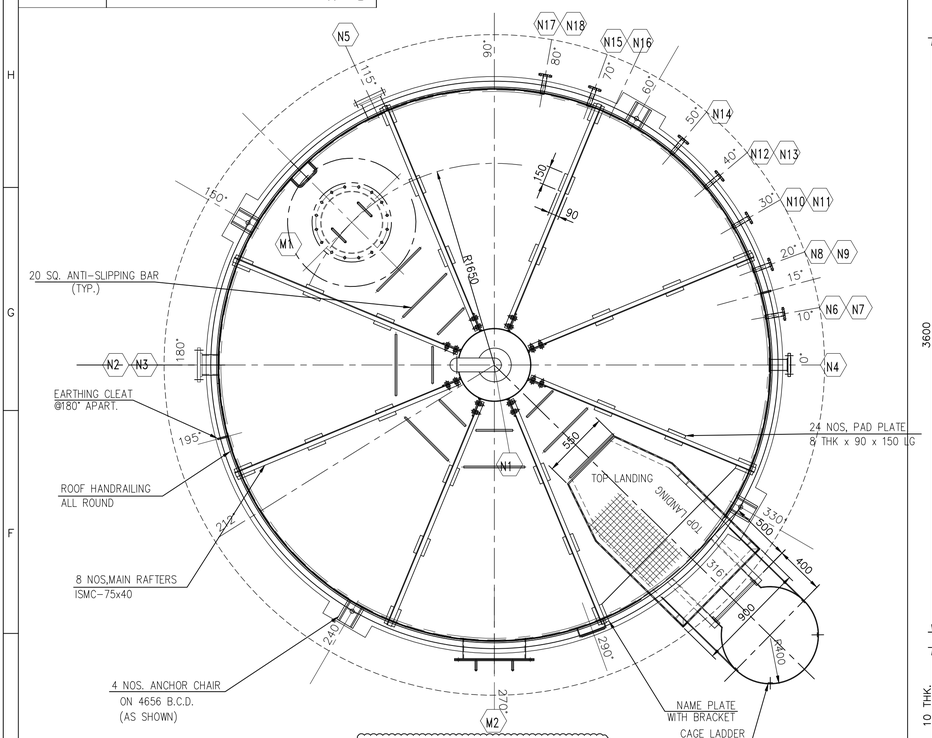
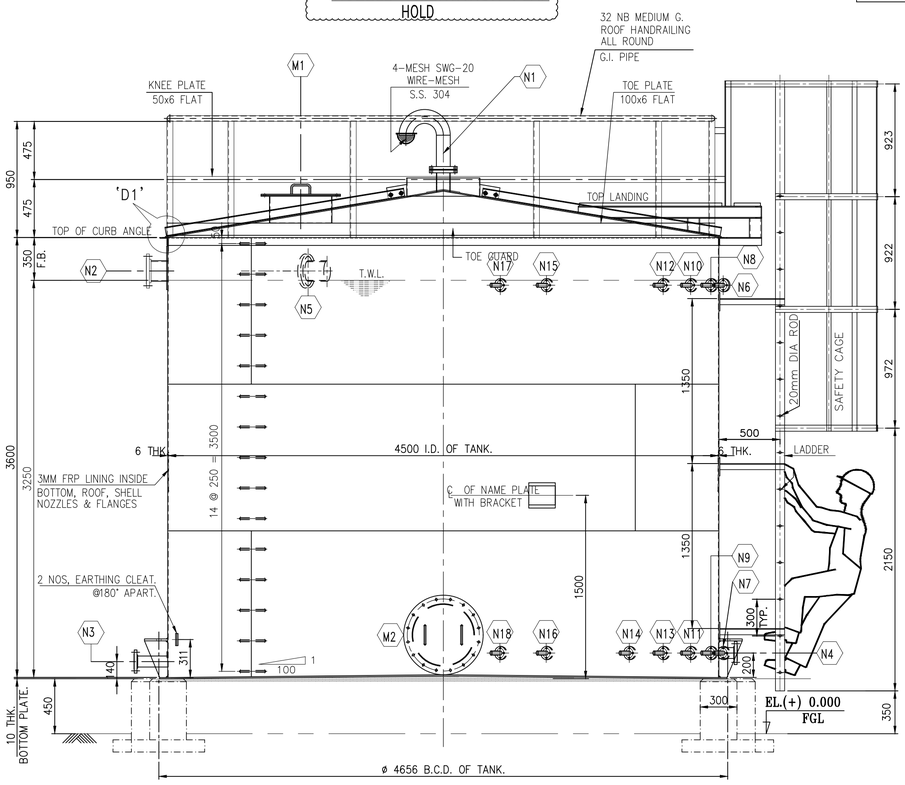
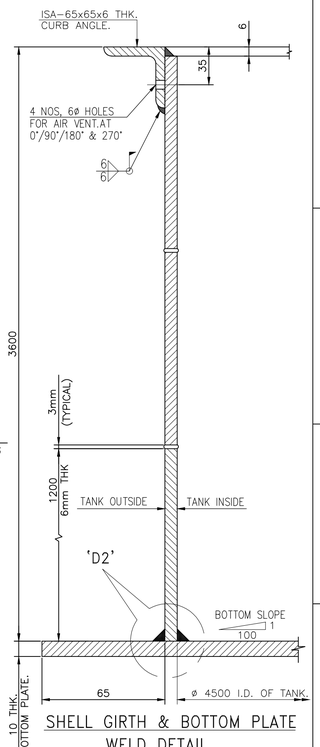
Dig. No. S21001-EN01-05GNE-221053 | SHT 1 OF 1



