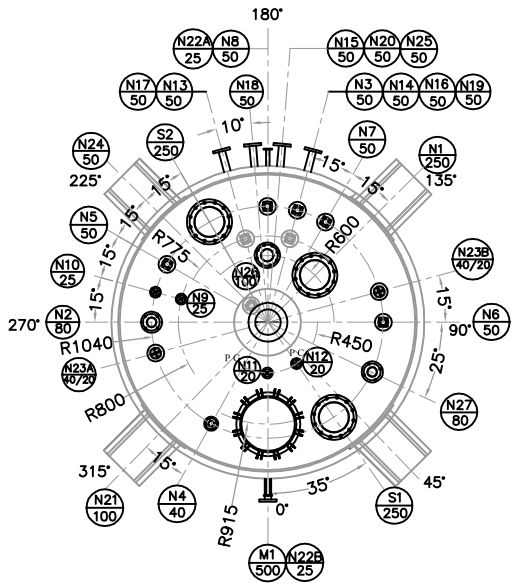
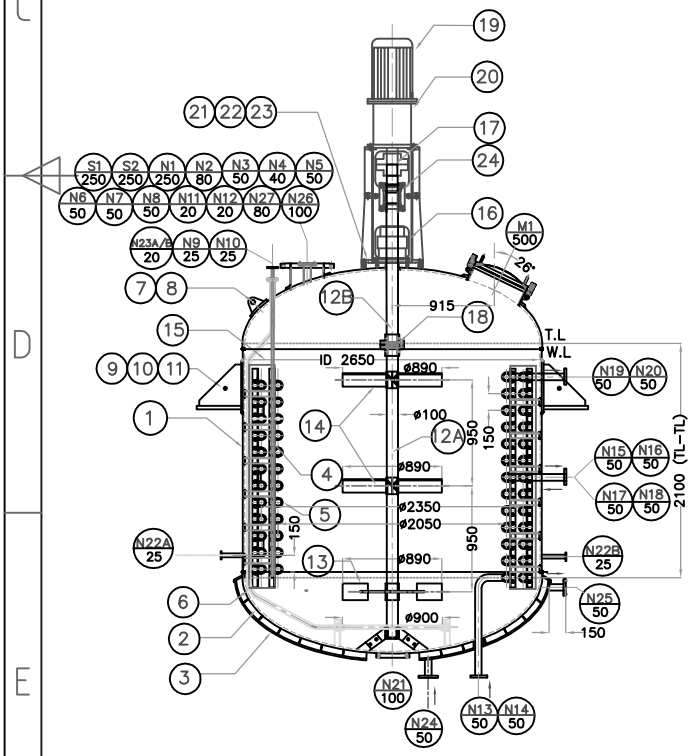
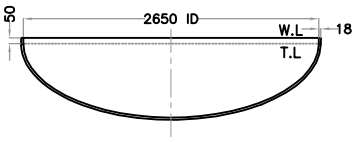


ORIENTATION



ELEVATION



DISH (SEMI ELLEPSOIDAL)

GENERAL DATA

1	EQUIPMENT	REACTOR 10 KL
2	EQUIPMENT NO.	RE DIC 101 & RE DIC 102
3	TYPE/POSITION	CYLINDRICAL /VERTICAL
4	QUANTITY	2 NO.
5	LOCATION	INDOOR

DESIGN DATA

1	DESIGN CODE	ASME SEC VIII, DIV I.					
		SHELL		JACKET		COIL	
2	DESIGN PR. KG/CM2(G)	FULL VACCUM-9		FULL VACCUM-4.5		FULL VACCUM-4.5	
3	OPERATING PR. KG/CM2(G)	FULL VACCUM-7		FULL VACCUM-4.5		FULL VACCUM-4.5	
4	HYDRO TEST PR.						
		NORM.	MAX.	NORM.	MAX.	NORM.	MAX.
5	DESIGN TEMP. °C		300		310	20	310
6	OPERATING TEMP. °C	20	260	20	310	20	310
7	CORR. ALLOW.	NIL					
8	RADIOGRAPHY	–					
9	EMPTY WT.	14000 KGS. (APPROX)					
10	WATER FILLED WT.	28000 KGS. (APPROX.)					

