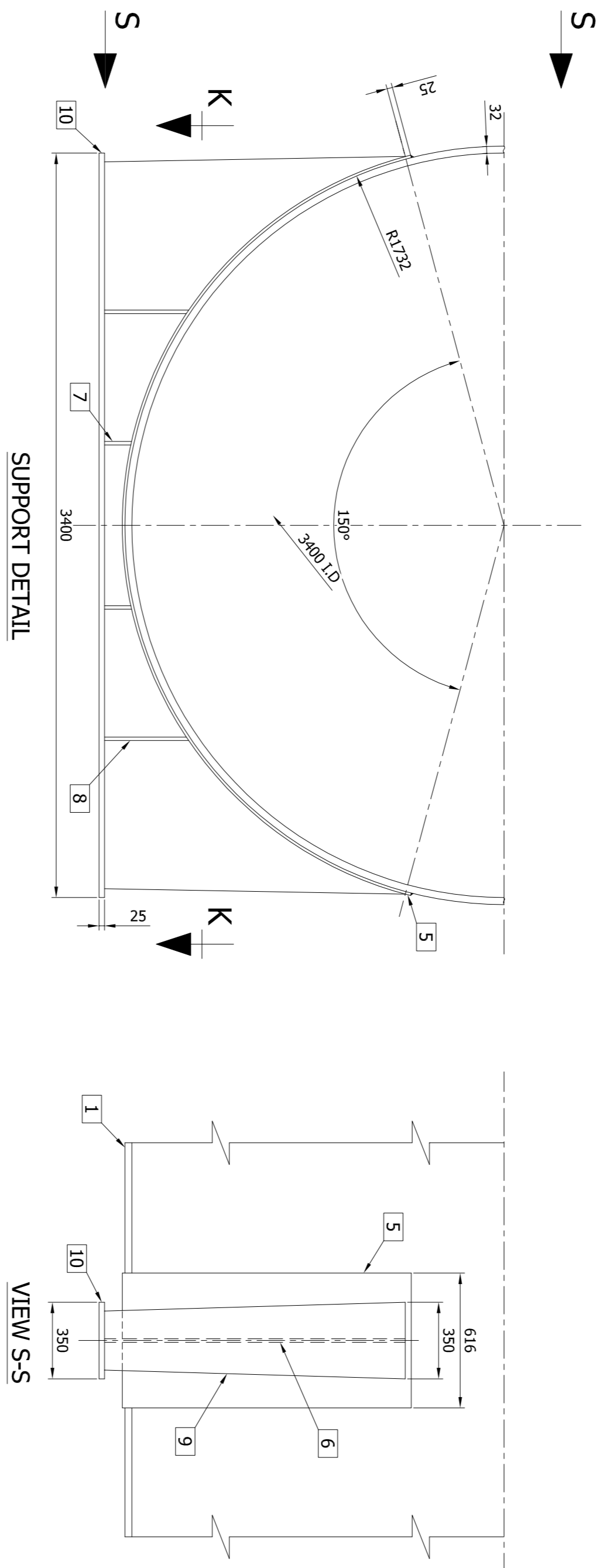
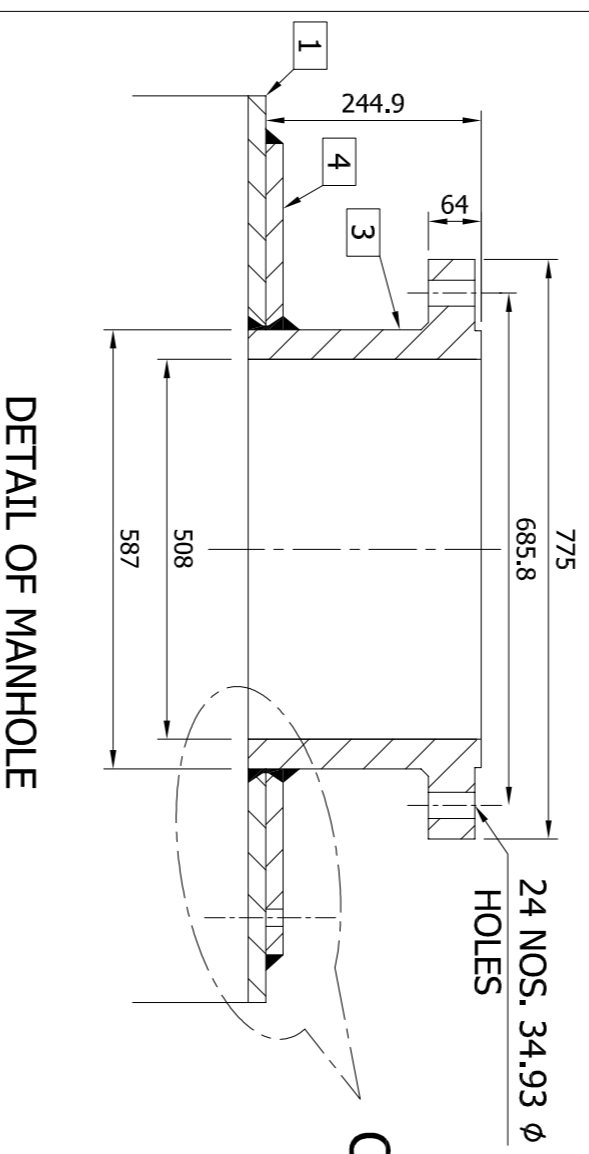


