



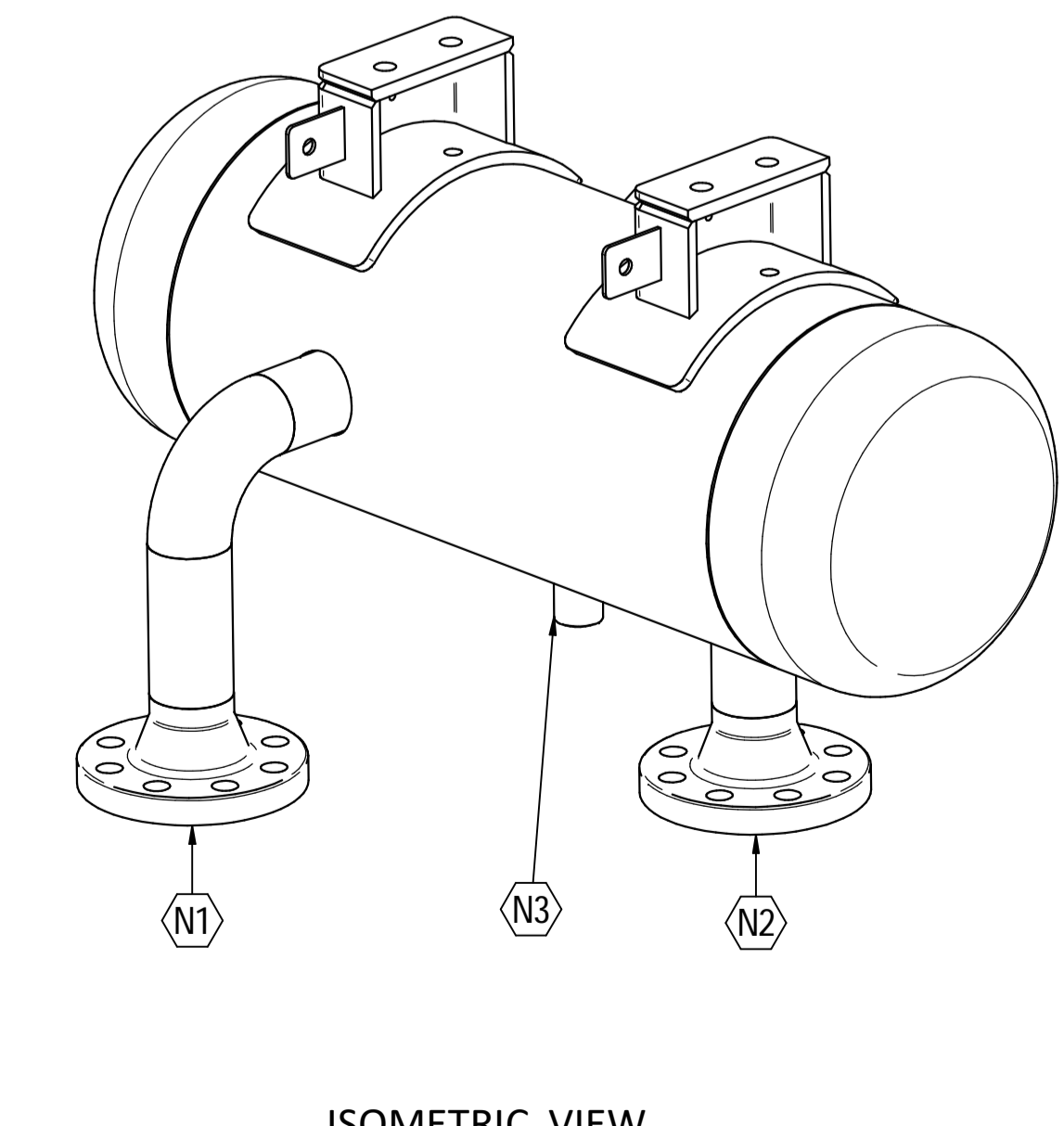
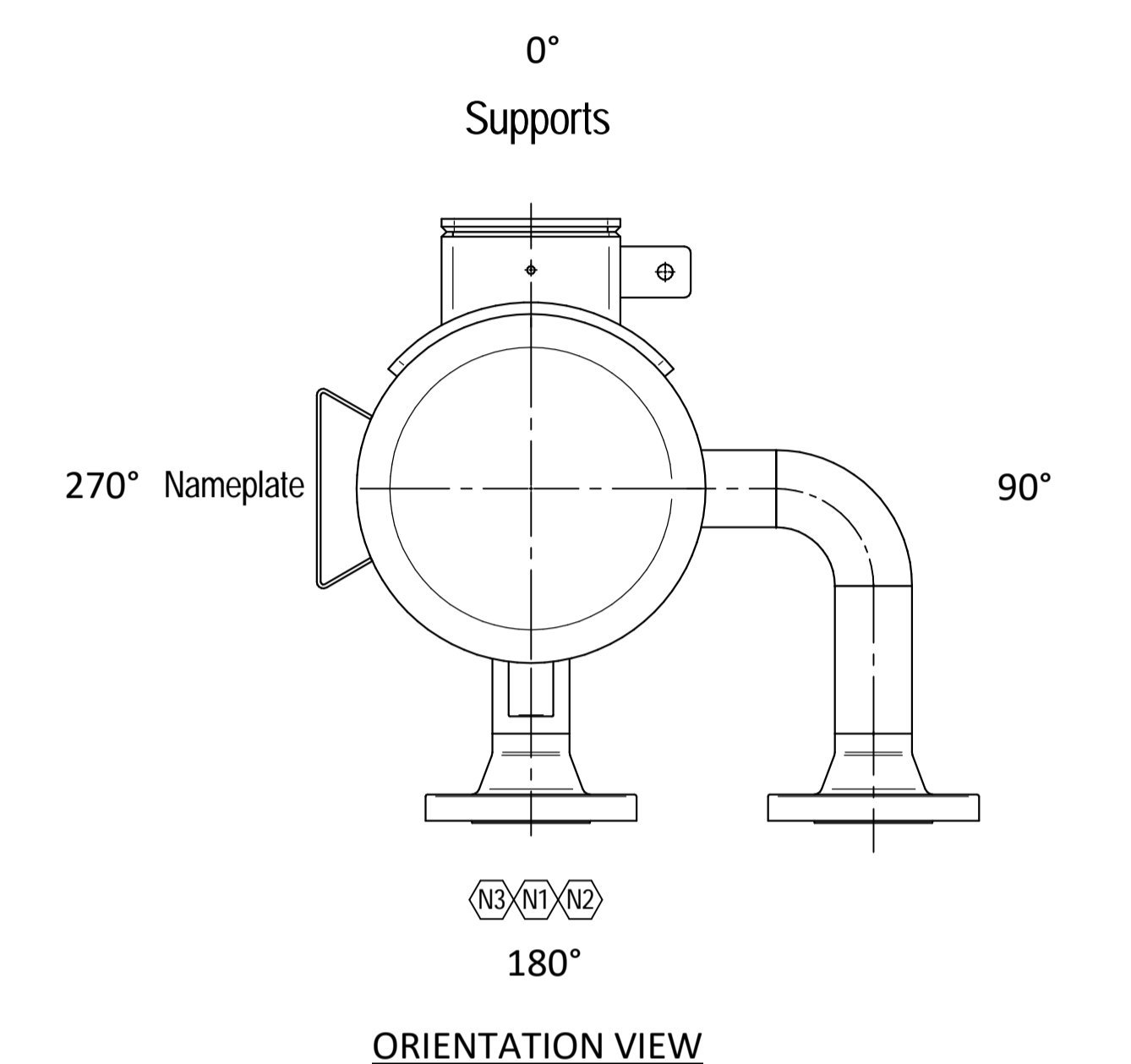
