

E.I.L. STANDARDS
 6-12-01; 6-12-02;
 6-12-11; 6-12-14; 6-44-04;
 3853-00-W-SP-001;
 3853-00-W-SP-004;

DESIGN DATA
 DESIGN CODE: ASME SEC - VIII DIV - 1 1995+ADDENDA LATEST+NACE MR-0175-97
 DESIGN PRESSURE: 9.0 KG/CM²(G)/F.V.
 WORKING PRESSURE: 6.0 KG/CM²(G)/F.V.
 CORROSION ALLOWANCE: 3.0 mm
 JOINT EFFICIENCY: SHELL 1.0, HEAD 1.0
 RADIOGRAPHY: SHELL FULL, HEAD FULL
 HEAT TREATMENT: NIL
 POST WELD HEAT TREATMENT: YES
 OPERATING MEDIUM: H₂+HC+H₂S+H₂O
 CAPACITY: 10 M³/DAY
 FIRE PROOFING (mm): -
 INSULATION: NIL
 INSPECTION BY: M/S B.V.I.S.
 PURCHASE ORDER No.: L.O.I. NO. XXXXXXXXXX DT. XXXXXX
 QUANTITY REQUIRED: ONE
 WEIGHT Kgs: EMPTY ~4700, OPERATING ~10375, HYDROTEST ~14700

REFERENCE DRAWINGS
 1. NAME PLATE SHIT 2 OF 3
 2. MANWAY DAWIT SHIT 3 OF 3
 3. NOTES XX-GEN-448
 4. LADDER CLEATS XX-GEN-479

HOLDS UP

STEM OUT CONDITIONS:
 STEAM TEMPERATURE: 150°C
 STEAM PRESSURE: 1 KG/CM²G

MANHOLE R.F. PAD FOULING WITH NOZ. 'SV' & PLATFORM CLEATS TO BE NOTCHED SUITABLY AT FOULING AREA. MINIMUM 980mm TO BE MAINTAINED AT PLATFORM CLEATS AFTER NOTCHING.

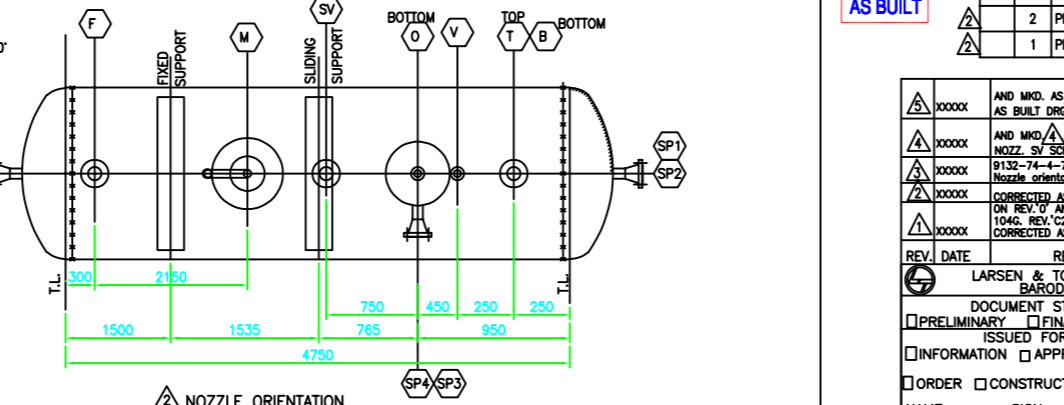
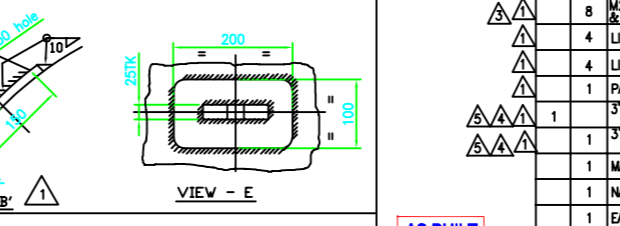
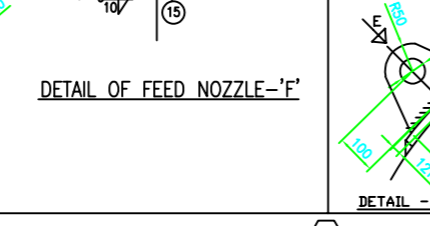
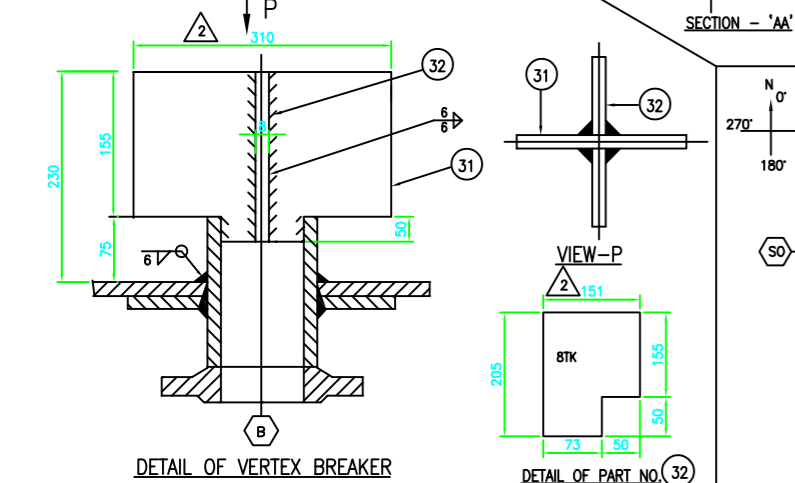
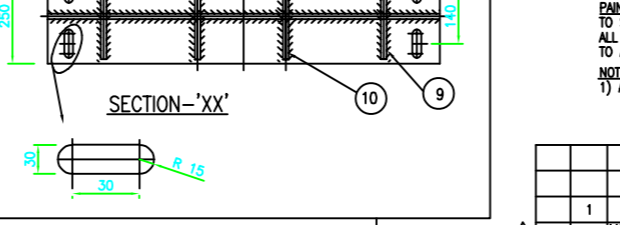
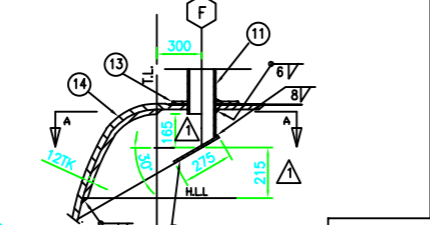
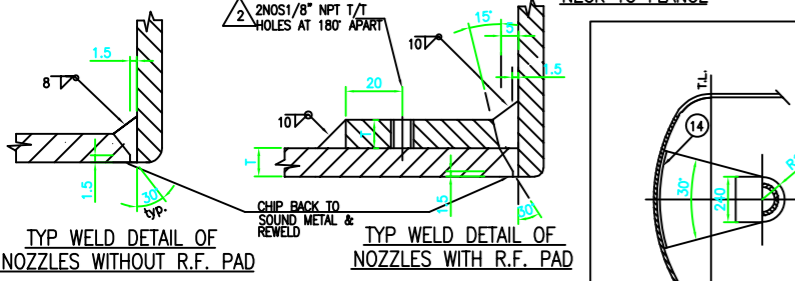
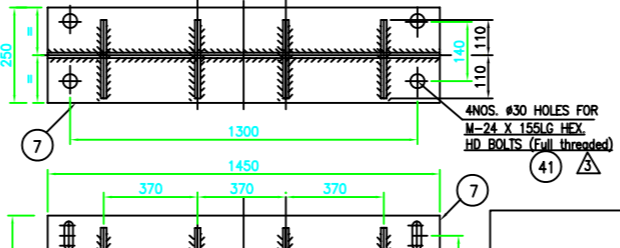
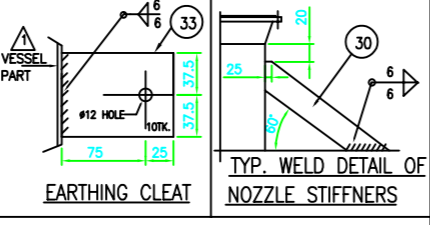
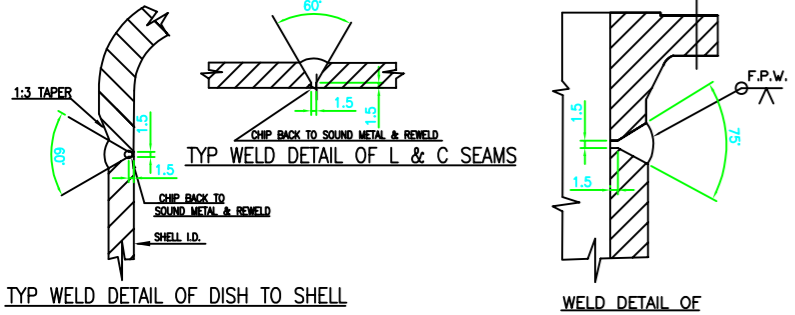
LOADING DATA

	ERRECTION	OPERATING	TESTING
LOAD AT BASE(KGS)	4700	10375	14700
SHEAR	WIND 390	390	120
FORCE(KG)	SEISMIC 190	415	*
MOMENT (KG-M)	WIND 390	390	120
	SEISMIC 225	490	*

* SEISMIC WON'T GOVERN DURING TESTING CONDITION

NOZZLE SCHEDULE

MARK	QTY	SERVICE	NOM. DIA.	SCH/THK	RATING TYPE/FACING	PROJ. W.N.R.F.	R.F. PAD OD X THK
F	1	FEED	8"	80	150	965 (988/984)	440 X 12
B	1	BOTTOM OUTLET	6"	80	965 (988/988)	340 X 12	
T	1	TOP OUTLET	6"	80	965 (982/970)	340 X 12	
V	1	VENT	2"	160	915 (919/922)		
SO	1	STEAM OUT	1 1/2"	160	550 (549/553)		
M	1	MANHOLE WITH BF+DAWIT	20"	12TK	1015 (1002/1007)	1010 X 12	
O	1	SOUR WATER OUTLET	2"	160	350 (350/352)		
SP1,2	2	STAND PIPE	2"	160	350 (551/551) For SP1 350 (551/551) For SP2		
SP3,4	2	STAND PIPE	2"	160	350 (512/512) For SP3 350 (512/512) For SP4		
SV	1	SAFETY VALVE	3"	80	150 W.N.R.F. 965 (988/982)	179 X 12	



PAINTING: AFTER HYDROTEST THE EQUIPMENT SHOULD BE BLANKED AND SAND BLASTED TO SA 2 1/2 OF SIS-05-5900 WITH SURFACE PROFILE OF 25 TO 30 MICRONS. ALL EXTERNAL SURFACES SHALL BE PAINTED WITH ONE COAT OF INORGANIC ZINC SILICATE COATING TO A TOTAL D.F.T. OF 65 TO 75MICRONS BY AIR LESS SPRAY.
NOTE:
 1) ALL FLANGE GASKET FACES TO BE SMOOTH FINISH TO 125 AARH.

AS BUILT

NO.	DESCRIPTION	QTY	UNIT	REMARKS
1	M24 X 155LG HEX. HD. BOLTS WITH WASHER & 2 NUTS (FULLY THREADED)	41		IS1367 CL. 4.4
4	LIFTING LUG 150 X 150 X 25TK	40		IS2062 GRA
4	LIFTING LUG PAD PL. 100X12TKX200LG	39		SA516GR80 NACE+HC
1	PAD PL. OD 179; ID 89; 12TK 'SV'	38		SA516GR80 NACE+HC
1	3"NB.FLG. SCH.160;150#;WNRF 'SV' (MACHINED FROM SCH.160)	37		SA106GRB NACE+HC
1	3"NB PIPE SCH 80; 170LG 'SV' (MACHINED FROM SCH.160)	36		SA106GRB NACE+HC
1	MANWAY DAWIT ASSY.	35		REF SH 30F3
1	NAME PL. & BRACKET	34		REF SH 20F3
1	EARTHING CLEAT 100 X 75 X 10TK	33		IS2062 GRA
2	PL. 205 X 151 X 8TK(CUT TO SUIT)	32		SA516GR80 NACE+HC
1	PL. 310 X 205 X 8TK(CUT TO SUIT)	31		SA516GR80 NACE+HC

INTER DISCIPLINE CHECK

DISCIPLINE	SIG.	DATE
MECHANICAL		
ELECTRICAL		
INSTR.		
QUALITY		
PROJECTS		

REVISIONS

REV. DATE	REV. DESCRIPTION	DRN. CHKD.	APPD.

DOCUMENT STATUS
 PRELIMINARY FINAL AS BUILT
 ISSUED FOR APPROVAL ENQUIRY
 ORDER CONSTRUCTION REVIEW

REVISIONS
 1 REVIEWED NO COMMENTS
 2 AS COMMENTED REVISED DRAWING REQUIRED
 3 NOT MEETING SPECIFICATIONS RESUBMIT

NAME: SIGN: DATE: NAME: SIGN: DATE:

PART LIST

OWNER: HINDUSTHAN PETROLEUM CORPORATION LTD. - VISAKH REFINERY, VISAKHAPATNAM

ENGINEERS INDIA LIMITED, NEW DELHI.

