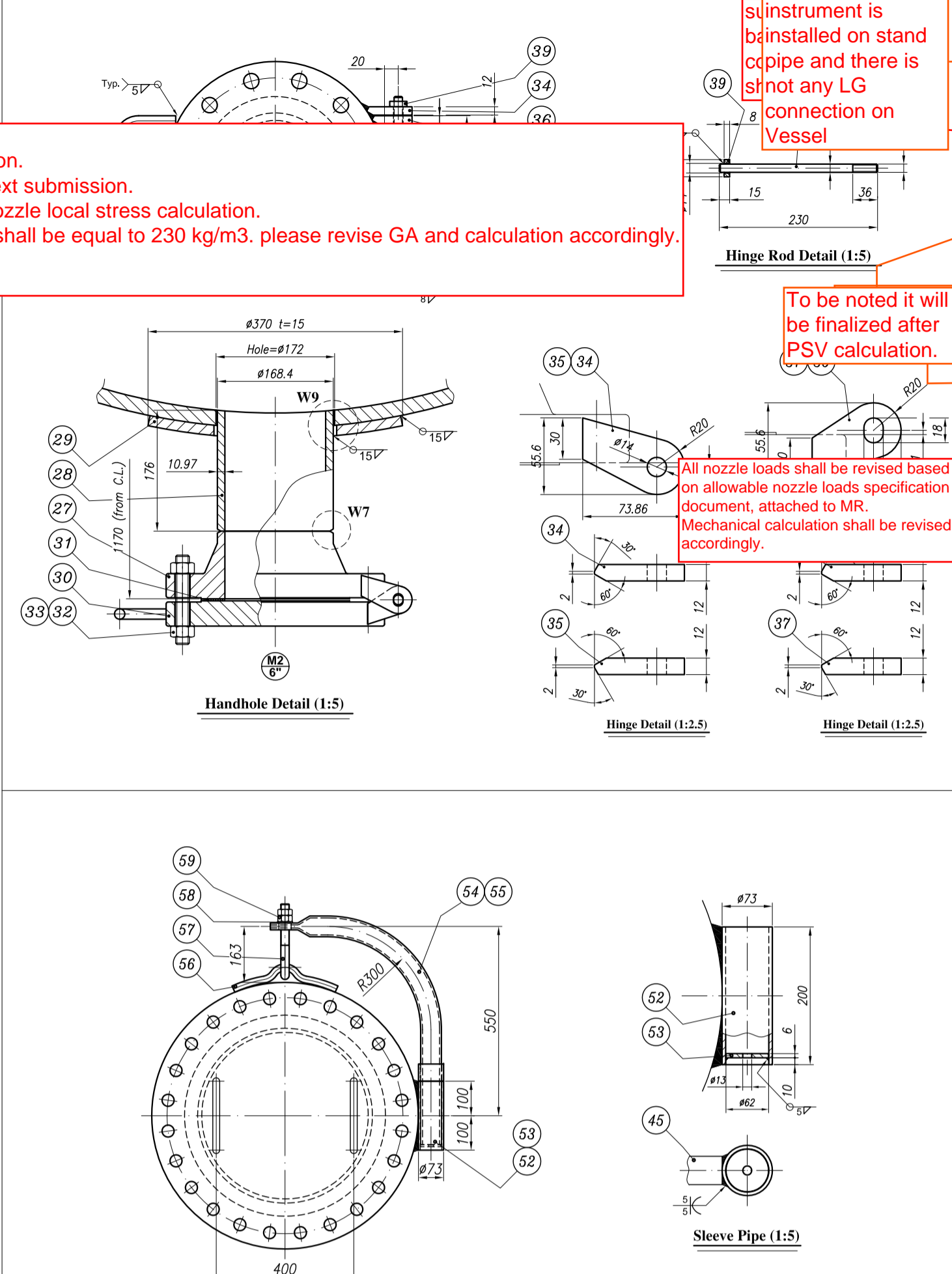
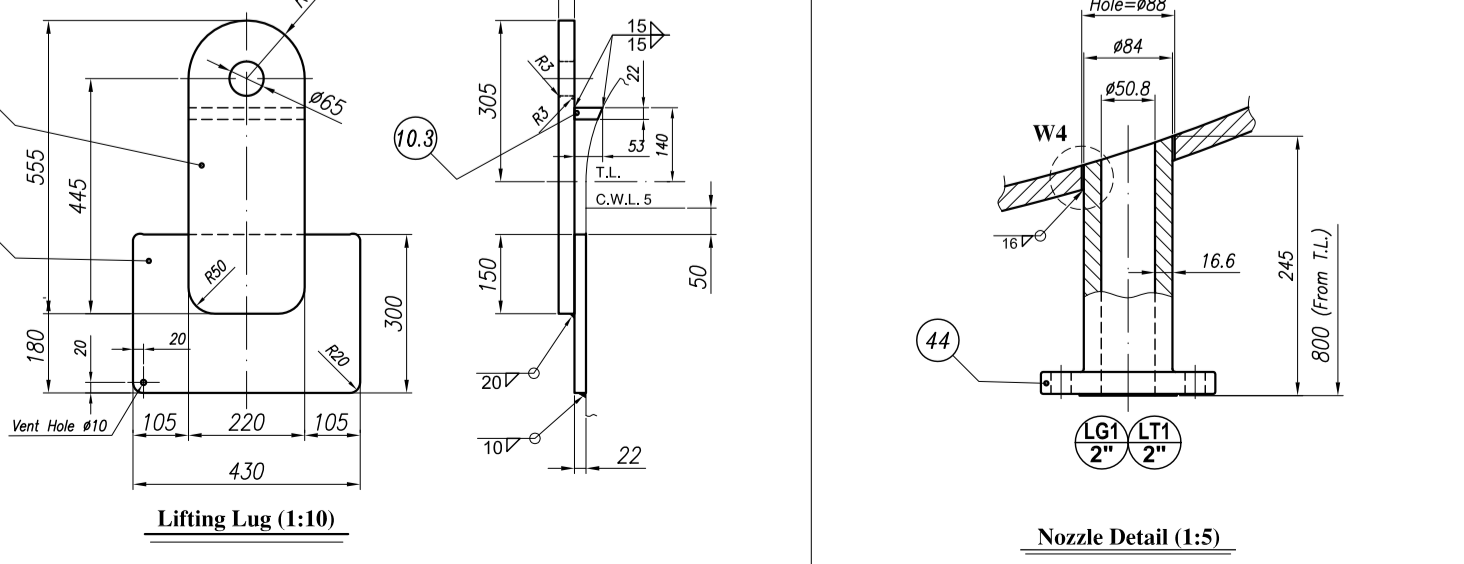
