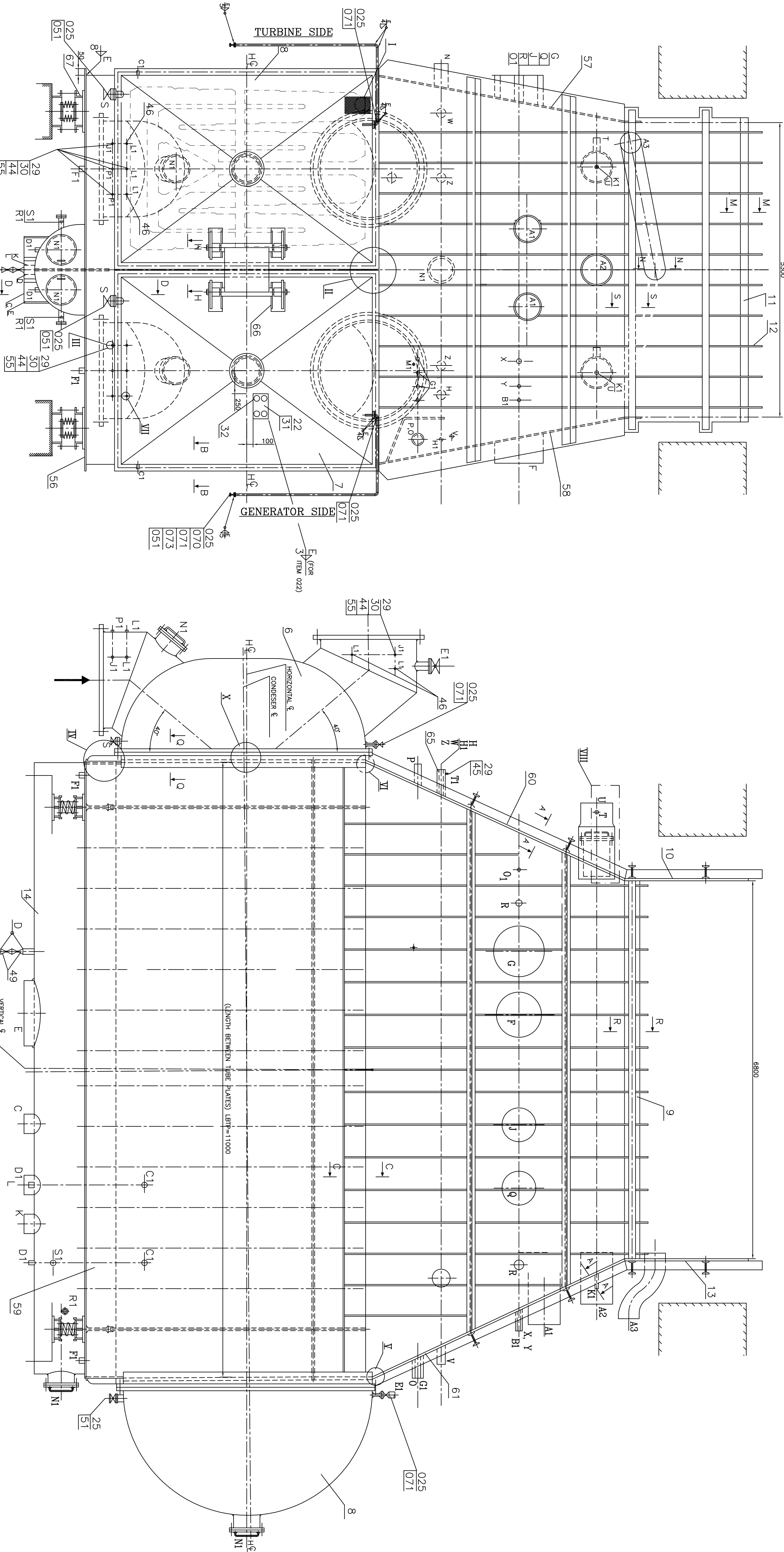




REFERENCE DRAWINGS :-

- 1-16010-40019 CONDENSER
- 2-16000-40016 INSTALLATION OF LEVEL
- 1-16011-40073 INSTRUMENTS ON CONDENSER
- 1-16012-40021 LOWER DOME WALL (GEN SIDE)
- 1-16013-40003 LOWER DOME WALL (TMR SIDE)
- 1-16014-40016 SIDE WALL (TMR SIDE)
- 1-16015-40005 LOWER DOME WALL (FMB SIDE)
- 1-16016-40004 LOWER DOME WALL (GEN SIDE)
- 1-16017-40001 SIDE WALL (GEN SIDE)
- 1-16027-40002 DOME INTERNAL STIFFENING
- 1-16028-40002 SHELL INTERNAL DETAILS
- 1-16028-40003 AIR EXTRACTION PIPING
- 1-16027-40003 INSULATION
- 1-16027-40003 ARRANGEMENT
- 1-16071-40003 CONDENSER SUPPORTS

