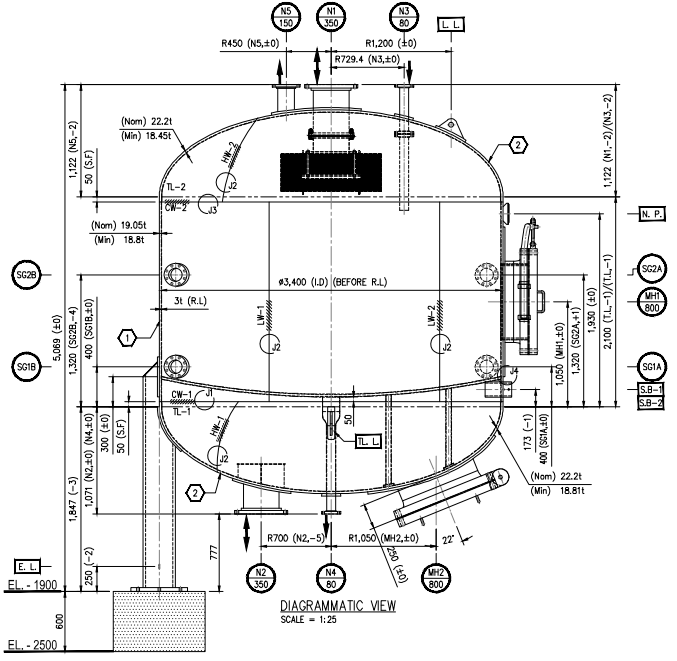
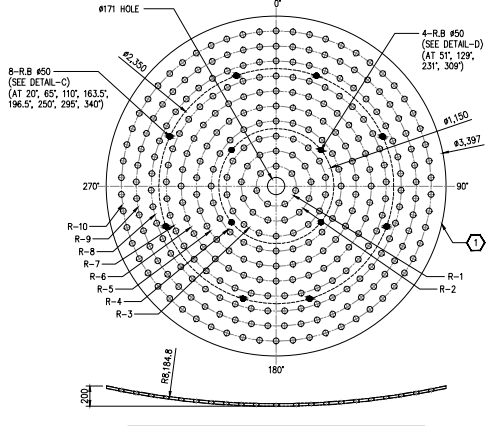


TRUE ORIENTATION PLAN
SCALE = 1:25



DIAGRAMMATIC VIEW
SCALE = 1:25



NO.	RADIUS	NO. OF HOLES	DIA. OF HOLES (AFTER 3mm THK (BEFORE 3mm THK RUBBER LINED))	DIA. OF HOLES (BEFORE 3mm THK RUBBER LINED)
R-1	200	7	50φ	56φ
R-2	350	13	50φ	56φ
R-3	500	18	50φ	56φ
R-4	650	24	50φ	56φ
R-5	800	30	50φ	56φ
R-6	950	36	50φ	56φ
R-7	1100	41	50φ	56φ
R-8	1250	47	50φ	56φ
R-9	1400	53	50φ	56φ
R-10	1550	58	50φ	56φ
TOTAL		327 Nos.		

NOZZLE PLATE DETAIL
SCALE = 1:25

BILL OF VESSEL MATERIAL

ITEM	DESCRIPTION	QTY	MATERIAL	REMARKS
1	SHELL	1	SA-516M Gr.485	3400 LD x 2000 S.H x 19.05t
2	HEAD (SE 2-1)	2	SA-516M Gr.485	3400 LD x 50 S.F x 22.21
3	LEG SUPPORT	4	SA-106M Gr. B	DN300 Sch XXS
4	LEG SUPPORT PAD	4	SA-516M Gr.485	500W x 400H x 19.05t
5	LEG SUPPORT PAD	4	SA-516M Gr.485	500W x 19.05t
6	COVER PLATE	4	SA-516M Gr.485	6.35t
7	BASE PLATE	4	SA-516M Gr.485	400W x 400 L x 38.1t
8	LIFTING LUG	3	SA-516M Gr.485	22.21
9	LIFTING LUG PAD	3	SA-516M Gr.485	70W x 22.21
10	TAILING LUG	1	SA-516M Gr.485	22.21
11	TAILING LUG PAD	1	SA-516M Gr.485	70W x 22.21
12	EARTHING LUG	2	SA-240M 316L	50W x 50L x 6t
13	SUPPORT CHANNEL	1	SA-358 or EQUIV.	C 150 x 75 x 6.5t
14	SUPPORT CHANNEL	1	SA-358 or EQUIV.	C 150 x 75 x 6.5t