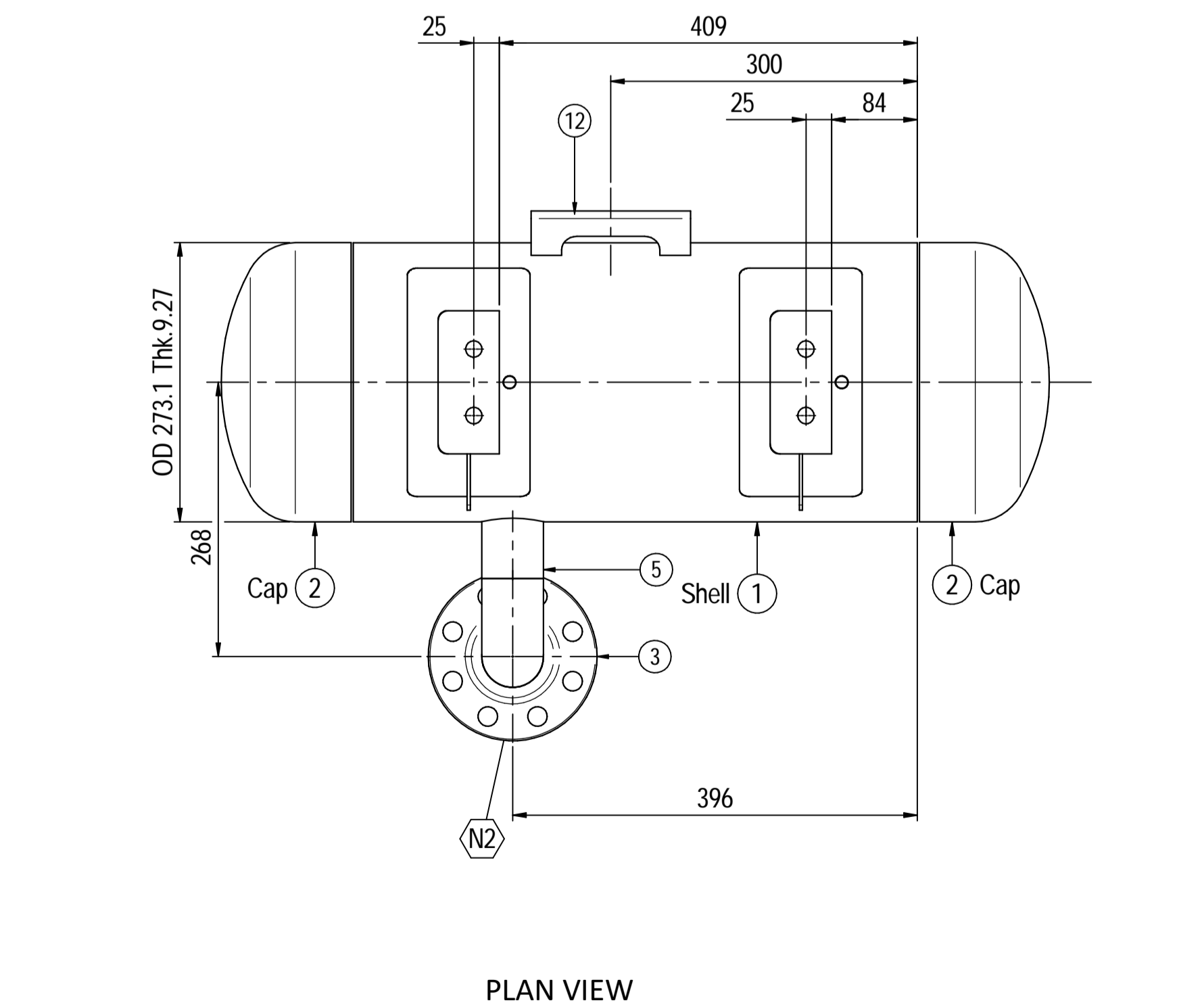
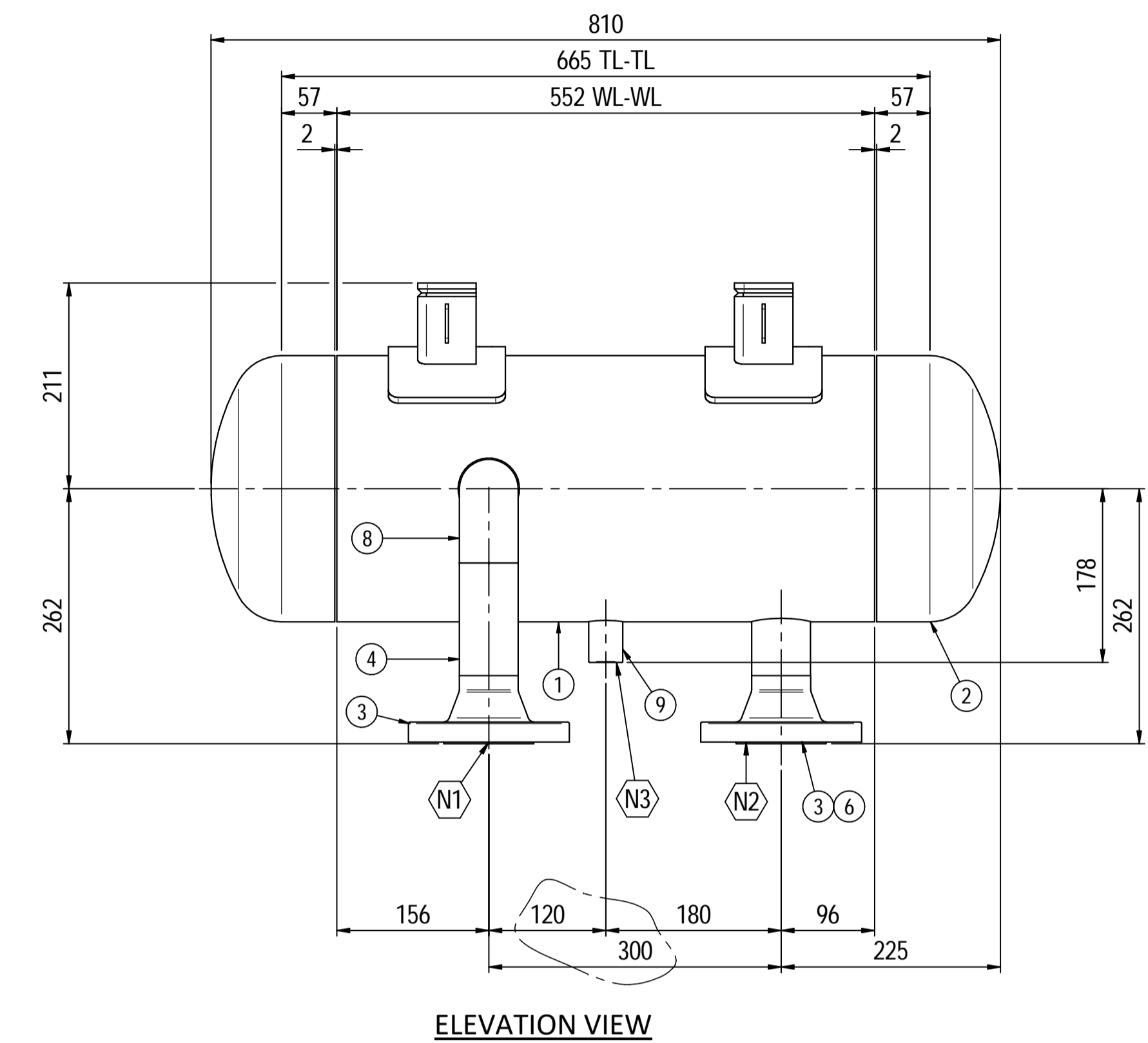
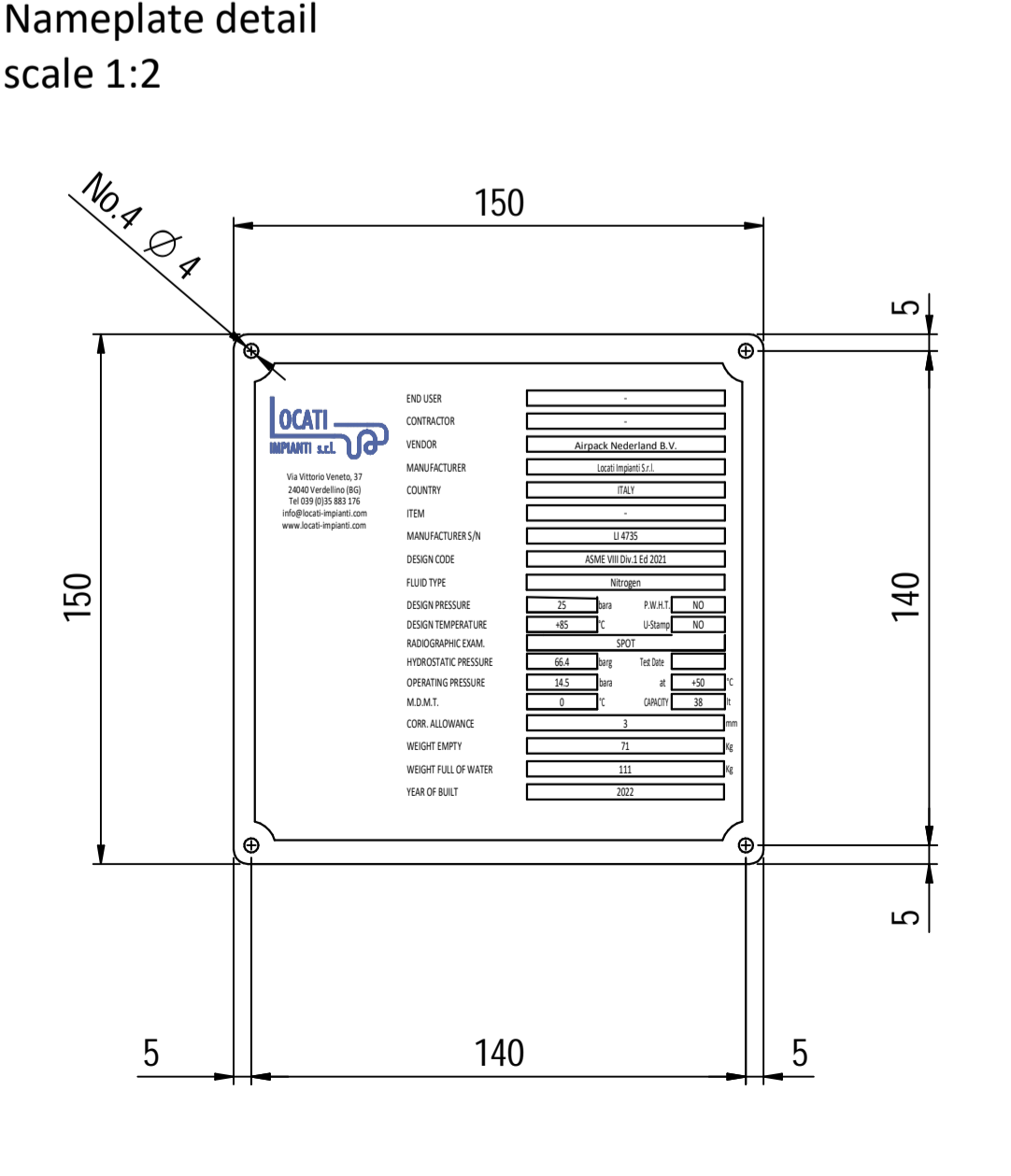
