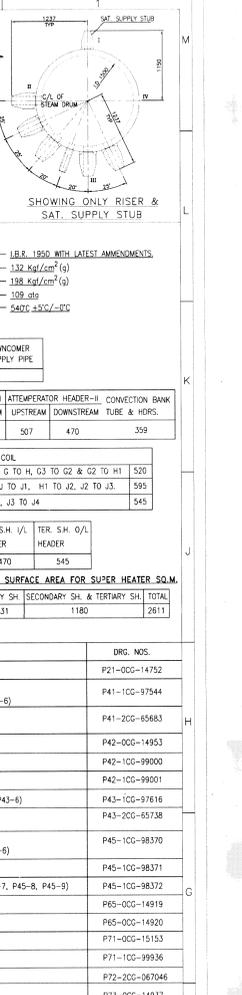
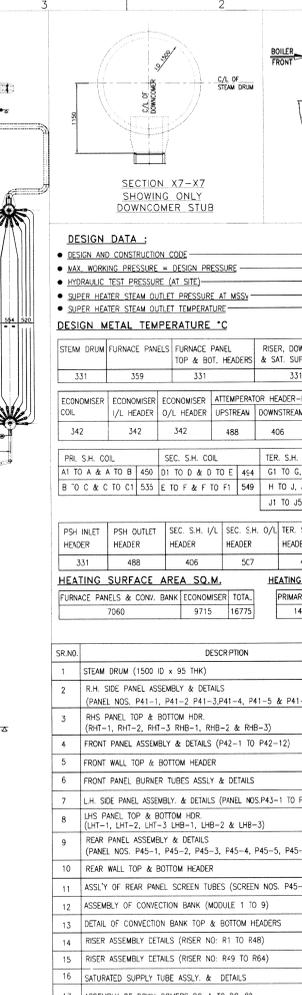
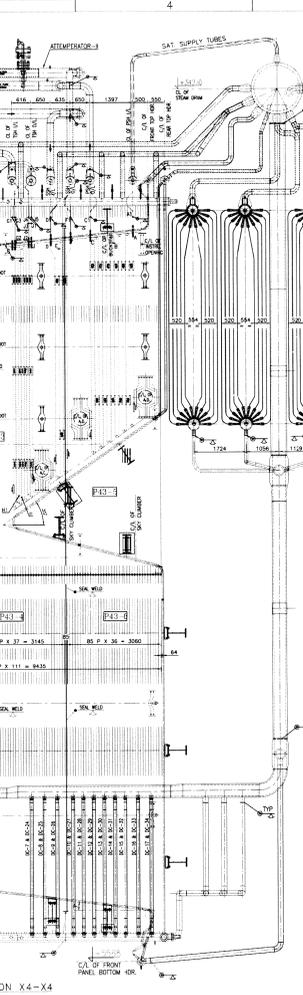
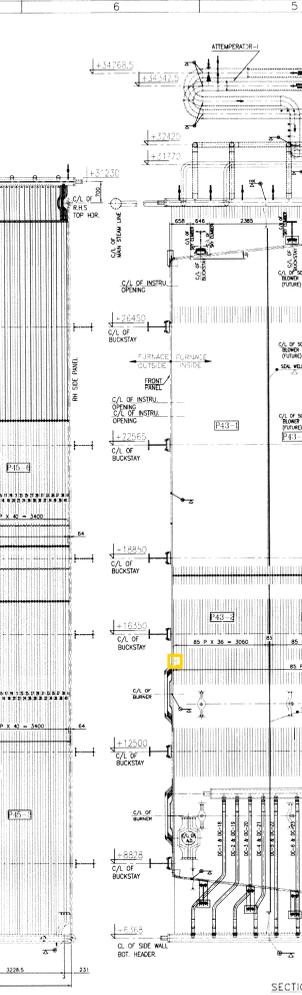
