



WHR BASED POWER PLANT

Installation Of WHR Based Power Plant for Union Cement Company

M/S Union Cement Company (UCC) is operating 4 lines of cement at Ras Al Khaimah in UAE. UCC have installed WHR based power plant on Line # 4 of 10,000 tpd capacity.

M/S UCC installed 15 MW waste heat recovery based power plant with gross power generation of 13.675 MW using exhaust gases from Line 4 on January 2013.

Owner

Union Cement Company (UCC)



Project Consultant

Holtec Consulting Private Limited, India

EPC Contractor

Sinoma Energy Conservation Limited, China

Scope of Consulting Services

- Basic study for the waste heat recovery system
- Project planning, Monitoring and control.
- Procurement assistance for Plant and Machinery on EPC basis.
- Review engineering Services for the waste heat recovery system.
- Inspection and supervision of construction, erection and commissioning.
- Performance Testing.

Key Project Data

Main Equipments

SP boilers (2 nos)	HP steam 20.62 tph each and LP steam 4.74 tph each
AQC Boiler	HP steam 35.04 tph LP steam 9.19 tph
Air Cooled Condenser	95 TPH
Steam Turbine	Rated power 15 MW

Salient Features

- Plant comprising total three (3) number of boilers i.e 2 nos preheater boilers and 1 nos AQC boiler.
- One air cooled condenser with design temperature of 45 Deg C.
- One dual pressure steam turbine
- Water Treatment plant of capacity 2 X 13.5 m3/hr.
- One auxiliary cooling tower.

Significant Accomplishments

- The electricity generated from the WHR system met around 28% of energy requirement which replaces equivalent amount of electricity drawn from the grid.
- Clean and the green environment.
- Proven and reliable (Rankine Steam Cycle) technology installed for the WHR based power plant.
- WHR based power plant was commissioned with in the scheduled time period.
- The P.G. Test was carried out and plant is operating at 13.8 MW (Rated Capacity)
- **SATISFIED CUSTOMER**