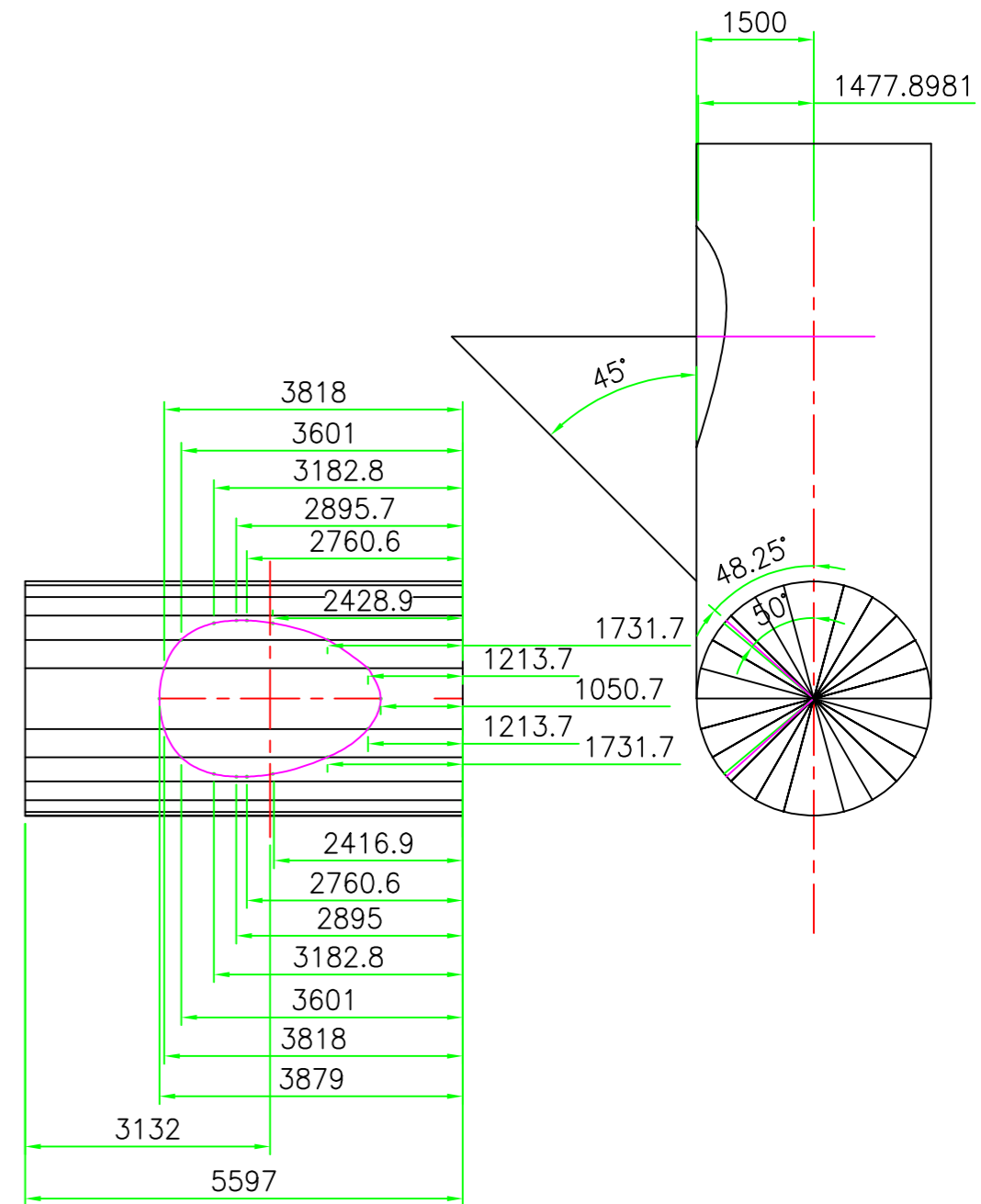
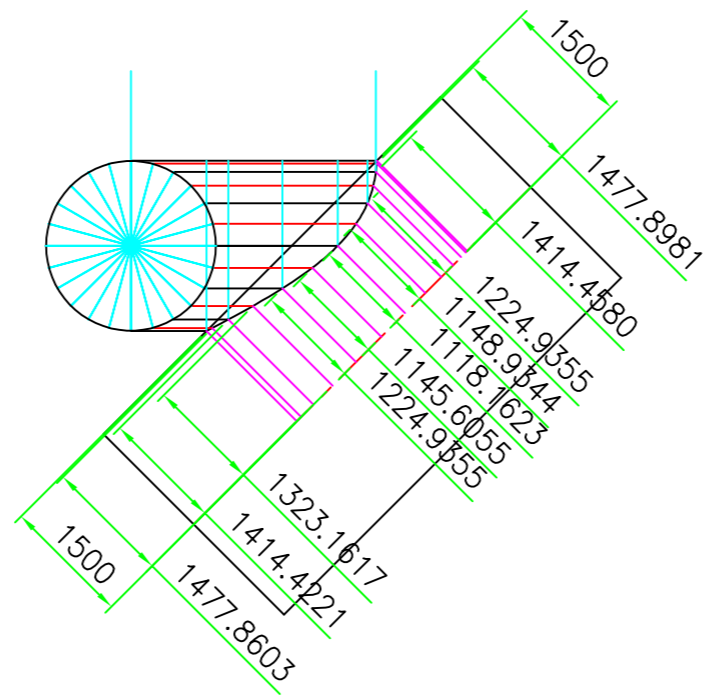
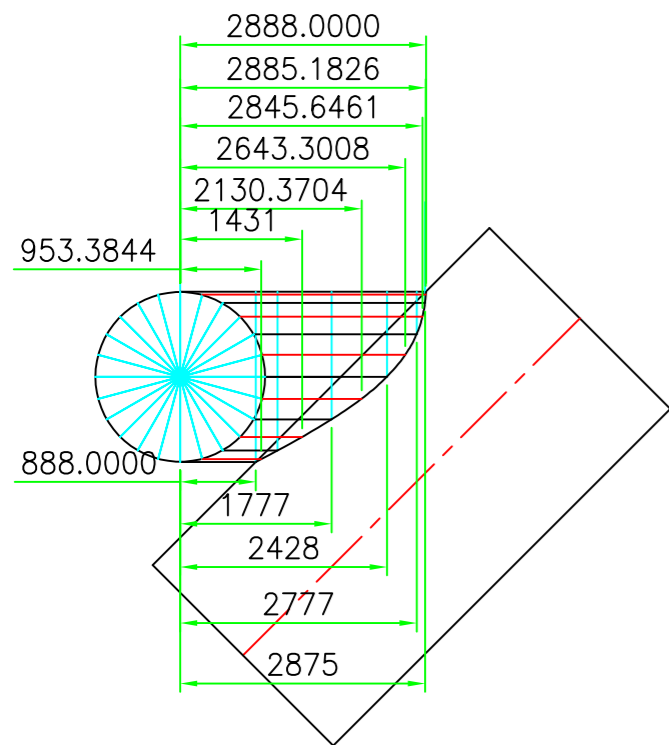
LARSEN & TOUBRO LIMITED, BARODA.

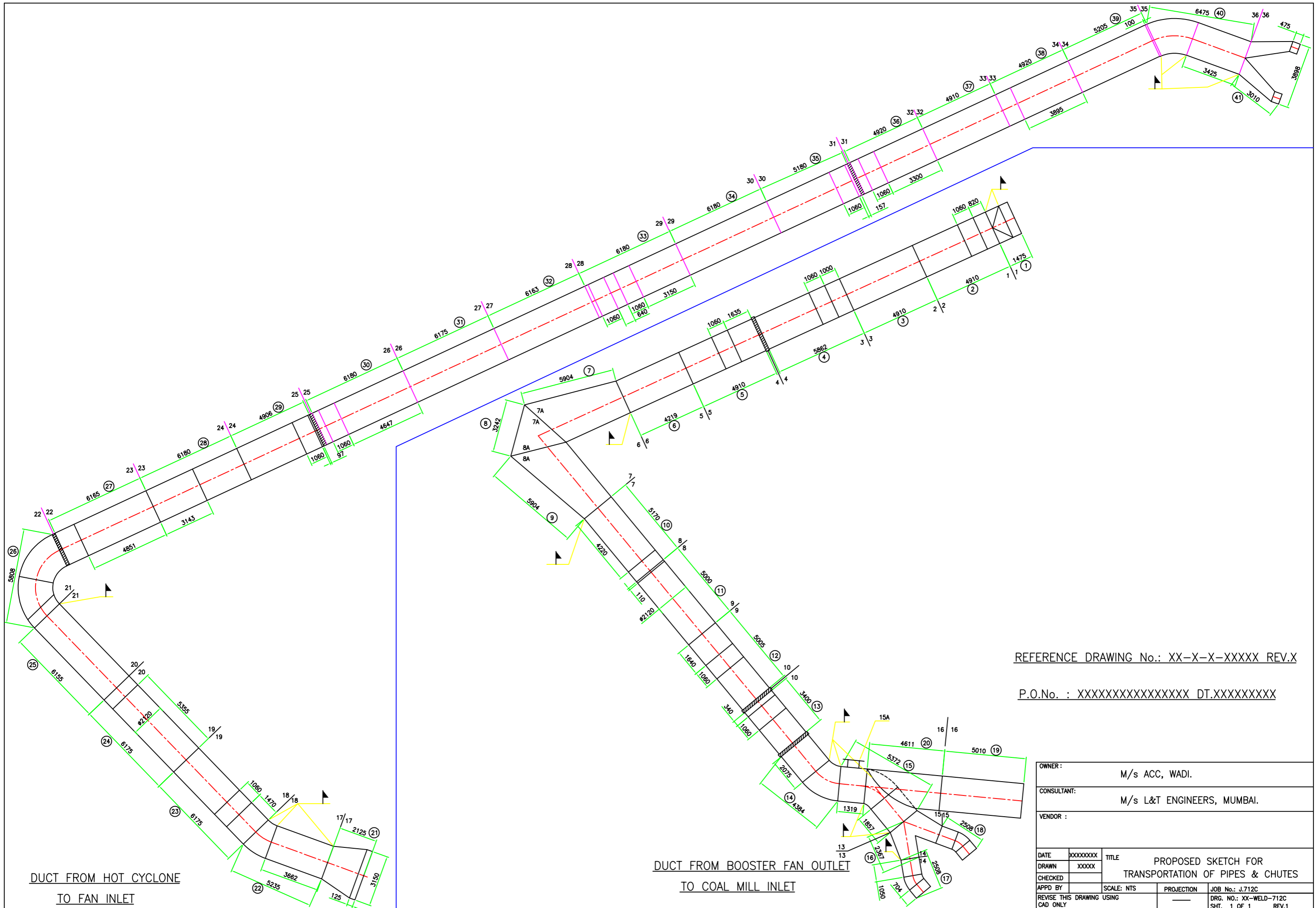
DEPT: HARP
 DATE: XXXXXX
 CHECKED: XXXXXX
 DATE: XXXXXX
 APPD BY: XXXXXX
 DATE: XXXXXX

VENDOR: XXXXXX

TITLE: DHDS PROJECT STRIPPER/STABILIZER REFLUX DRUM (ITEM NO.: 60-D-10) JOB NO.: J.488K

L&T JOB No: XXXXX CAD FILE NAME:488K1
 REF. DRG. NO.:XXXXXXXXX DRG. No:XXXXXXXXX
 XXXXXXXXXXXX REV.'XX' SHT. 1 OF 3 REV. '5'





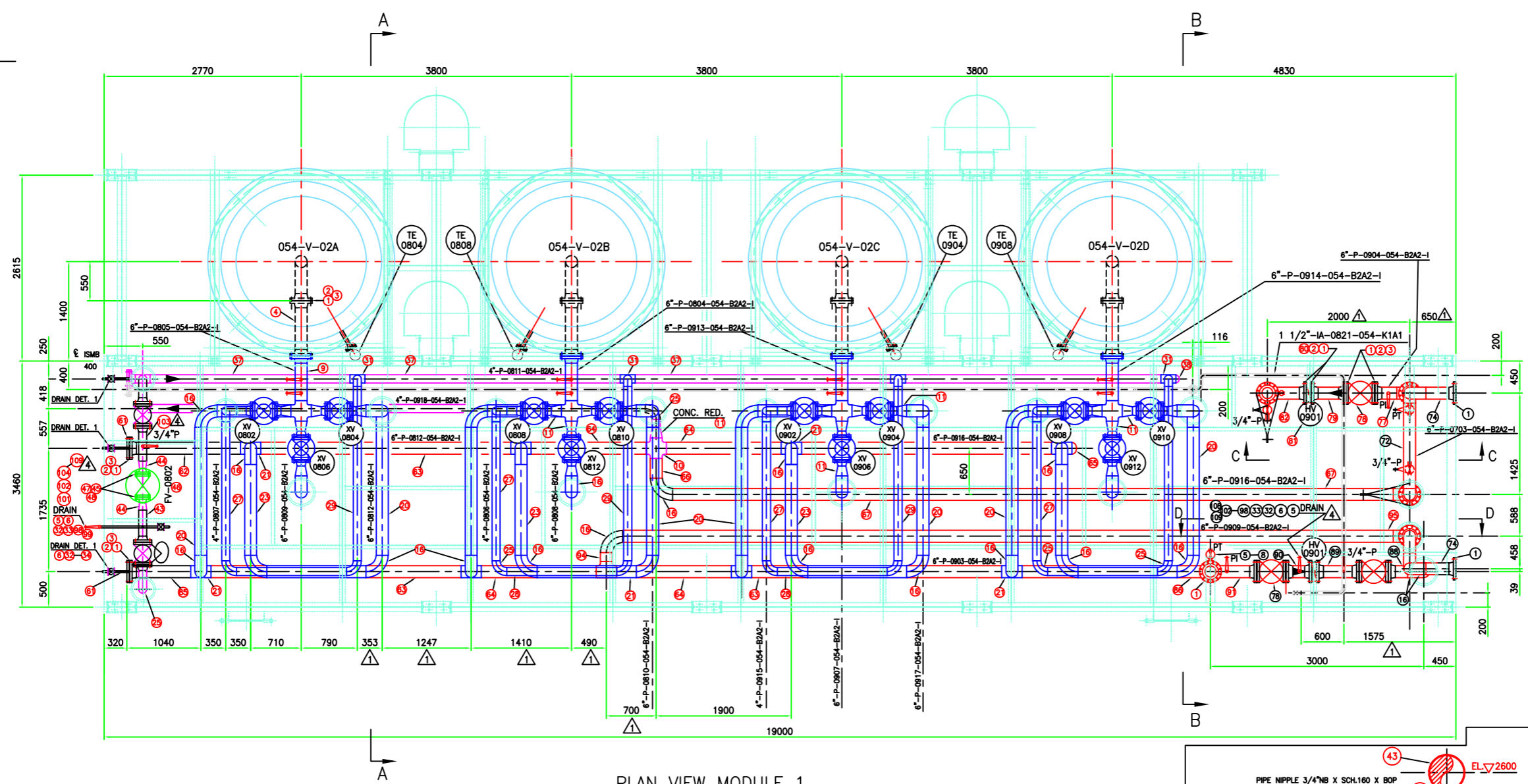
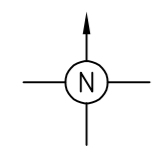
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P.O.No. : XXXXXXXXXXXXXXXX DT.XXXXXXXXXX