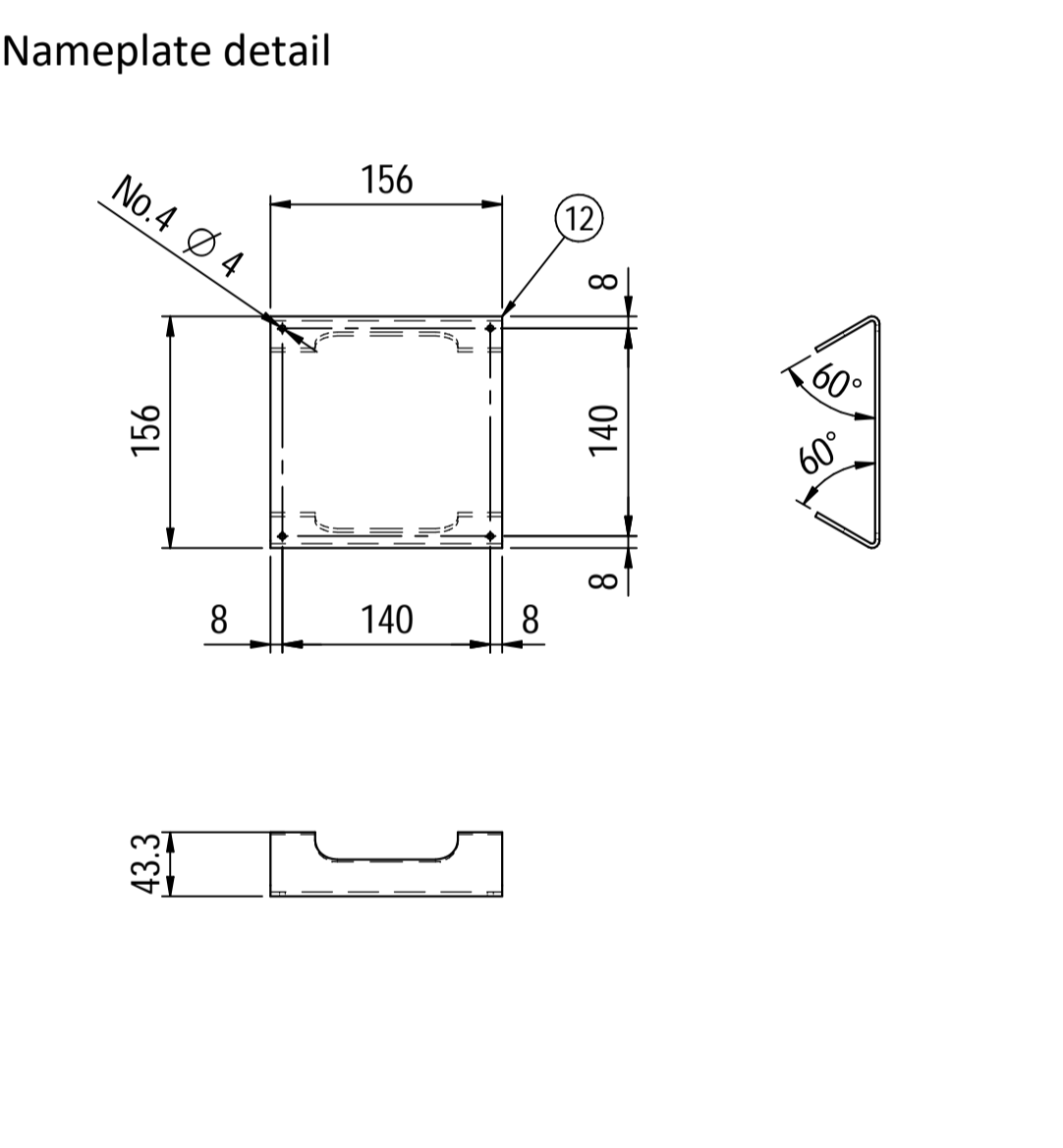
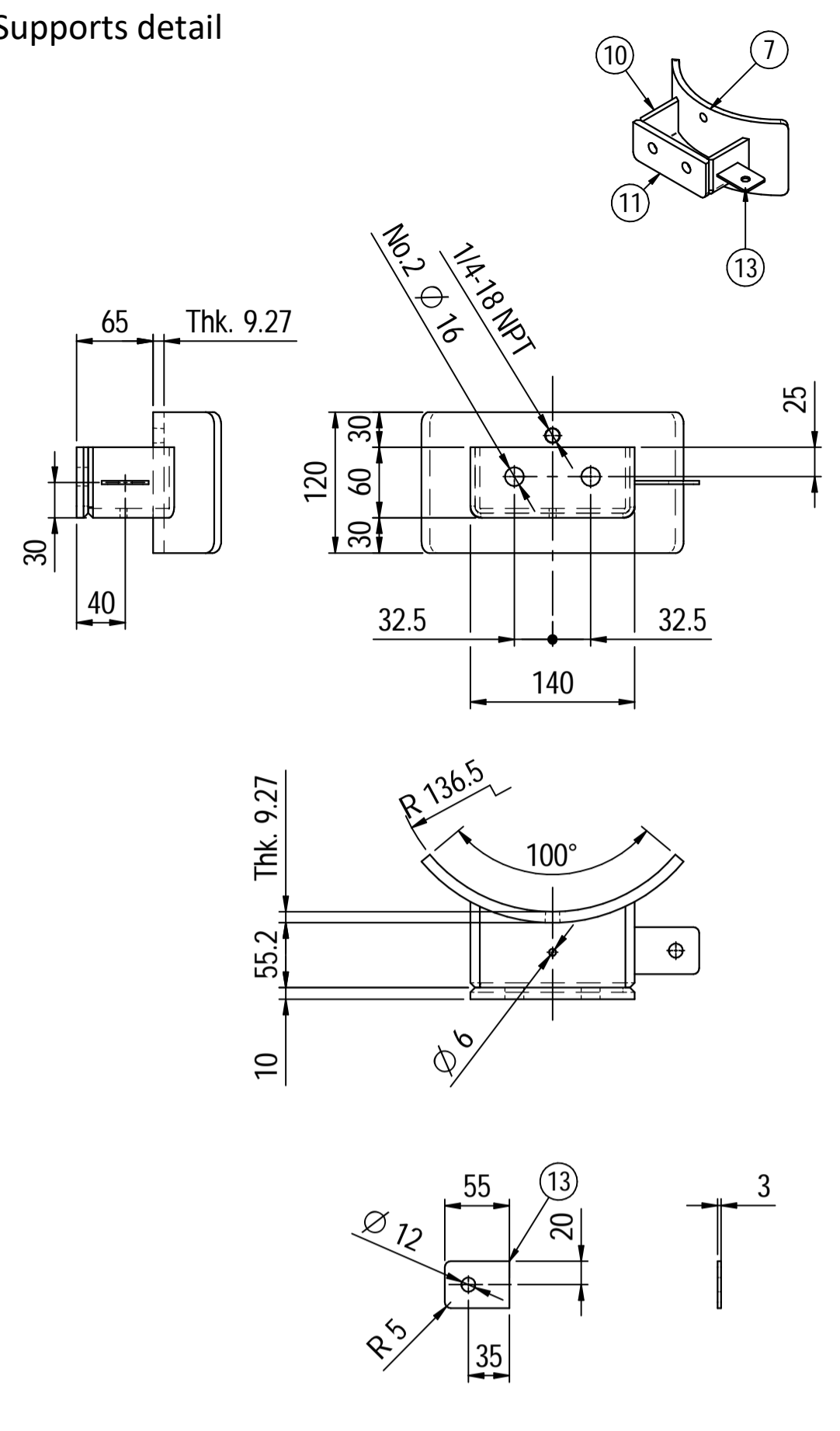