ELEVATION

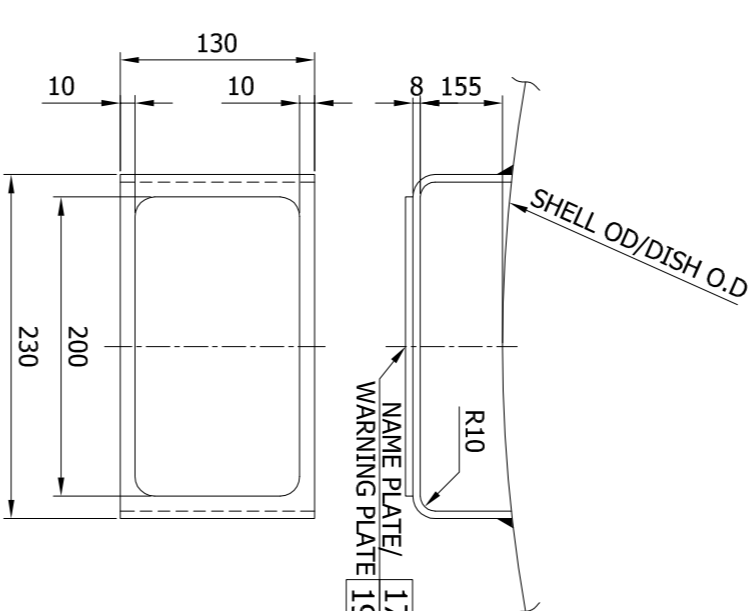


SUPPORT DETAIL

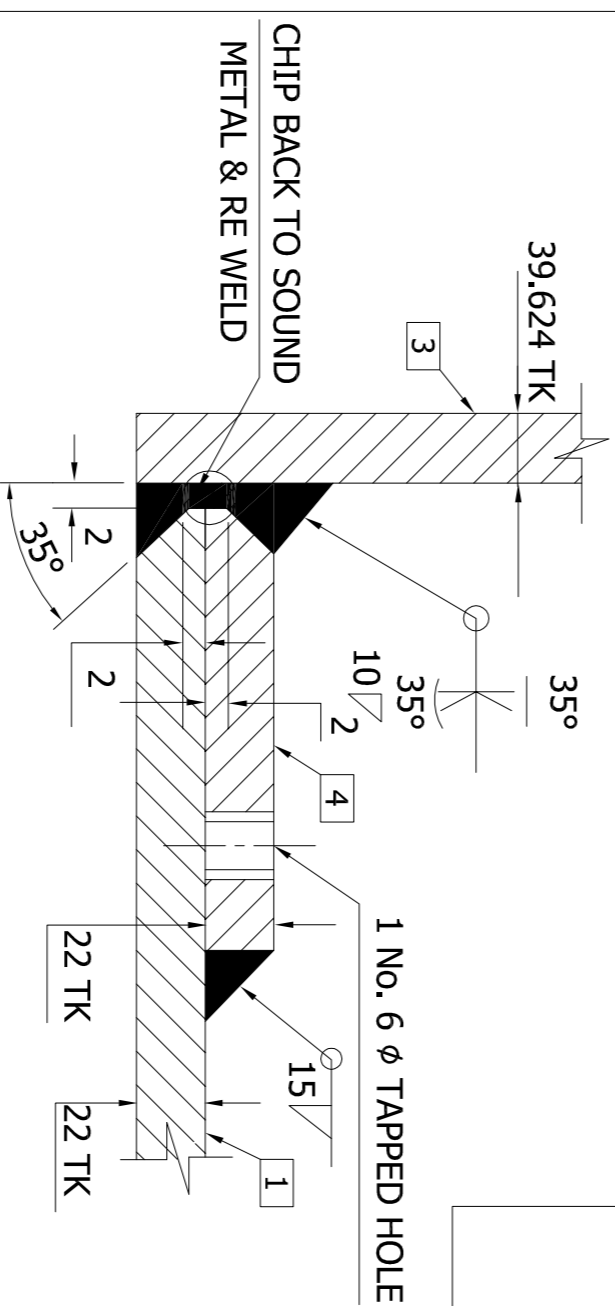
VIEW S-S



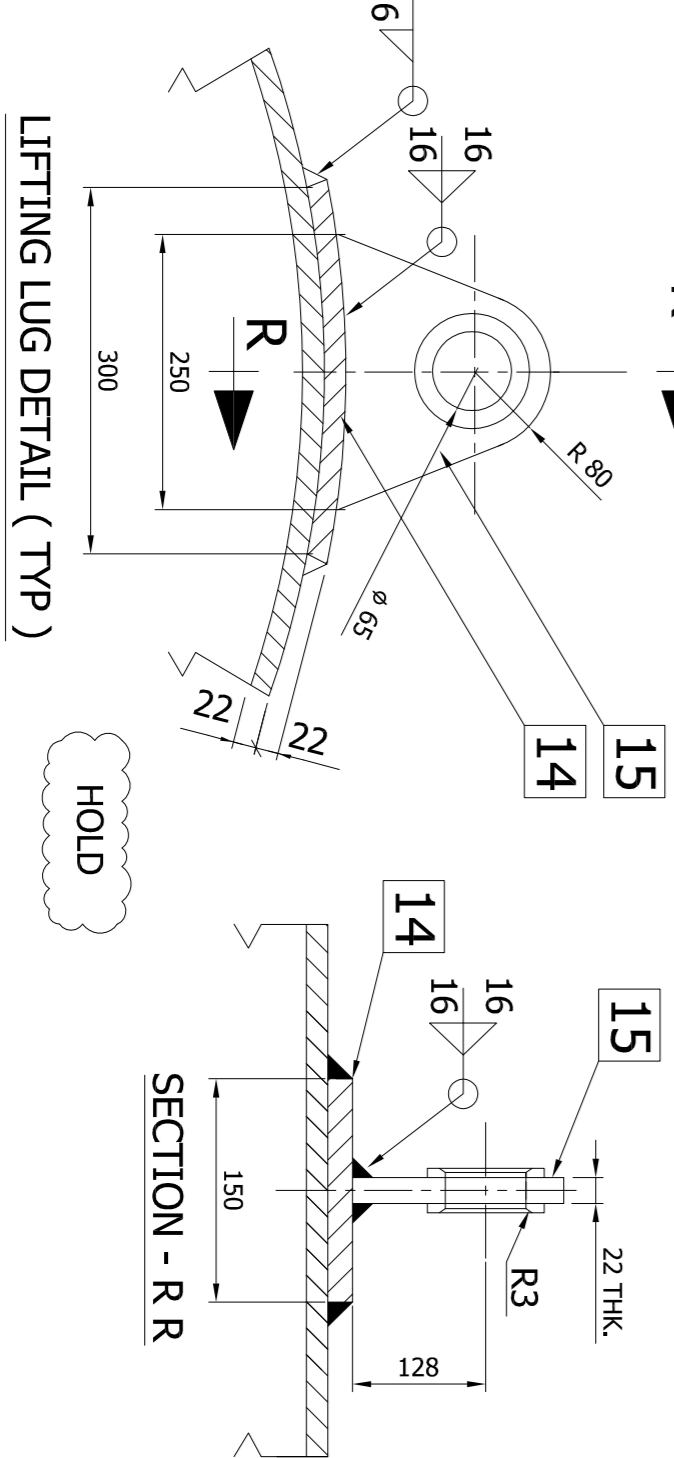
DETAIL OF MANHOLE



BRACKET FOR NAME PLATE [16] & WARNING PLATE [18]



DETAIL - C



LIFTING LUG DETAIL (TYP)

SL. NO.	DESCRIPTION	QTY.	MATERIAL	SIZE	AREA (M <sup>2</sup> )	WT. (KG)	REMARKS
19	WARNING PLATE	6	REF. DWG.				
18	BRACKET FOR WARNING PLATE	6	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	
17	NAME PLATE	6	REF. DWG.				
16	BRACKET FOR NAME PLATE	6	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	
15	LIFTING LUG	4	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	
14	PAID PLATE FOR LIFTING LUG	4	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	
13	GUSSET PLATE	14	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	
12	SUPPORT PLATE	7	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	
