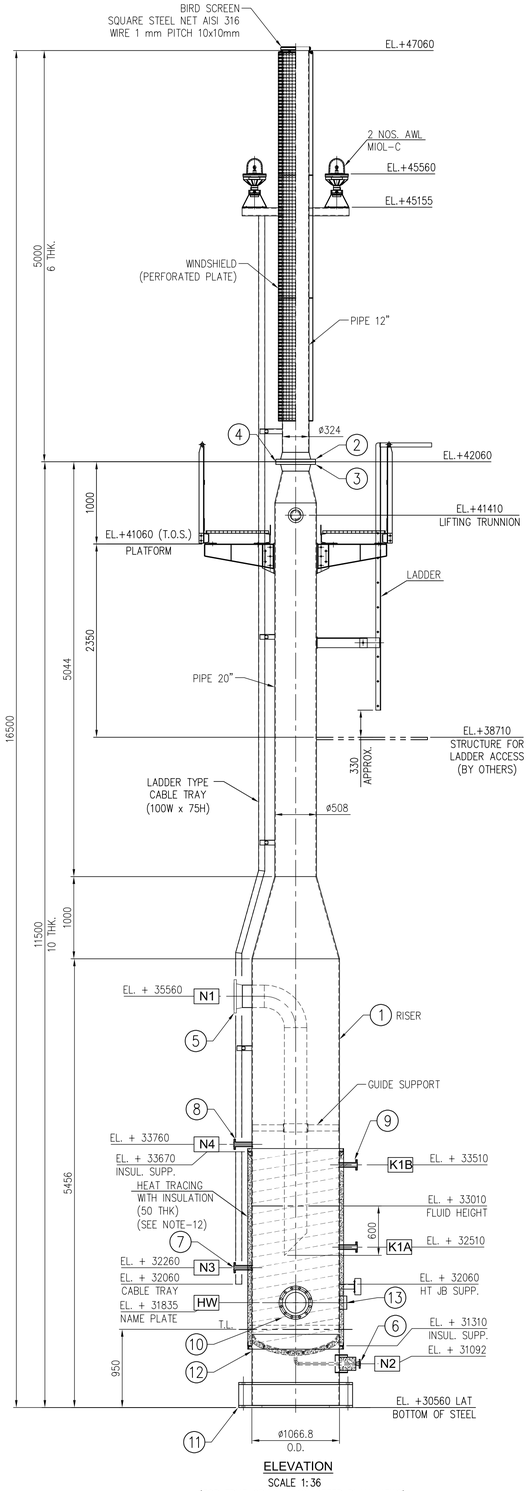
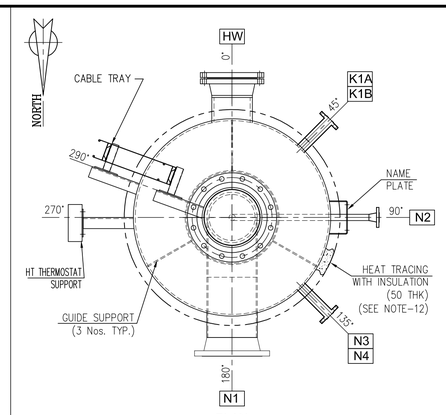
DRAWING NO. 1724000887-MAC-DA-00003_04 REV. 04

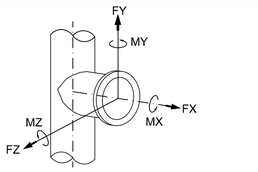


ELEVATION
SCALE 1:36
(FOR TRUE ORIENTATION REFER PLAN VIEWS)

