

VAR. ITEM NO.	ITEM NO.	DESCRIPTION	QTY.	UNIT	WT.	ZONE
	12	PLATE 12x200x300	5	652		
	11	PLATE 12x150x150	2	210		
	10	NAME PLATE ARRANGEMENT	3	900		
	09	SMC 150x75L=150	10	080		
	08	WASHER M10	0	001		
	07	NUT M10	0	015		
	06	BOLT M10x30	0	021		
	05	TRAY SUPPORT	1	826		
	04	DEAERATOR TRAY ASSY	6	137		
	03	DEFLECTING GUIDE ASSY	14	447		
	02	VENT AND SPRAY ASSY OF DEAERATOR	540	418		
	01	SHELL PLATE 12x2285x4675	1006	280		

- NOTES
- 01 DESIGN PRESSURE : 3.5 Kg/cm<sup>2</sup> (g)
  - 02 DESIGN TEMPERATURE : 150°C
  - 03 WORKING MEDIUM : STEAM/WATER
  - 04 HY. TEST NEED NOT DONE IN THE SHOP
  - \* 05 THE ORIENTATION OF ITEM NO.10 SHOWN IN ELEVATION IS INDICATIVE ONLY
  - 06 ITEM NOS 06 TO 08 ARE TO BE STAINLESS STEEL(AISI 304) OF GOOD COMMERCIAL QUALITY AND THEY ARE TO BE LOCALLY & ASSEMBLED.
  - 07 ITEM NO 04 SHALL BE KEPT CONCENTRIC TO ITEM NO 01 BEFORE BOLTING.
  - 08 FOLLOW QCP : AS PER RELAVANT QP

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**Bharat Heavy Electricals Ltd**  
 DNR HEAVY PLATES & VESSELS PLANT  
 VISAKHAPATNAM-530012

**DEAERATOR ASSEMBLY**  
 90 T/HR

DRAWING NO: 1-81-026-U8024

REV: 00

DATE: 02.08.2018

SCALE: AS SHOWN

APPROVED: A.K.V.K.KISHORE

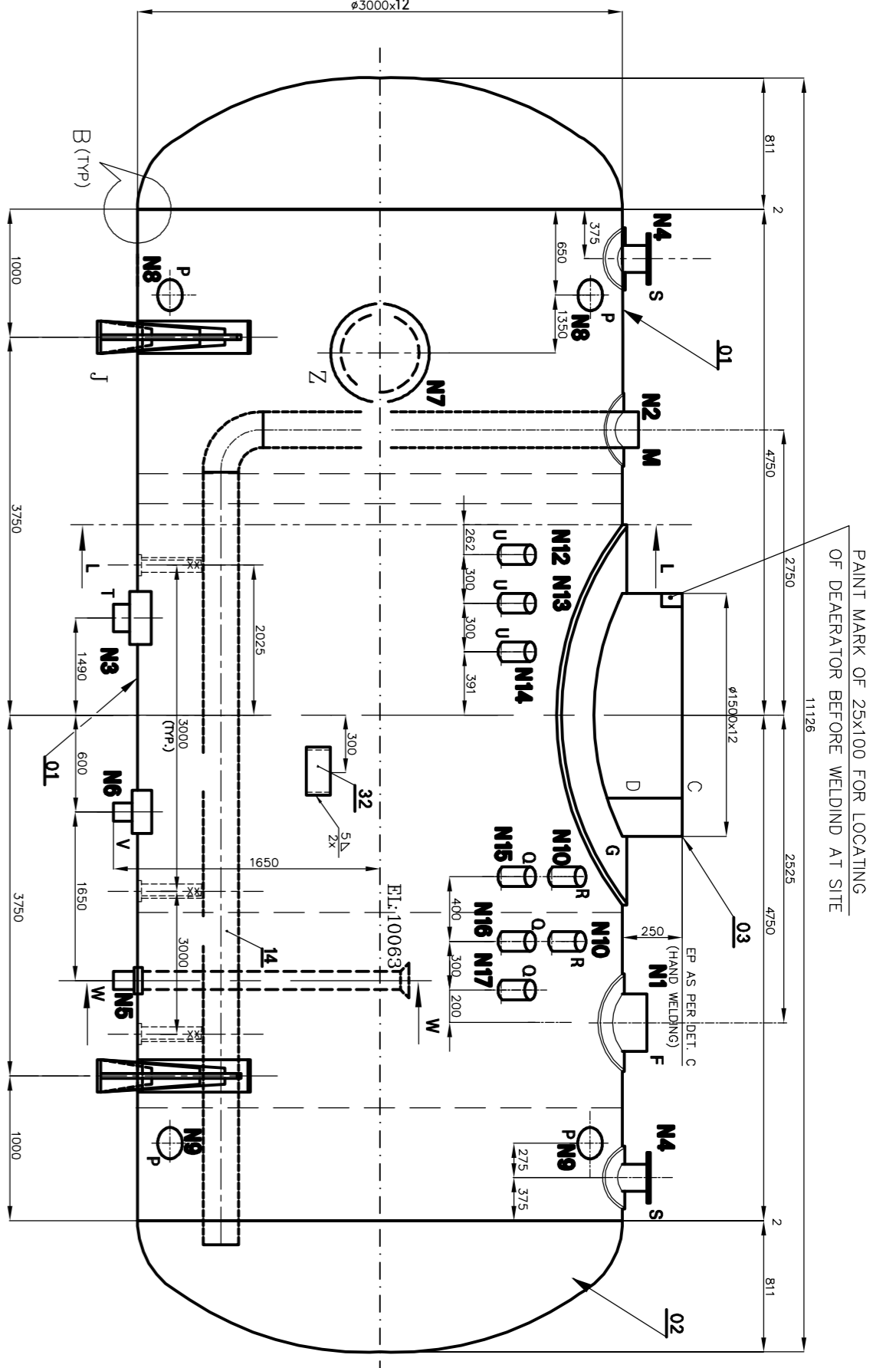
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CHECKED: D.SANJEEV