NOZZLES DATA

NOZZLE MARK	SERVICE	QTY.	SIZE	SCH.	FLANGE STD./TYPE/RATING	NOZZLE PROVL FROM VESSEL SHELL / HEAD	REMARK
N1	SERVICE INLET	1	DN350	40	ASME SOFF C.150	25mm FROM HEAD	
N2	SERVICE OUTLET	1	DN350	40	ASME SOFF C.150	275mm FROM HEAD	
N3	RESIN INLET	1	DN80	40	ASME SOFF C.150	333mm FROM HEAD	
N4	RESIN OUTLET	1	DN80	40	ASME SOFF C.150	200mm FROM HEAD	
N5	VENT	1	DN150	40	ASME SOFF C.150	281mm FROM HEAD	W/RESIN TRAP
MH1	MANHOLE	1	DN800	19.05t	ASME WNF C.150	250mm FROM SHELL	W/DAWT
MH2	MANHOLE	1	DN800	19.05t	ASME WNF C.150	250mm FROM HEAD	W/HNCE
SG1A/B	SIGHT GLASS	2	ø100	-	-	-	W/COVER
SG2A/B	SIGHT GLASS	2	ø100	-	-	-	W/COVER

VESSEL TAG NO.

TAG NO.	SOLD/PI/08B010	SERIAL NO.	VESB-V2469	UNIT	1
TAG NO.	60DF108B010	SERIAL NO.	VESB-V2471	UNIT	1

DESIGN CODE / SPEC		ASME SECTION VIII DIV 1, 2015 ED.	
U DESIGNATOR		NO	
MATERIAL OF CONSTRUCTION			
SHELL		SA-516M Gr.485 (NOTE 12)	
HEAD		SA-516M Gr.485 (NOTE 12)	
FLANGES		SA-105M	
MANHOLE NECK		SA-516M Gr.485 (NOTE 12)	
NOZZLES		SA-106M Gr. B	
SIGHT GLASS		ACRYLIC GLASS (50mm)	
BOLTS & NUTS		SA-193M Gr. B7 & SA-194M Gr. 2H (H.D.G)	
GASKET		5mmt EPDM RUBBER	
LEG SUPPORT		SA-106M Gr. B	
NOZZLE PLATE		SA-516M Gr.485	

VESEL DESIGN CONDITIONS

External Design Pressure MPa(g)	Design / Operating Press. MPa(g)	Design / Operating Temp.(°C)	S.G.	Joint Eff.	C.A.	Hydro Test Press. MPa(g)
-	1.49 (14.9)	60	1.0	1.0	0	2.235 (22.35)
- 1.1 (11)						

(M.A.N.P.) 149 MPa (14.9 barg) @ 60°C (M.D.N.T.) 0°C @ 1.49 MPa (14.9 barg)

NOT EXAMINATION REQUIREMENT
Exempted As Per UCS-66 & UC-200.

EXTERNAL PARTING SPECIFICATION

PROCESS	GENERIC NAME (SPECIFIC NAME)	No.	DFT (micron)
Surface Preparation	BLAST TO SA 2.5		
1st Coat	ZINC EPOXY (JOTUN; BARRIER)	1	80
2nd Coat	EPOXY HIGH SOLID (JOTUN; PENQUARD MIDCOAT MID)	2	75
3rd Coat	POLYURETHANE (JOTUN; HARDTOP XP)	1	40
Color	BASE COLOUR: RAL 6029 (MINT GREEN) COLOUR CODE: RAL 6020 (CHROME GREEN) BASE COLOUR: RAL 6029 (MINT GREEN)		
TOTAL		270	

INTERNAL LINING SPECIFICATION

PROCESS	GENERIC NAME (SPECIFIC NAME)	No.	DFT (micron)
Surface Preparation	BLAST TO SA 2.5		
1st Coat	3mmt HARD RUBBER LINING		