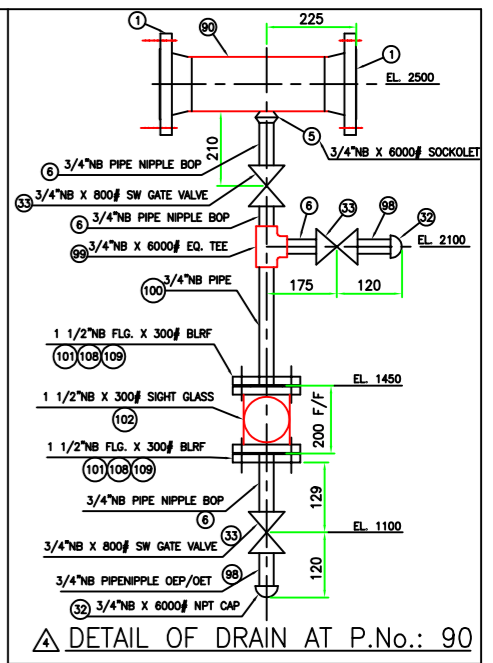
OWNER:		M/s ACC, WADI.	
CONSULTANT:		M/s L&T ENGINEERS, MUMBAI.	
VENDOR :			
DATE	XXXXXXXX	TITLE	PROPOSED SKETCH FOR
DRAWN	XXXXX		TRANSPORTATION OF PIPES & CHUTES
CHECKED			
APPD BY		SCALE: NTS	PROJECTION
REVISION THIS DRAWING USING			JOB No.: J.712C
CAD ONLY			DRG. NO.: XX-WELD-712C
			SHT. 1 OF 1 REV.1

DUCT FROM HOT CYCLONE
TO FAN INLET

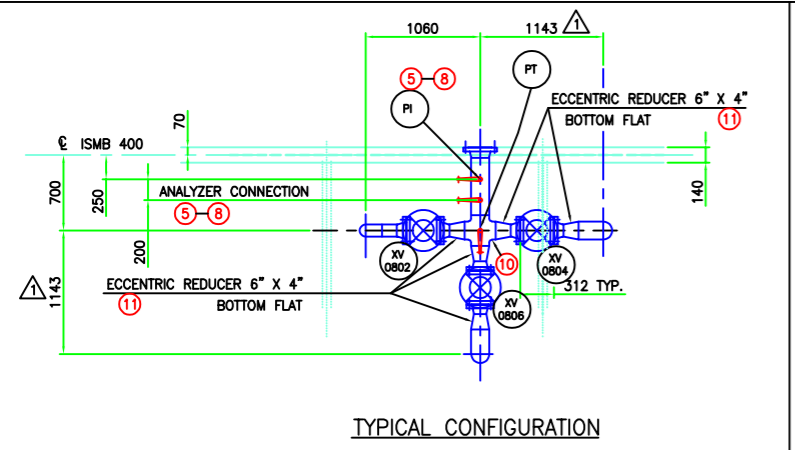
DUCT FROM BOOSTER FAN OUTLET
TO COAL MILL INLET



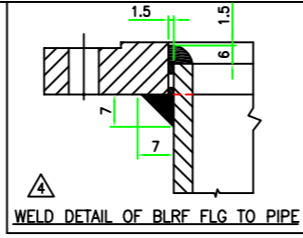
PLAN VIEW MODULE 1
FOR PART LIST REFER SHT. 10 OF 20



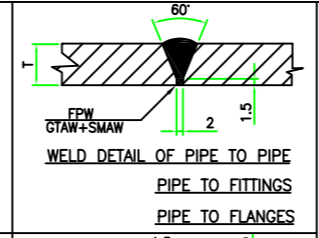
DETAIL OF DRAIN AT P.No.: 90



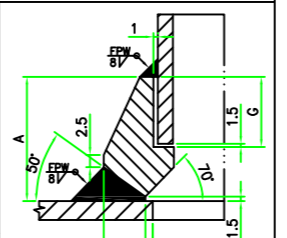
TYPICAL CONFIGURATION



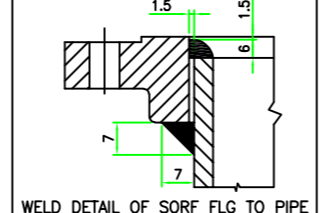
WELD DETAIL OF BLRF FLG TO PIPE



WELD DETAIL OF PIPE TO FITTINGS

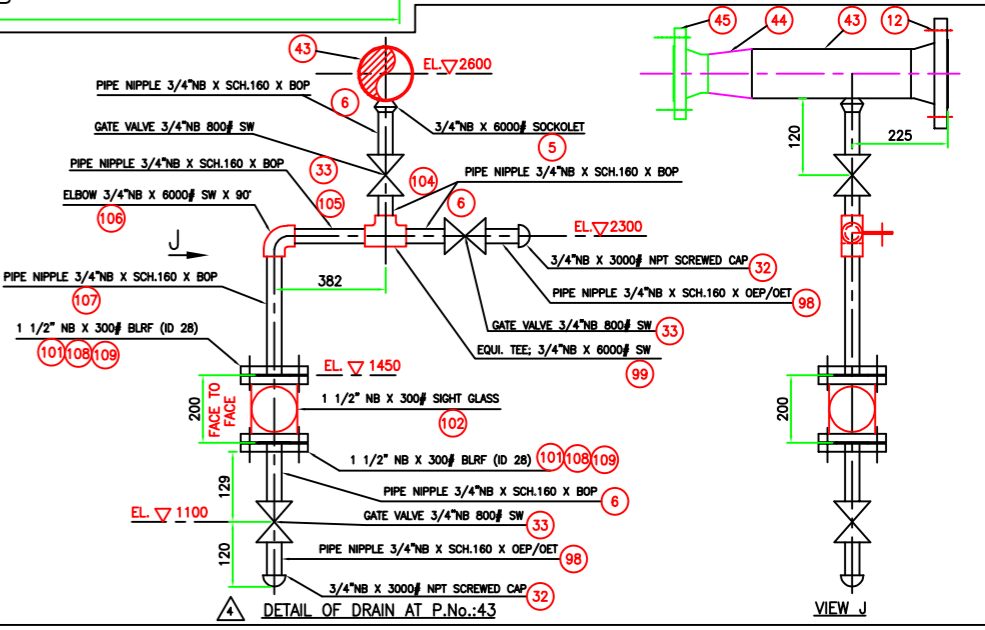


WELD DETAIL OF PIPE TO FLANGES

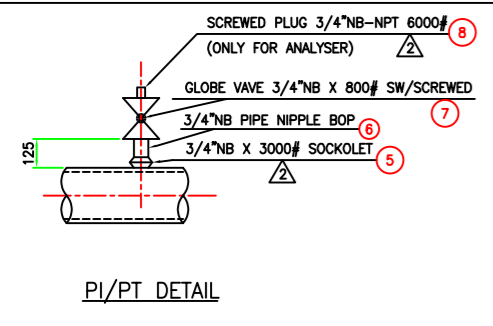


WELD DETAIL OF SORF FLG TO PIPE

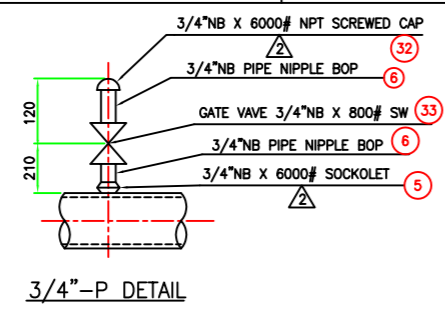
SOCKET SIZE	6000#				
	A	B	C	F	G
3/4"	36.5	50.8	25.4	45.2	12.5
1"	39.7	61.9	33.3	57.2	12.5



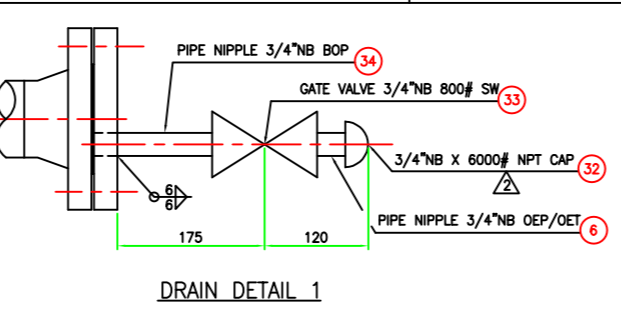
DETAIL OF DRAIN AT P.No.: 43



PI/PT DETAIL



3/4\"-P DETAIL



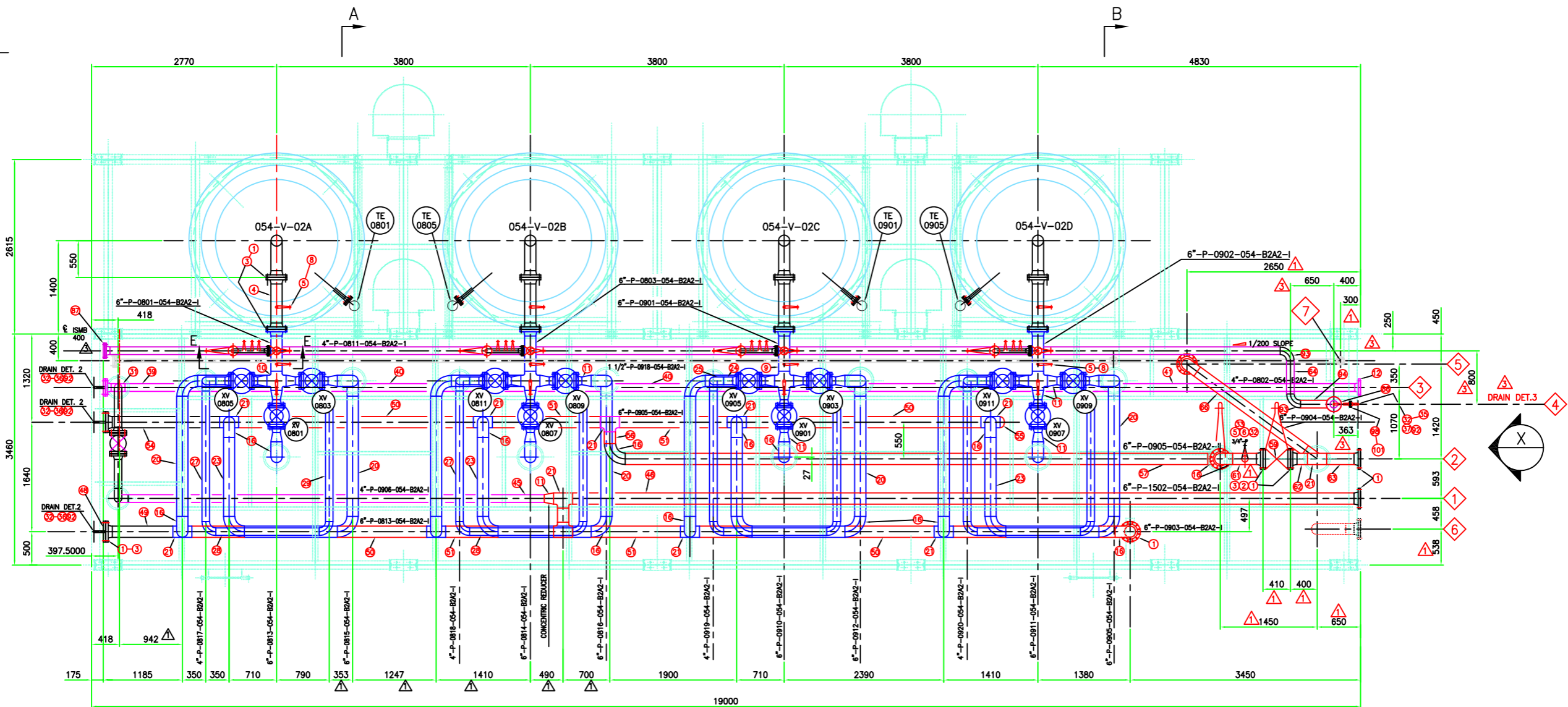
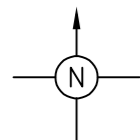
DRAIN DETAIL 1