OWNER:  شرکت سست و سویی گیس ایرپک (سهامی عامه) SSTI	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	PULSATION DAMPER DETAIL DRAWING FOR NITROGEN GAS BOOSTER								
MC :  شرکت سست و سویی گیس ایرپک (سهامی عامه) SSTI	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-23C	BU	20	VD	303	ME	DWG	0079	Rev.:	Page
								03	1 of 6

PULSATION DAMPER DETAIL DRAWING FOR NITROGEN GAS BOOSTER

03	13/05/2022	For approval	KP	CL	JR	
02	06/05/2022	For approval	KP	CL	JR	
01	26/04/2022	For approval	KP	CL	JR	
00	06/04/2022	For approval	KP	CL	JR	
Rev.	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
					Class: 1	Phase: P



Material List					
Pos.	Q.ty	Description	Mat.	Cert.	
1	1	Shell by seamless pipe 10" Sch.STD L=552	SA106 Gr.B	3.1	
2	2	Cap 10" Sch40	A234 WPB	3.1	
3	2	Flange 2" WN #300 RF Sch.160	A105	3.1	
4	1	Seamless pipe 2" Sch160 L=115.5	A106 GrB	3.1	
5	1	Seamless pipe 2" Sch160 L=69	A106 GrB	3.1	
6	1	Seamless pipe 2" Sch160 L=68	A106 GrB	3.1	
7	2	Pad by pipe 10" Sch.STD	A106 Gr.B	3.1	
8	1	Seamless elbow 2" 90° LR Sch160	A234 WPB	3.1	
9	1	Coupling 1/2" NPT #6000	A105	3.1	
10	2	Plate 74.5x231 Thk.8	A516 70	3.1	
11	2	Plate 16x65 Thk.10	A516 70	3.1	
12	1	Nameplate support 156x241 Thk.3mm	A516 70	3.1	
13	2	Earthing Plate 55 x 40 Thk.3	A240 TP316L	3.1	