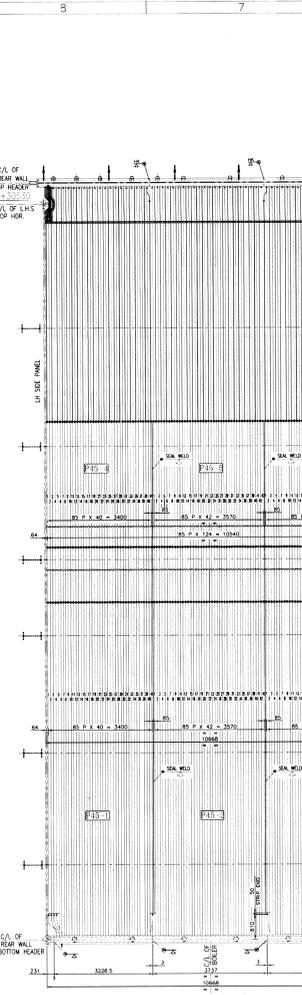
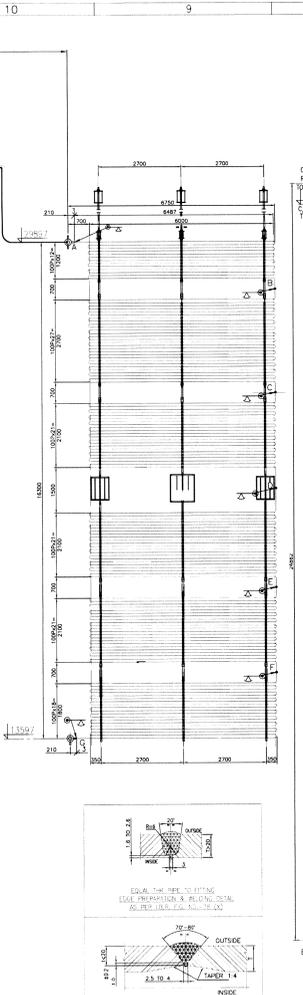
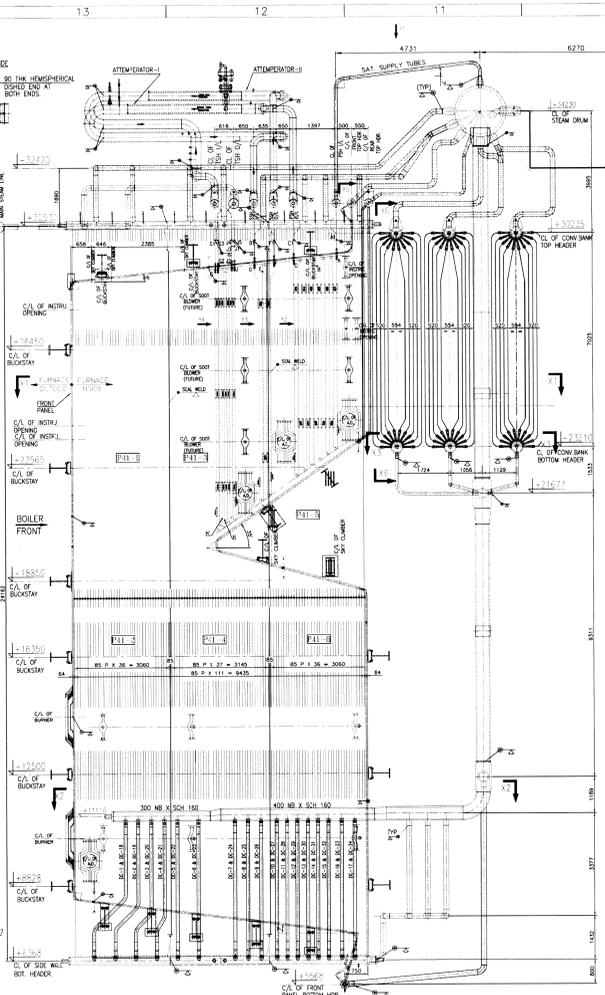
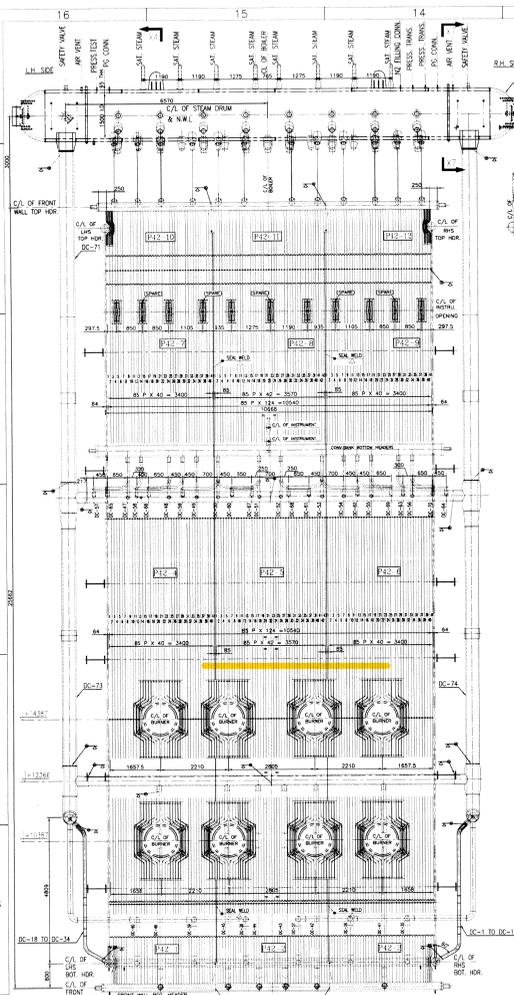
