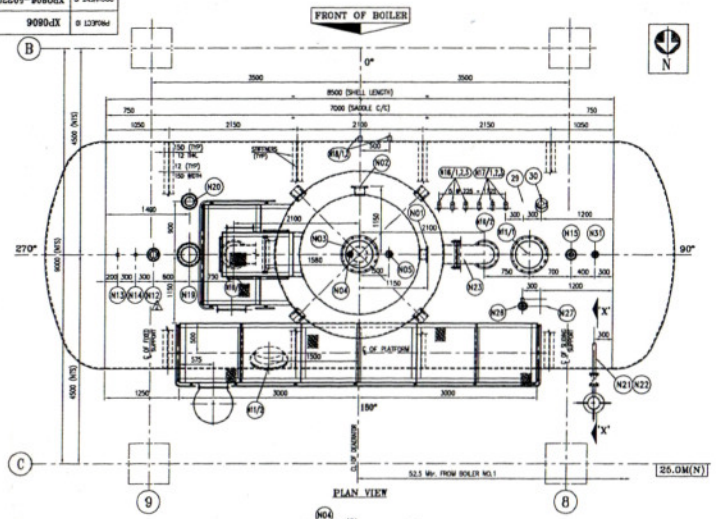
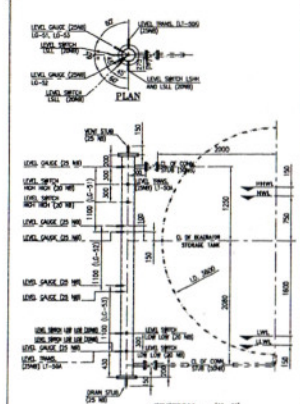
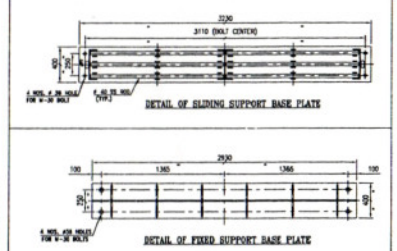
PROJECT ID : XP0806
DOCUMENT ID : XP0806-50270100-ASY-001