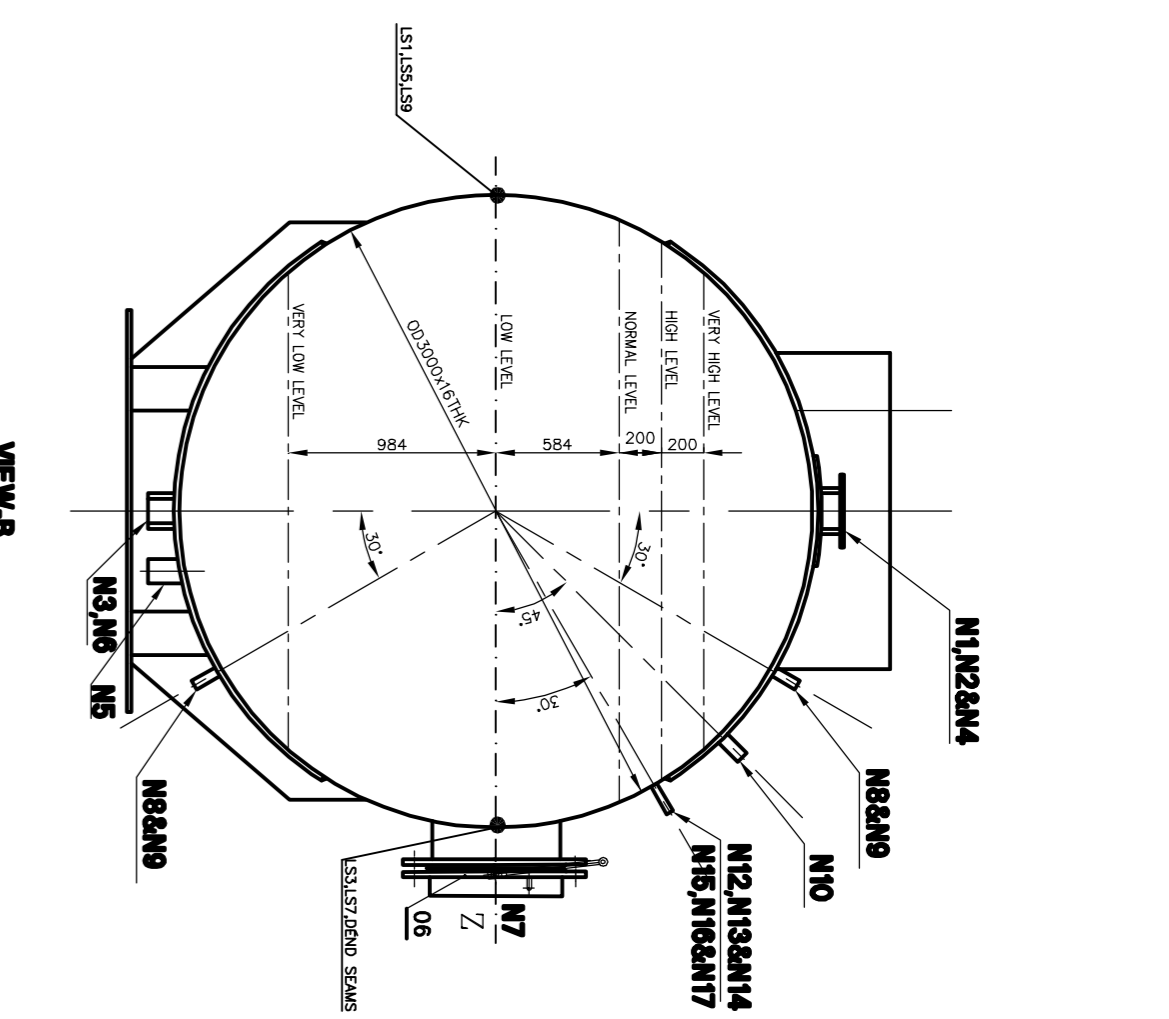
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REF TO ASSY / SUB ASSY