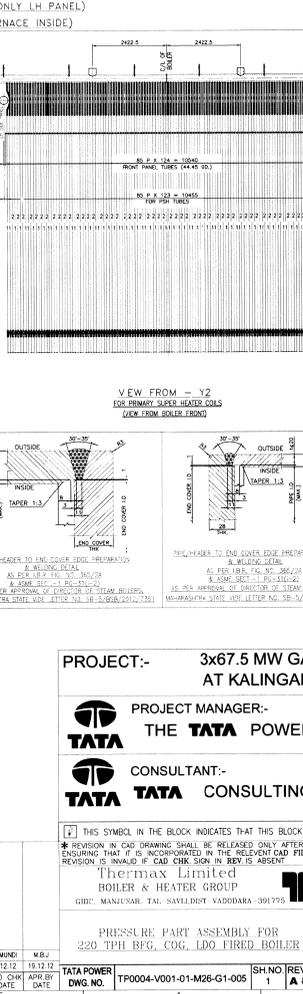
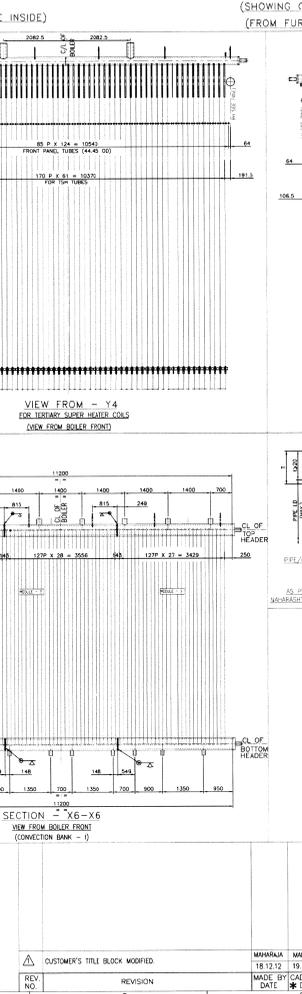
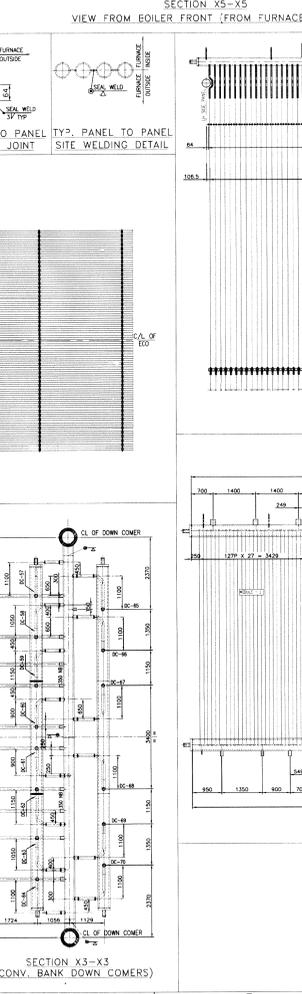
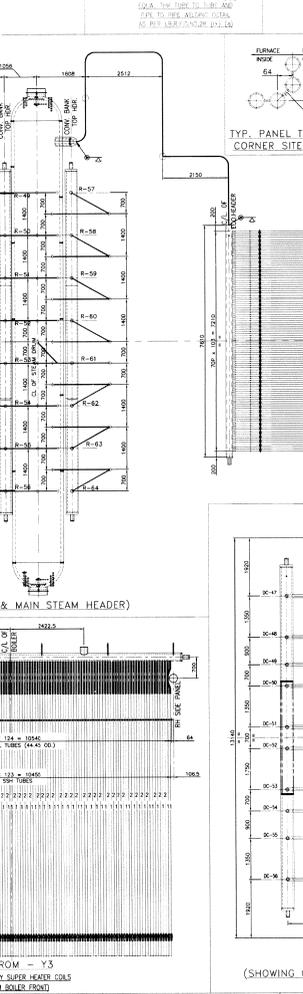