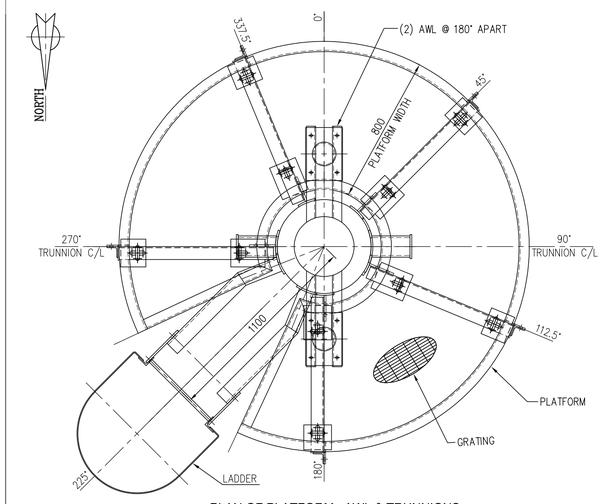


PLAN

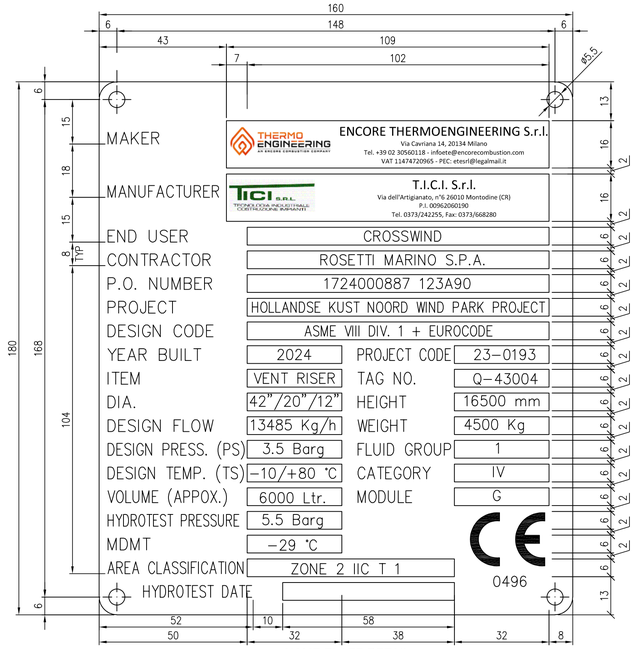
PLATFORM, AWL & TRUNNION NOT SHOWN FOR CLARITY



NOZZLE LOADS						
	LOADS [kN]			MOMENTS [kN x m]		
	FX	FY	FZ	MX	MY	MZ
INLET N1 (10")	7.78	14.45	14.45	6.31	4.74	4.74



PLAN OF PLATFORM , AWL & TRUNNIONS



NAME PLATE DETAIL

MATERIAL LIST

ITEM	Q.TY	DESCRIPTION	DIMENSION	MATERIALS
1	1	RISER SHELL	42" (1066.8) OD. x 10 THK	A516 GR.60/EQUIV
		RISER SHELL	20" (508) OD. x 10 THK	A516 GR.60/EQUIV
		VENT TIP SHELL	12" (323.9) OD. x 6 THK	AISI 316
2	1	VENT TIP FLANGE	ø12" 150# WNRF ASME B16.5	AISI 316L
3	1	RISER OUTLET FLANGE	ø12" 150# WNRF ASME B16.5	A350 GR LF2
4	1	GASKET	ø12" 150#, SPIRAL WOUND	NOTE-10
5	1	VENT INLET FLANGE	ø10" 150# WNRF, SCH.40 ASME B16.5	A350 GR LF2
5A	1	VENT INLET PIPE (DIP PIPE)	ø10" SCH.40 (SMLS)	A333 GR.6
6	1	DRAIN CONNECTION FLANGE	ø1" 150# WNRF, SCH. 80 ASME B16.5	A350 GR LF2
7	1	SWAN NECK CONNECTION FLG.	ø1" 150# LWNRF ASME B16.5	A350 GR LF2
8	1	FILLING LINE FLANGE	ø1" 150# LWNRF ASME B16.5	A350 GR LF2
9	2	LEVEL TRANSMITTER CONNECTION	ø1" 150# LWNRF ASME B16.5	A350 GR LF2
10	1	HAND HOLE FLANGE	ø8" 150# WNRF, SCH.40 ASME B16.5	A350 GR LF2
11	1	ANCHOR CHAIR	-	S275J0 or EQUIV.
12	1	SKIRT SHELL	42" (1066.8) OD.	S275J0 or EQUIV.
13	1	NAMEPLATE	-	AISI 316L