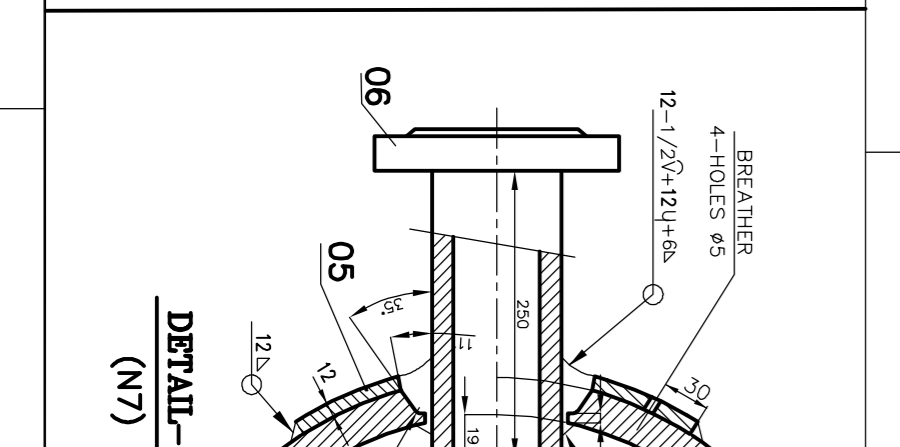
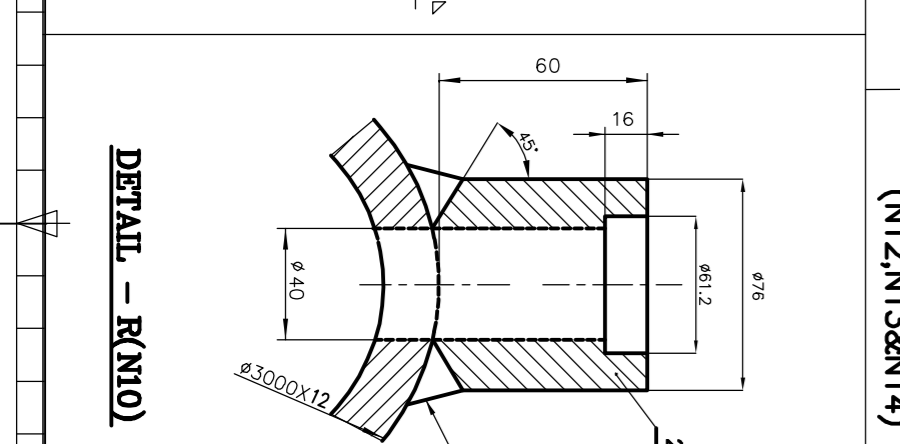
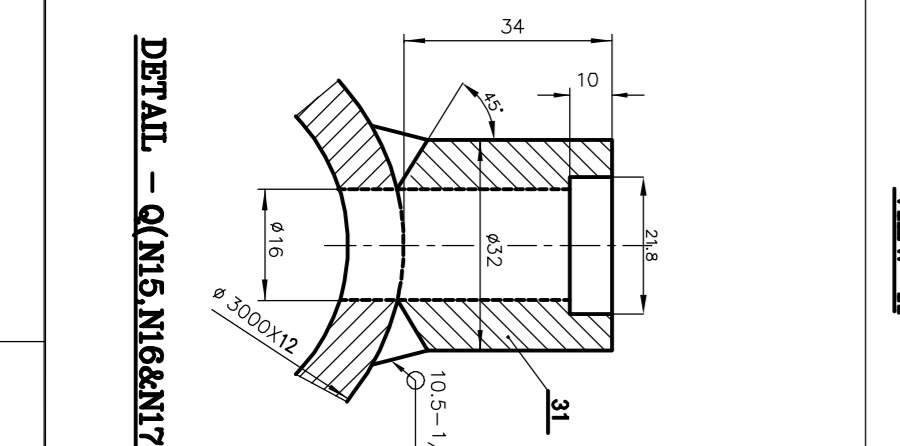
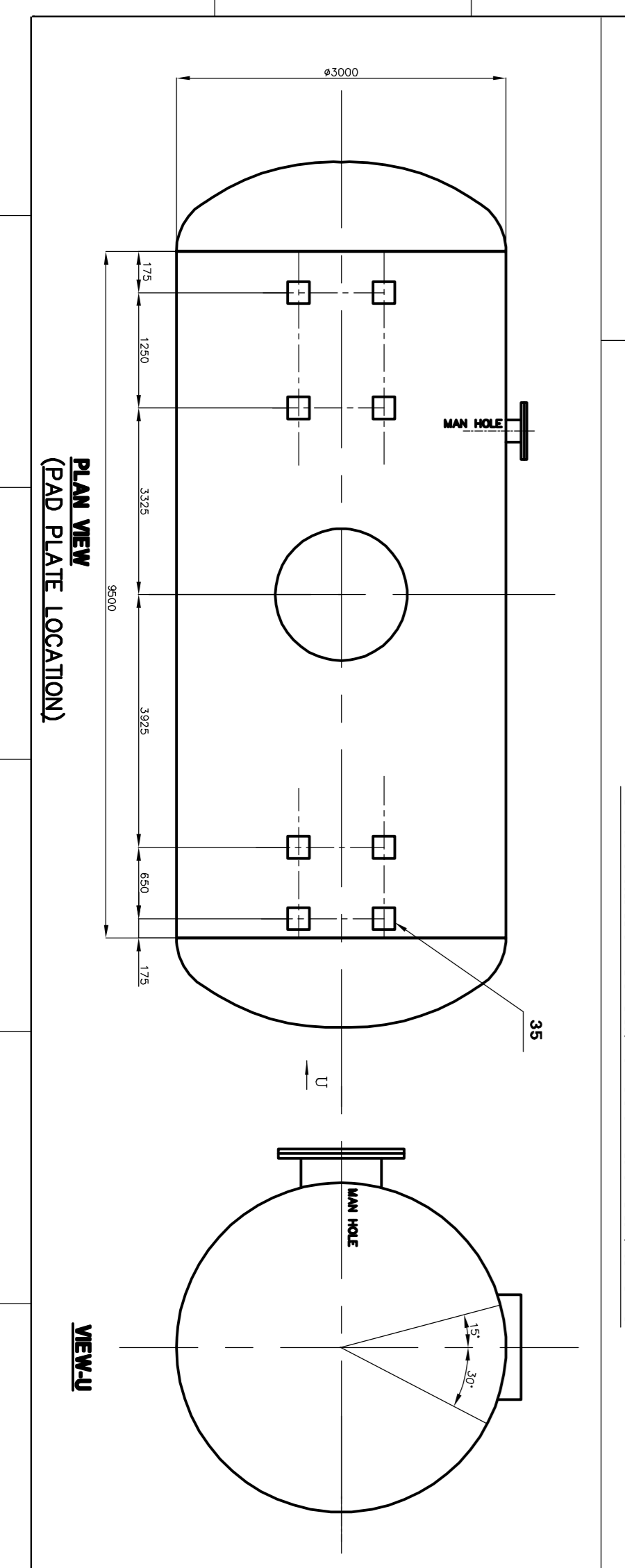
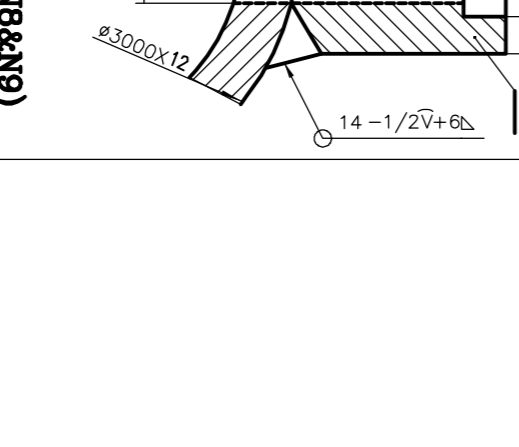
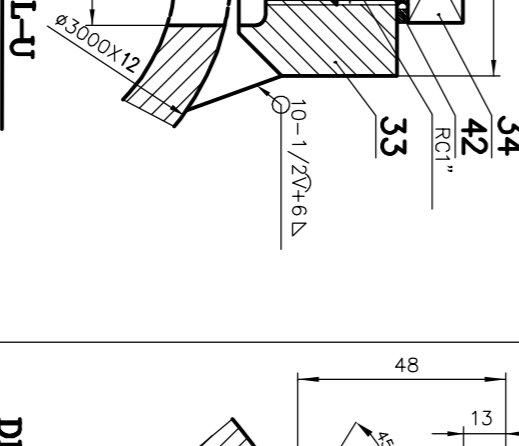
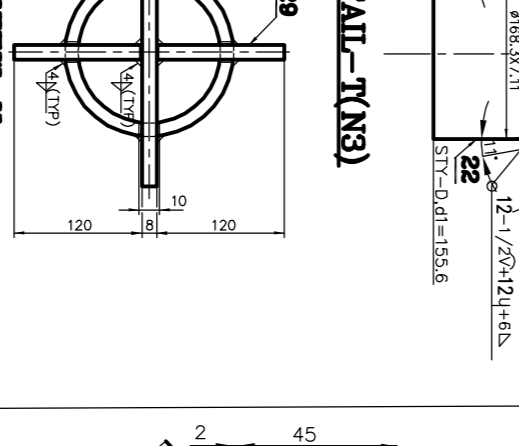
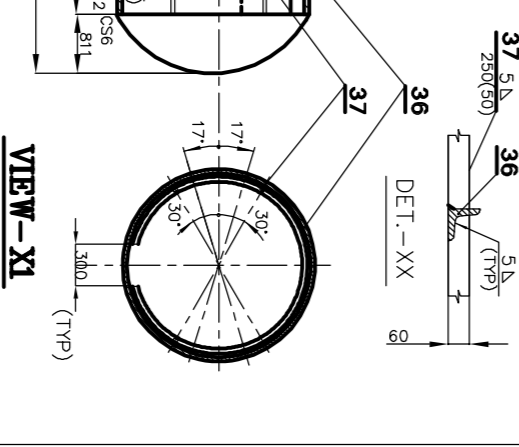