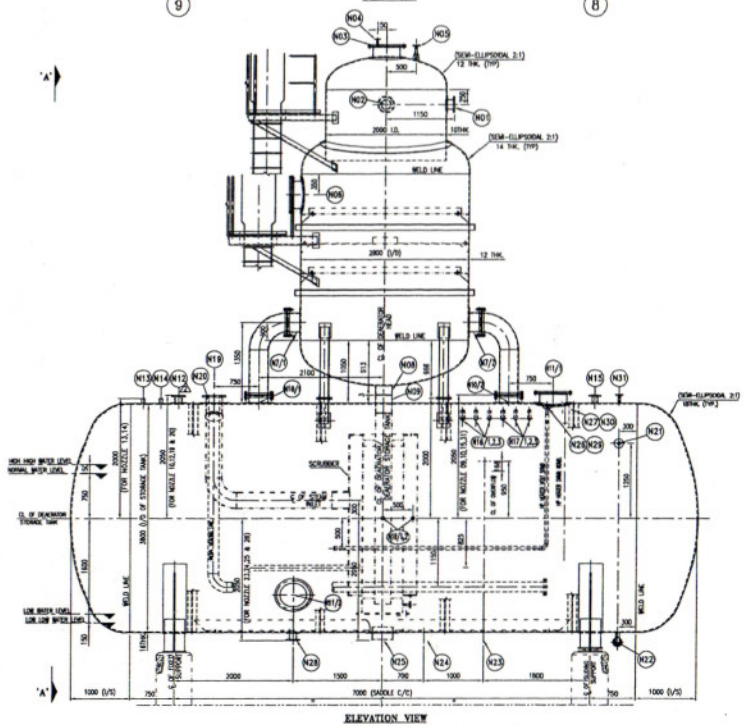


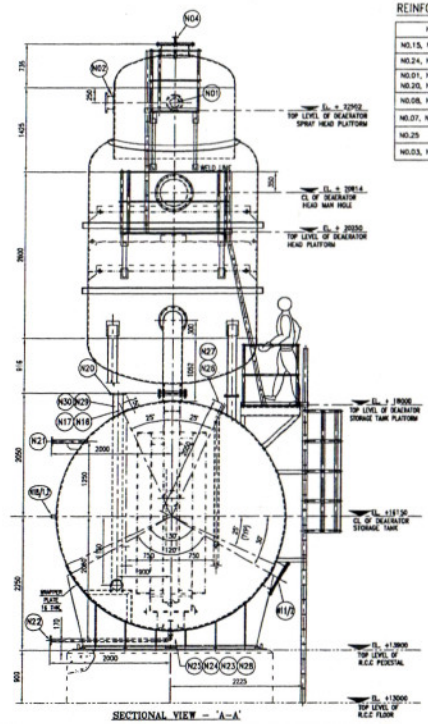




GENERAL NOTES:–

1. ALL DIMENSIONS ARE IN M.M. UNLESS STATED OTHERWISE.
2. ALL FLANGED OPENING SHELL BE BLINDED BEFORE DESPATCH ATLEAST BY WOODEN COVER. BEVEL END CONNECTIONS SHALL BE SUITABLY CAPPED BEFORE HYDRAULIC TEST
3. INTERNAL BOLTING IF ANY SHALL BE PROTECTED AGAINST LOOSENING BY PROVISION OF DOUBLE NUTS, ANTI LOOSE WASHERS ETC.
4. ALL BUTT / GROOVE WELDS TO BE CHIPPED BACK TO SOUND METAL AND TO BE REWELDED.
5. MINERAL WOOL MATTRESS HAVING 100 KG/CUM DENSITY WILL BE USED AS INSULATING MATL.
6. ALL 50 NB AND BELOW NOZZLES WILL BE PROVIDED WITH GUSSET PLATES AT TWO PERPENDICULAR DIRECTIONS.
7. FOR P&I FOR DEAERATOR & CHEMICAL DOSING SYSTEM REFER DRAWING No. XP0806-50990200-PID-003
8. EXTERNAL PAINTING :– TWO COATS OF RED OXIDE PRIMER PRIOR TO DESPATCH.
9. FOR GENERAL ARRANGEMENT PLAN REFER DRAWING No. XP0806-50990100-ASY-002




REINFORCING PAD SIZES:

| NOZZLE NO. | NOZZLE SIZE (NB) | PAD SIZE |
|---|---|---|
| NO.15, NO.27, NO.30 | 80NB. | 200 O/D x 93 I/D x 10 THK. |
| NO.24, NO.28, NO.12 ⚠ | 100NB. | 250 O/D x 118 I/D x 10 THK. |
| NO.01, NO.02, NO.20, NO.23 | 150NB. | 300 O/D x 172 I/D x 10 THK. |
| NO.08, NO.09, NO.19 | 250NB. | 400 O/D x 277 I/D x 10 THK. |
| NO.07, NO.10 | 300NB. | 450 O/D x 328 I/D x 10 THK. |
| NO.25 | 350NB. | 500 O/D x 360 I/D x 10 THK. |
| NO.03, NO.06, NO.11 | 450NB. | 640 O/D x 470 I/D x 10 THK. |

DESIGN DATA:–

| | | |
|---|---|---|
| DESIGN CODE | AS PER ASME Sec.–VIII DIV. I 2001 + ADDENDA 2003. | |
| DESIGN PRESSURE / TEMP. | 7.0 Kg/cm^2 (g) & FULL VACUUM / 250°C | |
| HYDRAULIC TEST PRESSURE | 1.3 TIMES DESIGN PRESSURE | |
| WORKING PRESSURE / TEMP. | 4.8 Kg/cm^2 (g) / 157°C | |
| RADIOGRAPHY | AS PER ASME (100 RADIOGRAPHY ON SHELL & DISHED END) &100% RT FOR ALL 'T' JOINTS. ⚠ | |
| STRESS RELIEVING | AS PER ASME | |
| INSTALLATION | OUT DOOR | |
| CONTENTS | WATER & STEAM | |
| MATL. OF CONSTRUCTION | PLATES FOR SHELL/DE/FLANGES/ COMP. PADS & WRAPER PLATES | SA 515 Gr. 70 |
| | MAN HOLE | SA 515 Gr. 70 |
| | SUPPORTS | IS : 2062 Gr.A |
| | TRAYS / SPRAY NOZZLE | AISI : 304 |
| WEIGHTS (APPROX.) | EMPTY WT. (WITH PLATFORM, STAND PIPE & SADDLE) | 34.5 MT. (APPROX) |
| | OPERATING WT. | 115 MT. (APPROX) |
| | TEST WT. | 160 MT. (APPROX) |
| WELDING JOINT EFFICIENCY | 0.85 FOR SHELL & 0.85 FOR DISHED END. | |
| INSULATION MATERIAL | MINERAL WOOL MATTRESS BACKED WITH CHICKEN WIREMESSH | |
| INSULATION THICKNESS | 75 mm | |
| INSULATION DENSITY | 100 Kg/M^3 | |
| TYPE OF DISHED HEAD / CODE | SEMI ELLIPSOIDAL (2:1) / IS: 4049 PART–II | |
| CAPACITY OF DEAERATOR | 252 M^3/Hr. | |
| STORAGE TANK CAPACITY. (FOR 20 MIN. STORAGE) | REQUIRED: 77 M^3. / PROVIDED: 79 M^3 BETWEEN NWL TO LWL | |
| ALUMINIUM CLADDING THICKNESS | 24 SWG | |
| PRESSURE DROP IN SPRAY NOZZLE | 0.2 Kg/CM^2 | |
| CORROSION ALLOWANCE (ONLY FOR CARBON STEEL) | 3.0 MM (CA NOT APPLICABLE FOR S.S. COMPONENTS) | |
| ⚠ DEAERATOR VENT LOSS | 0.5% | |