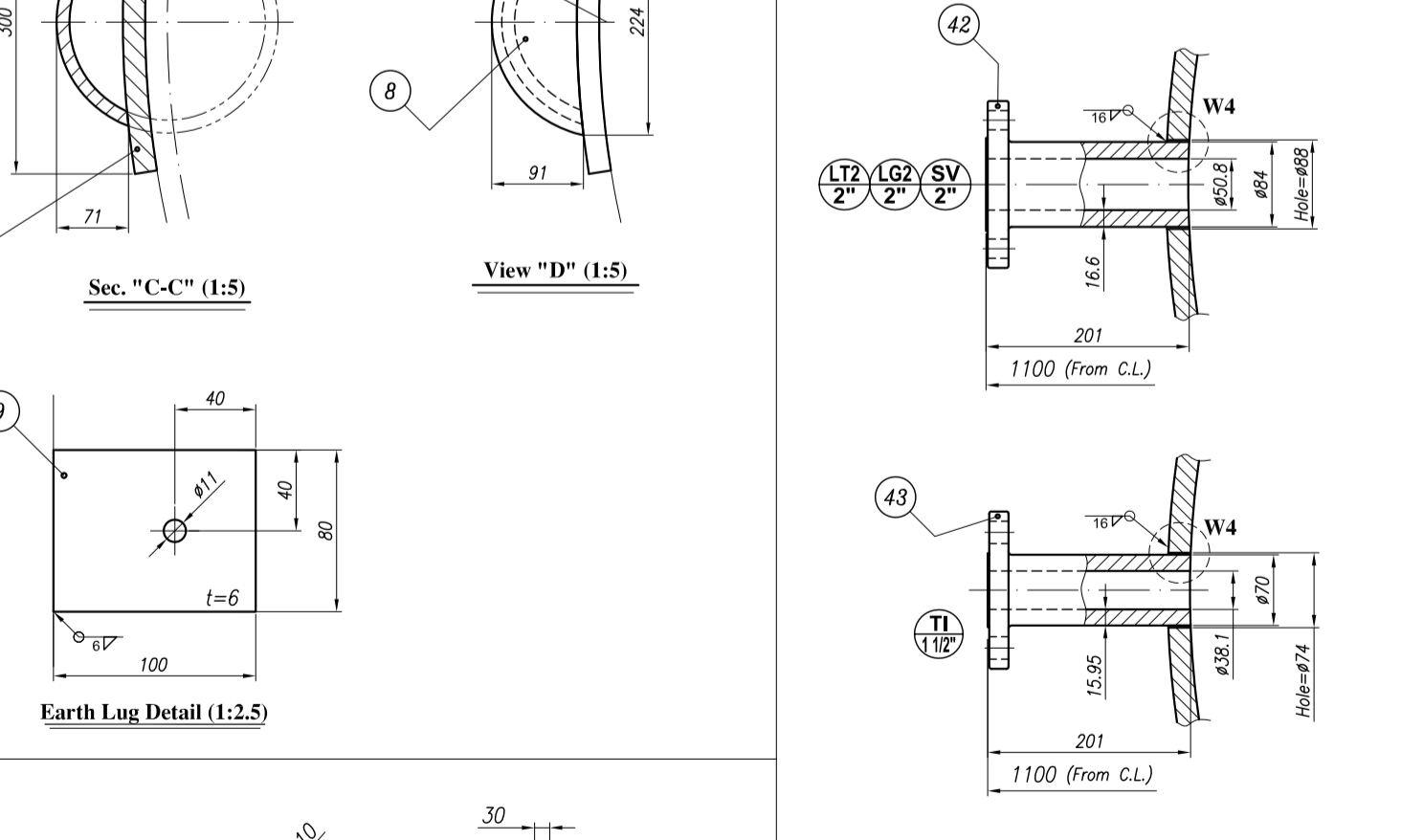
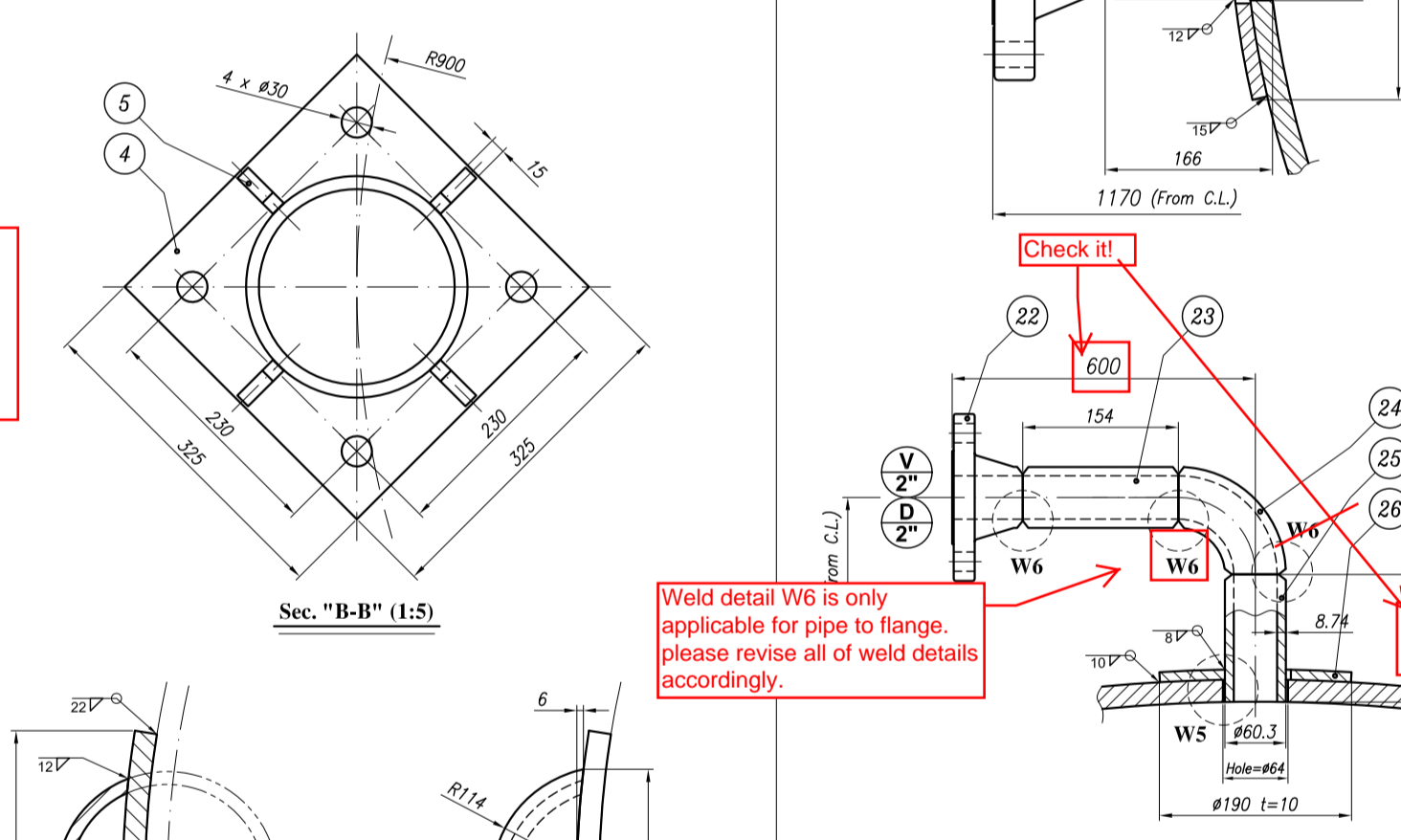
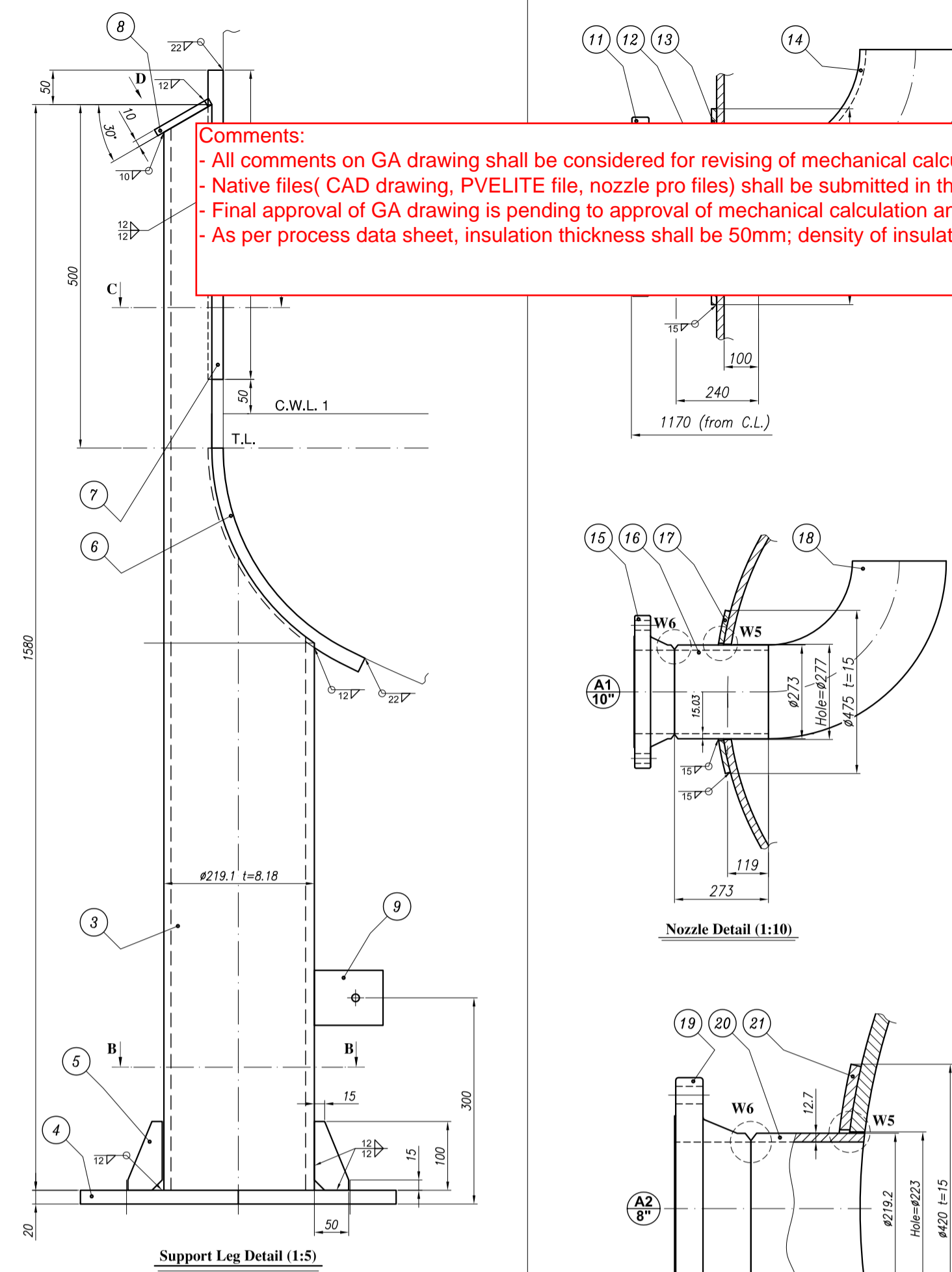