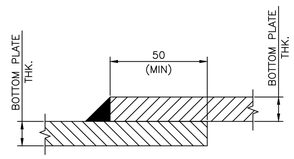
NOZZLE ORIENTATION PLAN
HOLD



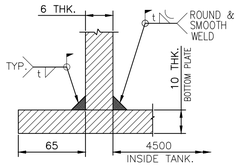
ELEVATION



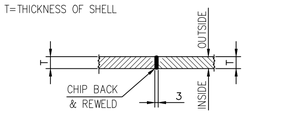
SHELL GIRTH & BOTTOM PLATE WELD DETAIL



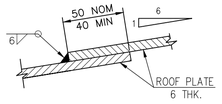
BOTTOM TO BOTTOM JOINT DETAIL



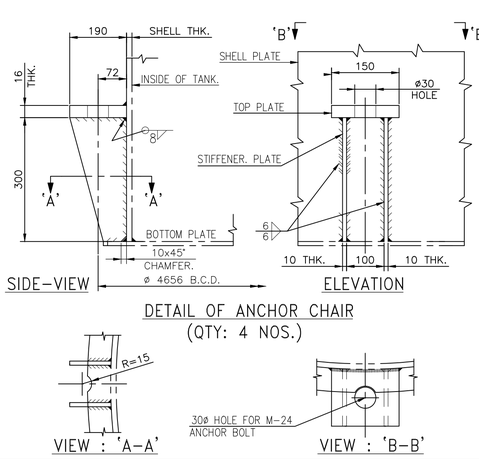
DETAIL : 'D2'



VERTICAL SHELL JOINT WELD DETAIL

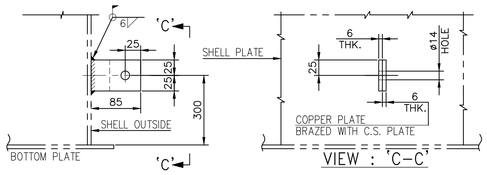


ROOF PLATE LAP JOINT DET.



DETAIL OF ANCHOR CHAIR (QTY: 4 NOS.)

VIEW : 'A-A' VIEW : 'B-B'

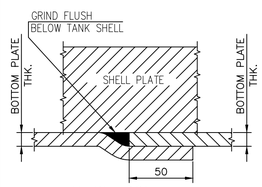


DETAIL OF EARTHING CLEAT QTY. : 2 NOS.