REV	DESCRIPTION	DATE	DRN	CHKD	APPD
1	FAX MSG. DT 31-8-00. AND ALL CORRECTIONS MKD AS REV 3/4\"-NB DRAIN SYSTEM ADDED AT P Nos. 43&90 AS PER M/s UOP				
2	REV1 DRG. AND ALL CORRECTIONS MKD AS DRAIN DETAIL - 2 DELETED AS PER M/s LLOYDS COMMENTS ON				
3	REV '1' DRAWINGS. ALL CORRECTIONS MKD AS CORRECTED AS PER M/s UOP COMMENTS MADE ON SHT No. 15 & 16 OF 21				
4	REV 1 CORRECTED AS PER M/s UOP REV 1 DRGS, REVISED & MKD AS				

OWNER:	M/S I.O.C.L., GUWAHATI.
CONSULTANT:	M/s UOP N.V., BELGIUM.
VENDOR:	
DATE:	XXXXXX
DRAWN:	XXXXXX
CHECKED:	XXXXXX
APPD BY:	XXXXXX
SCALE:	1:35
PROJECTION:	1st ANGLE
JOB NO.:	J.723
DRG. NO.:	XX-GEN-502
SHT.:	12 OF 21
REV.:	4

PLAN VIEW OF MODULE-1

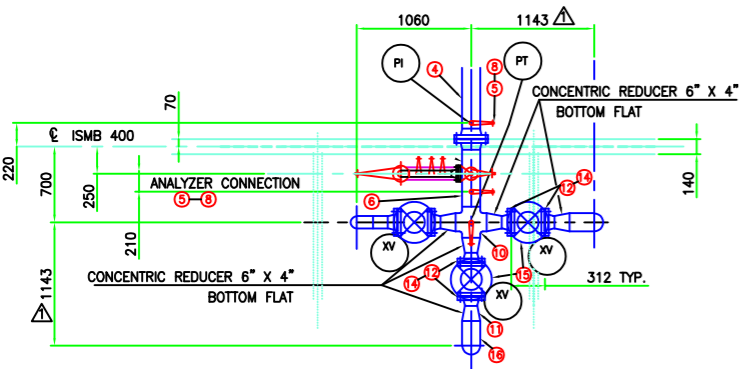
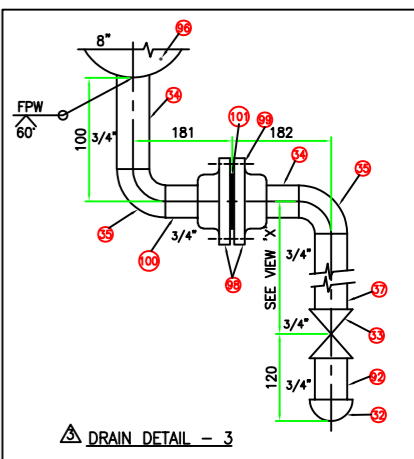
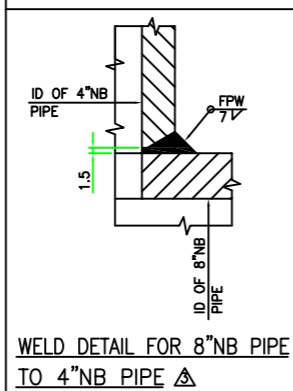
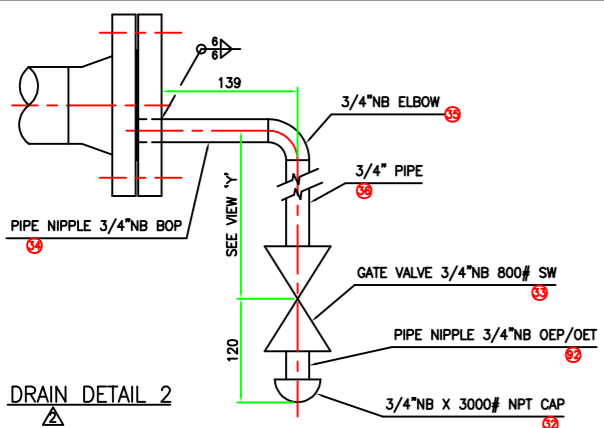
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 CAD FILE SCALE : 1:35
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PLAN VIEW MODULE 2

FOR PART LIST REFER SH. 16 OF 21

- ① FROM PV-0801
- ② TO FEED - ADSORPTION EFFLUENT EXCHANGER
- ③ FROM FV-0801
- ④ TO RELIEF HEADER
- ⑤ FROM ADSORBER FEED HEADER
- ⑥ TO PURGE GAS DESORPTION EFFLUENT EXCHANGER
- ⑦ INSTRUMENT AIR



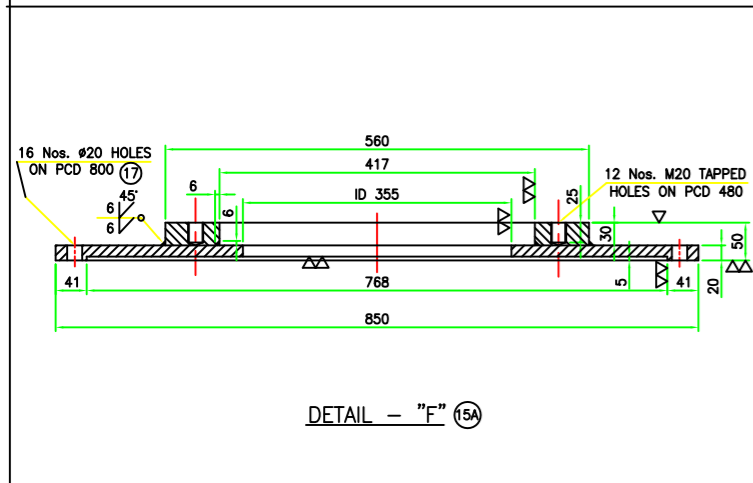
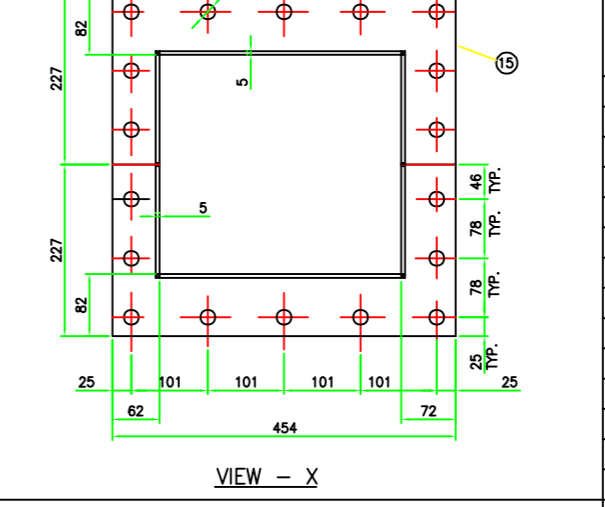
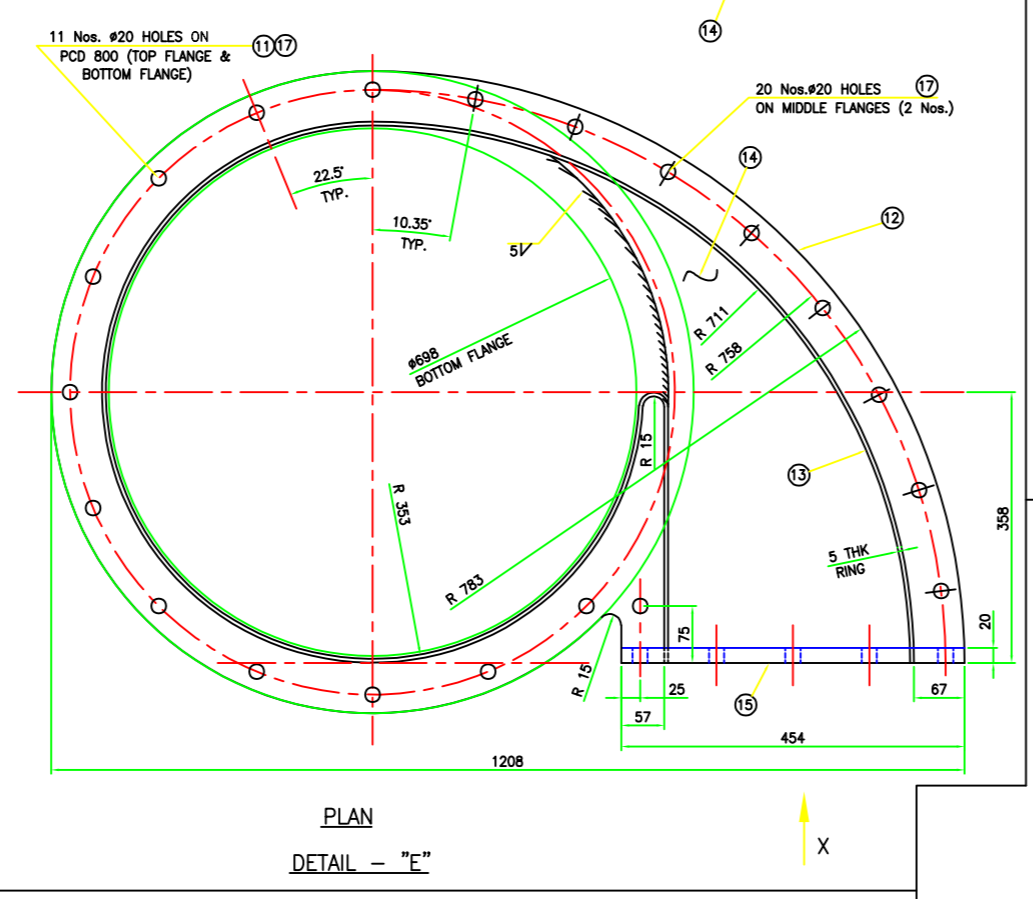
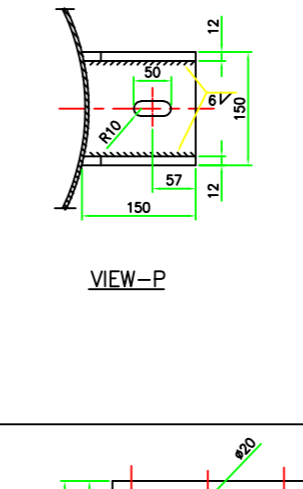
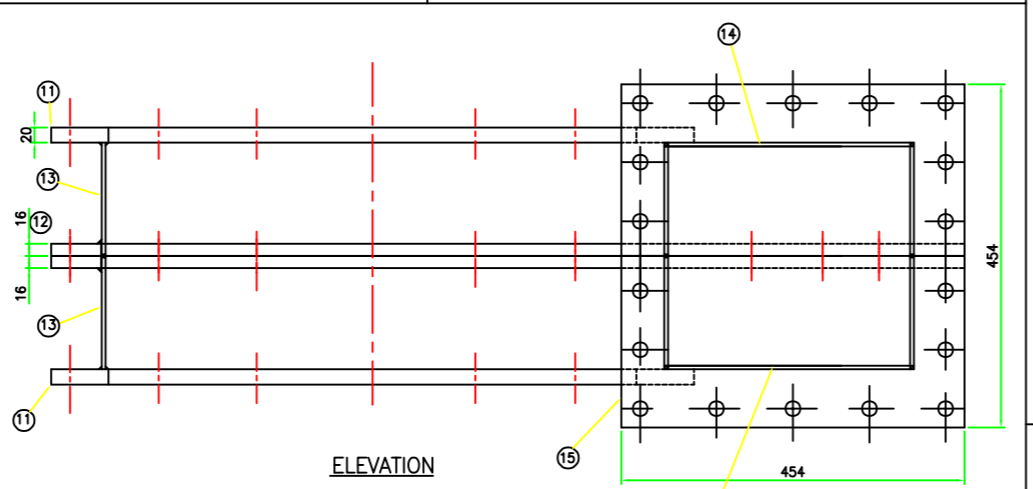
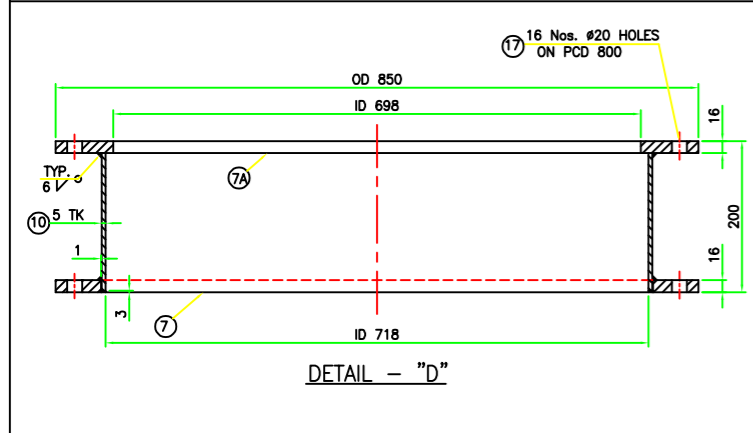
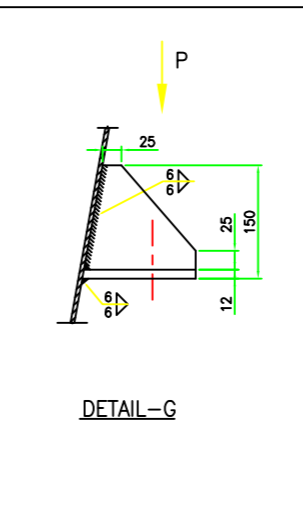
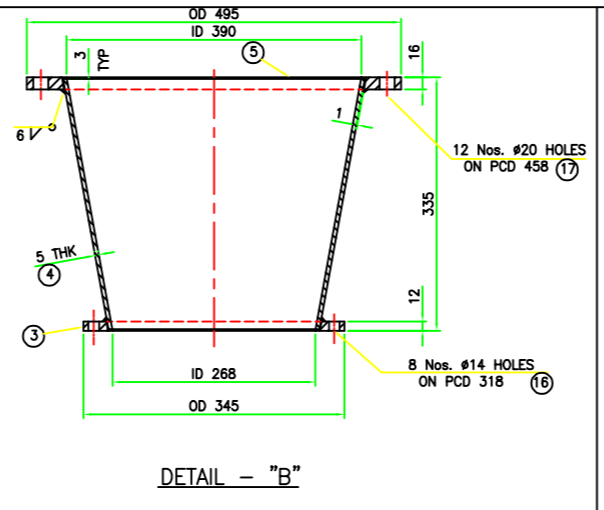
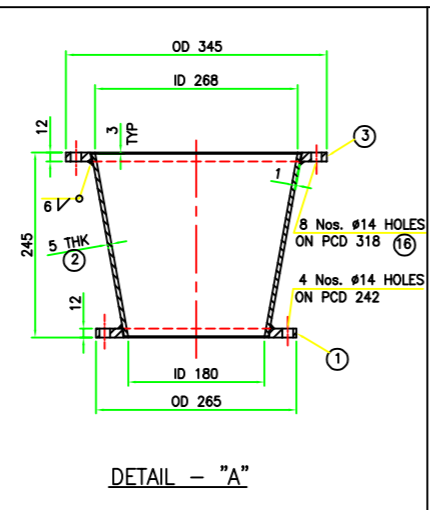
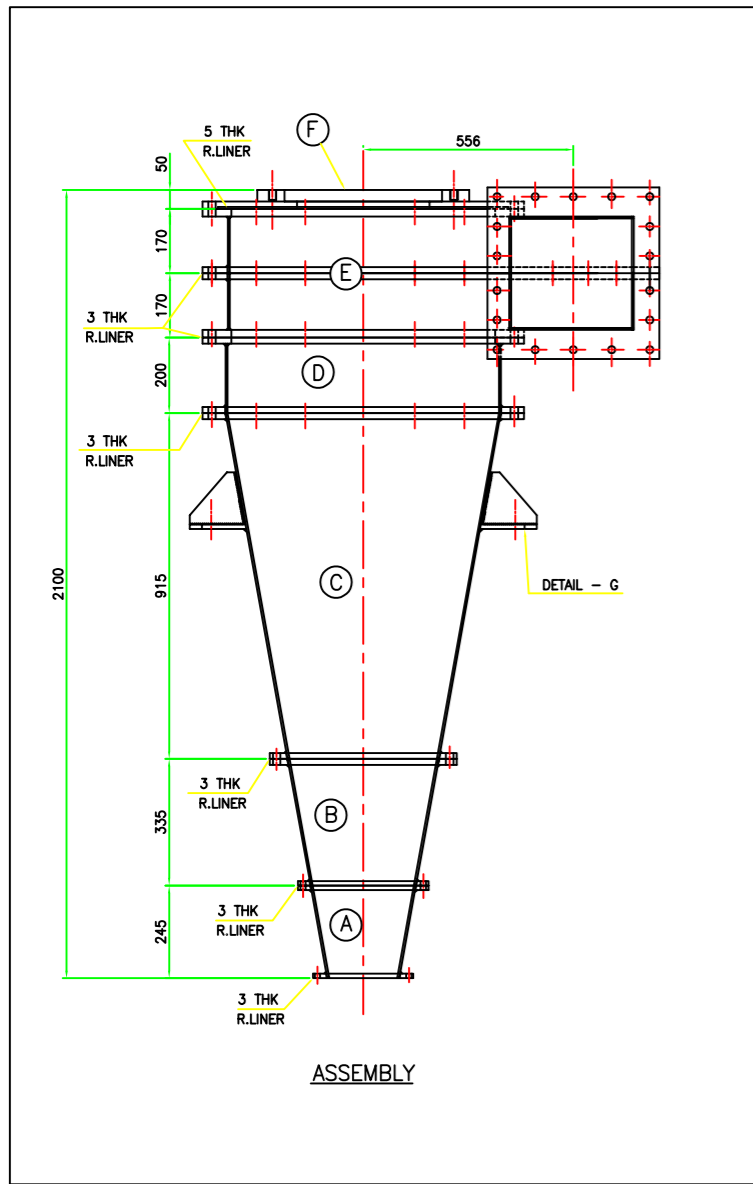
TYPICAL CONFIGURATION