PLATES MATERIAL SHOULD BE – SA 515 Gr. 70

NOZZLE SCHEDULE

| NOZZLE NO. | SIZE NB | NOZZLE SPEC. NB | SIZE RATING | SIZE TYPE | SIZE FACING | SERVICE | REMARKS |
|---|---|---|---|---|---|---|---|
| 1 | 150 | SA 106 Gr.B SCH.80 | ASME B16.5 150 # | SLIP–ON | R.F. | CONDENSATE INLET–I | |
| 2 | 150 | SA 106 Gr.B SCH.80 | ASME B16.5 150 # | SLIP–ON | R.F. | CONDENSATE INLET–II | |
| 3 | 450 (I/D) | SA 515 Gr. 70 8mmTHK. PL. | ASME B16.5 150 # | SLIP–ON | R.F. | MAN HOLE | DEAERATOR SPRAY HEAD |
| 4 | 25 | SA 106 Gr.B SCH.XXS | ASME B16.5 150 # | SLIP–ON | R.F. | AIR VENT | |
| 5 | 40 | SA 312 TP 304 SCH.XXS | ASME B16.5 150 # | SLIP–ON | R.F. | GAS VENT | |
| 6 | 450 (I/D) | SA 515 Gr. 70 8mmTHK. PL. | ASME B16.5 150 # | SLIP–ON | R.F. | MAN HOLE | |
| 7/1,2 | 300 EACH | SA 106 Gr.B SCH.40 | ASME B16.5 150 # | SLIP–ON | R.F. | EQUALISING PIPE | DEAERATOR HEAD |
| 8 | 250 | SA 106 Gr.B SCH.40 | – | BEVELED END | – | DOWNCOMER | |
| 9 | 250 | SA 106 Gr.B SCH.40 | – | BEVELED END | – | DOWNCOMER | |
| 10/1,2 | 300 EACH | SA 106 Gr.B SCH.40 | ASME B16.5 150 # | SLIP–ON | R.F. | EQUALISING PIPE | |
| 11 /18,2 | 450 (I/D) | SA 515 Gr. 70 8mmTHK. PL. | ASME B16.5 150 # | SLIP–ON | R.F. | MAN HOLE | |
| ⚠ 12 | 100 | SA 106 Gr.B SCH.80 | ASME B16.5 150 # | SLIP–ON | R.F. | SAFETY VALVE | |
| 13 | 15 | SA 106 Gr.B SCH.XXS | – | 1/2"N.P.T SOCKET WITH 100mm NIPPLE | – | COMPOUND GAUGE | |
| 14 | 20 | SA 106 Gr.B SCH.XXS | – | BEVEL END | | P.T. CONNECTION | 1" SOCKET WITH 100mm PIPE |
| 15 | 80 | SA 106 Gr.B SCH.160 | ASME B16.5 150 # | SLIP–ON | R.F. | VACUUM BREAKER | |
| 16/A TO X | 50 | SA 106 Gr.B SCH.160 | – | BEVELED END | – | BFP MINIMUM FLOW RECIRCULATION LINE | |
| 17/A TO X | 40 | SA 106 Gr.B SCH.XXS | – | BEVELED END | – | BFP LEAK OFF LINE | |
| 18/1,2 | 25 | SA 106 Gr.B SCH.XXS | – | | – | THERMOWELL | 1" SOCKET WITH 100mm PIPE |
| 19 | 250 | SA 106 Gr.B SCH.40 | ASME B16.5 150 # | SLIP–ON | R.F. | MAIN STEAM INLET | |
| 20 | 150 | SA 106 Gr.B SCH.80 | ASME B16.5 150 # | SLIP–ON | R.F. | INITIAL HEATING LINE | DEAERATOR STORAGE TANK |
| 21 | 50 | SA 106 Gr.B SCH.160 | ASME B16.5 150 # | SLIP–ON | R.F. | STAND PIPE CONECTION | |
| 22 | 50 | SA 106 Gr.B SCH.160 | ASME B16.5 150 # | SLIP–ON | R.F. | STAND PIPE CONECTION | |
| 23 | 150 | SA 106 Gr.B SCH.80 | ASME B16.5 150 # | SLIP–ON | R.F. | OVER FLOW LINE | |
| 24 | 100 | SA 106 Gr.B SCH.80 | ASME B16.5 150 # | SLIP–ON | R.F. | DEAERATOR DRAIN | |
| 25 | 350 | SA 106 Gr.B SCH.40 | ASME B16.5 150 # | SLIP–ON | R.F. | DEAERATOR OUTLET | |
| 26 | 50 | SA 106 Gr.B SCH.160 | ASME B16.5 150 # | SLIP–ON | R.F. | 1st HP HEATER VENT | |
| 27 | 80 | SA 106 Gr.B SCH.160 | ASME B16.5 150 # | SLIP–ON | R.F. | 1st HP HEATER DRAIN | |
| 28 | 100 | SA 106 Gr.B SCH.80 | ASME B16.5 150 # | SLIP–ON | R.F. | ALTERNATE DRAIN | |
| 29 | 50 | SA 106 Gr.B SCH.160 | ASME B16.5 150 # | SLIP–ON | R.F. | 2nd HP HEATER VENT | |
| 30 | 80 | SA 106 Gr.B SCH.160 | ASME B16.5 150 # | SLIP–ON | R.F. | 2nd HP HEATER DRAIN | |
| 31 | 40 | SA 106 Gr.B SCH.XXS | ASME B16.5 150 # | SLIP–ON | R.F. | INITIAL FILLING LINE | |