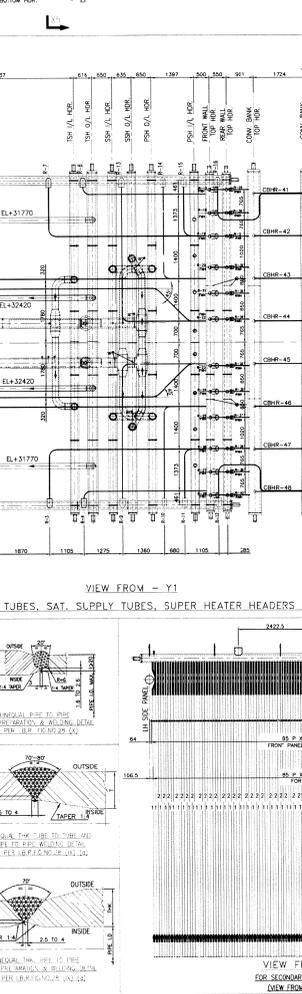
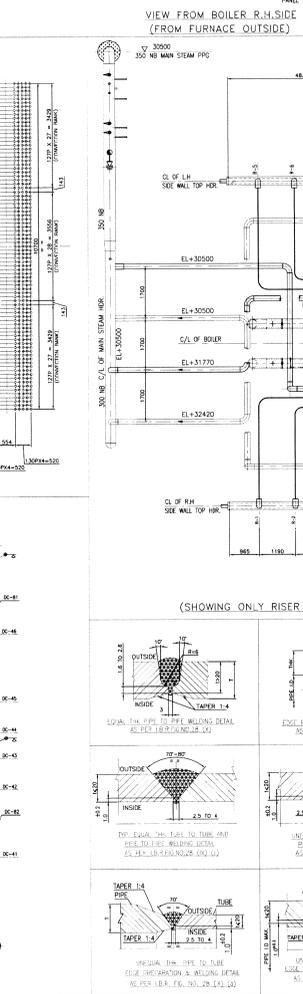
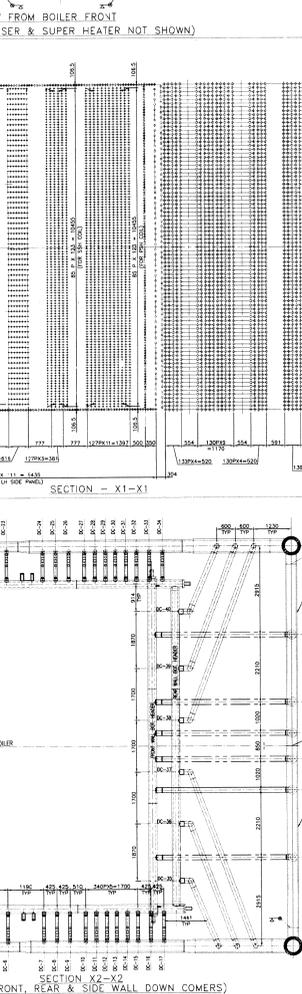
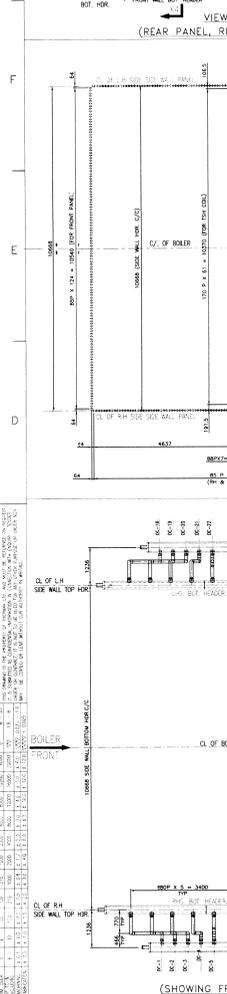