REF. UOP DRAWING No. B H6705 - 502. SH. 2 OF 3

OWNER:	M/S I.O.C.L., GUWAHATI.
CONSULTANT:	M/s UOP N.V., BELGIUM.
VENDOR:	
DATE:	XXXXX
DRAWN:	XXXXX
CHECKED:	XXXXX
APPD BY:	XXXXX
SCALE:	1:35
PROJECTION:	1st ANGLE
JOB NO.:	J.723
DRG. NO.:	XX-GEN-502
SH.:	13 OF 21
REV.:	3

REV	DESCRIPTION	DATE	DRN	CHKD	APPD
1	CORRECTIONS ARE MKD AS REV 1				
2	CORRECTED AS PER M/s UOP REV 1 DRG (DT.28.7.00). ALL				
3	SH. 12 OF 21 REV 1 DRG. AND MKD AS REV 1				
4	DRAIN DETAIL - 2 ADDED AS PER M/s LLOYDS COMMENTS ON				
5	AS REV 1				
6	CORRECTED AS PER M/s UOP REV 1 DRG, REVISED AND MKD				

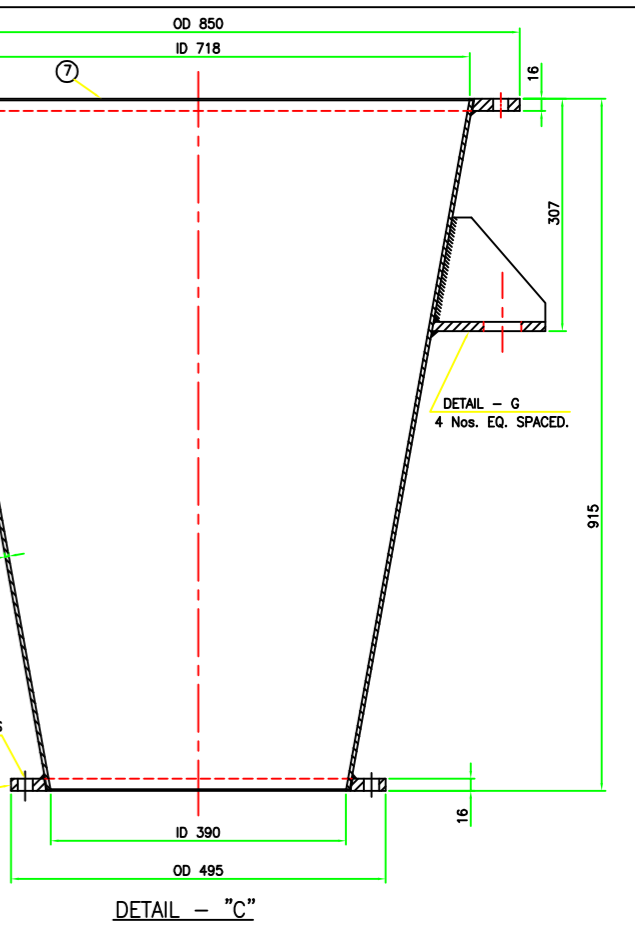
CAD FILE NAME : 723PIPE
 CAD FILE SCALE : 1:35
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NOTES :

1. ALL DIMENSIONS ARE IN MM.
2. RADIOGRAPHY - NIL.
3. RUBBER LINERS SUPPLIED BY OTHERS.
4. FABRICATED AS PER SAMPLE.

S.No.	DESCRIPTION	QTY.
A	LOWER CONE SECTION	6 Nos.
B	MIDDLE CONE SECTION	6 Nos.
C	UPPER CONE SECTION	6 Nos.
D	CYLINDRICAL SECTION	2 Nos.
E	INLET HEAD	2 Nos.
F	TOP COVER	6 Nos.



QTY.	DESCRIPTION	ITEM NO.	GRADE	IS CODE
70	M18 X 75 LG ; HEX. BOLT WITH NUT & WASHER	17		IS 1364
8	M12 X 60LG ; HEX.BOLT WITH NUT & WASHER	16		IS 1364
1	FLANGE ; OD 850/348 X 55TK	15A		IS 2062 GR A
2	SQUARE FLANGE ; 454 X 227 X 20 TK	15		IS 2062 GR A
2	TOP & BOTTOM PLATE ; 340 X 700 LG X 5TK CUT TO SHAPE	14		IS 2062 GR A
2	RING ; WIDTH 150 X 5TK X 3200 LG CUT TO SHAPE	13		IS 2062 GR A
2	MIDDLE FLANGES ; WIDTH 67 X 16TK CUT TO SUIT AS PER DETAIL-E	12		IS 2062 GR A
2	TOP&BOTTOM FLANGE ; OD 850 X ID 698 X20TK	11		IS 2062 GR A
1	SHELL ; OD 728 X 200 LG X 5 TK	10		IS 2062 GR A
8	RIB ; 150 X 150 X 12 TK CUT TO SUIT	9		IS 2062 GR A
4	BRACKET PLATE ; 150 X 150 X 12 TK CUT TO SUIT	8		IS 2062 GR A
1	FLANGE ; OD 850 X ID 698 X 16 TK	7A		IS 2062 GR A
2	FLANGE ; OD 850 X ID 730 X 16 TK	7		IS 2062 GR A
1	CONE ; ID 390/718 X 5 TK X HT .915 CUT TO SUIT	6		IS 2062 GR A
2	FLANGE ; OD 495 X ID 402 X 16 TK	5		IS 2062 GR A
1	CONE ; ID 268/390 X 5 TK X HT .335 CUT TO SUIT	4		IS 2062 GR A
2	FLANGE ; OD 345 X ID 280 X 12 TK	3		IS 2062 GR A
1	CONE ; ID 180/268 X 5 TK X HT. 245 CUT TO SUIT	2		IS 2062 GR A
1	FLANGE ; OD 265 X ID 192 X 12 TK	1		IS 2062 GR A

PUR No. M.No. DESCRIPTION P.No. DRG.No. MATL. UNIT WT. TOTAL WT.

PART LIST

OWNER: M/s K.I.O.C.L.

CONSULTANT: M/s K.I.O.C.L.

VENDOR :