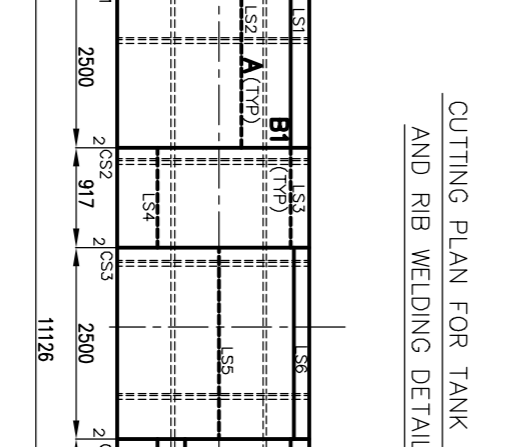
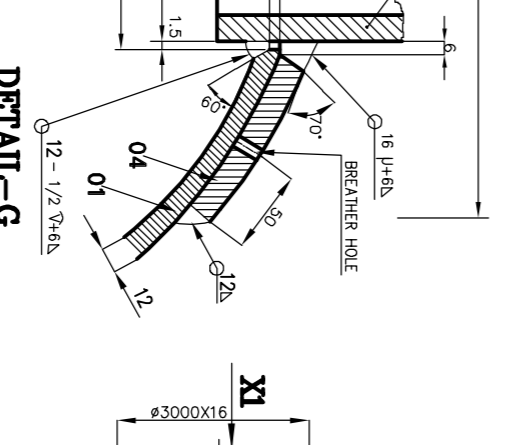
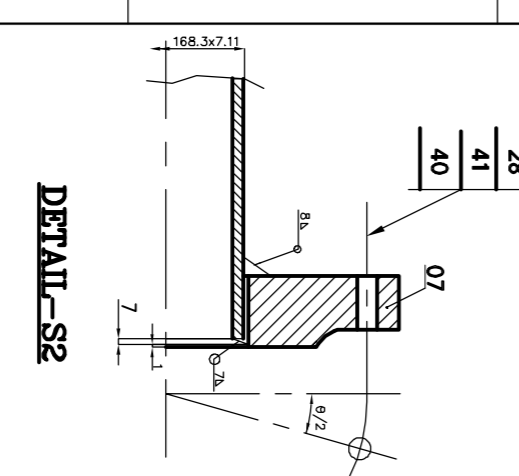
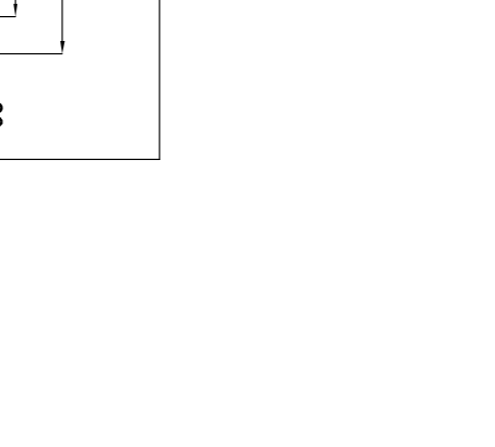
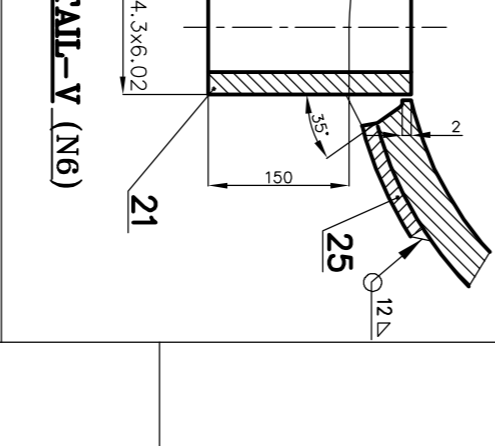
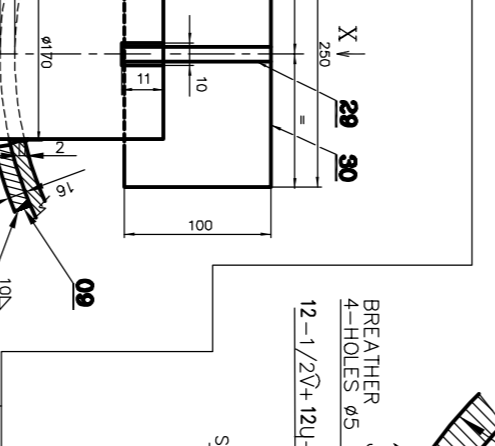
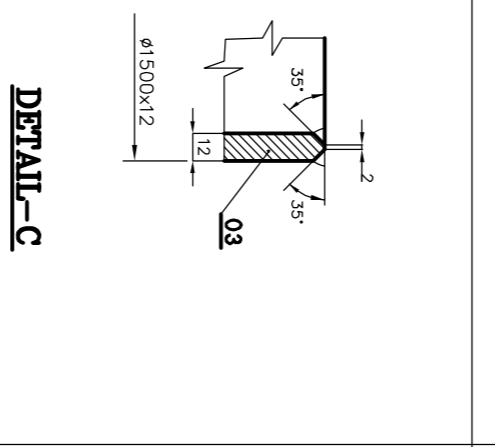
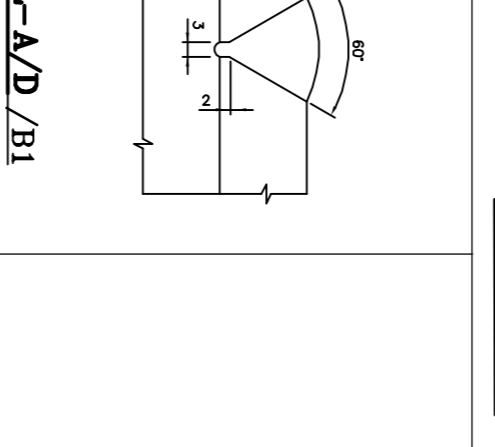
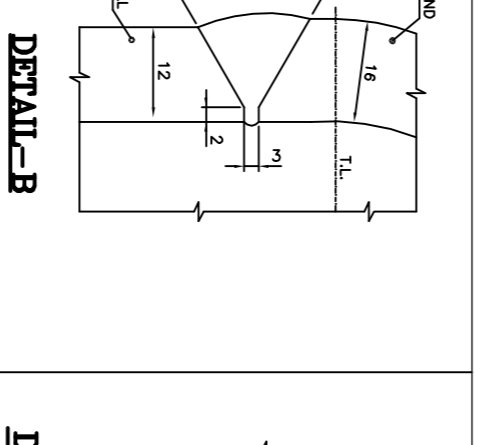