MATERIAL OF CONSTRUCTION

S.N	DESCRIPTION	MATERIAL/SPECIFICATION	MOC	QTY.
1	SHELL	ID2650X2100(TL-TL)x16THK	SS316	1
2	DISH (SEMI ELLIPSOIDAL)	ID2650X18THK(16min after forming)	SS316	2
3	JACKET	ID2782X14THK ON BOTTOM DISH	SS304	1
4	HEATING/COOLING COIL – OUTER	DIA 2350,50NB,Sch10, 12 TURNS	SS316	1 SET
5	HEATING/COOLING COIL – INNER	DIA 2050,50NB,Sch10, 12 TURNS	SS316	1 SET
6	SPARGING COIL	DIA 900, 25 NB,SCH 40	SS316	1
7	LIFTING HOOK PAD PLATE	125 X 200 X 16 THK	SS304	3
8	LIFTING HOOK	200 X 150 X 25 THK	SS304	3
9	PAD PLATE LUG SUPPORT	400X500X16 THK.	SS304	4
10	BASE PLATE LUG SUPPORT	360X400X35 THK.	IS2062	4
11	GUSSET PLATE LUG SUPPORT	375X400X20 THK.	IS2062	8
12A	AGITATOR SHAFT	DIA 100, 2750 L	SS316	1
12B	AGITATOR SHAFT	DIA 100, 1700 L	SS316	1
13	PITCHED BLADE TURBINE AGITATOR	890 Dia	SS316	1 SET
14	PADDLE BLADE AGITATOR	890 Dia	SS316	2SETS
15	BAFFLE	230X2000X12	SS316	4
16	DOUBLE MECH. SEAL	TYPE M451KL D22/100	EBIPL	1
17	FLEXIBLE COUPLING	ELECON / Fenner Make,	STD	1
18	RIGID COUPLING	–	SS316	1
19	MOTOR	30 HP, 1440 RPM, FLP	BHARATH BIJLEE	1
20	GEAR BOX	PLANATORY GEAR	TRASMITAL	1
21	STOOL POST BASE PLATE	SS 316 LINING	IS2062	1
22	STOOL POST	406 OD X 12.7 THK	SA 106	1
23	STOOL POST FLANGE	–	IS2062	1
24	BEARING HOUSING	WITH BEARINGS	EN 8	1SET

NOZZLE SCHEDULE

NOZZLE NECK					FLANGE		SERVICE	MOC
MARK	QTY.	SIZE	THK.	PROJ.	RATE	FACE		
M1	1	500	10 THK.	120			MANHOLE	SS 316
N1	1	250	SCH 40	180	150#	SORF	VAPOUR OUTLET	SS 316
N2	1	80	SCH 40	180	150#	SORF	SPARE	
N3	1	50	SCH 40	180	150#	SORF	SAFETY RELEASE VALVE	SS 316
N4	1	40	SCH 40	180	150#	SORF	FUNNEL INLET	SS 316
N5	1	50	SCH 40	180	150#	SORF	FROM MT DC 101	SS 316
N6	1	50	SCH 40	180	150#	SORF	SAMPLING LINE INLET	SS 316
N7	1	50	SCH 40	180	150#	SORF	FROM RT DC 101	SS 316
N8	1	50	SCH 40	180	150#	SORF	FROM DT DC 101	SS 316
N9	1	25	SCH 40	180	150#	SORF	NITROGEN SPARGER	SS 316
N10	1	25	SCH 40	180	150#	SORF	NITROGEN FLUSHING	SS 316
N11	1	20	SCH 40	180	150#	SORF	PRESSURE GAUGE	SS 316
N12	1	20	SCH 40	180	150#	SORF	PRESSURE CONTROLLER	SS 316
N13-20	8	50	SCH 40	180	150#	SORF	HEATING MEDIUM IN/OUT	SS 316
N21	1	100					FLUSH VALVE MOUNT	SS 316
N22 A/B	2	25	SCH 40	180	150#	SORF	SAMPLING VALVE MOUNT	SS 316
N23 A/B	2	40/20	SCH 40	180	150#	SORF	THERMOWELL	SS 316
N24	1	50	SCH 40	180	150#	SORF	HEATING MEDIA INLET	SS 304
N25	1	50	SCH 40	180	150#	SORF	HEATING MEDIA OUTLET	SS 304
N26	1	100	SCH 40	180	150#	SORF	VENT	SS 316
N27	1	80	SCH 40	180	150#	SORF	SPARE	SS 316
S1-2	2	250					LIGHT / SIGHT GLASS	SS 316

NOTE:

1. All dimensions are in mm unless otherwise specified.
2. All welds to be continues unless otherwise specified.
3. All internal welds ground flush & external welds ground smooth.
4. All sharp corners shall be round off.
5. All nozzles bolts holes should staraddle main centre line of the vessel.
6. All nozzle flanges shall confirm ANSI B16.5 Class 150
7. All reinforcement pads shall have 6 mm tapped holes.
8. All nozzles pipe shall be SMLS unless otherwised specified
9. All nozzles less than 50NB shall be provided 2 nos of 30 wide x 6 thk stiffners @90 deg. apart.
10. Output speed 30rpm

REV.	DATE	REV. NOTE	CHKD.	APPROVED
1	1.9.10	Nozzle orientation	GIRISH	SDS

SIECO ENGINEERS PVT. LTD.
NO. 25, BOMMASANDRA IND. AREA,
BANGALORE-560 099. INDIA.

REF:- PO DTD 03.07.2010

CLIENT: **DIC INDIA LIMITED**

DRAWN	CHKD.	APPROVED
PRAJEESH	SDS	SM

TITLE DESCRIPTION: 10KL REACTOR GENERAL ARRANGEMENT

SCALE: NTS	SHEET 1 OF 2	DATE 15.07.10	DRG. NO. SCO/DIC/P-009/10-11/019	REV. 1