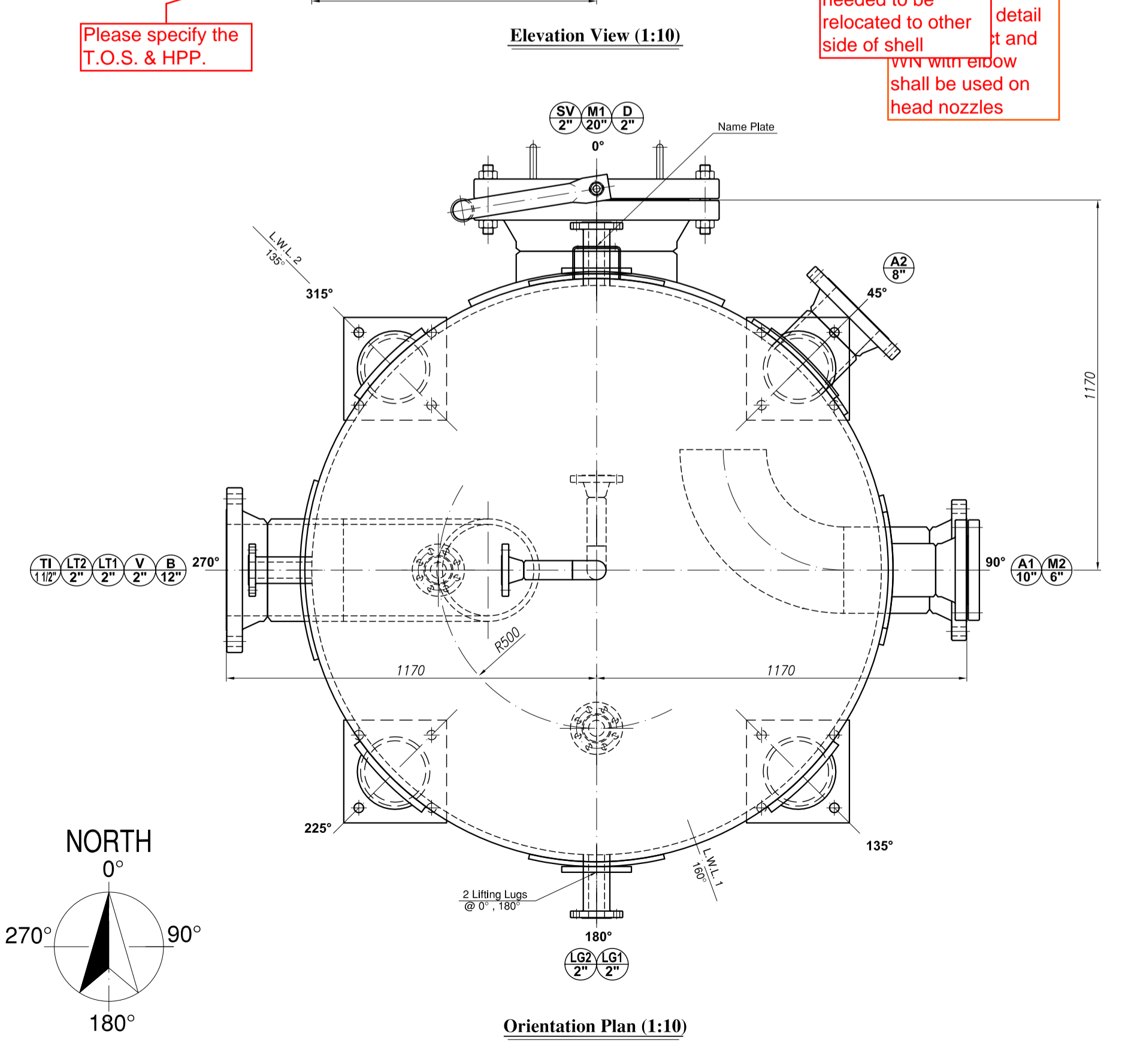
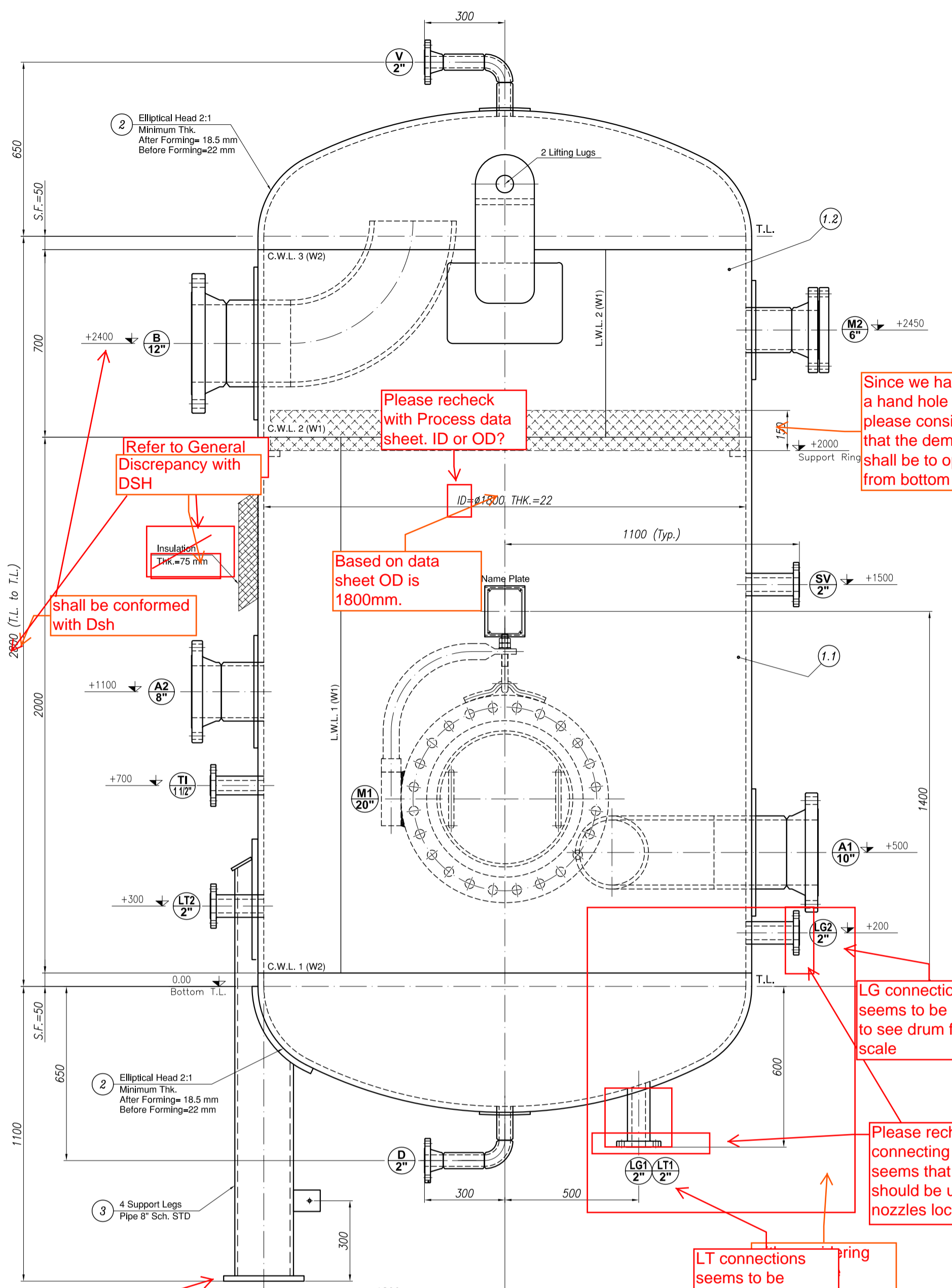


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TABULATION OF REVISED PAGES

Page	Rev-D0	Rev-D1	Rev-D2	Rev-D3	Rev-D4
1	x				
2	x				
3	x				
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Comments:
 - All comments on GA drawing shall be considered for revising of mechanical calculation.