11	PAID PLATE	7	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	SA 537 CL.1	
10	BASE PLATE	6	SA 537 CL.1	350 x 3400 LG.			
09	SIDE SUPPORT	12	SA 537 CL.1	350 x 1375 LG.			
08	SIDE SUPPORT	16 THK.	SA 537 CL.1	16 THK.			HOLD
07	SIDE SUPPORT	16 THK.	SA 537 CL.1	124 x 127 LG.			
06	WEB PLATE	24	SA 537 CL.1	124 x 127 LG.			
05	WEB PLATE	6	SA 537 CL.1	1248 x 3284 LG.			
04	WEAR PLATE	6	SA 537 CL.1	616 x 4632 LG.			
03	FLANGE (LUNGER)	1	SA 537 CL.1	276 I/O X 550 O/D			M
02	DISHED END	2	SA 537 CL.1	3408 I.D. x 1978K. (M.H.)			M
01	SHELL	1	SA 537 CL.1	3400 I.D. x 6485 LG.			2:1 HEMISPHERICAL

FOR TENDER PURPOSE ONLY

COMPONENT	MATERIAL	TESTING TEMP.	MIN. AVERAGE ENERGY
SHELL/END RING/SUPPORT	SA 537CL.1	-40°C	27 J
NOZZLE PIPE/BOLTS FOR FLANGES	SA 320 Gr. 1.7M	-45°C	27 J
NOZZLE FLANGE (INTERNAL FLANGE)	SA 350U2 CL.1	-55°C	41J

ELECTRODE SPECIFICATION

SMAW	SA 537 CL.1	TO	SA 537 CL.1	AWM E 2018-1
SAW	SA 537 CL.1	TO	SA 537 CL.1	SFA 5.17 F 7 A (P) 5 EH 12 K