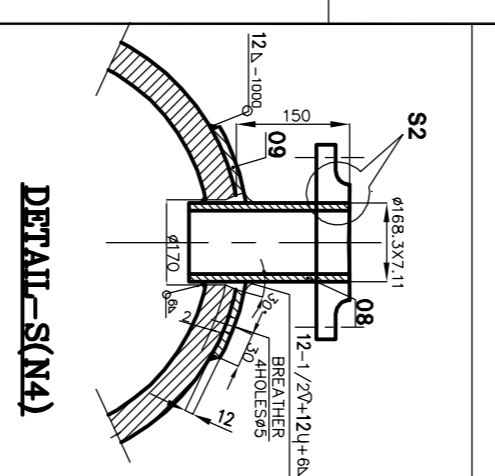
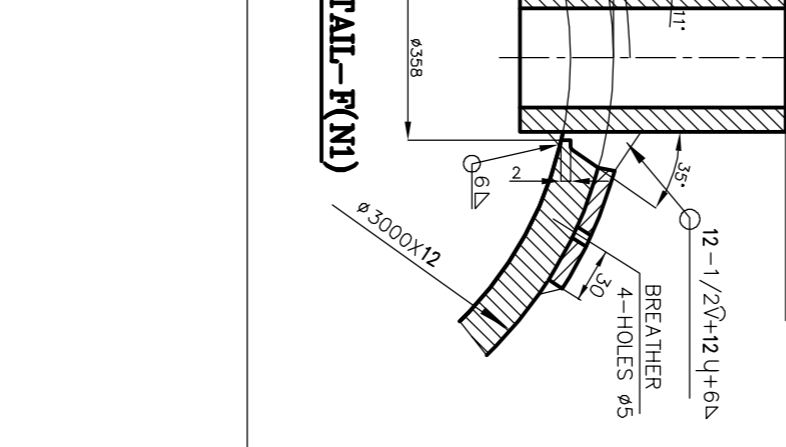
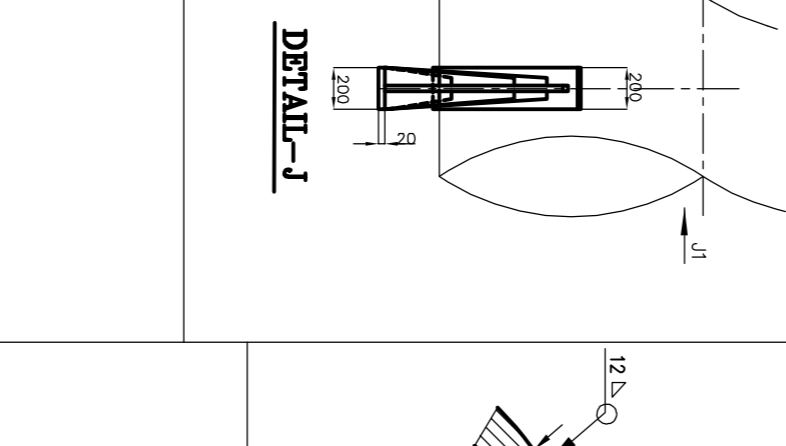
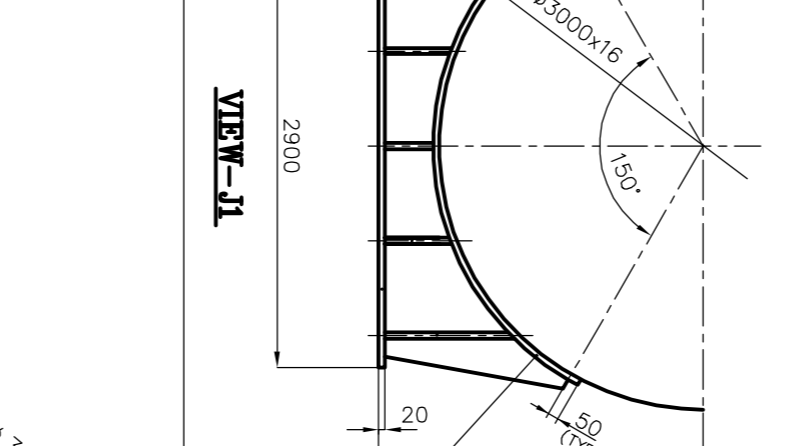
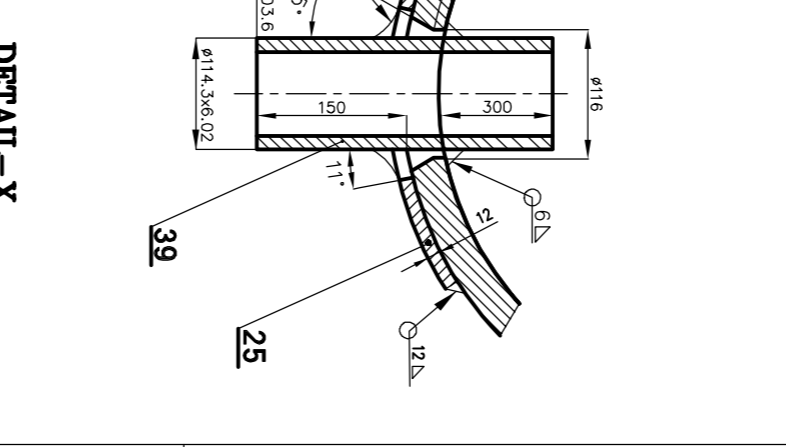
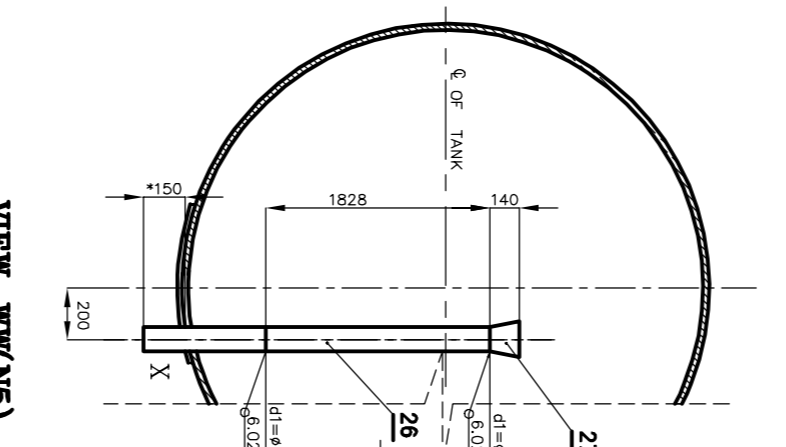
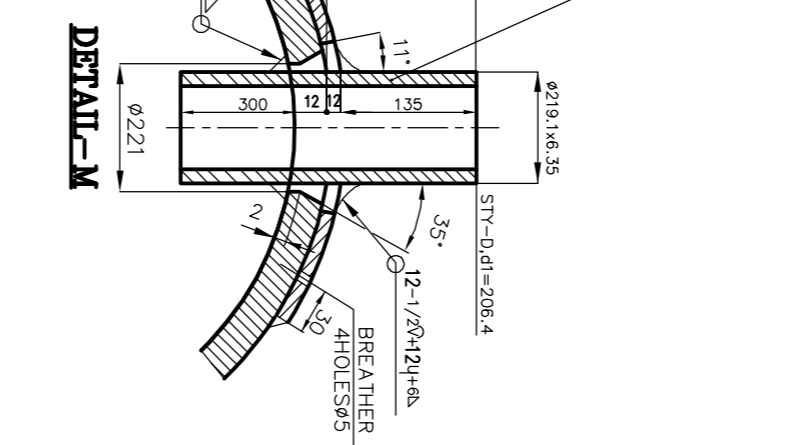
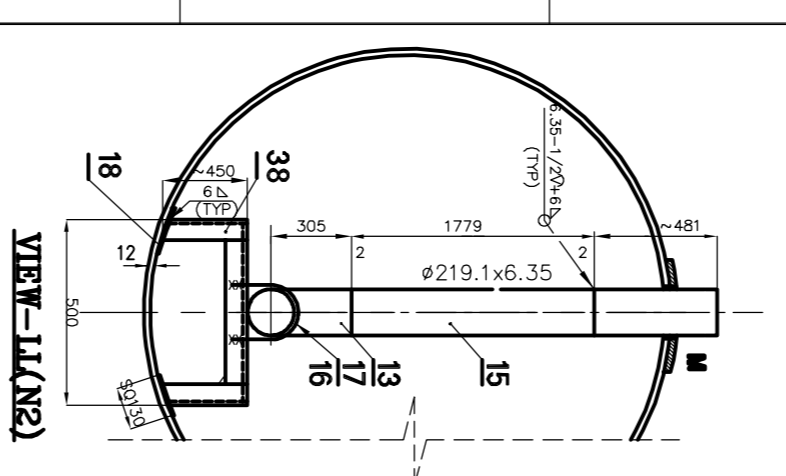