 - Native files (CAD drawing, PVELITE file, nozzle pro files) shall be submitted in the next submission.
 - Final approval of GA drawing is pending to approval of mechanical calculation and nozzle local stress calculation.
 - As per process data sheet, insulation thickness shall be 50mm; density of insulation shall be equal to 230 kg/m3. please revise GA and calculation accordingly.

Based on PID 11
 This instrument is installed on stand pipe and there is not any LG connection on Vessel

Based on PID 12
 comment on detail

Based on PID 6
 NOZZLE DATA

NO.	QTY	TYPE	DESCRIPTION	SIZE	UNIT	REMARKS
1	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
2	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
3	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
4	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
5	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
6	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
7	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
8	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
9	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
10	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
11	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
12	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
13	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
14	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
15	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
16	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
17	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
18	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
19	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
20	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
21	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
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23	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
24	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
25	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
26	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
27	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
28	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
29	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
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31	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
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39	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
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44	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
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46	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
47	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
48	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
49	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
50	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
51	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
52	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
53	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
54	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
55	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
56	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
57	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
58	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
59	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
60	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
61	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5
62	1	NOZZLE	SA 516 Gr.70	12" x 12"	1	ASME B.16.5

MAX ALLOWABLE NOZZLE LOADS TABLE

NOZZLE NO.	NOZZLE SIZE	DIRECT LOADS (N)	MOMENT LOADS (N.M)
A1	8"	6000	4700
A2	8"	8000	6800
B	12"	12000	10900
D.V.S.V	2"	2000	500

GENERAL NOTES
 (1) All dimensions are in millimeters unless otherwise noted.
 (2) Projection of nozzles are measured from flange face to center line.
 (3) All elevations are measured from bottom T.L. unless otherwise specified.
 (4) Bolt holes for flanges shall be straddled to equipment main axis.
