

[illegible]

GENERAL NOTES

UNLESS STATED OTHERWISE

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
2. ALL ANCHOR BOLT HOLES TO STRADDLE N/S CENTER LINE.
3. NORTH DIRECTION WHEREVER SHOWN IS WITH RESPECT TO PLAN VIEW.
- 4.a) FOR NOZZLES ON SHELL PROJECTIONS ARE REFERRED TO FROM VESSEL CENTER LINE TO FLANGE CONTACT FACE.
- b) FOR NOZZLES ON HEAD PROJECTIONS ARE REFERRED TO FROM HEAD T.L. TO FLANGE CONTACT FACE.
5. THE INDICATED THICKNESS IS THE MINIMUM ACCEPTABLE AFTER CONSTRUCTION.
6. FLANGE GASKET FACE SHALL HAVE 125 AARH FINISH.
7. DIMENSIONS OF FLANGES SHALL BE AS PER ANSI B16.5 UNLESS OTHERWISE STATED.
8. ID OF WELD NECK FLANGES SHALL MATCH WITH CORRESPONDING ID OF NOZZLE PIPE/SHELL.
9. NOZZLES 50NB AND BELOW SHALL BE STIFFENED WITH 2NOS.40X6THK. FLATS 90° APART.
10. VESSEL IS SUBJECTED TO STEAM OUT CONDITIONS OF 0.5 KG/CM²(G) @190°C.
11. SURFACE CLEANING / PRIMER PAINTING SHALL BE AS PER SPEC. 6907-0642-PT-107
12. NOZZLE SCHEDULES INDICATED ARE MINIMUM REQUIRED. IT SHALL BE FABRICATOR'S RESPONSIBILITY TO SELECT NOZZLE SCHEDULES SO THAT NO SHRINKAGE OR WRAPING OCCURS DURING WELD OVERLAY.
13. ALL INTERNALS SHALL BE SIZED SO AS TO PASS THROUGH MANHOLE.
14. ALL SS SURFACE SHALL BE PICKLED & PASSIVATED AS PER ASTM A380
15. DEMISTER SHALL BE SUPPLIED AS PER DS NO. 6907-051-02-DS-1905 & SPEC. NO. 6907-112-16-46-SP-0009.

DEMISTER SHALL CONSIST OF 03 NOS. OF LAYERS AS FOLLOWS :

TOP LAYER : 3" OF 128 KG/M² (8 LB/FT²)

MIDDLE LAYER : 3" OF 144 KG/M² (9 LB/FT²)

BOTTOM LAYER : 3" OF 80 KG/M² (5 LB/FT²)

15. PIPE TO PIPE, PIPE TO FLANGE, PIPE TO FITTING & FITTING TO FLANGE JOINT SHALL BE WELDED WITH THE SAME TECHNIQUE USED FOR MAIN EQUIPMENT WELDING.