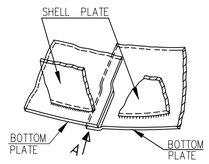
VIEW : 'C-C'

GENERAL NOTE'S:-

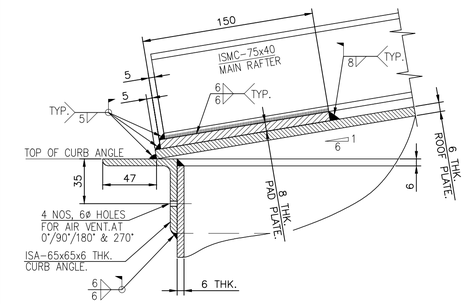
1) ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS & COORDINATES ARE IN METERS, UNLESS NOTED OTHERWISE.
2) TANKS SHALL BE DESIGNED, FABRICATED & TESTED TO THE REQUIREMENT OF IS 803.
3) TOLERANCE AS PER IS 803.
4) NOZZLE UPTO 50NB TO BE STIFFENED WITH 2 NOS. STIFFENERS OF 40 mm WIDE & 6 THK. FLAT WELDS AT 90°.
5) DP TEXT SHOULD BE APPLIED ON ALL WELDING JOINTS ON THE BOTTOM OF TANKS.



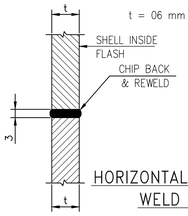
VIEW FROM – A
JOGGLING DETAILS
(WHERE SHELL PLATE WILL REST)



PREPARATION OF BOTTOM PLATES UNDER TANK SHELL



DETAIL : 'D1'



HORIZONTAL SHELL JOINT WELD DETAIL

DESIGN DATA

DESIGN CODE	IS 803
SERVICE	0.25% H2SO4 PROCESS WATER
LIQUID HANDLED	0.25% H2SO4 PROCESS WATER
LIQUID DENSITY KG/M³	1010
OPERATING TEMPERATURE (°C)	AMBIENT
DESIGN TEMPERATURE (°C)	50°C
OPERATING PRESSURE KG/CM²(g)	ATM
DESIGN PRESSURE KG/CM²(g)	FULL OF WATER + ATMOSPHERIC
TEST PRESSURE KG/CM²	FULL OF WATER
CORROSION ALLOWANCE (BOTTOM/SHELL)	1.5 mm
CORROSION ALLOWANCE (ROOF)	1.5 mm
JOINT EFFICIENCY	0.7
RADIOGRAPHY	NIL
INSULATION	NO
CAPACITY (m³) NOMINAL	50.0
BASIC WIND SPEED	
SEISMIC /DESIGN	
QTY. REQUIRED	01 NO.
EMPTY WEIGHT	~4000 Kg. HOLD
OPERATING WEIGHT	
TEST WEIGHT (FULL OF WATER)	

MATERIAL OF CONSTRUCTION

SHELL PLATE & TOP COVER PLATE	IS 2062 GR. B
BOTTOM PLATE	IS 2062 GR. B
MANHOLE NECKS.	IS 2062 GR. B
MANHOLE FLANGES.	IS 2062 GR. B
NOZZLE FLG. & BLIND FLG.	SA 105
NOZZLE PIPES ≤ 250 NB	SA 106 GR.B
NOZZLE PIPES (FAB.) > 250 NB	IS 2062 GR. B
FLANGE DRILLING	ANSI B 16.5
TANK INTERNAL LINING	3MM FRP (FIBER REINFORCED PLASTIC)
R.F.PADS, GUSSETS, NOZZLES STIFFENERS	IS 2062
ANCHOR BOLTS	IS 1367 GR. 4.6 OR EQUIVALENT
BOLTS & NUTS (NOZZLES)	IS 1367 CL. 4.6/4.0
STRUCTURALS (CURB ANGLE/ROOF STIFFENERS)	IS 2062
GASKET (3 THK.)	IS 2712
EXTERNAL (GUSSETS)	IS 2062
NAME PLATE/BRACKET	SS 304/IS 2062
EARTHING CONNECTION	IS 2062 GR.A / COPPER
LADDER / HANDRAIL	IS 1239(CLASS MEDIUM) GALVANIZED
GRATINGS	IS 2062