 (5) Stated thickness is minimum after forming thickness of straight flange of elliptical heads shall be in no case smaller than vessel shell required thickness.
 (6) Gasket material: Jacketed Metal Stainless Steel, graphite filler, 3.2 mm Thk.
 (7) Full radiographic examination shall be performed for nozzle necks made by plate.
 (8) Flange Face finishing shall be smooth with 125 micro inch maximum to 250 micro inch maximum as per ASME B.16.5 for 24" and less. Also ASME B16.47 SERIES B for more than 24".
 (9) The purchaser's drawings of these and spare parts shall be done by vendor.
 (10) The purchaser shall be responsible for the design of the nozzle and its connection to the vessel.
 (11) The purchaser shall be responsible for the design of the nozzle and its connection to the vessel.
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LOADING DATA AT BASE

MOMENT (N.M)	23.3	8.4
SHEARING LOAD (KN)	1.4	7

WEIGHTS

OPERATING WEIGHT (kg)	6118	HYDROSTATIC WEIGHT (kg)	14880
FABRICATE WEIGHT (kg) <td>5723 <td>EMPTY WEIGHT (kg) <td>6095 </td></td></td>	5723 <td>EMPTY WEIGHT (kg) <td>6095 </td></td>	EMPTY WEIGHT (kg) <td>6095 </td>	6095

PARTS LIST

NO.	PART NAME	MATERIAL	DIMENSION	QTY.	REMARK
1.1	Shell (Plate)	SA 516 Gr.70	2000 x 5724 x 22	1	19779797
1.2	Shell (Plate)	SA 516 Gr.70	700 x 5724 x 22	1	1692 (602)
2	Ellip. Head 2:1	SA 516 Gr.70	LW180, S40, W14.1, THK=15	2	701 (402)
3	Support Leg Pipe	SA 106 Gr. B	8" Sch. STD. L=150	4	75 (30)
4	Base Plate	SA 285 Gr. C	325 x 325 x 20	4	16 (64)
5	Gasket Plate	SA 285 Gr. C	150 x 150 x 15	16	16 (64)
6	Support Pad	SA 516 Gr.70	300 x 450 x 22	4	23 (92)
7	Support Pad	SA 516 Gr.70	300 x 400 x 22	4	20 (80)
8	Closure Plate	SA 285 Gr. C	81 x 224 x 10	4	1 (4)
9	Earth Lug	SA 240 Gr. B	100 x 100 x 25	2	0.4 (8)
10.1	Lifting Lug (Plate)	SA 516 Gr.70	220 x 555 x 30	2	27 (54)
10.2	Lifting Lug Pad (Plate)	SA 516 Gr.70	300 x 430 x 22	2	22 (44)
10.3	Gasket Plate	SA 516 Gr.70	53 x 220 x 22	2	2 (4)
11.1	Flange (M1)	SA 333 Gr.6	8" SCH. 80, R.F. SCH.80	1	31 (62)
11.2	Flange (M2)	SA 333 Gr.6	8" SCH. 80, L=131	2	7 (14)
13	Pad	SA 516 Gr.70	0380 x 0229 x 12	2	8 (16)
11	Flange (B)	SA 350 LF2	12" W.N. 300 R.F. SCH.80	1	64 (64)
12	Pipe (B)	SA 333 Gr.6	12" SCH. 80, L=240	1	30 (30)
13	Pad	SA 516 Gr.70	0570 x 0334 x 15	1	20 (20)
14	Elbow (B)	SA 234 WPB	12" SCH. 80, L.R., 90°	1	90 (90)
15	Flange (A1)	SA 350 LF2	10" W.N. 300 R.F. SCH.80	1	42 (42)
16	Pipe (A1)	SA 333 Gr.6	10" SCH. 80, L=273	1	26 (26)
17	Pad	SA 516 Gr.70	0475 x 0283 x 15	1	13 (13)
18	Elbow (A1)	SA 234 WPB	10" SCH. 80, L.R., 90°	1	57 (57)
19	Flange (A2)	SA 350 LF2	8" W.N. 300 R.F. SCH.80	1	31 (31)
20	Pipe (A2)	SA 333 Gr.6	8" SCH. 80, L=166	1	10 (10)
21	Pad	SA 516 Gr.70	0420 x 0229 x 15	1	11 (11)
22	Flange (V.D)	SA 350 LF2	8" W.N. 300 R.F. SCH.80	2	4 (8)
23	Pipe (V.D)	SA 333 Gr.6	8" SCH. 80, L=131	1	3 (3)
24	Elbow (V.D)	SA 234 WPB	8" SCH. 80, L.R., 90°	1	27 (27)
25	Pipe (V.D)	SA 333 Gr.6	8" SCH. 80, L=126	2	1 (2)
26	Pad (V.D)	SA 516 Gr.70	0190 x 070 x 10	2	2 (4)
27	Flange (M2)	SA 350 LF2	8" W.N. 300 R.F. SCH.80	1	19 (19)
28	Pipe (M2)	SA 333 Gr.6	8" SCH. 80, L=176	1	7 (7)
29	Pad	SA 516 Gr.70	0370 x 0178 x 15	1	9 (9)
30	Blind Flange	SA 350 LF2	8" 300 R.F.	1	22 (22)
31	Gasket	Spiral Wound	8" 300 R.F.	1	NOTE (4)
32	Stud Bolt	SA 193 Gr. B7	3/4" UNC, L=130	12	0.36 (4.32)
33	Hex. Nut	SA 194 Gr. 2H	3/4" UNC	24	0.87 (2.11)
34	Hinge Plate	SA 516 Gr.70	56 x 74 x 12	1	0.4 (0.4)
35	Hinge Plate	SA 516 Gr.70	56 x 74 x 12	1	0.4 (0.4)
36	Hinge Plate	SA 516 Gr.70	56 x 55 x 12	1	0.3 (0.3)
37	Hinge Plate	SA 516 Gr.70	56 x 68 x 12	1	0.3 (0.3)
38	Hinge Rod	SA 36	012, L=230	1	0.2 (0.2)
39	Ring	SA 516 Gr.70	025 x 074 x 8	1	0.02 (0.02)
40	Hex. Nut	SA 194 Gr. 2H	M12, L=200	2	0.87 (1.74)
41	Handle (Bar)	SA 36	015, L=385	1	0.2 (0.2)
42	Flange (S.V.L2,LG2)	SA 350 LF2	8" W.N. 300 R.F. SCH.80	3	21 (63)
43	Flange (T)	SA 350 LF2	8" W.N. 300 R.F. SCH.80	1	4 (4)
44	Flange (L.T.L1,LG1)	SA 350 LF2	12" W.N. 300 R.F. SCH.80	2	8 (16)
45	Manhole Flange (M)	SA 350 LF2	20" W.N. 300 R.F. SCH.80	1	182 (182)
46					