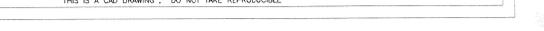
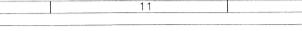
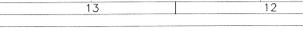
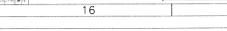
DO NOT SCALE.  
IF IN DOUBT, ASK



DO NOT SCALE.  
IF IN DOUBT, ASK



DO NOT SCALE.  
IF IN DOUBT, ASK



DESIGN DATA :  
• DESIGN AND CONSTRUCTION CODE I.B.R. 1950 WITH LATEST AMENDMENTS  
• MAX WORKING PRESSURE = DESIGN PRESSURE 132 kg/cm<sup>2</sup> (g)  
• HYDRAULIC TEST PRESSURE (AT SITE) 188 kg/cm<sup>2</sup> (g)  
• SUPER HEATER STEAM INLET PRESSURE AT MSS 139 kg/cm<sup>2</sup> (g)  
• RISER HEADERS STEAM INLET TEMPERATURES 420°C - 430°C - 430°C

DESIGN METAL TEMPERATURE °C  
STEAM DRUM FURNACE PANELS FURNACE PANEL RISER, DOWNCOMER & SAT. SUPPLY PIPE  
331 359 331 331

ECONOMISER	ECONOMISER	ECONOMISER	ATTENUATOR HEAD-I	ATTENUATOR HEAD-II	CONNECTION BANK
COL	U/L HEAD	O/L HEAD	UPSTREAM	DOWNSTREAM	TUBE & HORS.
342	342	342	488	406	507
470	470	470	470	470	359

PR. SH. COL.	SEC. SH. COL.	TER. SH. COL.
A1 TO A & A TO B 450	D1 TO D & D TO E 464	G1 TO G, G TO H, G3 TO G2 & G2 TO H1 520
B TO C & C TO C1 555	E TO F & F TO F1 549	H TO J, J TO J1, H1 TO J2, J2 TO J3 595
	J1 TO J5, J5 TO J4	545

PSH INLET HEADER	PSH OUTLET HEADER	SEC. SH. U/L HEAD	SEC. SH. O/L HEAD	TER. SH. U/L HEAD	TER. SH. O/L HEAD
331	498	406	527	470	545

HEATING SURFACE AREA SQ.M.		HEATING SURFACE AREA FOR SUPER HEATER SQ.M.	
FURNACE PANELS & CONV. BANK	ECONOMISER TOTAL	PRIMARY SH.	SECONDARY SH. & TERTIARY SH. TOTAL
7060	9715	16775	1431
			1180
			2611