PAINTING :-

01. THE CONDENSER HAS BEEN PAINTED AT WORKS AS FOLLOWS :
 - (a) SURFACE SURFACES : EPOXY BASED ZINC RICH PRIMER PAINT.
 - (b) OUT SIDE SURFACES :- HIGH BUILD INTERMEDIATE EPOXY PAINT.
02. THE CONDENSER SHALL BE PAINTED AT SITE AS FOLLOWS :
 - (a) ALL OUTSIDE SURFACES OF THE CONDENSER ARE TO BE PAINTED (IF DAMAGED) WITH HIGH BUILD INTERMEDIATE EPOXY PAINT AS PER AAS6142.
 - (b) TAIL GLOS POW VERTICAL FINISHING PAINT AS PER AAS6142.
 - (c) WHEREVER WATER SIDE SURFACES OF WATER CHAMBER INCLUDING TUBE PLATES ARE SUPPLIED PAINTED WITH STEAM WASHABLE PAINT, THIS IS TO BE REMOVED BY THINERS & CLEAN SURFACE SHOULD BE OBTAINED.
 - (d) AFTER CLEANING THE WATER SIDE SURFACE OF 'P' W/BOX & WATER CHAMBER COATS (OPT 60 MICRO) AS PER THE COLOUR SCHEME ENALISED FOR THE STATION. INSULATION OF PLASTIC PLUGS IN THE TUBE ENDS SO AS TO PROTECT THE TUBES.
 - (e) ALL ABOVE ARE TO BE COMPLETED BEFORE HYDRAULIC TESTING.

LIST OF REFERENCE STANDARDS:-

1. HW6202099 : VISUAL INSPECTION OF WELD SEAMS
2. AAS6217005 : GENERAL TOLERANCES FOR WELDED STRUCTURES.
3. HE070001 : EXPANSION OF TUBES
4. AAS6101 : ANTI CORROSION PRIMER PAINT
5. AAS6101 : ANTI CORROSION PRIMER PAINT
6. AAS6139 : HIGH BUILD BLACK COAL/TAR EPOXY PRIMER PAINT.
7. AAS6139 : STEAM WASHABLE SOLUTION OF WELD JOINTS.
8. AAS6139 : FIELD WELDING SCHEDULE
9. HE/EN/10265 : FIELD WELDING SCHEDULE AT SITE.
10. HE/EN/10265 : CONDENSER TUBE SEAL WELDING PROCEDURE.
11. HE/EN/10265 : CONDENSER TUBE SEAL WELDING PROCEDURE.
12. HE/EN/10265 : CONDENSER TUBE SEAL WELDING PROCEDURE.