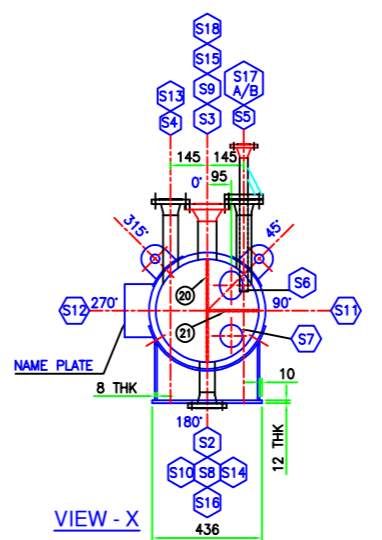
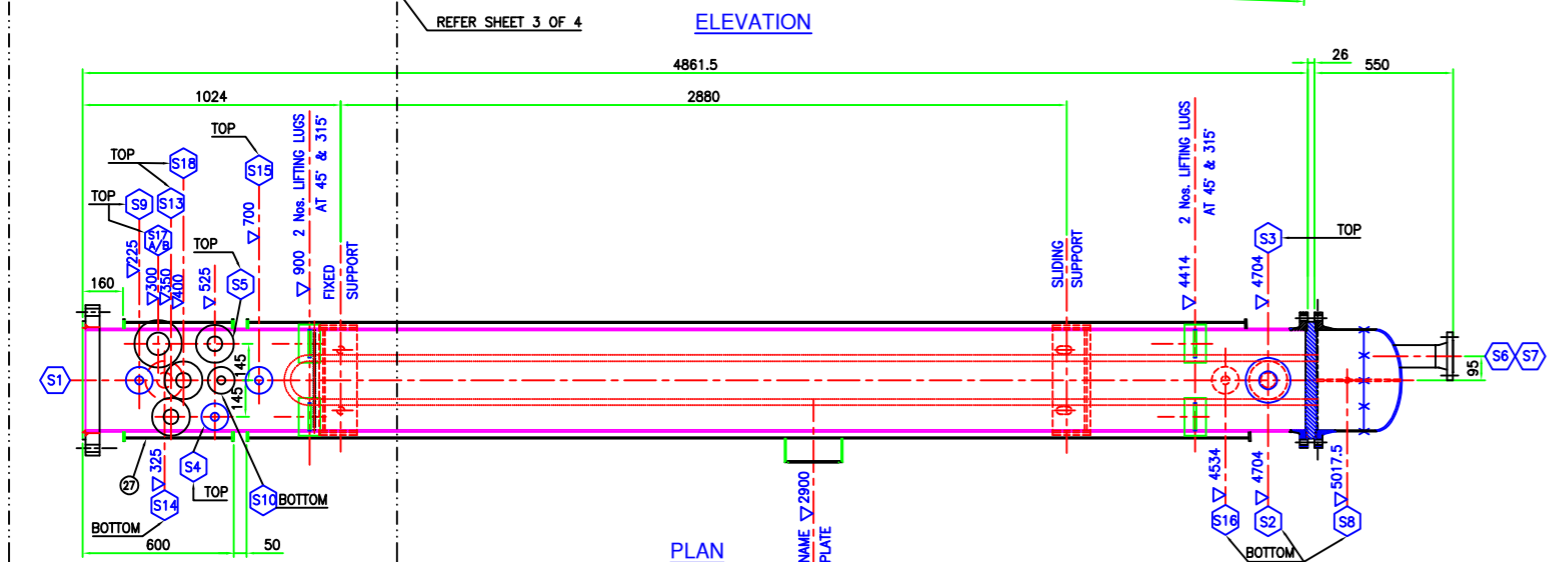
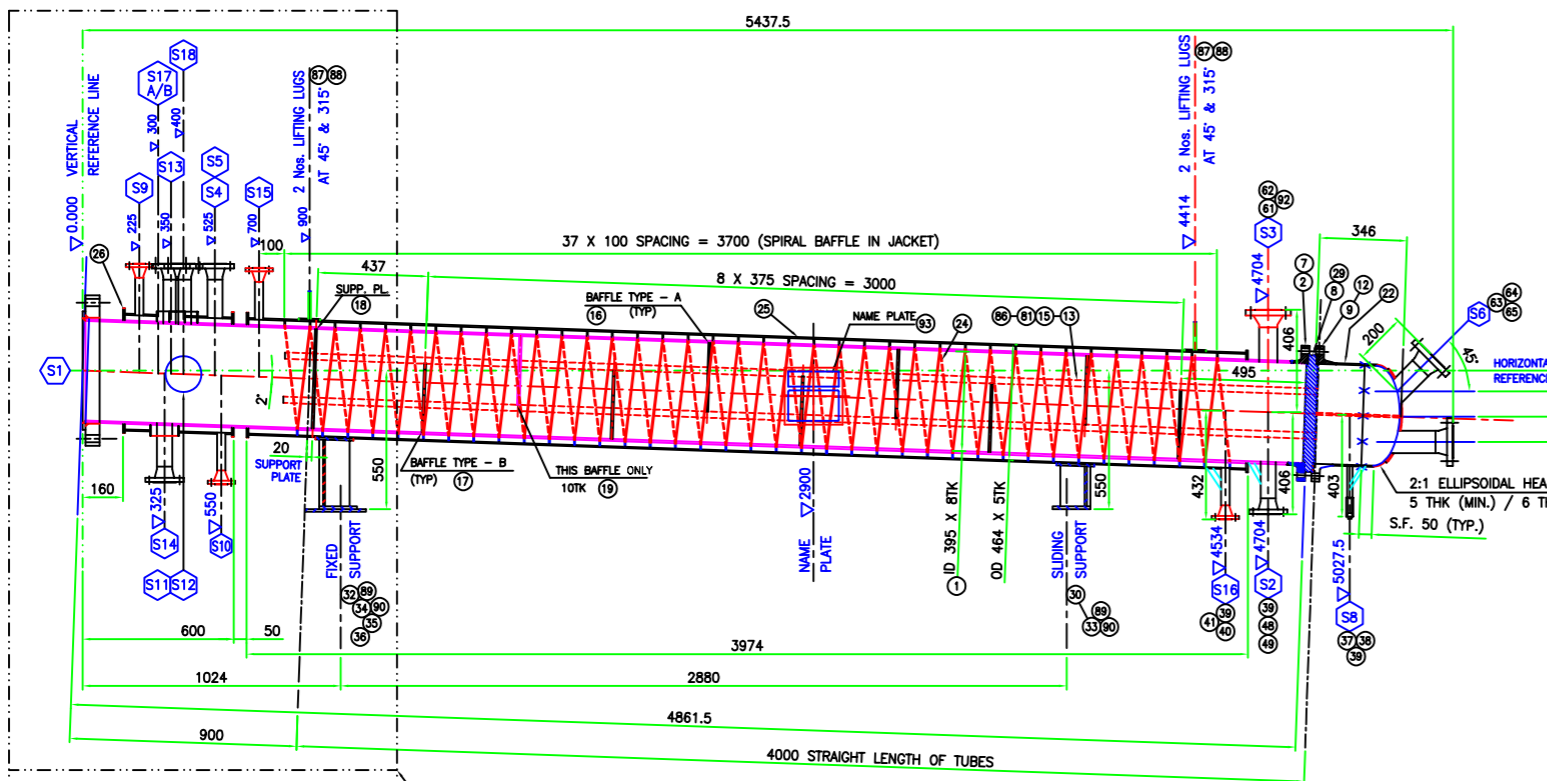
DATE	DRAWN	CHECKED	APPD BY	SCALE: 1: 10	PROJECTION	JOB NO. J734
XXXXXX	XXXXXX					

REVISION DATA

REV	DESCRIPTION	DATE	DRN	CHKD	APPD

REVISE THIS DRAWING USING CAD ONLY

DRG. NO.: XX-GEN-504
SHT. 1 OF 1
REV.0



QTY	DESCRIPTION	P.No.	DRG.No.	MATL.	UNIT	TOTAL	
2	GLASS : 00156 X 14TK 'S11,12'	76		BOROSILICATE			
4+16	GASKET : OD156/ID 116 X 3TK 'S11,12'	75		PIPE ENVELOPE GRAPHITE (FLAT)			
2	FLANGE : 100 NB X SCH.40S X 280 LG. 'S11,12'	74		SA 182 F 316 TP 316			
2	PIPE : 100 NB X SCH.40S X 280 LG. 'S11,12'	73		SA 312 TP 304			
1	PAD PLATE : 00200/089 X 8TK 'S17B'	72		SA 240 TP 316			
4+4	M16 X 95 LG. STUD WITH TWO NUTS 'S17B'	71		SA 182 OR 8/ SA 194 OR 8			
1+4	GASKET : 80NB X 150# X 3TK 'S17B'	70		PIPE ENVELOPE GRAPHITE (FLAT)			
1	BLIND FLANGE : 80NB X 150# BLRF 'S17B'	69		SA 182 F 316 TP 316			
1	FLANGE : 80 NB X SCH.40S X 150# WNRF 'S17B'	68		SA 182 F 316 TP 316			
1	PIPE : 80 NB X SCH.40S X 310 LG. 'S17B'	67		SA 312 TP 304			
1	PIPE : 80 NB X SCH.80S X 185 LG. 'S7'	66		SA 312 TP 304			
1	COMMON R.F. PAD PLATE : 5TK (AS PER DETAIL) S687	65		SA 240 TP 316			
2	FLANGE : 80 NB X SCH.80S X 150# WNRF 'S6,7'	64		SA 182 F 316 TP 316			
1	PIPE : 80 NB X SCH.80S X 170 LG. 'S6'	63		SA 312 TP 304			
1	FLANGE : 65 NB X SCH.80S X 150# WNRF 'S3'	62		SA 312 TP 316			
1	PIPE : 65 NB X SCH.80S X 140 LG. 'S3'	61		SA 312 TP 316			
2	BLIND FLANGE : 50NB X 150# BLRF 'S14,18'	60		SA 182 F 316 TP 316			
1	PIPE : 50NB X SCH.80S X 175 LG. 'S14'	59		SA 312 TP 316			
1	HALF COUPLING : 1"NPT X 3000# 'S17A'	58		SA 403 TP 316			
2	PIPE SLEEVE : 6"NB X SCH10S X 229 LG 'S11,12'	57		SA 312 TP 316			
2	PIPE : 50 NB X SCH.80S X 280 LG. 'S13,18'	56		SA 312 TP 316			
12+4	M16 X 85 LG. STUD WITH TWO NUTS 'S5,14,18'	55		SA 182 OR 8/ SA 194 OR 8			
3+12	GASKET : 50NB X 150# X 2TK 'S5,14,18'	54		PIPE ENVELOPE GRAPHITE (FLAT)			
1	BLIND FLANGE : 50NB X 150# BLRF 'S5'	53		SA 182 F 316 TP 316			
1	FLANGE : 50 NB X SCH.80S X 150# WNRF 'S5'	52		SA 182 F 316 TP 316			
1	PIPE : 50 NB X SCH.80S X 280 LG. 'S5'	51		SA 312 TP 304			
2	PIPE SLEEVE : 4"NB X SCH10S X 60 LG 'S18,14'	50		SA 312 TP 316			
4	FLANGE : 50 NB X SCH.80S X 150# WNRF 'S17A'	49		SA 182 F 316 TP 316			
1	PIPE : 50 NB X SCH.80S X 160 LG. 'S2'	48		SA 312 TP 316			
1	SPRAY NOZZLE : 1"NPT (AS PER DETAIL) 'S17A'	47		SA 182 F 316 TP 316			
1	FLANGE : 25NB X SCH.80S X 150# WNRF 'S17A'	46		SA 182 F 316 TP 316			
1	PIPE : 25 NB X SCH. 80S X 530 LG. 'S17A'	45		SA 312 TP 316			
4+4	M12 X 70 LG. STUD WITH TWO NUTS 'S4'	44		SA 182 OR 8/ SA 194 OR 8			
1+4	GASKET : 25NB X 150# X 2TK 'S4'	43		PIPE ENVELOPE GRAPHITE (FLAT)			
1	BLIND FLANGE : 25NB X 150# BLRF 'S4'	42		SA 182 F 316 TP 316			
5	FLANGE : 25NB X SCH.80S X 150# WNRF 'S4,9,10,15,16'	41		SA 182 F 304 TP 316			
5	PIPE : 25NB X SCH.80S X 160LG 'S4,9,10,15,16'	40		SA 312 TP 304			
24	STIFFENER : 40 X 5TK (CUT TO SUIT)	39		SA 240 TP 316			
1	HALF COUPLING : 1/2" NB X 75LG X 3000# 'S8' WITH PLUG	38		SA 403 TP 304			
1	PIPE : 1/2"NB X SCH.10S X 135 LG. 'S8'	37		SA 312 TP 304			
1	SLIDING PLATE : 240 X 10TK X 440 LG	36		IS 2062			
1	PLATE : 365 X 8TK X 400 LG (CUT TO SUIT)	35		IS 2062			
2	PLATE : 120 X 8TK X 378 LG (CUT TO SUIT)	34		IS 2062			
1	PLATE : 260 X 8TK X 400 LG (CUT TO SUIT)	33		IS 2062			
2	BASE PLATE : 150 X 12TK X 436 LG	32		IS 2062			
2	PLATE : 120 X 8TK X 283 LG (CUT TO SUIT)	31		IS 2062			
2	WEAR PLATE : 150 X 8TK X 628 LG (BENT TO SHAPE)	30		SA 240 TP 316			
4	PULLING LUG : 38 X 40 X 16TK	29		IS 2062			
2	SLEEVE (PIPE) : 4"NB X SCH 10S X 185 LG 'S13,17B'	28		SA 312 TP 316			
1	JACKET SHELL : OD 464 X 5TK X 441 LG	27		SA 240 TP 304			
4	JACKET CLOSURE : OD 484 X ID 413 X8TK	26		SA 240 TP 316			
1	JACKET SHELL : OD 464 X 5TK X 3977 LG	25		SA 240 TP 304			
1	SPRAYER : 20 X 4TK X 55000 LG	24		SA 240 TP 316			
1	DISHED END: ID 396.8 X 2:1 ELLIPSOIDAL X 50 S.F. 5 THK (MIN.) / 6 THK (NOM.)	23		SA 240 TP 304			
1	CHANNEL SHELL : ID 396.8 X 5 TK X 114LG	22		SA 240 TP 304			
1	PARTITION PLATE : 194 X 8TK X 348 LG (CUT TO SUIT)	21		SA 240 TP 304			
1	PARTITION PLATE : 346 X 8TK X 395 LG (CUT TO SUIT)	20		SA 240 TP 304			
1	BAFFLE PLATE : OD 392 X 10TK	19		SA 240 TP 316			
1	SUPPORT PLATE : OD 392 X 8TK	18		SA 240 TP 316			
5	BAFFLE PLATE : OD 392 X 8 TK	17		SA 240 TP 316			
3	BAFFLE PLATE : OD 392 X 8 TK	16		SA 240 TP 316			
PUR No.	M.No.	DESCRIPTION	P.No.	DRG.No.	MATL.	UNIT WT	TOTAL WT

DESIGN DATA			
DESIGN CODE :	ASME SEC - VIII DIV - 1 (ED 1998+ADDENDA 99) & TEMA CLASS B		
DESCRIPTION	SHELL SIDE	JACKET SIDE	TUBE SIDE
DESIGN PRESSURE	KG/SQ.CM [G] 6.12 (F.V.)	6.12	6.12
DESIGN TEMPERATURE	'C 200	-----	200
WORKING PRESSURE	KG/SQ.CM [G] 0.03 TO 0.071	-----	-----
WORKING TEMPERATURE (IN/OUT) MAX.	'C 25/40	-----	15/18
HYDROSTATIC TEST PRESSURE	KG/SQ.CM [G] 8.26	8.26	8.26
HYDROSTATIC TEST TEMPERATURE	'C NOT LESS THAN 20'		
CORROSION ALLOWANCE	mm NIL	NIL	NIL
JOINT EFFICIENCY	1.0	1.0	1.0
RADIOGRAPHY	FULL	FULL	FULL
POST WELD HEAT TREATMENT	NIL	NIL	NIL
OPERATING MEDIUM	WATER VAPOUR	CHILLED WATER	CHILLED WATER
INSULATION	mm 70 / 60 FOR STEAM JACKET		
MINIMUM DESIGN METAL TEMPERATURE	'C 5.0		
INSPECTION BY	M/S XXXXX		
PURCHASE ORDER No.	XXXXXXXXXXXXXX, DLXXXXXX		
WORK ORDER No.	J.756		
WEIGHT Kgs.	EMPTY	-	-
	OPERATING	-	-
	HYDROTEST	-	-
QUANTITY REQUIRED	ONE		