HOLD

DESIGN DATA	
No OFF	06 (SIX)
CODE	ASME SEC. VIII DIV. 1, 2010 + IRS RULES FOR STEEL SHIPS 2013, CHAP. 4 THE C-INDEPENDENT TANK LIQUIFIED AMMONIA GAS (LUG)
TANK CLASSIFICATION - PARA 4.2.3 OF IRS RULES	
FLUID HANDLED	LIQUIFIED AMMONIA GAS (LUG)
OPERATING PRESSURE	Kg/cm <sup>2</sup> g 1.0
OPERATING PRESSURE	Kg/cm <sup>2</sup> g 1.0
OPERATING TEMP.	°C - 33
DESIGN PRESSURE	Kg/cm <sup>2</sup> g 22.84
DESIGN TEMP.	°C 55
WELDING TYP	DOUBLE / SINGLE
HYD. TEST PRESSURE	34.3 (AS PER IRS RULES)
HYD. TEST TIME	120 MINUTES
RADIOGRAPHY	FULL
JOINT EFFICIENCY	1
HEAT TREATMENT	YES
CORROSION ALLOWANCE	mm 1.5
INSULATION	100 MM PU/F (BY OTHERS)
VOLUME ( WATER FULL )	m <sup>3</sup> 60.9
THIRD PARTY INSPECTION	IRS
FAB. WEIGHT	TON 23.894 T X 6 Nos. = 143.364 T
PAINING	ONE COAT OF TMO-PAK POLYURETHANE HOLDING PRIMER (30 MICRONS) TO BE APPLIED ON EXTERNAL SURFACE, AFTER SA 2 1/2 GRIT SLAG BLASTING.

