

# **CONCEPT TO COMMISSIONING**

## 1x60 MW Power Plant for Sanghi Cement at Sanghipuram, Kutch in Gujarat

Sanghi Industries Limited (SIL) with diversified business portfolios such as Textile, Plastics and leather, Publication and Cement manufacturing, is one of the fastest growing companies in India having more than Rs.1640 Crores as asset. The Company entrusted **Holtec** for Engineering consultancy for their 3.0 mio tpa cement unit at Sanghipuram, Dist: Kutch in Gujarat and setting up 1X 63 MW Power Plant at their Cement Plant site

### Owner

Sanghi Industries Limited



### **Project Consultant**

Holtec Consulting Private Limited, India

### **EPC Contractor**

Greenosol Power Systems Ltd., HTC, Scope of Consulting Services

- Techno-Economic Feasibility Study & Report submission.
- Basic Engineering, Preparation of detail Tender/specification for EPC Contractor for captive power plant.
- Evaluation of offers & assistance in finalization of EPC Contractor
- 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 the supplier 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**

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- Power Plant is at sea coast and utilizes desalinated sea water for meeting water requirement.
- 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 December 2009 and running efficiently.

Salient Features	
Fuel Used	
Indian Coal / Imported Coal	3000 / 6000 kcal.Kg
Kutch Lignite / Petcoke	3200 / 8000 kcal.Kg
Boiler	
Туре	Circulating fluidized Bed Combustor
Capacity	1X260 TPH SH Steam at 540 <u>+</u> 5°C & 101 kg.sq.cm (a) pressure
Turbine	
Four-bleed cum condensing steam turbine with Water cooled condenser	1X63MW
- Generator output voltage	11 KV
<u>Technology</u>	Conventional steam cycle based on Rankine Cycle
Emission	≤ 50 mg/Nm <sup>3</sup>
Water Treatment	27 CuM/Hr RO plant for cycle water, cooling water and other plant requirement.
Instrumentation. & Control	Complete operation from plant DCS