



## CONCEPT TO COMMISSIONING

### 2x25 MW Power Plant for UltraTech Cement Limited at Tadipatri in Andhra Pradesh

Aditya Birla Group is \$40 billion well diversified global conglomerate. The group operates in about 36 countries and well established in production of viscose staple and acrylic fibres, Metals, fashion & garments, chemicals and fertilizers, cement and building materials etc. The group is also provides mobile network, Insurance and asset management Their Cement wing has entrusted **HOLTEC** for setting up 2x25 MW Captive Power Plant to meet the power requirement for its Cement manufacturing Unit at Bhogasamudram, Tadipatri, District:: Anantapur in Andhra Pradesh

#### Owner

ADITYA Birla Group Limited



#### Project Consultant

Holtec Consulting Private Limited, India

#### Supply of Main Machinery

Thyssen Krupp India Ltd, HTC, GEI, Ion Exchange

#### 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.

- 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

- Efficient and effective Ash Management study for usage of fly Ash as one of the raw materials for Cement production leading to cost saving
- 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 is expected to be commissioned in June 2013.

#### Key Project Data

<b>Thermal Plant</b>	
<b>Fuel</b>	
Indian / Imported Coal / Pet Coke / Washery Rejects	GCV-3200 /GCV-5950 /GCV- 7955 / GCV-2150 Kcal/Kg
<b>Boiler</b>	
Type	Circulating fluidized Bed Combustor
Capacity	2X115 TPH SH Steam at 540±5°C & 113 Ata pressure
<b>Turbine</b>	
- Four-bleed cum condensing steam turbine with Air cooled condenser	2X25 MW
- Generator output voltage	11 KV
<b>Technology</b>	
Conventional steam cycle based on Rankine Cycle	
<b>Emission</b>	
≤ 50 mg/Nm <sup>3</sup>	
<b>Instt. &amp; Control</b>	
Complete operation from plant DCS	
<b>Water Treatment</b>	
15 CuM/Hr RO plant for cycle water, cooling water and other plant requirement.	