GENERAL NOTES:-

- BILL OF MATERIAL IS SHOWN FOR ONE NUMBER BULLET ONLY.
- ALL BOLT HOLES SHALL STRADDLE PRINCIPAL AXIS OF THE EQUIPMENT.
- CHARPY IMPACT TESTING OF THE PRESSURE PARTS SHALL BE DONE AS INDICATED BELOW.
- ALL FIT-UPS & WELD JOINTS SHALL BE DONE AS PER THE WELDING PROCEDURE AS APPROVED BY THE INSPECTION / CLASSIFICATION AGENCY.
- STRESS RELIEVING SHALL BE DONE AS PER THE FOLLOWING CHART GIVEN.
- COLD INSULATION SHALL BE AS PER FEDO SPEC. 02/ES042/2010.
- SLING ANGLE FROM HORIZONTAL SHALL BE MINIMUM 45 DEGREES.
- SHACKLES CONSIDERED ARE CROSSY BOLT TYPE ANCHOR SHACKLES G - 2130/S 1 3/8" NOMINAL SIZE, WORKING LOAD LIMIT - 13 1/2 TONS, STOCK NO. 0195013 /1019522.
- PAID PLATE (PART 27) TO BE STITCH WELDED.
- 6 phi TAPPED HOLE TO BE PROVIDED ALL PAID PLATE.

CHARPY IMPACT TESTING

COMPONENT	MATERIAL	TESTING TEMP.	MIN. AVERAGE ENERGY
SHELL/END RING/SUPPORT	SA 537CL.1	-40°C	27 J
NOZZLE PIPE/BOLTS FOR FLANGES	SA 320 Gr. 1.7M	-45°C	27 J
NOZZLE FLANGE (INTERNAL FLANGE)	SA 350U2 CL.1	-55°C	41J

STRESS RELIEVING CHART

LOADING TEMP. (MAX.)	HEATING RATE (MAX.)	HOLDING TIME (MIN)	COOLING RATE (MAX.)	COOLING RATE BELOW 400 °C
400 °C	200 °C/hr	610 H/10°C	250 °C/hr	COOLED IN STILL AIR
200 °C	100 °C/hr	610 H/10°C	250 °C/hr	COOLED IN STILL AIR
100 °C	50 °C/hr	610 H/10°C	250 °C/hr	COOLED IN STILL AIR

REV.	ZONE	DESCRIPTION	DRN.	CHD.	APD.	DATE
1		NAME PLATE				8673/19/02
2		WARNING PLATE				8673/19/03

SL. NO.	REFERENCE DWGS.
1	NAME PLATE
2	WARNING PLATE

MARK	NO.	SIZE	O/DXTHK.	PROD. FROM 4/T.L.	FLANGE	BLIND FLANGE	STANDARD	CLASS	TYPE	REMARKS
M	1	500	587 x 39.7	500	1	-	BI 6.5	150	LUNGER	

TITLE		SCALE		DRN.		AMAND	
AMMONIA BULLETS		1:20		CHD.		VIDAY	
FACT ENGINEERING WORKS		2018		APD.		VIMAL	
JOB No. 8673/19		REF No. XXXX-02-DG-10617		DRG No.		8673/19/01	
KERALA		KERALA		SHEET NO. 1 OF 1		REVISION	