PROJECT: 2X25 MW COAL BASED CAPTIVE POWER PLANT
MORDI, DISTT. BANSWARA, RAJASTHAN

FOR APPROVAL ✓ | FOR INFORMATION ✓ | FOR PRODUCTION x | FOR ERECTION x

DO NOT SCALE
IF IN DOUBT PLEASE ASK

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INLEC

THE INDIAN SUGAR & GEN.ENGG.CORPN.
NOIDA (U.P)–201 301 (INDIA)

| | |
|---|---|
| CLIENT | M/s. RAJASTHAN SPINNING & WEAVING MILLS LTD. |
| CONSULTANT | M/s. INDO CANADIAN CONSULTANCY SERVICES LTD. NOIDA |
| SERVICE | 105 TPH, SINGLE DRUM, WATER TUBE, TOP SUPPORTED, AFBC BOILER |
| TITLE | GENERAL ARRANGEMENT OF DEAERATOR & STORAGE TANK |
| DRAWING DOCUMENT ID | XP0806-50270100-ASY-001 |
| REVISION | 04 |

| | |
|---|---|
| PROJECT ID | XP0806 |
| YEAR | 2006 |
| ELEMENT ID. | 50270100 |
| J.R.T. No. | 6149 |
| SHEET SIZE | A1 |
| SCALE | 1 : 40 & NTS |
| DRAWN | S. KRISHNA 20.06.2006 |
| CHECKED | |
| ENGINEER | |
| APPROVED | |
| TOTAL WEIGHT IN kg. | – |

| REVN. | ZONE | DESCRIPTION | REVD. BY | APPD. BY | DATE |
|---|---|---|---|---|---|
| ⚠ | 0a | DRAWING IS GENERALY REVISED WHICH WILL SUPERSETS THE REV.00 DRAWING. | S. KRISHNA | | 24/01/06 |
| ⚠ | 0a | SAFETY VALVE SIZE CHANGED TO 100NB & HOLD MARK– REMOVED. | PANK KUMR | | 23/08/06 |
| ⚠ | 0a | DESIGN DATA REVISED AS PER CONSULTANT COMMENTS. | PANK KUMR | | 05/09/06 |
| ⚠ | 0a | VENT LOSS ADDED IN DESIGN DATA. | PANK KUMR | | 18/09/06 |

| LINEAR | | | | RADII | |
|---|---|---|---|---|---|
| 7 – 30 | ±0.5 | 1001 – 2000 | ±3.0 | 4 – 6 | ±1.0 |
| 31 – 120 | ±0.8 | 2001 – 4000 | ±4.0 | 7 – 30 | ±2.0 |
| 121 – 315 | ±1.2 | 4001 – 8000 | ±5.0 | 31 – 120 | ±4.0 |
| 316 – 1000 | ±2.0 | 8001 – 12000 | ±8.0 | 121 – 315 | ±8.0 |

UNTOLERANCED DIMENSIONS CONFORM TO IS–2102 COARSE GRADE

THIS IS A CAD FILE - DO NOT CORRECT IT MANUALLY

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