TECHNICAL REQUIREMENTS :-

01. BEFORE WELDING ENSURE THAT ALL WELD PREPARATIONS AND AREA OF 80 MM AROUND IT ARE FREE FROM PAINT, OIL, GREASE ETC.
02. VISUAL INSPECTION OF ALL WELD SEAMS IS TO BE CARRIED OUT ACCORDING TO BHEL HARDWARE STANDARD HW6202099.
03. RCTIVE EXAMINATION ACCORDING TO BHEL HARDWARE STANDARD HW 6202099. CATEGORY OF SERVICE REQUIREMENT AS INDICATED IN RESPECTIVE ERECTION DROGS (SEE LIST OF DRAWINGS)
04. CATEGORY OF SERVICE REQUIREMENT FOR WELDING SHOWN IN THIS DROG IS AS FOLLOWS :-
 - CATEGORY 3 FOR THE REST OF WELD SEAM THAT IS STIFFENED ETC.
 - CATEGORY 4 FOR THE REST OF WELD SEAM THAT IS STIFFENED ETC.
05. CONNECTIONS WHICH ARE FAILING WITHIN RANGE OF HORIZONTAL TEST ARE TO BE BLANKED OFF PROPERLY AND SAME TO BE UNBLANKED AFTER HORIZONTAL TEST.
06. CARE TO BE TAKEN DURING HYDRO FILL TEST NOT TO TRANSFER EXCESS WEIGHT TO CONDENSER FOUNDATION THAN AS PER DRAWING 'CONDENSER SUPPORTS'.
07. TIGHTENING OF WATER BOX / WATER CHAMBER BOLT / STUDS IS TO BE DONE WITH AT HYDRAULIC TEST PRESSURE. OVER TIGHTENING SHOULD NOT BE DONE.
08. TUBE SUPPORT PLATES PINNED IN ONE PACKET (WHICH HAVE BEEN PINNED) / MARKED WITH PLANT ORDER NO./PACKET NO./PLATE NO.) SHOULD BE INSTALLED IN FEW SCATTERED HOLES IN FINGER OF THE LAYOUT SHOULD BE CHECKED FOR AL- SIDE SHOULD BE MINIMISED BY DISTRIBUTING IT IN OTHER FINGERS.
09. TOP TWO ROWS OF TUBE LAYOUT HAVE BEEN PROVIDED WITH TUBE OF 0.711 MM THICKNESS.
10. TO INSURE TOLERANCE ON LAPP AS INDICATED IN THE DRAWING.
11. PRESERVATION AND CONSERVATION IS TO BE DONE AS PER BHEL/HARDWARE STD. HE7205.
12. PRESERVATION AND CONSERVATION IS TO BE DONE AS PER BHEL/HARDWARE STD. HE7205.

NOTES :-

01. CONDENSER IS SUPPLIED IN A NO. OF ASSY/SUB-ASSY, VIZ. BOTTOM PLATES, SIDE WALL DOME WALLS FROM / REAR (S & RS) WATER CHAMBERS AND ELEMENTS (28 NOS), STEAM THROW DEVICE (2 NOS), AIR EXTRACTION PIPE, STAND PRESS, INSTRUMENTS AND FITTING ETC.
02. EXAM ITEM HAS BEEN IDENTIFIED WITH INDIFICATION NO. WHICH IS GIVEN IN 'X' INDICATES SITE WELDING.
03. SPRING COMPRESSION DATA GIVEN ON DRAWING NO. 1-16071-40003 ARE THEORETICAL. HOWEVER, FINAL SPRING SETTING / ADJUSTMENT IS TO BE DONE FASTENERS FOR WATER BOX & WATER CHAMBER HAVE BEEN SUPPLIED IN SUFFICIENT QUANTITY TO COVER TO THE HALF DEGREE INCLINATION AND FINAL FASTENERS FOR WATER BOX & WATER CHAMBER HAVE BEEN SUPPLIED WITH THE WATER STIFFENERS SUPPLIED TACK WELD ON LOWER DOME (FMB & FMB SIDE) ARE TO BE FINALLY WELDED AT SITE AFTER ENSURING THEIR ALIGNMENT WITH THE WATCHING STIFFENERS ON WATER CHAMBERS.
04. APPROACH FOR VIEWING OF INSTRUMENTS, ACCORDINGLY ROUTING OF CONNECTING PIPING TO COND. IS TO BE DONE. SUFFICIENT EXTRA PIPE LENGTHS FOR THE PURPOSE HAVE BEEN SUPPLIED.
05. 17. 4 NOS WATER BOX GATE VALVES ARE TO BE INSTALLED AT A CONVENIENT LOCATION AS SHOWN FOR EASE OF OPERATION.

OWNER:

Bhavna Energy Company Limited

OWNER'S ENGINEER:

TATA CONSULTING ENGINEERS LIMITED



MUMBAI

ADDITIONAL INFORMATION:

DIR. OF PROJECT NO. 2X250 MW LIGNITE BASED TPP AT PADVA, BHAYNAGAR DIST., GUJARAT

DISTRIBUTION OF PRINTS:

HCM-4

REVISIONS:

REV. DATE DESCRIPTION

01/03/13 CHECKED BY: [Signature]

02/08/13 CHECKED BY: [Signature]

03/08/13 CHECKED BY: [Signature]

04/08/13 CHECKED BY: [Signature]

PRODUCT GROUP No.1

2X250 MW LIGNITE BASED TPP AT PADVA, BHAYNAGAR DIST., GUJARAT

ASSY OF SURFACE CONDENSER

1-16010-40019 02

1-16010-40019 02

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