SR.NO.	DESCRIPTION	DRG. NOS.
1	STEAM DRUM (1500 ID x 95 THK)	P21-000-14752
2	R.H. SIDE PANEL ASSEMBLY & DETAILS (PANEL NOS. P41-1, P41-2, P41-3, P41-4, P41-5 & P41-6)	P41-100-97544
3	RHS PANEL TOP & BOTTOM HDR (RHT-1, RHT-2, RHT-3 RHB-1, RHB-2 & RHB-3)	P41-200-65683
4	FRONT PANEL ASSEMBLY & DETAILS (P42-1 TO P42-12)	P42-000-14953
5	FRONT WALL TOP & BOTTOM HEADER	P42-100-99000
6	FRONT PANEL BURNER TUBES ASS'Y & DETAILS	P42-100-99001
7	L.H. SIDE PANEL ASSEMBLY & DETAILS (P43-1 TO P43-8)	P43-100-97616
8	LHS PANEL TOP & BOTTOM HDR (LHT-1, LHT-2, LHT-3 LHB-1, LHB-2 & LHB-3)	P43-200-65738
9	REAR PANEL ASSEMBLY & DETAILS (PANEL NOS. P45-1, P45-2, P45-3, P45-4, P45-5, P45-6)	P45-100-98370
10	REAR WALL TOP & BOTTOM HEADER	P45-100-98371
11	ASSEMBLY OF REAR PANEL SCREEN TUBES (SCREEN NOS. P45-7, P45-8, P45-9)	P45-100-98372
12	ASSEMBLY OF CONVECTION BANK (MODULE 1 TO 9)	P65-000-14919
13	DETAIL OF CONVECTION BANK TOP & BOTTOM HEADERS	P65-000-14920
14	RISER ASSEMBLY DETAILS (RISER NO. R1 TO R48)	P71-000-15153
15	RISER ASSEMBLY DETAILS (RISER NO. R49 TO R64)	P71-000-99936
16	SATURATED SUPPLY TUBE ASS'Y & DETAILS	P72-000-067046
17	ASSEMBLY OF DOWN COMERS DC-1 TO DC-87	P73-000-14937
18	DOWNCOMER DETAILS -DC-35 TO DC-46 & DC-71 TO DC-82	P73-000-14938
19	DET OF DOWN COMERS -DC-1 TO 34, DC-47 TO 70	P73-000-98826
20	ASSEMBLY OF PRIMARY SUPERHEATER COILS	PA1-100-99400
21	ASSEMBLY OF SECONDARY & TERTIARY SUPER HEATER COILS	PA2-000-15047
22	PSH INLET & OUTLET HEADER	PA3-100-99402
23	SSH INLET & OUTLET HEADER	PA3-100-99403
24	TSH INLET & OUTLET HEADER	PA3-100-99404
25	ASSEMBLY & DETAILS OF ATTENUATOR - I & CONNECTING LINKS	P81-100-100604
26	ASSEMBLY & DETAILS OF ATTENUATOR - II & CONNECTING LINKS	P81-100-100605
27	ECONOMISER COIL ASSEMBLY (INTEGRAL)	PL1-200-66041
28	ECONOMISER TOP & BOTTOM HEADER (INTEGRAL)	PL2-200-66042
29	INTEGRAL PIPING-I (MAIN STEAM PPG)	Z11-100-99979
30	INTEGRAL PIPING-II (STEAM DRUM MOUNTING)	Z11-100-99980
31	INTEGRAL PIPING-III (BOILER DRAIN & VENT PPG)	Z11-100-99981
32	INTEGRAL PPG-IV (SPRAY WATER PPG & BLR MOUNTING)	Z11-100-100012
33	INTEGRAL PIPING-V (FWL & FW PPG)	Z11-200-66945

NOTES:-  
• ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE SPECIFIED.  
• FOR STRESS RELIEVING, RADIOGRAPHY & MATERIAL DATA REFER INDIVIDUAL DRAWINGS.  
• STRESS RELIEVING AT SITE TO BE DONE BEFORE HYDRAULIC TEST.  
• BUCKSTAYS ARE NON IIR COMPONENT.  
• -Z- INDICATES SITE WELD.

