



PROJECT PROFILE

Associated Cement Company Limited

Associated Cement Company Limited (ACC) is part of **HOLCIM** group with 17 plants spread all over India.

In 2011, **ACC** had commissioned a production line of capacity 7,000 tpd clinker at **Chanda Cement Works** in Maharashtra. The pyro processing consist

of 6 stage, double string preheater with Inline Calciner (ILC), dry process Kiln and Cross Bar Cooler. **ACC** proposed to enhance the clinkerization capacity of the production line to 8,500 tpd.

ACC entrusted **HOLTEC** to carry out the Feasibility Study for capacity upgradation including review of upstream equipments and storages at **Chanda Cement Works**.

Preheater and Blending Silo



Key Assignment Information

- ➔ A modern cement production line of capacity 7,000 tpd clinker was commissioned in 2011.
- ➔ Proposal to enhance the clinkering capacity to 8,500 tpd.
- ➔ Formulation of technical concept and road map to achieve target clinkerization.
- ➔ Preparation of action plans for each proposed modification with description, GA drawing, capex estimation, time schedule and payback period.
- ➔ Evaluations carried out by team comprising of raw materials, plant operations, mechanical, electrical and Instrumentation specialists.
- ➔ About 35 consultant days spent on field and about 250 consultant days in the home office

Objective and Coverage

- Capacity upgradation feasibility study of pyro processing section from 7,000 tpd to 8,500 tpd.
- Basic design and preparation of GA drawings of modifications suggested.
- Technical specifications of modifications suggested.
- Action plan for each modification suggested.

The coverage included:

- Existing plant & equipment with respect to specifications, potential output, actual achieved output, etc, encompassing :
 - ✓ Raw material crushing system, pre-homogenization and storage (including limestone and correctives)
 - ✓ Raw material grinding system, homogenization and storage
 - ✓ Kiln feed, pre-heater, pre-calciner, kiln and cooler

- ✓ Handling, storage and feeding system for fuel
- ✓ Clinker transport and storage
- ✓ Environmental control system
- ✓ Major fans

- Process measurements for heat, mass and gas balance in the clinkerisation section.
- Operational bottlenecks and constraints inhibiting plant performance at 8,500 tpd.

The Recommendations comprised of:

- Preparation of action plans for each proposed modification in enumerating the description of modification, GA drawings, estimated CAPEX, time schedule and pay back period.

HOLTEC's intervention was instrumental in determining the technical feasibility and providing **ACC** with a roadmap for capacity enhancement.