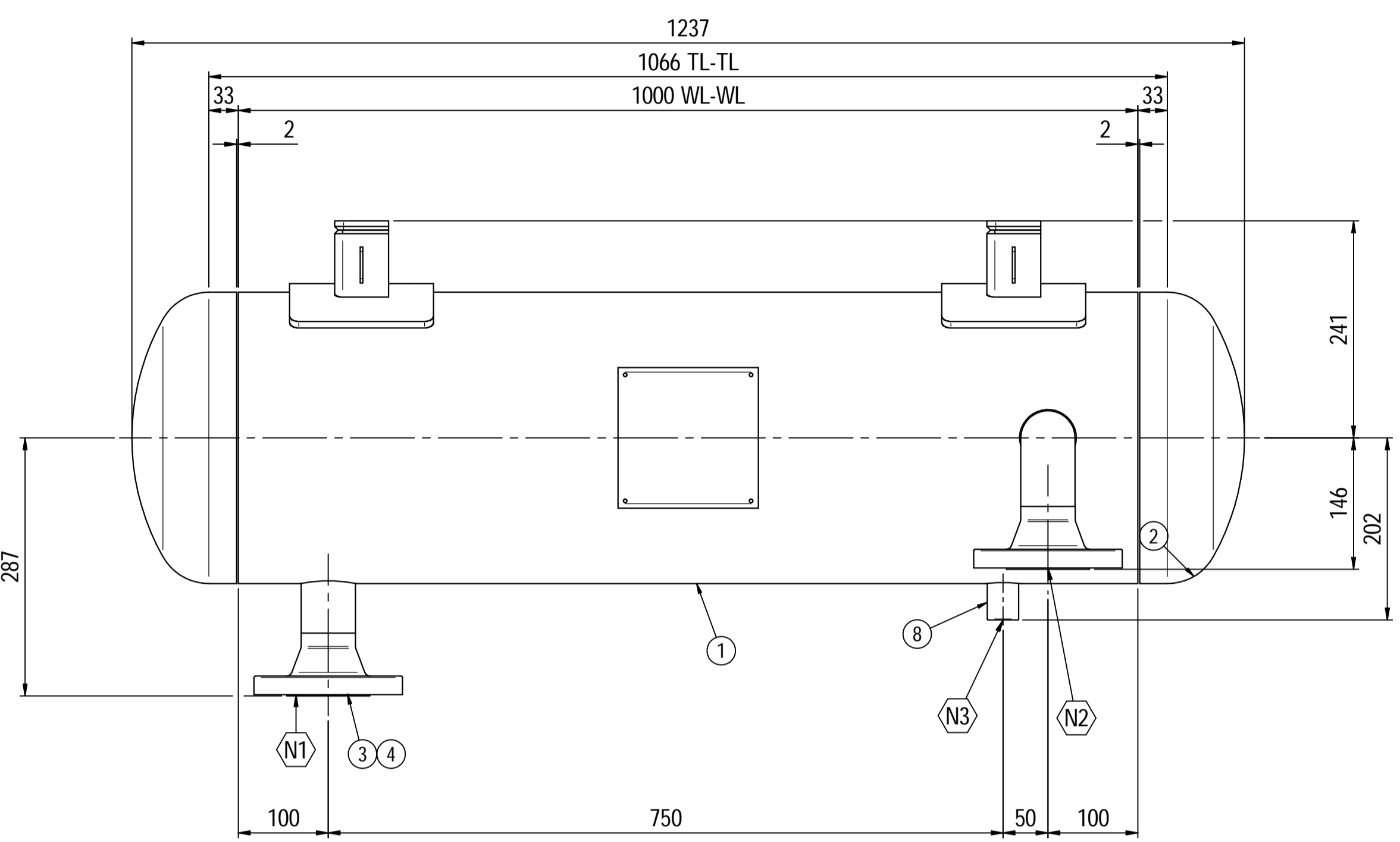
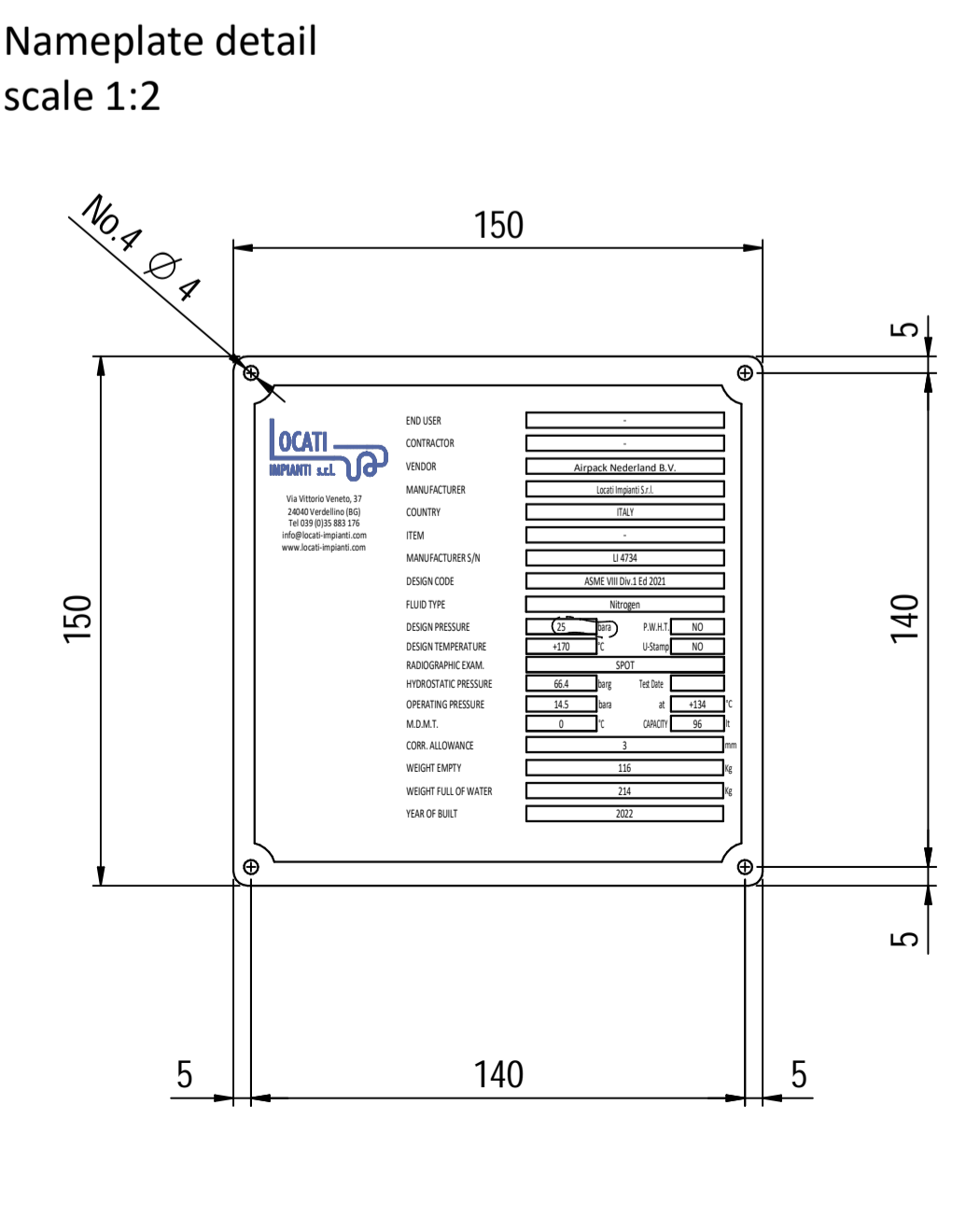
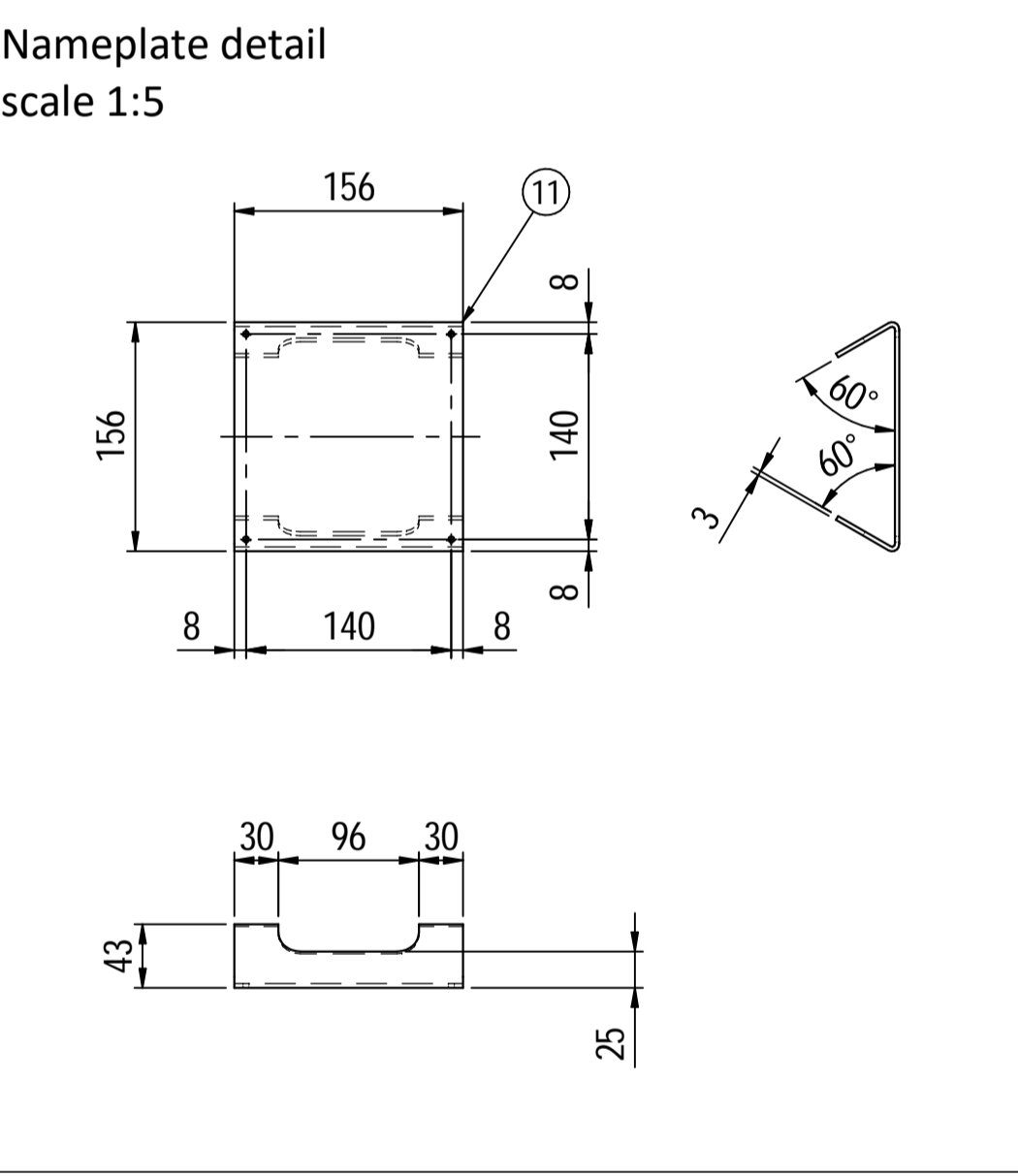
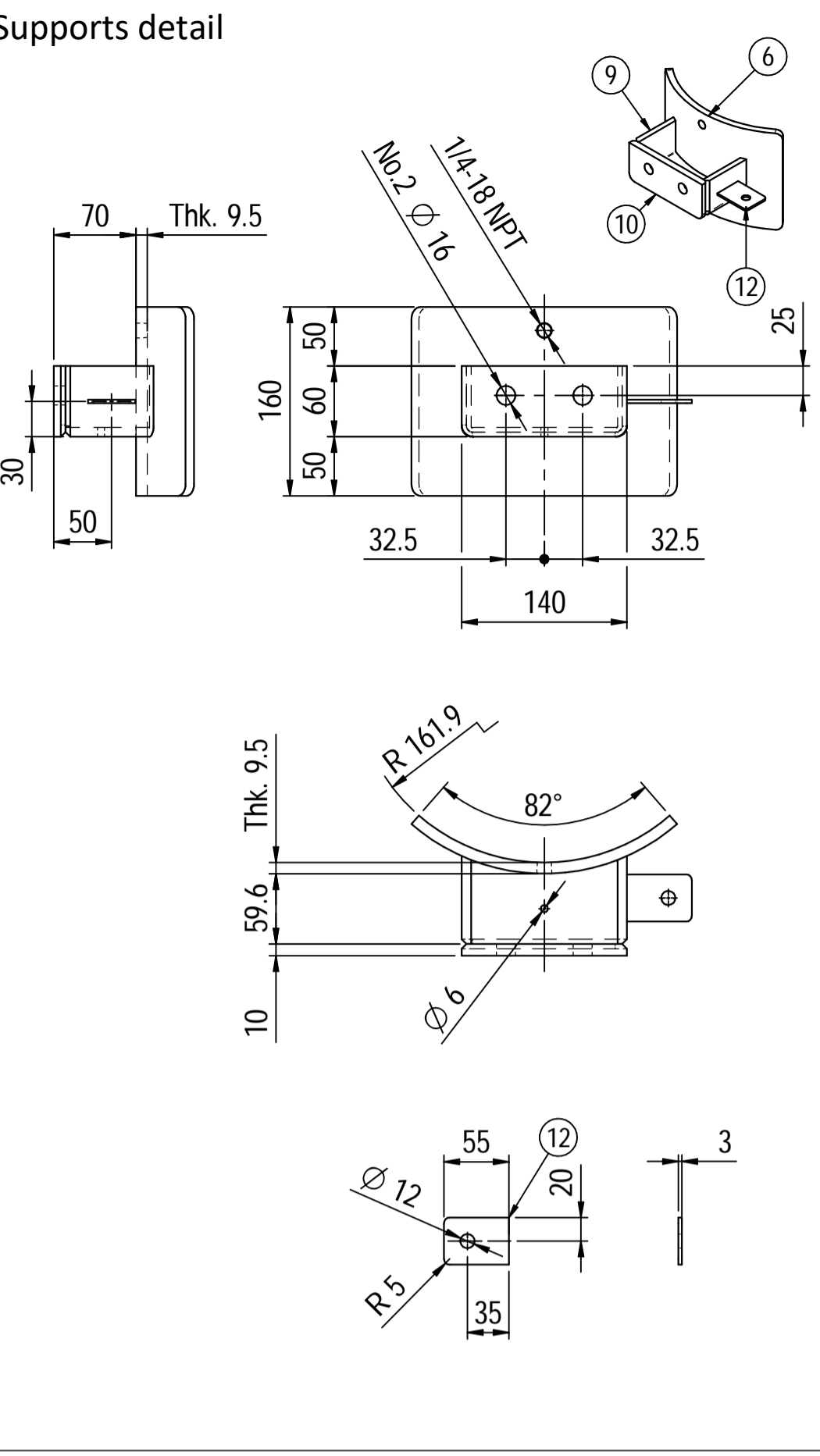
Note:

- 1) Governing measurement S.I. unless otherwise specified;
- 2) Flange bolt holes have to be straddled from main vessel center line in plan & vertical & horizontal centreline in elevation;
- 3) Material: certification 3.1 EN 10204;
- 4) All internal edge shall be rounded off;
- 5) Nozzle flanges in accordance with ASME B16.5: 2013;
- 6) Flange fittings in accordance with ASME B16.9: 2012;
- 7) The flange dimensions are in accordance with ASME B16.5: 2013;
- 8) All fillet welds not detailed on "WELDING MAP" or drawing shall have the weld; throated equal to 0,7 times the minimum thickness to be welded;
- 9) All welds are continuous except where indicate;
- 10) See document C220006CLC011 for vessel calculation.

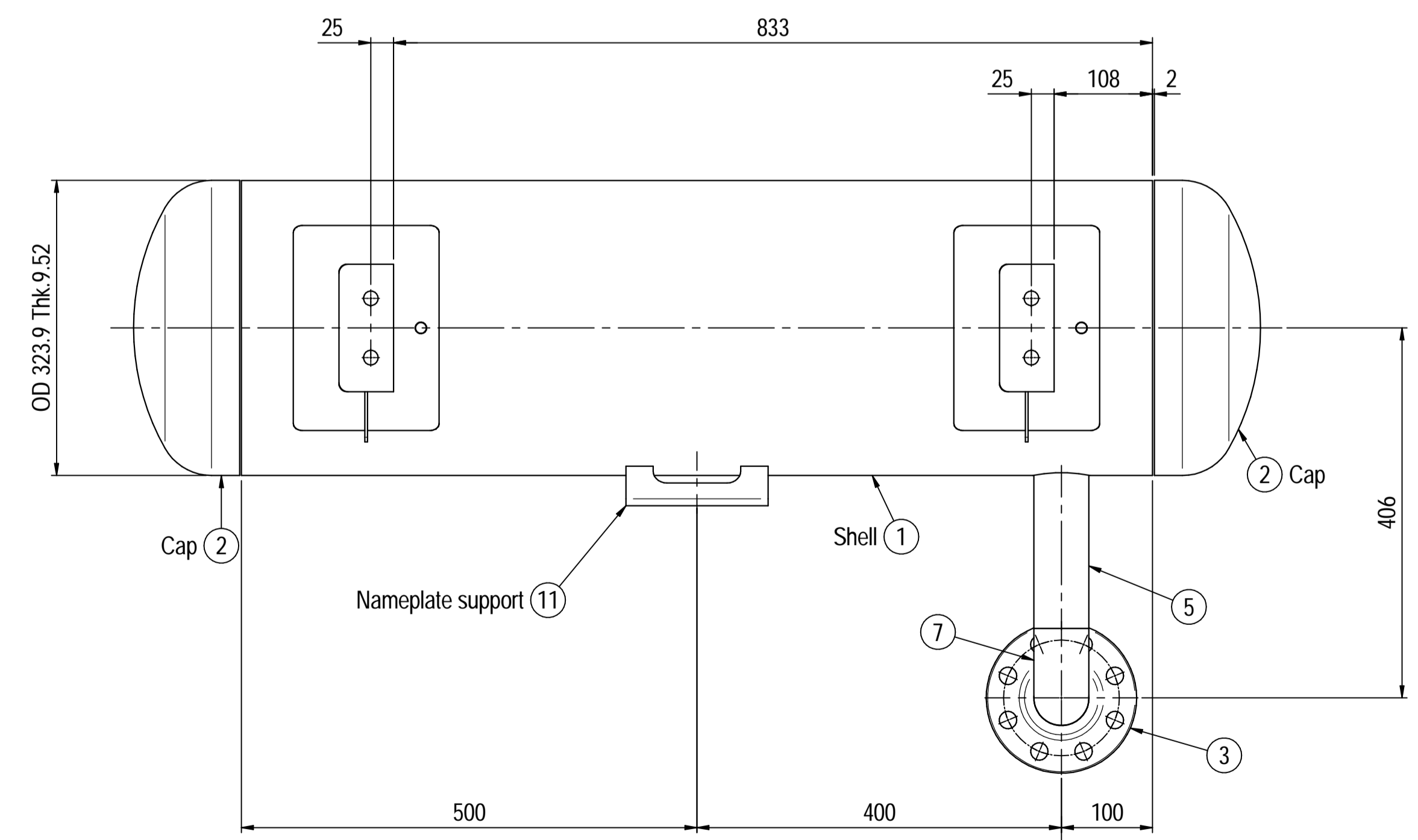
ITEM	QTY	SERVICE	SIZE	O.D.	THK	RATING	TYPE	FACE	O.D.	THK.	Tc
N3	1	DRAIN	1/2"	38.1	8.38	#6000	-	NPT-F	-	-	8.5 ± 10
N2	1	AIR OUTLET	2"	60.3	8.74	#300	WN	RF	-	-	8.5 ± 10
N1	1	AIR INLET	2"	60.3	8.74	#300	WN	RF	-	-	8.5 ± 10