REVISION	DATE	BY	CHKD	APP'D
1	18.12.12	M.M.	M.B.	M.B.
2	19.12.12	M.B.	M.B.	M.B.
3	19.12.12	M.B.	M.B.	M.B.
4	19.12.12	M.B.	M.B.	M.B.
5	19.12.12	M.B.	M.B.	M.B.
6	19.12.12	M.B.	M.B.	M.B.
7	19.12.12	M.B.	M.B.	M.B.
8	19.12.12	M.B.	M.B.	M.B.
9	19.12.12	M.B.	M.B.	M.B.
10	19.12.12	M.B.	M.B.	M.B.
11	19.12.12	M.B.	M.B.	M.B.
12	19.12.12	M.B.	M.B.	M.B.
13	19.12.12	M.B.	M.B.	M.B.
14	19.12.12	M.B.	M.B.	M.B.
15	19.12.12	M.B.	M.B.	M.B.
16	19.12.12	M.B.	M.B.	M.B.
17	19.12.12	M.B.	M.B.	M.B.
18	19.12.12	M.B.	M.B.	M.B.
19	19.12.12	M.B.	M.B.	M.B.
20	19.12.12	M.B.	M.B.	M.B.
21	19.12.12	M.B.	M.B.	M.B.
22	19.12.12	M.B.	M.B.	M.B.
23	19.12.12	M.B.	M.B.	M.B.
24	19.12.12	M.B.	M.B.	M.B.
25	19.12.12	M.B.	M.B.	M.B.
26	19.12.12	M.B.	M.B.	M.B.
27	19.12.12	M.B.	M.B.	M.B.
28	19.12.12	M.B.	M.B.	M.B.
29	19.12.12	M.B.	M.B.	M.B.
30	19.12.12	M.B.	M.B.	M.B.
31	19.12.12	M.B.	M.B.	M.B.
32	19.12.12	M.B.	M.B.	M.B.
33	19.12.12	M.B.	M.B.	M.B.
34	19.12.12	M.B.	M.B.	M.B.
35	19.12.12	M.B.	M.B.	M.B.
36	19.12.12	M.B.	M.B.	M.B.
37	19.12.12	M.B.	M.B.	M.B.
38	19.12.12	M.B.	M.B.	M.B.
39	19.12.12	M.B.	M.B.	M.B.
40	19.12.12	M.B.	M.B.	M.B.
41	19.12.12	M.B.	M.B.	M.B.
42	19.12.12	M.B.	M.B.	M.B.
43	19.12.12	M.B.	M.B.	M.B.
44	19.12.12	M.B.	M.B.	M.B.
45	19.12.12	M.B.	M.B.	M.B.
46	19.12.12	M.B.	M.B.	M.B.
47	19.12.12	M.B.	M.B.	M.B.
48	19.12.12	M.B.	M.B.	M.B.
49	19.12.12	M.B.	M.B.	M.B.
50	19.12.12	M.B.	M.B.	M.B.

PROJECT:- 3x67.5 MW GAS FIRED CPP AT KALINGANAGAR, ODISHA

PROJECT MANAGER:- THE TATA POWER COMPANY LIMITED

CONSULTANT:- TATA CONSULTING ENGINEERS LIMITED

Thermax Limited BOILER & HEATER GROUP

Boiler No. W1010100

SCALE: 1:80

DATE: 18.12.12

MADE BY: CAD, CHKD BY: M.B., DATE: 19.12.12

APPROVED: M.B., DATE: 19.12.12

SHR. SIZE: THERMAX DRC. NO. 024-000-015466

DEPT: CPP-1

AREA: CPP-1

CODE 1: DEPT CODE

CODE 2: AREA CODE

CODE 3: SUBJECT CODE

REV: TATA DRG. NO. TH00002003

THIS IS A CAD DRAWING. DO NOT TAKE REPRODUCIBLE