ELEVATION



VIEW-B



SCHEDULE OF STUBS:-

STUB NO	STUB SIZE	PIPE SIZE	DESCRIPTION	NO OFF CONNECTION	END VALUE
N1	NB500	φ55.6x3.63	STEAM INLET	1	B.W.
N2	NB500	φ55.6x3.63	INITIAL HEATING	1	B.W.
N3	NB500	φ55.6x3.63	SAFETY VALVE	1	B.W.
N4	NB500	φ55.6x3.63	SAFETY VALVE	2	CLSD FLANGED
N5	NB500	φ55.6x3.63	FEED WATER TANK OVER FLOW	1	B.W.
N6	NB500	φ55.6x3.63	FEED WATER TANK OVER FLOW	1	B.W.
N7	NB500	φ55.6x3.63	MAN HOLE	1	FLANGED
N8	NB40	φ48.3x3.05	STAND PIPE-1	2	S.W.
N9	NB40	φ48.3x3.05	STAND PIPE-2	2	S.W.
N10	NB50	φ50.8x3.54	BRD RECIRCULATION	2	S.W.
N11	RC1"	-	TEMPERATURE INDICATOR-T1	1	SCREENED
N12	RC1"	-	TEMPERATURE INDICATOR-T2	1	SCREENED
N13	RC1"	-	TEMPERATURE ELEMENT-T3	1	SCREENED
N14	RC1"	-	THERMOWELL -T4	1	SCREENED
N15	NB15	φ21.3x3.73	PRESSURE INDICATOR-PI	1	S.W.
N16	NB15	φ21.3x3.73	PRESSURE TRANSMITTER-TT	1	S.W.
N17	NB15	φ21.3x3.73	PRESSURE ROCKET-PP	1	S.W.

NOTES  
 01. DESIGN PRESSURE : 3.5 kg/cm<sup>2</sup>(g)  
 02. DESIGN TEMPERATURE : 150°C  
 03. HYD. TEST TO BE DONE AT SITE  
 04. FABRICATION, INSPECTION AND TESTING SHALL BE AS PER IEC.  
 05. FOLLOW COR :- AS PER RELEVANT OP.  
 06. DIMENSIONS ARE TO BE TAKEN FROM THE CENTER LINE UNLESS OTHERWISE SPECIFIED.  
 07. DIMENSION WITH + INDICATES FINISHED FINAL DIMENSION OF SHIP AFTER FINAL ASSEMBLY.  
 08. MATERIAL SPECIFICATION SA516Gr70 IS ALSO ACCEPTABLE IN PLACE OF SA515Gr70.  
 09. PIPES AND PLATES OF HIGHER SIZE IS ACCEPTABLE.  
 10. PLATE FORMED PIPES FOR MORE THAN NB500 WITH 100% RT.  
 11. STIFFENING RINGS SHALL BE WELDED INSIDE THE TANK WHEREVER SPACE AVAILABLE AND THE MAXIMUM DISTANCE BETWEEN THE STIFFENING RINGS SHALL BE 2000 MM.  
 12. IF SINGLE PLATE IS NOT AVAILABLE L52, L56, L10 SHALL BE KEPT AT 315' & L54, L58 SHALL BE KEPT AT 135'.

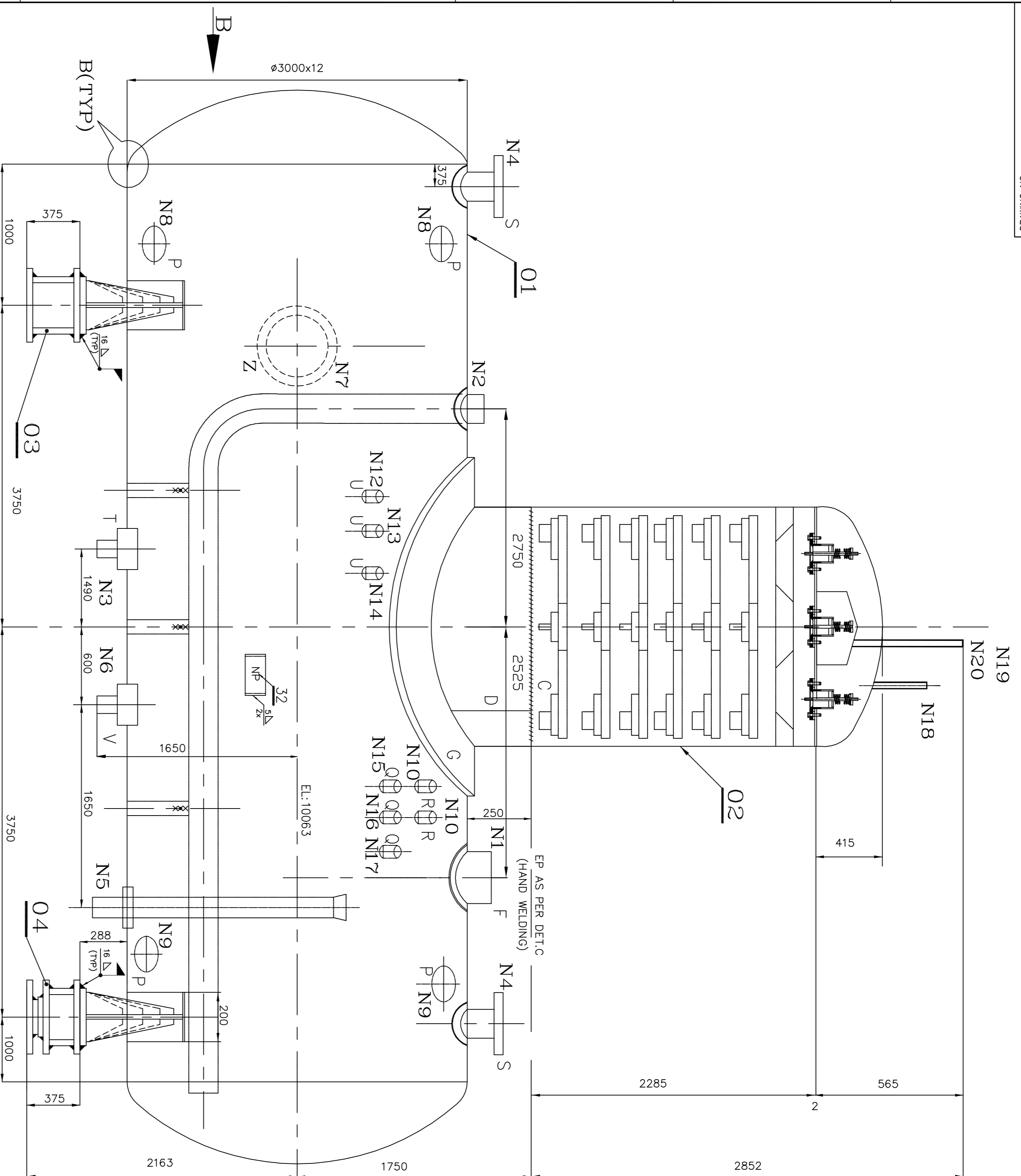
VAR ITEM NO	DESCRIPTION	QTY	UNIT	REMARKS
17	NOT M20	41304	20000	
18	PIPE CLAMP NB200	7740	08 1019	
15	PIPE φ219.1x6.35	58	258	
14	PIPE WITH END CLOSURE	242	167	
13	ASME BR16 BR 1R 1R	18	1700	
12	PIPE φ219.1x6.35	18	1700	
11	PIPE φ219.1x6.35	18	1700	
10	PIPE φ219.1x6.35	18	1700	
9	PIPE φ219.1x6.35	18	1700	
8	PIPE φ219.1x6.35	18	1700	
7	PIPE φ219.1x6.35	18	1700	
6	PIPE φ219.1x6.35	18	1700	
5	PIPE φ219.1x6.35	18	1700	
4	PIPE φ219.1x6.35	18	1700	
3	PIPE φ219.1x6.35	18	1700	
2	PIPE φ219.1x6.35	18	1700	
1	PIPE φ219.1x6.35	18	1700	

REV. NO.	ZONE	BRIEF RECORD OF REVISIONS	PPD.	CHD.	APPD.