DATI DI PROGETTO / Design data			
FLUIDO	Nitrogen	COLLAUDO	Test
STATO FISICO DEL FLUIDO	Gas	NATIONAL BOARD REGISTRATION	NO
CODICE DI CALCOLO	ASME VIII Div. 1 Ed.2021	CANADIAN REGISTER NUMBER	NO
PRESSIONE DI ESERCIZIO	14.5 bara	SERVIZIO LETALE	NO
PRESSIONE DI PROGETTO	25 bara (24 barg)	X-RAY	RT examination
PRESSIONE ESTERNA	NO	LICUIDI PENETRANTI	NO
PRESSIONE DI PROVA IDRAULICA	66.4 barg	ULTRASUONI	NO
TEMPERATURA DI ESERCIZIO	+50 °C	CONTROLLO MAGNETOSCOPICO	NO
TEMPERATURA DI PROGETTO	+85 °C	WELDING MAP	NO
SOVRAMETALLO DI CORROSIONE	3 mm	PROCEDIMENTO DI SALDATURA	See doc: C220006WBK013
CAPACITA'	38 l	TIPO DI FONDO	CAP
EFFICIENZA GIUNTI	0.85	FORMAZIONE FONDO	HOT
MAWP @ Design Temperature	38.12 bar @ +85 °C	PESO A VUOTO	71 kg
MAWP(EXT)	NO	PESO IN ESERCIZIO	71 kg
MDMT @ MAWP	0 °C @ 38.12 bar	PESO PIENO D'ACQUA	111 kg
TRATTAMENTO TERMICO	NO	DATI DEL VENTO	-
IMPACT TEST	NO	DATI SISMICI	-

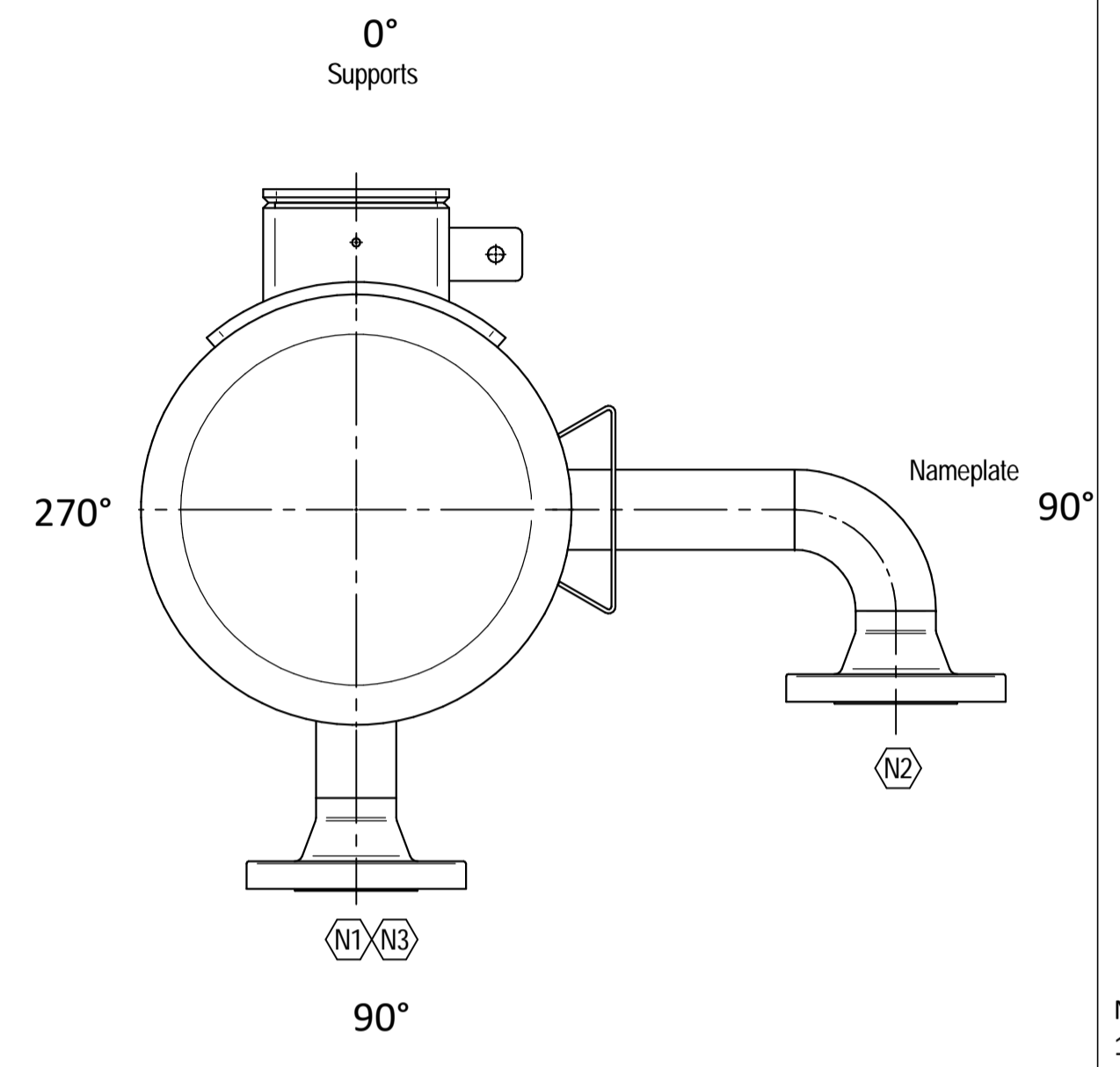
Rev.	Descrizione / Description	Disegnato/Draw	Controllato/Checked	Approvato/Approved	Data/Date
04	Modified as per Client commnets	CM	MV	GL	11/05/2022
03	Modified as per Client commnets	CM	MV	GL	15/04/2022
02	Modified as per Customer commnets	CM	MV	GL	02/04/2022
01	Modified shell length	CM	MV	GL	30/03/2022
00	FIRST ISSUE	CM	MV	GL	16/03/2022