SPECIFICATIONS				DESIGN DATA				
	DENOTES APPLICABILITY			CODE	ASME SEC. VIII DIV 1(LATEST) + ADDENDA			
	GENERAL SPEC. FOR PRESSURE VESSELS	6-12-0001		WORKING PRESSURE	(Kg/Cm²g)	INT	0.31	EXT.
	SUPP. SPEC. FOR CS VESSELS	6-12-0002		DESIGN PRESSURE	(Kg/Cm²g)	INT	3.5	EXT. – F.V.
	SUPPLEMENTARY SPEC. FOR STAINLESS STEEL CLAD VESSEL	6-12-0007		WORKING TEMPERATURE	(°C)		47	
	STD. SPEC. FOR BOQS PLATES	6-12-0011		DESIGN TEMPERATURE	(°C)		140	
	STD. SPEC. FOR STRUCTURAL QUALITY PLATES	6-12-0014		MDMT	(°C)		1	
	STANDARD SPEC. FOR CLAD PLATE	6-12-0015		CORROSION ALLOWANCE	(mm)	NIL		
	STANDARD SPEC. FOR SS PLATE	6-12-0020		TYPE OF HEADS	TOP : FLAT, BOTTOM : TORISPHERICAL			
	JOB SPEC. FOR SHOP & FIELD PAINTING	6907-0642-PT-L07		JOINT EFFICIENCY	SHELL	0.85	HEAD	SINGLE PIECE
	JOB SPEC. FOR KNITTED WIRE MESH DEMISTER 6907-112-16-46-SP-0009			RADIOGRAPHY	SHELL	SPOT	HEAD	SINGLE PIECE
STANDARDS				POST WELD HEAT TREATMENT	-			
	VESSEL TOLERANCES	7-12-0001		HEAT TREATMENT	HEAD AS PER SPEC.			
	SUPPORT FOR HORIZONTAL VESSEL	7-12-0002		WIND SPECIFICATION	IS : 875			
	WOODEN PILLOWS FOR SADDLE SUPPORT	7-12-0003		EARTH–QUAKE SPECIFICATION	SITE SPECTRA			
	SKIRT BASE DETAILS	7-12-0004		OPERATING MEDIUM	CO2+STEAM SP. GRAVITY– 0.9894			
	SKIRT OPENING DETAILS	7-12-0005		CAPACITY	(M³)	1.2		
	ANGLE LEG SUPPORT	7-12-0006		PAINTING / CLEANING	AS PER JOB SPEC. (REFER NOTE-11)			
	PIPE LEG SUPPORT	7-12-0007		INSULATION THICKNESS (mm)	NIL	☒ HOT	☐ COLD	
	PIPE LEG SUPPORT	7-12-0007		FIRE PROOFING	☒ YES ☐ NO			
	BRACKET SUPPORT FOR VERTICAL VESSEL	7-12-0008		HYDROSTATIC TEST (Kg/Cm²g)	–HORIZONTAL–		VERTICAL	
	MANHOLE WITH HINGED COVER	7-12-0009		PRESSURE (NEW & COLD)	4.55 (AT TOP)			
	MANHOLE WITH DAVIT (FOR GUIDENCE ONLY)	7-12-0010		INSPECTION BY	☒ EL	☐ CIB	☐ LLOYDS	
MATERIAL OF CONSTRUCTION (AS PER ASME/IS OR EQUIVALENT)–								
	RETAINING PLATE	7-12-0012		SHELL	SA 516 GR60 + SS 304L CLAD			
	NOZZLE REINFORCEMENT AND PROJECTION	7-12-0013		REINFORCEMENT PAD	SA 516 GR.60			
	PAD NOZZLES FOR VESSELS	7-12-0014		HEADS	SA 516 GR.60 + SS 304L CLAD			
	STANDARD BOLT HOLE ORIENTATION	7-12-0015		SHELL FLANGES	SA 105 + SS 304L WELD OVERLAY @			
	ALLOY LINER DETAILS	7-12-0016		NOZZLE FLANGES	SA 105 + SS 304L W.O. @			
	SIGHT GLASSES FOR PRESSURE VESSELS	7-12-0017		NOZZLE NECK UPTO 80NB	SA 105 + SS 304L W.O. @			
	INTERNAL FLANGES	7-12-0018		NOZZLE NECK ABOVE 80NB UPTO 150NB	SA 106 GR.B + SS 304L W.O. @			
	VORTEX BREAKERS	7-12-0019		NOZZLE NECK ABOVE 150NB	SA 516 GR.60 + SS 304L CLAD			
	INLET DEFLECTOR BAFLE	7-12-0020		PIPE FITTINGS	SA 234 GR.WPB+WELD OVERLAY @			