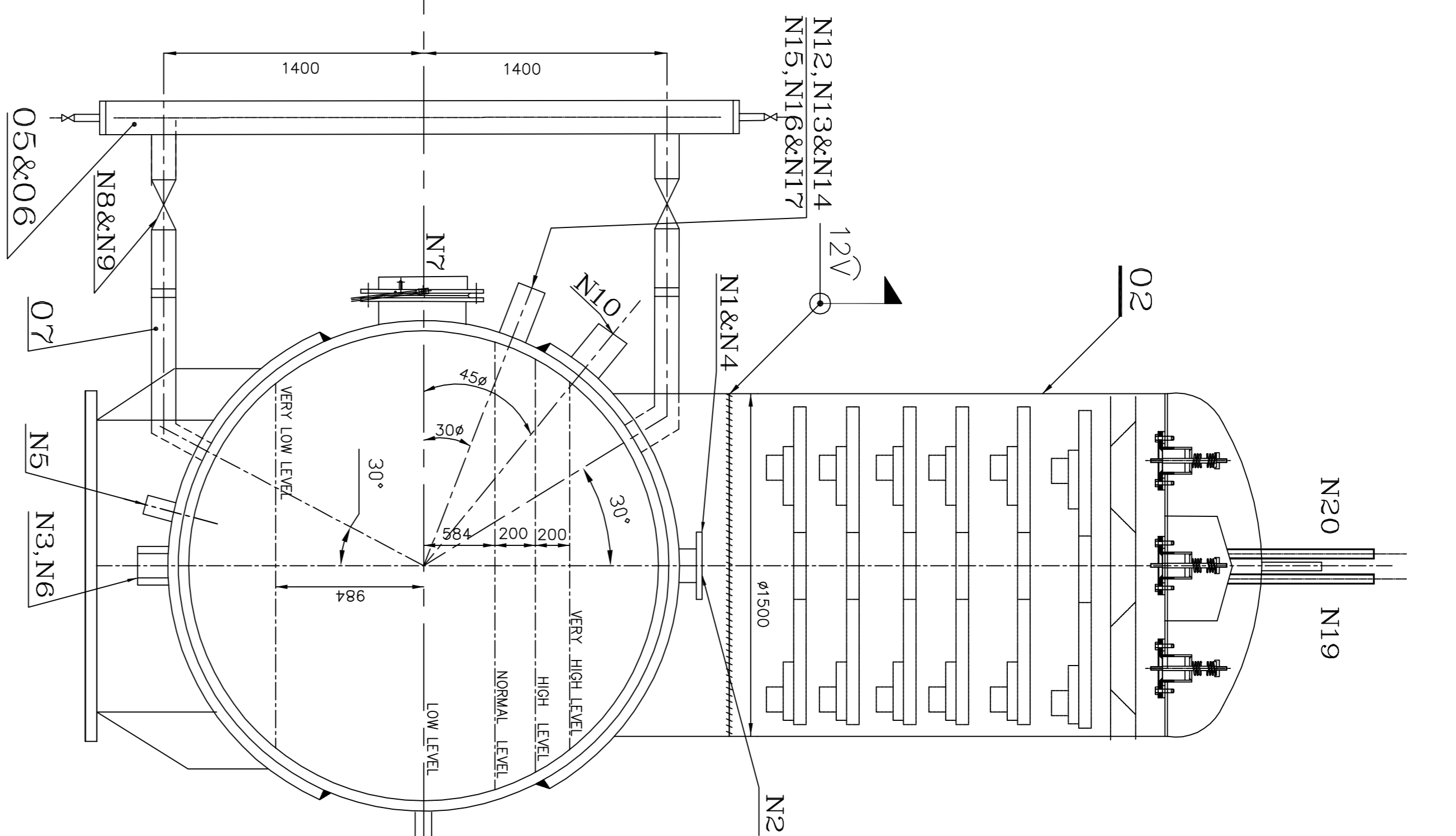
PROJECT: 2x660MW MAITRE SUPER THERMAL POWER PROJECT (EPC MAIN PLANT PACKAGE)  
 RAIPAL, BANGLADESH  
 OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH  
 CONTRACT NO: 7790  
 DRAWING NO: 1-81-026-1B026  
 SHEET NO: 00

DESIGNED BY: [Signature]  
 CHECKED BY: [Signature]  
 DRAWN BY: [Signature]  
 SCALE: NTS

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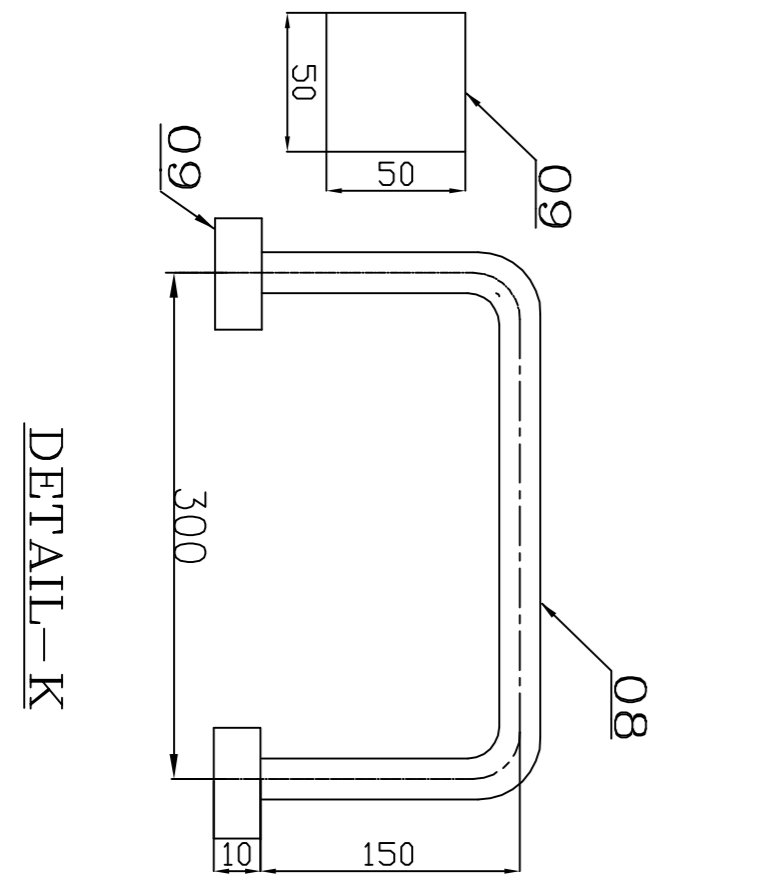
ELEVATION (VIEW-A)



