



2x60 MW Power Plant for Jaiprakash Associates Limited at Sidhi in Madhya Pradesh

Jaypee Group is a Rs.20,000 Crores well diversified infrastructural industrial conglomerate in India. Over the decades it has maintained salience with leadership in Engineering and Construction, Cement, Power, Hospitality, Real Estate, Expressways, Sports Agri business. The Company entrusted **Holtec** for setting up 2x60 MW Captive Power Plant to meet the power requirement for its Cement manufacturing Unit at village: Kariajhar, District: Sidhi in Madhya Pradesh and JAL's group of plants

Owner

Jaiprakash Associates Limited



Project Consultant

Holtec Consulting Private Limited, India

Supply of Main Machinery

Thermax, Siemens, GEI, Doshion

Scope of Consulting Services

- Techno-Economic Feasibility Study & Report submission.
- Basic Engineering, Preparation of detail Tender/specification for various packages and facilitating Procurement of equipments and machineries.
- Evaluation of offers & assistance in finalization of packages.
- Review of plant technical concept, heat & mass balance diagrams, preliminary plant layout, electrical single line diagrams & philosophy of C&I systems using PLC/DCS systems.
- Review and approval of data and drawings from suppliers with a view to coordinate the project activities to ensure that they meet the requirements as laid down in the respective specifications.

CONCEPT TO COMMISSIONING

- Design of foundations, buildings and structural in conformity with the project engineering and general arrangement drawings for the process departments and material handling sections
- Detailed Engineering & Inspection.
- Project Implementation & Management
- Supervision of Construction, Erection, Trial Runs and Commissioning.

Significant Accomplishments

- Power plant designed and running on diversified fuels.
- System designing for pollution control measures comprising Electrostatic Precipitator and Bag Filters in the Fuel and Ash Handling system in order to maintain clean and green environment.
- The plant was commissioned in June 2012

Salient Features

| Thermal Plant | |
|---|--|
| <u>Fuel</u> | |
| Indian / Imported Coal / Pet Coke / Coal Washery | GCV-3200 /GCV-6000 /GCV- 8000 GCV-2200 Kcal/Kg |
| Coal Consumption | Approx. 55 TPH per boiler |
| <u>Boiler</u> | |
| Type | Circulating fluidized Bed Combustor |
| Capacity | 2X250 TPH SH Steam at 540±5°C & 110Ata pressure |
| Boiler feed | Over & Under bed feeding |
| | |
| Turbine | |
| - Four-bleed cum condensing steam turbine with Air cooled condenser | 2X60 MW |
| - Generator output voltage | 11 KV |
| <u>Technology</u> | Conventional steam cycle based on Rankine Cycle |
| <u>Emission</u> | ≤ 50 mg/Nm ³ |
| <u>Instt. & Control</u> | Complete operation from plant DCS |
| <u>Water Treatment</u> | 27 CuM/Hr RO plant for cycle water, cooling water and other plant requirement. |