VESEL WEIGHT IN - KG

EMPTY	MAX. OPERATING	HYDROTEST
12907	42129	42129

VESEL CONTENT : CONDENSATE CAPACITY : 29.3 m³

- NOTES:
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
 - MINIMUM THICKNESS SHOWN IS MINIMUM REQUIRED THICKNESS, INCLUSIVE OF CORROSION ALLOWANCE.
 - FLANGES BOLT HOLE SHALL STRADDLE HORIZONTAL OR VERTICAL AXIS.
 - FLANGES PASS FACE TO BE MACHINED DOWN FLAT FOR RUBBER LINING.
 - ALL INSIDE SHARP EDGES SHALL BE BEND SMOOTH TO A MINIMUM RADIUS OF 3 MM.
 - ALL FILLET WELD SIZE TOLERANCES SHALL BE -0/+5mm.
 - ALL COMPENSATING PAD REQUIRE INDICAL MIT TELL-TALE HOLE & FINISH WITH HEAVY GREASE AFTER TESTING.
 - NOZZLE PROJECTION & ALIGNMENT TOLERANCE SHALL BE AS PER DCP009 LATEST REVISION.
 - VESS/WPS/238 TO BE USED FOR ALL EXTERNAL ATTACHMENT.
 - 10.05R DPT OR MT TEST ON LW, CW AND NOZZLES AFTER WELDING.
 - WHEN 2 PICES COMPENSATING PAD IS USED, THE WELD SEAM SHALL BE ORIENTATED AT LEAST 45° FROM THE LONGITUDINAL AXIS OR RT/UT EXAMINED.
 - 12.SA-516M Gr.485 IS EQUIVALENT TO SA-516 Gr.70.
- LEGEND:
- CW = CIRG SEAM WELDING LINE
 - LW = LONG SEAM WELDING LINE
 - TL = TANGENT LINE
 - L = LIFTING LUG
 - TLL = TAILING LUG
 - E.L. = EARTH LUG
 - NP = NAME PLATE
 - SOFF = SUB-ON FLAT FACE
 - S.G. = SPECIFIC GRAVITY
 - DI = DYE PENETRANT INSPECTION
 - MT = MAGNETIC PARTICLE TEST
 - UT = ULTRASONIC TEST
 - P.WHT = POST WELD HEAT TREATMENT
 - M.A.E.W.P = MAXIMUM ALLOWABLE EXTERNAL WORKING PRESSURE
 - M.D.M.T = MINIMUM DESIGN METAL TEMPERATURE
 - DFT = DRY FILM THICKNESS
 - C.A. = CORROSION ALLOWANCE

- REFERENCE DRAWINGS:
- PIPING AND INSTRUMENTATION DIAGRAM FOR CONDENSATE POLISHING PLANT REFER DRAWING NO: T856-L1-OFF-C-LD-M-PID-2133.
 - GENERAL ARRANGEMENT DRAWING FOR CONDENSATE POLISHING PLANT REFER DRAWING NO: T856-L1-OFF-C-LD-M-DCA-3100.
 - GENERAL ARRANGEMENT OF STEAM TURBINE BUILDING REFER DRAWING NO: T856-L1-OFF-C-00-M-2800.
 - FOUNDATION OUTLINE FOR CONDENSATE POLISHING PLANT REFER DRAWING NO: T856-L1-OFF-C-LD-M-DPN-3008.
 - PAINTING SPECIFICATION FOR CONDENSATE POLISHING PLANT REFER DRAWING NO: T856-BSWS-G-017.
 - SHOP INSPECTION AND TEST PROGRAM FOR CONDENSATE POLISHING PLANT REFER DRAWING NO: T856-L1-OFF-C-LD-C-00-SCH-3910.

O	28/JAN/19	ISSUED FOR FABRICATION	PPA	VLP	ITH	MT
D	12/DEC/18	ISSUED FOR APPROVAL	PPA	VLP	ITH	MT
C	26/APR/18	ISSUED FOR APPROVAL	PPA	VLP	ITH	MT
B	28/DEC/17	ISSUED FOR APPROVAL	ZHM	VLP	ITH	MT
A	02/NOV/17	ISSUED FOR APPROVAL	ZHM	VLP	ITH	MT

SCALE: 1/25

UNITS: VIEW: ISO/PLAN/ST/3RD

CP SYSTEM CONTRACTOR: BSW

BSWS DRAWING TITLE: OUTLINE DRAWING FOR CONDENSATE POLISHING WELD BED VESSEL (UNIT 5) A

BSWS DRAWING NO: T856-BSWS-M-001

SHEET NO. 1 OF 3