NOZZLE SCHEDULE									
MARK	QTY	NOM. DIA.	SCH/THK	SERVICE	FLG. FACE	# RATING	PROJ	REMARKS	
S1	1	400	-	VAPOUR		150#			
S2	1	50	80S	CONDENSATE OUT		150#			
S3	1	65	80S	VACUUM		150#			
S4	1	25	80S	PRESSURE INDICATOR		150#			WITH BLIND FLANGE
S5	1	50	80S	TEMPERATURE INDICATOR		150#			WITH BLIND FLANGE
S6	1	80	80S	CHILLED WATER (TS)		150#			
S7	1	80	80S	CHILLED WATER OUT (TS)		150#			
S8	1	1/2"	80S	DRAIN CONNECTION COVER		3000#			HALF COUPLING WITH PLUG LENGTH 75mm
S9	1	25	80S	HEATING STEAM IN		150#			
S10	1	25	80S	CONDENSATE OUT		150#			
S11	1	100	40S	SIGHT GLASS		150# AS PER DRG.			WITH BLIND FLANGE AND SIGHT GLASS
S12	1	100	40S	SIGHT GLASS		150# AS PER DRG.			WITH B.F., S.G., LAMP AND HOLDER
S13	1	50	80S	FLUSHING WITH STEAM		150#			
S14	1	50	80S	FLUSHING RESERVE		150#			WITH BLIND FLANGE
S15	1	25	80S	CHILLED WATER OUT (SS)		150#			
S16	1	25	80S	CHILLED WATER IN (SS)		150#			
S17 A/B	1	80/25	40S/80S	FLUSHING WITH WATER		150#			SEE DETAIL
S18	1	50	80S	RESERVE		150#			WITH BLIND FLANGE
2				SLIDING STRIP: 35 X 14 TK X 3940 LG		15			SA 240 TP 316
4				TIE ROD: #10 X3975 LG. WITH TWO M10 NUTS		14			SS 304
48				TUBE: OD 25 X 1.5 TK X 8600 LG (CUT TO SUIT)		13			SA 213 TP 304
3				JACK SCREW: M 16 X 100 LG.		12			SS 304
20+4				M 20 X 140 LG. STUD WITH TWO NUTS		11			SA 193 GR B7/ SA 194 GR 2H
1				BODY FLANGE : OD 537 X ID 396.8 X 5 TK		10			SA 336
1+4				GASKET: OD 483 X 3 TK (CHANNEL SIDE) (AS PER DETAIL)		9			SA 316 JACKETED GRAPHITE FILLED
1				TUBE SHEET: OD 483 X 45 TK (AS PER DETAIL)		8			SS 316
1+4				GASKET: OD 463 X ID 443 X 3 TK (AS PER DETAIL)		7			SA 316 JACKETED GRAPHITE FILLED
20+4				M 27 X 180 LG. STUD WITH TWO NUTS 'S1'		6			SA 193 GR B7/ SA 194 GR 2H
1+4				GASKET: OD 470 X ID 435 X 3 TK 'S1'		5			SA 316 JACKETED GRAPHITE FILLED
1				END PLATE : OD 470 X ID 418 X 12 TK 'S1'		4			SA 240 TP 316
1				END FLANGE : OD 597 X ID 420 X 55 TK 'S1'		3			SA 336 F 316 SA 336 F 316
1				BODY FLANGE : OD 537 X ID 395 X 8 TK		2			SA 336 F 316 SA 240 TP 316
1				SHELL : ID 395 X 8 TK X 4789 LG		1			SA 240 TP 316

PART LIST									
PUR No.	M.No.	DESCRIPTION	P.No.	DRG.No.	MATL.	UNIT WT	TOTAL WT		
OWNER : M/s DSQ BIOTECH LTD., CUDDALORE.									
CONSULTANT : M/s LURGI INDIA COMPANY LTD.									
VENDOR :									
DATE : XXXX TITLE : ASSEMBLY OF CONDENSER									
DRAWN : XXXXXXXX ITEM No.: 05-E-601									
CHECKED :									
APPD BY : SCALE: 1:15 PROJECTION : JOB No.: J.756									
REVISE THIS DRAWING USING : 1st ANGLE DRG. No.:XX-GEN-507									
CAD ONLY : SHT. 1 OF 4 REV.0									