NOZZLES LIST

POS.	Q'TY	SIZE	RATING	FLANGE	SERVICE	PROJECTION FROM RISER C/L
N1	1	10"	150#	WNRF	VENT INLET FROM V-43001 W/ DIP PIPE	750
N2	1	1"	150#	WNRF	DRAIN	800
N3	1	1"	150#	LWNRF	SWAN NECK CONNECTION	750
N4	1	1"	150#	LWNRF	FILLING LINE	750
K1A/B	2	1"	150#	LWNRF	LEVEL TRANSMITTER	750
HW	1	8"	150#	WNRF	HAND HOLE W/ BLIND	750

LOADS AT THE BASE

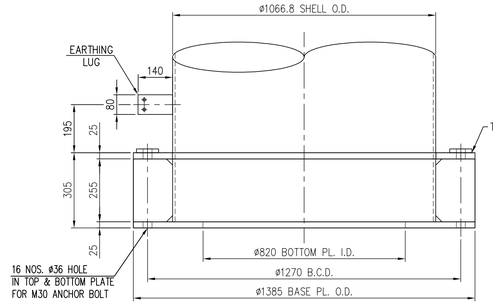
		Vertical [kN]	Shear [kN]	Moment [kN]
DEAD LOAD	DL	-27.66	0.00	0.00
DEAD LOAD CONTENT	DL_O	-17.06	0.00	0.00
LIVE LOAD ON PLATFORM	LL	-13.34	0.00	0.00
NOZZLE LOADS	NL	4.97	24.63	134.99
THERMAL	TL	0.00	0.00	0.00
WIND LOAD	WL	0.00	28.845	235.65
WAVE AND CURRENT LOADS	HL	0.00	-6.99	-55.95

THESE ARE THE RESULTANT FORCES AND THE SHEAR AND MOMENT CAN OCCUR IN ANY DIRECTION.

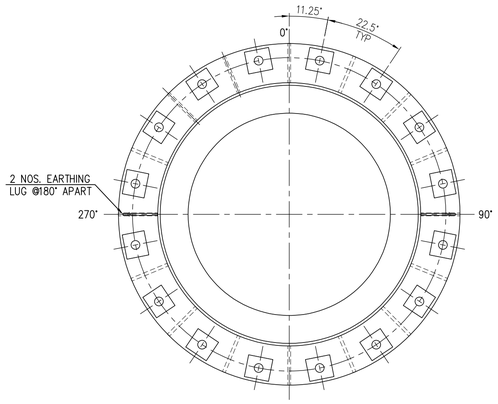
SHEAR = RESULTANT SHEAR: (FX^2 + FZ^2)^0.5

MOMENT = RESULTANT MOM: (MX^2 + MZ^2)^0.5

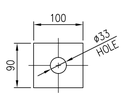
VERTICAL LOAD IS POSITIVE UPWARD



ELEVATION
ANCHOR CHAIR DETAIL
SCALE 1:12

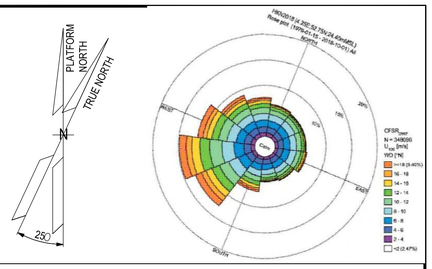


180°
PLAN VIEW



WASHER DETAIL

REFERENCE DOCUMENT	No.
MECHANICAL CALCULATION - HYDROGEN VENT	1724000887-MAC-CA-00004
DETAILED DRAWING WITH PART LIST - HYDROGEN VENT	1724000887-MAC-DD-00005
LIFTING DRAWING - HYDROGEN VENT	1724000887-MAC-DD-00019
-	-



NOTES

GENERAL NOTES:

1. ALL DIMENSION ARE IN mm UNLESS OTHERWISE STATED.
2. ALL ELEVATIONS ARE IN mm UNLESS OTHERWISE STATED.
3. ALL WELDING SHALL BE CONTINUOUS WITH CATHETUS EQUAL TO MINIMUM THK. TO BE WELDED.
4. REFERRING TO MAJOR AXIS FLANGE HOLES SHALL BE SYMMETRICALLY DISPOSED WITH EXCEPTION OF PILOTS FLANGES.
5. ALL FLANGES <= 24" ARE ACCORDING TO ASME B16.5 WITH FINISHING 125 AARH.
6. FOR SURFACE TREATMENT PLEASE REFER TO THE DOCUMENT NO. 1724000887-MAT-PRO-00010 (23-0193-0030).
7. MAIN COMPONENT WEIGHTS (APPROX.):
   RISER WEIGHT : 3950 kg (INCLUDING PLATFORM & LADDER)
   VENT TIP : 450 kg
8. FOR WIRING DIAGRAM (JB AND HT) REFER DOCUMENT NO. 1724000887-MAC-DG-00007 (23-0193-0170)
9. DELETED.
10. GASKET SHALL BE STAINLESS STEEL, SPIRAL WOUND, GRAPHITE FILLED, EPOXY-COATED CARBON STEEL CENTERING RING AND STAINLESS STEEL INNER RING.
11. FOR RISER CONSTRUCTION DETAILS REFER DRAWING NO. 1724000887-MAC-DD-00005 (23-0193-131).
12. HEAT TRACING CABLES AND INSULATION SUPPORTS ARE IN ETE SCOPE OF WORK. INSULATION SUPPLY & INSTALLATION BY OTHERS.

NAME PLATE NOTES:

a. ALL DIMENSIONS ARE IN mm, UNLESS OTHERWISE STATED.
b. NAMEPLATE MATERIAL : AISI 316L
   NAMEPLATE THK. : 2 mm
   TEXT COLOR : BLACK
   TEXT ENGRAVED
C. NAMEPLATE WILL BE FIXED ON VENT RISER REFER TO DOC. 1724000887-MAC-DD-00005 (23-0193-0131).

DESIGN DATA

DESCRIPTION	VALUES
DESIGN CODE	ASME VIII DIV. 1 + EUROCODE
MAX. GAS FLOW	13485 kg/h
AMBIENT TEMPERATURE	-8.4 / +25 °C
OPERATING PRESSURE	ATM barg
DESIGN TEMPERATURE	-10 / +80 °C
DESIGN PRESSURE	3.5 barg
CORROSION ALLOWANCE	3 mm (FOR CARBON STEEL ONLY)
HYDROTEST PRESSURE	5.5 barg
AREA CLASIFICATION	ZONE 2 IIC T 1
MDMT	-29 °C
FLUID GROUP	1
CATEGORY	IV
MODULE	G
SEISMIC	N/A
WIND VELOCITY	28 m/s
TYPE OF FLUID	HYDROGEN GAS
WELDING EFFICIENCY	0.85
RADIOGRAPHY	SPOT RT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	13-11-2024	SCB	VT	AL	ACCEPTANCE FOR CONSTRUCTION
03	10-10-2024	SCB	VT	AL	ACCEPTANCE FOR CONSTRUCTION
02	05-09-2024	SCB	VT	AL	ACCEPTANCE FOR CONSTRUCTION
01	30-07-2024	SCB	VT	AL	ISSUED FOR REVIEW
00	03-06-2024	RJS	SCB	AL	ISSUED FOR REVIEW

THERMO ENGINEERING — AN ENCORE COMBUSTION COMPANY

ETE JOB 23-0193
ETE DWG NR. 23-0193-0101

CROSSWIND — ROSETTI MARINO

TITLE :
HYDROGEN VENT
GENERAL ARRANGEMENT
INCLUDING FOUNDATION LOADS

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE 1:36
DRAWN RJS | CHECKED SCB | APPROVED AL | DATE 03/06/24
A1 | DRAWING NO. 1724000887-MAC-DA-00003 | SHEET 001 | REV. 04

File Name : 1724000887-MAC-DA-00003_04