	SUPPORT RING & BOLTING BAR	7-12-0021		GASKETS EXTERNAL	SPIRAL WOUND GASKET WITH SS 316 METAL			
	SUPPORT RING SIZES FOR PACKED TOWERS	7-12-0022		GASKETS INTERNAL	WINDING AND GRAFOIL FILLER MATERIAL WITH			
	PIPE DAVIT	7-12-0023			INNER RING AS PER ASME B16.20			
	LIFTING LUG TOP HEAD TYPE	7-12-0024		GASKETS INTERNAL	-			
	FIRE PROOFING AND INSULATION SUPPORTS	7-12-0025		EXTERNAL STUDS/BOLTS/NUTS	SA 193 GR.B7/SA 194 GR.2H			
	EARTHING LUG	7-12-0026		INTERNAL STUDS/BOLTS/NUTS	SA 193 GR.B8/SA 194 GR.(0.03% MAX)			
	NAME PLATE	7-12-0027		SKRT / SUPPORT	IS 2062 GR.B			
	MANUFACTURER NAME PLATE	7-12-0028		SKRT / SUPPORT BASE	IS 2062 GR.B			
	BRACKET FOR NAME PLATE	7-12-0029		INTERNAL PARTS (WELDED)	SA 240 TP 304L/SA 312 TP 304L			
	NAME PLATE FOR SMALL EQUIPMENT	7-12-0030		INTERNAL PARTS (BOLTED)	SA 240 TP304L/SA 312 TP304L			
	DETAILS OF FORGED NOZZLES	7-12-0031		EXTERNAL CLIPS & ATTACHMENTS WELDED OVER PAD	IS 2062 GR.B			
	SUPPORTS FOR INTERNAL FEED PIPE	7-12-0032		EXTERNAL CLIP & ATTACHMENTS DIRECTLY WELDED TO SHELL	SA 516 GR.60			
	HOT INSULATION SUPPORTS FOR HORIZONTAL VESSEL	7-12-0033		PIPE DAVIT SUPPORT FOR COLD INS. VESSELS	7-12-0034			
	PIPE DAVIT SUPPORT FOR COLD INS. VESSELS	7-12-0034		TYP.DETAILS OF WIRE MESH DEMISTER SUPPORTS	7-12-0036			
	S.R. NOZZLE NECK	7-12-0037		DEMISTER / GRID	SS 304L			
				(@) 5 MM WELD OVERLAY WITH 3 MM UNDLUTED CHEMISTRY.				
REFERENCE DRAWINGS				STATUTORY REGULATIONS				
	NOZZLE ORIENTATIONS	6907-051-16-43-4102, REVO		INDIAN BOILER REGULATIONS (IBR)				
	LADDERS / PLATFORM CLEATS	-		DEPARTMENT OF EXPLOSIVES, NAGPUR (COOE)				
	PIPE SUPPORT CLEATS	-						
	TRAY SUPPORT AND BOLTING BARS	N.A.						
	DEMISTER DATA SHEET	6907-051-02-DS-1905						
HOLD UPS				APPROXIMATE WEIGHT (KGS)				
	NOZZLE ORIENTATIONS	SIZE OF NOZZLES MCF		ERECTION WEIGHT		900	OPERATING WEIGHT 1290	
	NOZZLE ELEVATIONS	PIPE SUPPORT CLEATS		HYDROTEST WEIGHT (SHOP)		1950	HYDROTEST WEIGHT 2100	
	SUPPORT HEIGHT	LADDER / PLATFORM CLEATS		NUMBER OF ITEMS :		ONE		
	DETAIL OF INTERNALS	TRAY SUPPORTS/ BOLTING BARS						
	REBOILER CLIPS	PIPE DAVIT						



ENGINEERS INDIA LIMITED
KOLKATA

JOB NO. : 6907
CLIENT : BCPL
PLANT : GSU, LAKWA

REV.	DATE	REVISION	BY	CHK	APPROVED	APPROVED
0	19.03.2010	ISSUED FOR PURCHASE	A.ROY	BVK/PB	AKG	
A	01.07.2009	ISSUED FOR BIDS	A.ROY	AS/PB	AKG	

VESSEL DESIGN DATA
REFLUX DRUM
ITEM NO. 051-VV-102

वेसेल डिजाइन डेटा
रिफ्लक्स ड्रम
आइटम नम्बर 051-वीवी-102

DRAWING NO.
6907-051-16-46-3016

REV.
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SHEET 2 OF 2

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