ROOF NOZZLE SCHEDULE

MARK	NOZZLE SIZE (NB)	NOZZLE SCH./THK.	QTY.	FLANGE TO ANSI B16.5 RATING	TYPE	FACE	SERVICE	PROJ.	REMARKS
M1	600	8 THK.	1	AS PER IS 803			MANHOLE	150	
N1	100	SCH.40	1	150#	S.O.	R.F.	VENT	150	WITH GOOSE NECK

SHELL NOZZLE SCHEDULE

MARK	NOZZLE SIZE (NB)	NOZZLE SCH./THK.	QTY.	FLANGE TO ANSI B16.5 RATING	TYPE	FACE	SERVICE	PROJ.	REMARKS
M2	600	8 THK.	1	AS PER IS 803			MANHOLE	150	
N2	100	SCH.40	1	150#	S.O.	R.F.	OVERFLOW	175	
N3	50	SCH.80	1	150#	S.O.	R.F.	DRAIN	275	
N4	65	SCH.40	1	150#	S.O.	R.F.	PUMP SUCTION	150	
N5	50	SCH. 80	1	150 #	S.O	R.F	TANK INLET	150	
N6 TO N13	25	SCH. 80	1	150 #	S.O	R.F	FOR LEVEL SWITCH	150	
N14	NOT USED								
N15 TO N18	25	SCH. 80	1	150 #	S.O	R.F	FOR LEVEL SWITCH	150	

PAINTING

PRIMER EXTERNAL	2 COATS OF EPOXY ZINC PHOSPHATE PRIMER. DFT/COAT 35 MICRONS
FINAL EXTERNAL	CHLORINATED RUBBER PAINT OF DFT 500 MICRONS.

REFERENCE DRAWING

TITLE	DRAWING NO.

ABBREVIATION

T.O.P. = TOP OF PLATFORM
T.W.L. = TOP WATER LEVEL
F.O.F. = FACE OF FLANGE
T.O.F. = TOP OF FOUNDATION
F.B. = FREEBOARD
S.W.D. = SIDE WATER DEPTH
B.O.P. = BOTTOM OF PIPE
F.G.L. = FINISH GROUND LEVEL
B.C.D. = BOLT CIRCLE DIAMETER

ISSUED FOR	APPROVAL ☐	INFORMATION ☐	MANUFACTURING ☐	CONSTRUCTION ☐	AS-BUILT ☐

REV.	DATE	DESCRIPTION OF REVISIONS	DRAWN	CHECKED	APPR'D
0	25/02/2022	FIRST ISSUE	BK	SM	BCB

Owner:
HINDALCO INDUSTRIES LIMITED
Ahura Centre, 1st Floor, B Wing, Mahakali Caves Road, Andheri (East), Mumbai - 400 093, India

EPCM Contractor:
W. L. GORE & ASSOCIATES (Pacific) Pte, Ltd. India Branch
703, A-Wing, 215 Atrium, Andheri Kurla Road, Mumbai - 400059, India

Nominated Subcontractor - Engineering, Quality Control, Supervision:
SMARTLuth Solution and Service Pvt. Ltd.
Unit No: 503, 5th Floor, ECO Centre,. EM-4 Sector-V, Salt Lake City, Kolkata - 700091, India

REVISION REV.	ZONE	BY/DT	CHD/DT	APPD/DT	DESCRIPTION

RELEASE STATUS	DATE	SIGNATURE
PRELIMINARY		
FOR TENDER ONLY		
FOR CONSTRUCTION		
REVIEWED: ARCHITECTURAL		
REVIEWED: CIVIL & STRUCTURAL		
REVIEWED: ELECTRICAL		
REVIEWED: INSTRUMENTATION		
REVIEWED: MECHANICAL		

DESIGNED	DRAWN	CHECKED	APPROV.	REV.	DATE

Hindalco Renusagar U5 1x80 MW PF Captive Power Plant
Flue Gas Desulfurization Project (FGD) with GORE™ SO_2 Control System
GA DRAWING OF SAC RECOVERED WATER TANK
–

Drg. No. S21001-EN01-05GNE-221053
GORE No. RPDU5.MV.XXX | SH 1 OF 1
GORE Job No. RPDU5 | SCALE: 1:25
File: XXXXXXXXXX

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