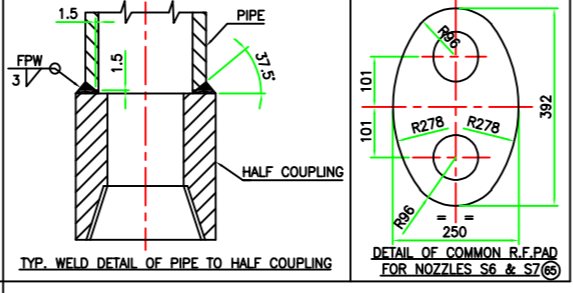
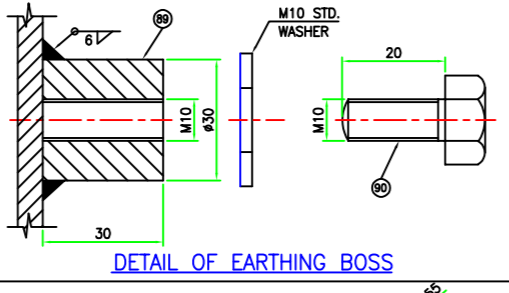
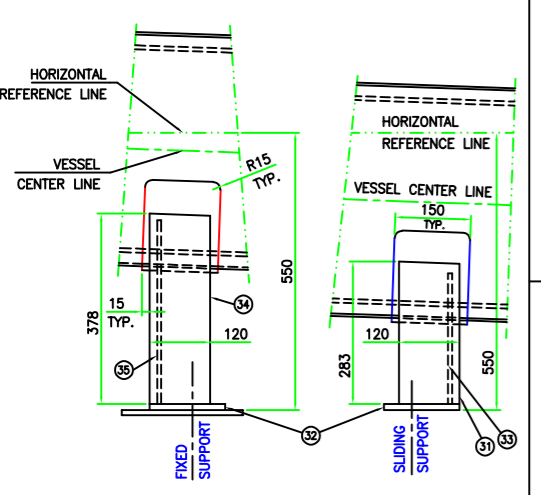
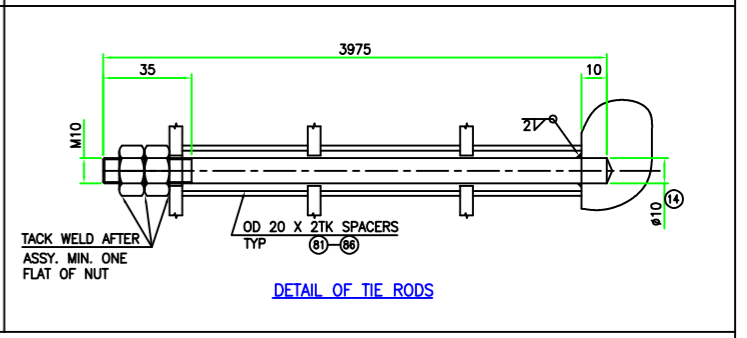
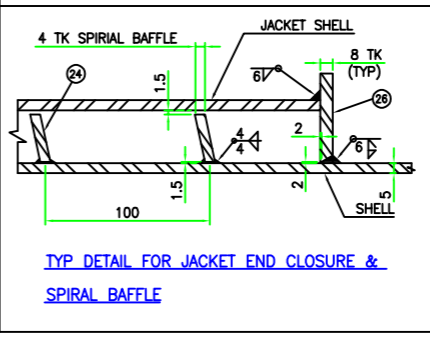
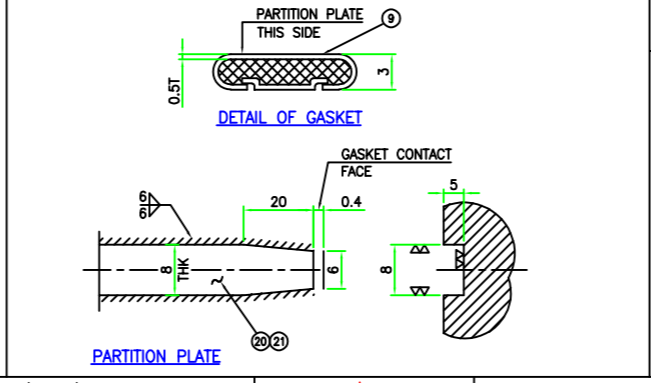
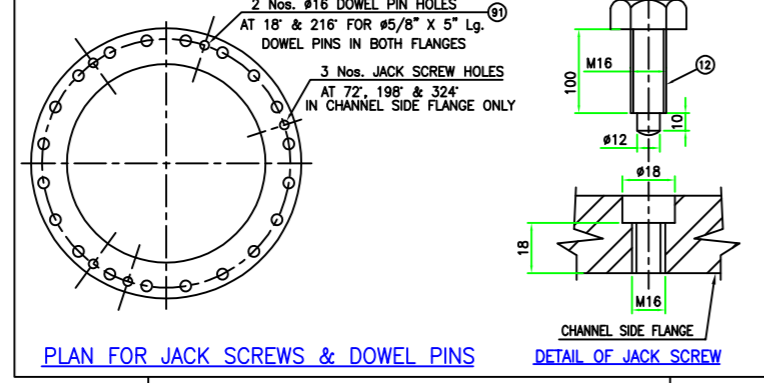
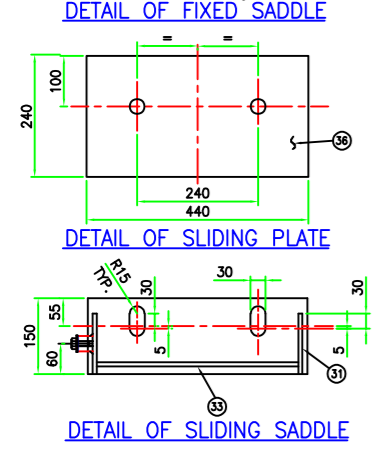
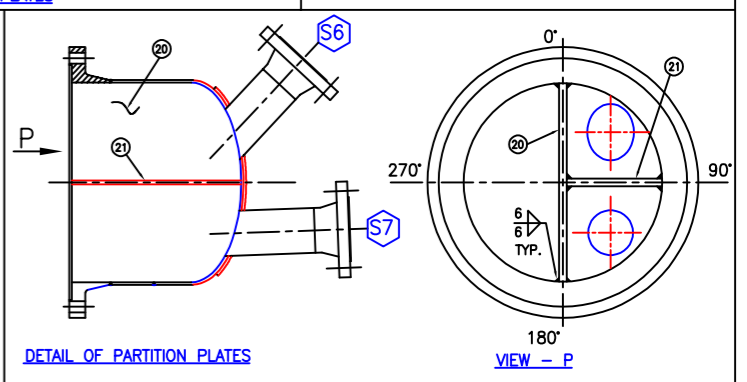
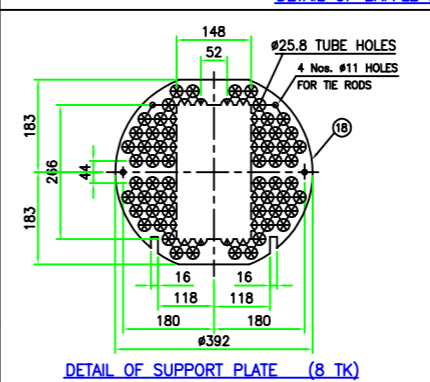
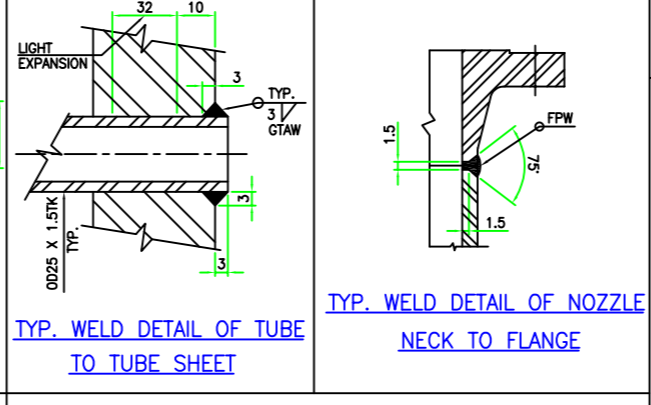
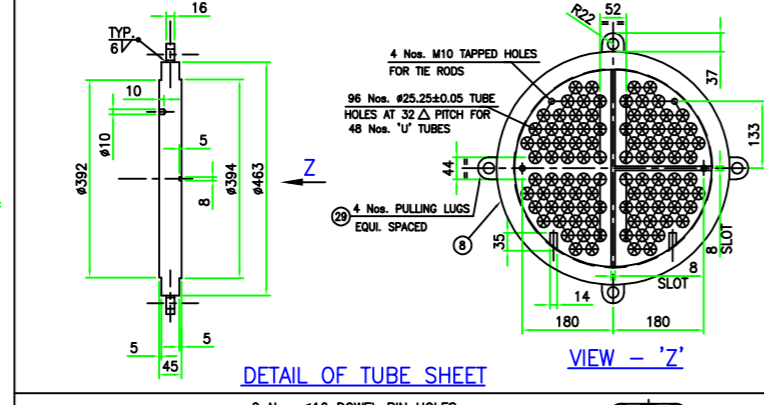
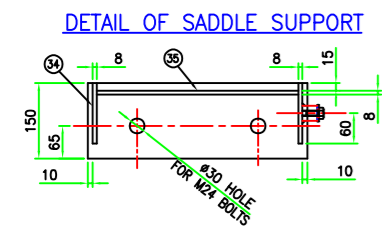
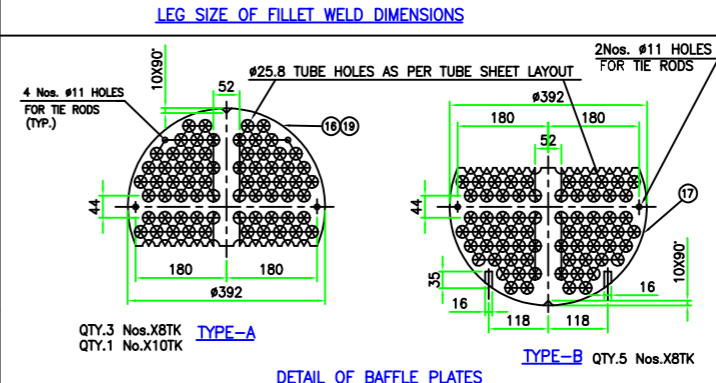
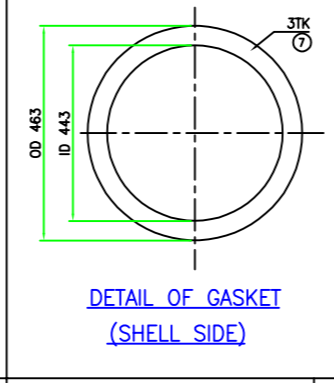
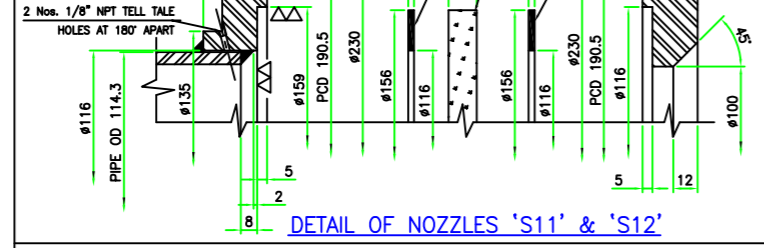
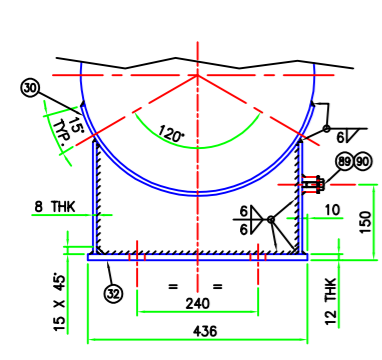
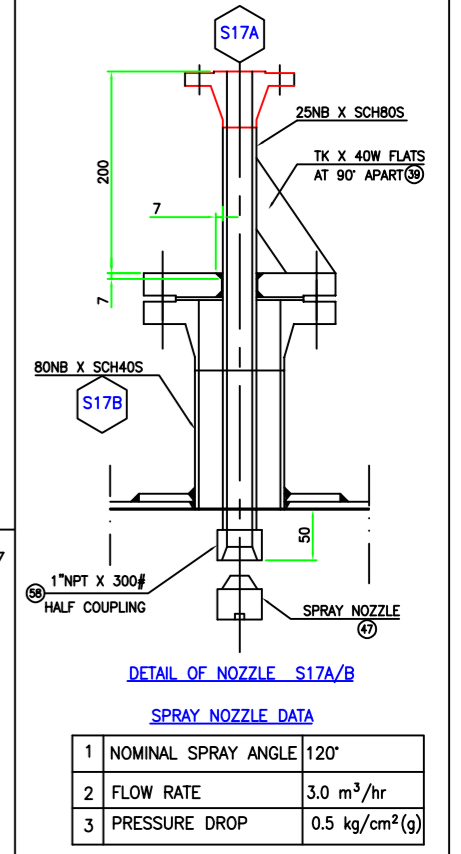
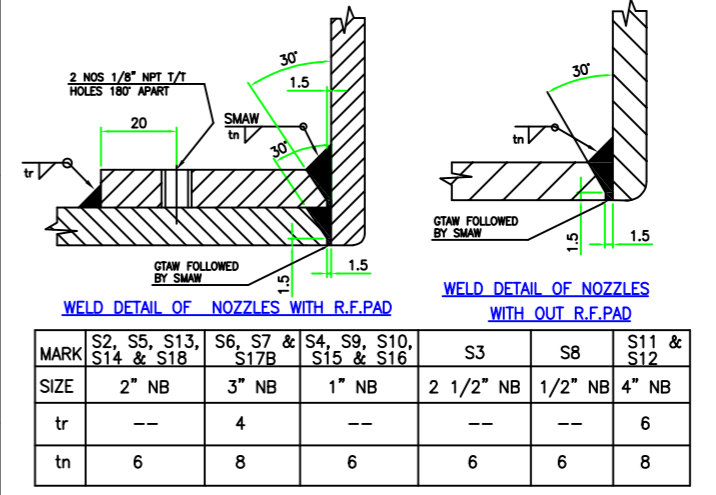
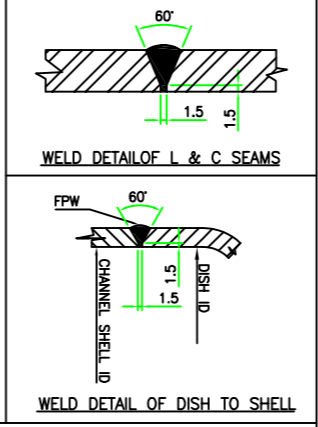
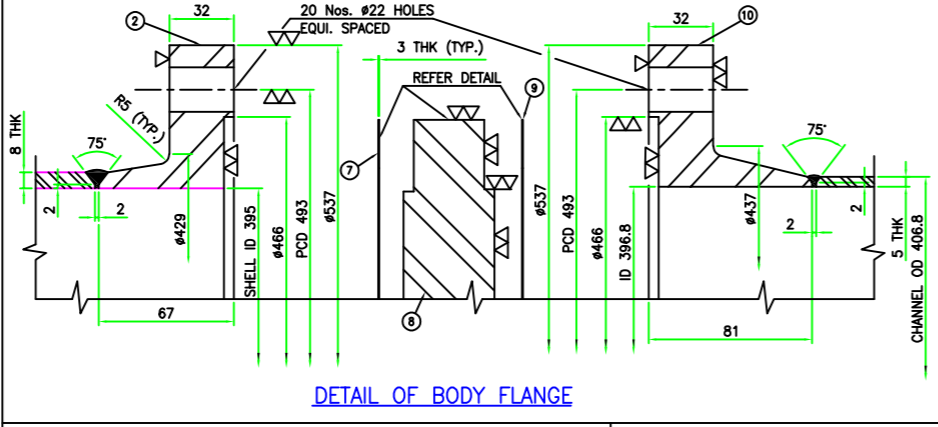
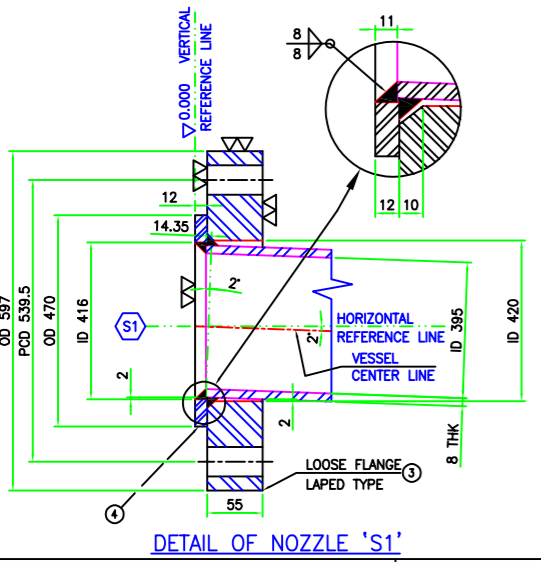
- NOTES :**
- ALL DIMENSIONS ARE IN M.M. UNLESS OTHERWISE SPECIFIED.
 - ALL BOLT HOLES IN NOZZLE FLANGES SHALL BE STRADDLE CENTRE LINE.
 - ALL BUTT WELDS IN SHELL/DISHED ENDS SHALL BE FULL PENETRATION WELD. NOZZLE WELDED WITH SHELL/DISHED END/RF PAD SHALL BE FULL PENETRATION. NOZZLE SHALL BE GROUND FINISHED WITH INSIDE SURFACE THE INSIDE EDGE OF NOZZLE SHALL BE ROUNDED OFF WITH RADIUS OF 3 MM.
 - ALL NOZZLES UP TO 50 NB SHALL BE STIFFENED WITH TWO STIFFENERS OF 5TK X 40 WID AT 90° APART.
 - EARTHING BOSS SHALL NOT BE PAINTED.
 - ALL UNMACHINED PORTION OF C.S. PARTS TO BE PAINTED WITH TWO COATS OF ZINC EPOXY CHROMATE PRIMER, EACH COAT MIN 30 MICRONS TOTAL 60 MICRONS AFTER WIRE BRUSHING.
 - ALL NOZZLE FLANGES SHALL BE BLANKED WITH 6 THK M.S. MATERIAL PLATE.
 - VESSEL SHALL BE PICKLED AS PER LIC 4577 Z STD.
 - ALL NOZZLE RF PAD SHALL BE TESTED WITH AIR AT 1.5 Kg/cm² (g)
 - ALL NOZZLE FLANGES SHALL AS PER ASME B 16.5. UNLESS OTHERWISE SPECIFIED.
 - NOZZLE FLANGES GASKET FACE SHALL BE SMOOTH FINISH TO 125 RMS.
 - ALL NOZZLE FLANGES & NOZZLES SHALL BE PARALLEL/PERPENDICULAR AS APPLICABLE TO THE HORIZONTAL REF. LINE OF EQUIPMENT & NOZZLE LOCATION SHALL BE MEASURED FROM VERTICAL REF. LINE.

REFERENCE LURGI DRAWING No.: D10088741 LI 4017, REV.1

APPLICABLE STANDARDS		DRAWING INDEX	
LURGI NAME PLATE	LIC 4501	ASSEMBLY OF CONDENSER	SHT.1 OF 4
MANUFACTURER'S NAME PLATE	LIC 4602	DETAILS OF CONDENSER	SHT.2 OF 4
NAME PLATE BRACKET	LIC 4503	ENLARGED VIEWS OF CONDENSER	SHT.3 OF 4
PICKLING	LIC 4577 Z	NAME PLATE & BRACKET	SHT.4 OF 4

QTY	DESCRIPTION	P.No.	DRG.No.	MATL.	UNIT	TOTAL
1	DETAIL OF NAME PLATE & BRACKET	93		REF. SHT. 4 OF 4		
1	R.F. PAD: OD 147 X ID 74 X 8 THK 'S3'	92		SA 240 TP 316		
2	DOWEL PIN : #5/8" X 5"LG	91		IS 1367		
2	BOLT WITH WASHER : M10 X 20LG	90		IS1367		
2	EARTHING BOSS : #30 X 30LG	89		IS 2062		
4	PAD PLATE : 175 X 85 X 5TK	88		SA 240 TP 304		
4	LIFTING LUG : 115 X 110 X 10TK (CUT TO SUIT)	87		SA 240 TP 316		
2	SPACER: 1/2" NB X SCH.10S X 870 LG	86		SA 312 TP 304		
6	SPACER: 1/2" NB X SCH.10S X 742 LG	85		SA 312 TP 304		
2	SPACER: 1/2" NB X SCH.10S X 808 LG	84		SA 312 TP 304		
2	SPACER: 1/2" NB X SCH.10S X 429 LG	83		SA 312 TP 304		
16	SPACER: 1/2" NB X SCH.10S X 367 LG	82		SA 312 TP 304		
2	SPACER: 1/2" NB X SCH.10S X 491 LG	81		SA 312 TP 304		
1aet	A/C LAMP & LAMP HOLDER : 60W, 240V WEATHER PROOF TO IP55	80				
2	PAD PLATE : OD 230/ID 115 X 8TK 'S11,12'	79		SA 240 TP 316		
16+4	M16 X 120 LG. STUD WITH TWO NUTS 'S11,12'	78		SA 182 OR 8/ SA 194 OR 8		
2	BLIND FLANGE : 100NB X 150# AS PER DETAIL 'S11,12'	77		SA 182 F 316		

CAD FILE NAME : 75651
 CAD FILE SCALE : 1:15
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OWNER:	M/s DSQ BIOTECH LTD., CUDDALORE.		
CONSULTANT:	M/s LURGI INDIA COMPANY LTD.		
VENDOR:			
DATE	XXXXX	TITLE:	DETAILS OF CONDENSER
DRAWN	XXXXX		
CHECKED			
APPD BY		SCALE: NTS	PROJECTION
REVISION THIS DRAWING USING CAD ONLY			1st ANGLE
JOB No.:	J.756	DRG. NO.:	XX-GEN-507
		SHT.	2 OF 4
REV	DESCRIPTION	DATE	DRN
	REVISION DATA		CHKD
			APPD
			REV.0