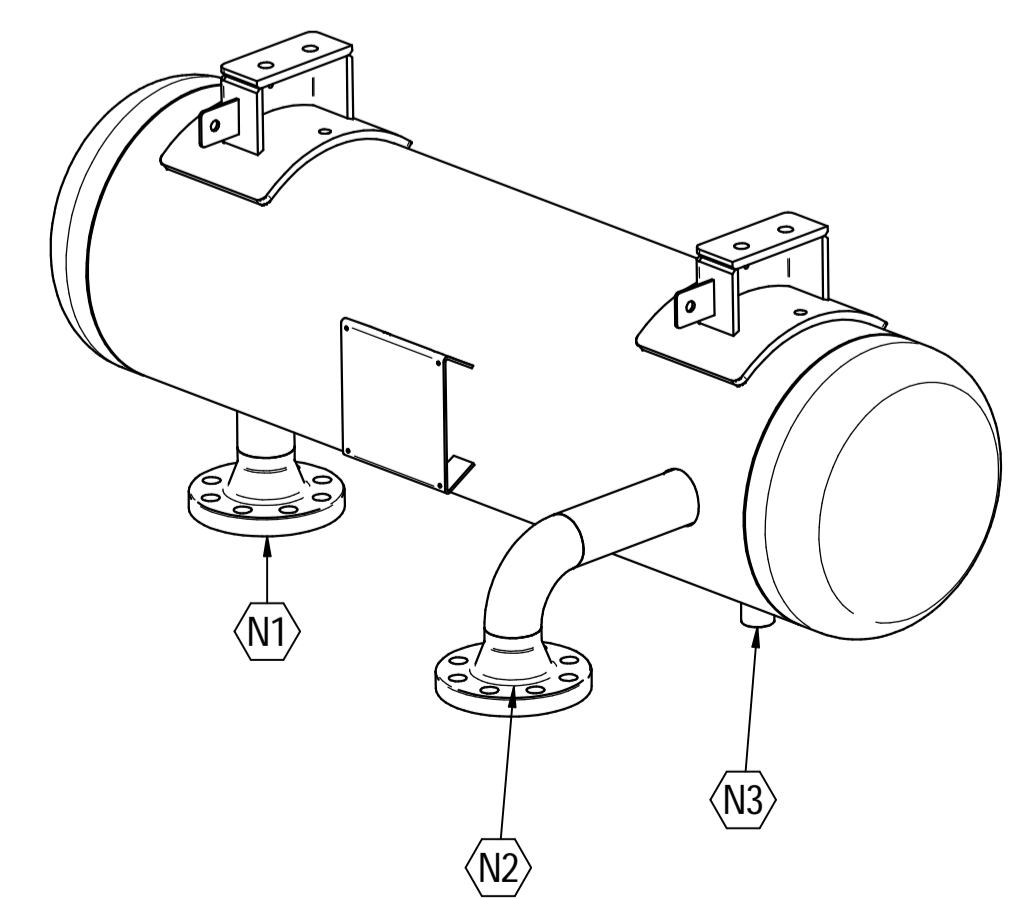
ELEVATION VIEW



PLAN VIEW



ORIENTATION VIEW



ISOMETRIC VIEW scale 1:8

Material List				
Pos.	Q.ty	Description	Mat.	Cert.
1	1	Shell by pipe 12" Sch.STD L=1000	SA106 Gr.B	3.1
2	2	Reduced cap 12" Sch.STD	SA234 WPB	3.1
3	2	Flange 2" WN #300 RF Sch.160	A105	3.1
4	1	Seamless pipe 2" Sch.160	A106 GrB	3.1
5	1	Seamless pipe 2" Sch.160	A106 GrB	3.1
6	2	Pad by pipe 12" Sch.STD	A106 Gr.B	3.1
7	1	Seamless elbow 2" 90° LR Sch.160	A234 WPB	3.1
8	1	Coupling 1/2" NPT #6000	A105	3.1
9	2	Plate 74.5x231 Thk.8	A516 70	3.1
10	2	Plate 16x65 Thk.10	A516 70	3.1
11	1	Nameplate support 156x241 Thk.3mm	A516 70	3.1
12	2	Earthing Plate 55 x 40 Thk.3	A240 TP316L	

Note:
 1) Governing measurement S.I. unless otherwise specified;
 2) Flange bolt holes have to be straddled from main vessel center line in plan & vertical & horizontal centreline in elevation;
 3) Material: certification 3.1 EN 10204;
 4) All internal edge shall be rounded off;
 5) Nozzle flanges in accordance with ASME B16.5: 2013;
 6) Flange fittings in accordance with ASME B16.9: 2012;
 7) The flange dimensions are in accordance to ASME B16.5: 2013;
 8) All fillet welds not detailed on "WELDING MAP" or drawing shall have the weld; throated equal to 0,7 times the minimum thickness to be welded;
 9) All welds are continuous except where indicate;
 10) See document C220006CLC010 for vessel calculation.

ITEM	QTY	SERVICE	SIZE	PIPE O.D.	THK	RATING	FLANGE TYPE	FACE	FACE O.D.	THK.	Tc
N3	1	DRAIN	1/2"	38.1	8.38	#6000	-	NPT-F	-	-	8.5 ± 10
N2	1	AIR OUTLET	2"	60.3	8.74	#300	WN	RF	-	-	8.5 ± 10
N1	1	AIR INLET	2"	60.3	8.74	#300	WN	RF	-	-	8.5 ± 10

DATI DI PROGETTO / Design data			
FLUIDO	Nitrogen	COLLAUDO	Test
STATO FISICO DEL FLUIDO	Gas	NATIONAL BOARD REGISTRATION	NO
CODICE DI CALCOLO	ASME VIII Div. 1 Ed.2021	CANADIAN REGISTER NUMBER	NO
PRESSIONE DI ESERCIZIO	14.5 bara	SERVIZIO LETALE	NO
PRESSIONE DI PROGETTO	25 bara (24 barg)	R-RAY	RT examination
PRESSIONE ESTERNA	NO	LICUIDI PENETRANTI	NO
PRESSIONE DI PROVA IDRAULICA	66.4 barg	ULTRASUONI	NO
TEMPERATURA DI ESERCIZIO	+134 °C	CONTROLLO MAGNETOSCOPICO	NO
TEMPERATURA DI PROGETTO	+170 °C	WELDING MAP	NO
SOVRAMEZZA	3 mm	PROCEDIMENTO DI SALDATURA	See doc: C220006WBK013
EFFICIENZA GIUNTI	0.85	FORMAZIONE FONDO	CAP
MAWP @ Design Temperature	33.46 barg @ +170 °C	PESO A VUOTO	116 kg
MDMT @ MAWP	0 °C @ 33.46 barg	PESO PIENO D'ACQUA	214 kg
TRATTAMENTO TERMICO	NO	DATI DEL VENTO	-
IMPACT TEST	NO	DATI SISMICI	-

Rev.	Descrizione / Description	Disegnato/Draw	Controllato/Checked	Approvato/Approved	Data/Date
03	Modified as per Customer comments	CM	MV	GL	11/05/2022
02	Aligned design pressure with datum	CM	MV	GL	15/04/2022
01	Modified strength length on cap	CM	MV	GL	30/03/2022
00	FIRST ISSUE	CM	MV	GL	16/03/2022

Oggetto/Object: N2 PULSATION DAMPER 1st STAGE DISCHARGE
 Scala/Scale: 1 : 5
 Comm. N°/Job No.: C220006
 Cliente/Customer: Airpack Nederland B.V.
 Ord. No.: 18498-VV-0901
 Dis. N°/Dwg No.: C220006DWG004
 Rev. 03