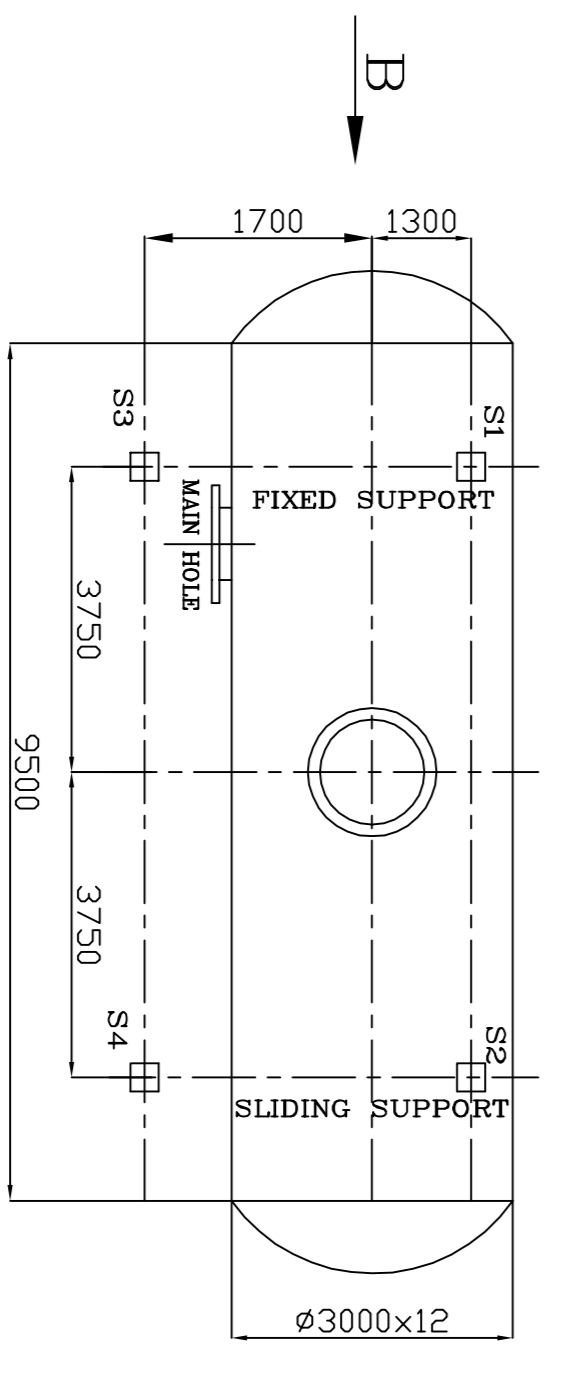
VIEW-B

**SCHEDULE OF STUBS:**

STUB No.	DESCRIPTION	No. OFF.	STUB SIZE	CONNECTING PIPE SIZE ODxT	END CONNECTION	REMARKS ELEVATION
N 1	STEAM INLET	1	NB 350	355.6 x 9.53	B.W.	d1 = 336.5
N 2	INITIAL HEATING	1	NB 200	219.1 x 6.35	B.W.	d1 = 206.4
N 3	BFD SUCTION	1	NB 150	168.3 x 7.11	B.W.	d1 = 155.6
N 4	SAFETY VALVE	2	NB 150	168.3 x 7.11	CL150 FLANGED	
N 5	FEED WATER TANK OVER FLOW	1	NB 100	114.3 x 6.02	B.W.	d1 = 103.5
N 6	DRAIN	1	NB 100	114.3 x 6.02	B.W.	d1 = 103.5
N 7	MAN HOLE	1	NB 600	---	FLANGED	
N 8	STAND PIPE - 1 (LT & LG)	2	NB 40	48.3 x 5.08	S.W.	
N 9	STAND PIPE - 2 (LT)	2	NB 40	48.3 x 5.08	S.W.	
N 10	BFD RE-CIRCULATION	2	NB 50	60.3 x 5.54	S.W.	
N 11	TEMPERATURE INDICATOR-TI	1	M33x2	---	SCREWED	
N 12	TEMPERATURE INDICATOR-TI	1	M33x2	---	SCREWED	
N 13	TEMPERATURE INDICATOR-TI	1	M33x2	---	SCREWED	
N 14	TEMPERATURE INDICATOR-TI	1	M33x2	---	SCREWED	
N 15	PRESSURE INDICATOR-PI	1	NB 15	21.3 x 3.73	S.W.	
N 16	PRESSURE TRANSMITTER-PT	1	NB 15	21.3 x 3.73	S.W.	
N 17	PRESSURE POCKET-PP	1	NB 15	21.3 x 3.73	S.W.	
N 18	BM WATER INLET	1	NB 100	114.3 x 3.05	B.W.	d1 = 108.2
N 19	VENT (CONTROLLED)	1	NB 25	33.4 x 4.55	S.W.	
N 20	VENT (UN CONTROLLED)	1	NB 25	33.4 x 4.55	S.W.	



DETAIL-K



KEY PLAN

- NOTES:-**
- 01 DESIGN PRESSURE : 3.5 Kg/sq.cm(g)
  - 02 DESIGN TEMPERATURE : 150 C
  - 03 WORKING MEDIUM : STEAM / WATER
  - 04 HYDRAULIC TEST PRESSURE AT SITE : 5.25Kg/sq.cm(g)
  - 05 FABRICATION, INSPECTION AND TESTING SHALL BE AS PER QAP
  - 06 FOLLOW QCP : AS PER RELEVANT QP.
  - 07 ITEM NO.07 PIPE NB 40 ISSUED IN RUNNING METRE FOR STAND PIPE CONNECTION. TO BE SUITABLY CUT, BENT AND WELDED AT SITE.
  - 08 SPARE STUBS SHALL BE BLANKED SUITABLY
  - 09 ITEM NO.08 & 09 SHALL BE WELDED SUITABLY AT SITE INSIDE THE TANK AS SHOWN IN DETAIL 'K' TO ENABLE ENTRY THROUGH MAN HOLE
  - 10 ALL WELDING DETAILS ARE AS PER DRG.NO. 1-81-026-U8026

ITEM NO.	DESCRIPTION	DRAWING NO.	QTY.
01	FEED WATER STORAGE TANK Ø 3000	1-81-026-U8029	1
02	DEAERATOR ASSY.	1-81-026-U8024	1
03	FIXED SADDLE	3-81-026-U8031	1
04	SLIDING SADDLE	3-81-026-U8038	1
05	STAND PIPE FOR LEVEL TRANSMITTER	3-81-026-U8034	561.685
06	LEVEL GAUGE	3-81-026-U8036	591.265
07	PIPE Ø 48.3x5.08 L = 5000	SA-106 GR.B	27.050
08	RUNG ROD Ø16x600	IS2062 Fe410A	0.1960
09	PLATE 10x400x400	IS2062 Fe410W	12.1560

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**PROJECT:** 2x660MW MAITREE SUPER THERMAL POWER PROJECT  
**RAMPAL, BANGLADESH**  
**(EPC MAIN PLANT PACKAGE)**

**OWNER:** BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH

**ENGINEER CONSULTANT:** FICHTNER  
 M & P Fichtner GmbH  
 Schönbühlstrasse 1  
 70569 Stuttgart  
 GERMANY

**DESIGNER:** BHARAT HEAVY ELECTRICALS LIMITED  
 HEAVY PLATES & VESSELS PLANT, VISAKHAPATNAM-530012

**APPROVED BY:** DEAERATOR MAIN ASSEMBLY

**DATE:** 02.08.2018

**SCALE:** NTS

**REV:** 00

**CUST. No.:** 7790

**FORM NO. 0425/2**