



1.65 mtpa clinker and 2.31 mtpa cement Derba Midroc Cement PLC., Derba, near Addis Ababa, Ethiopia

Derba Midroc Cement PLC (DMC) is a subsidiary company of Midroc Group. It is the leading private investment group in Ethiopia and is a global partner with diversified business portfolios such as Civil and Industrial Construction, Petroleum, Manufacturing, Hotels & Tourism, Real Estate, Industrial Trade and Cement manufacturing. Holtec association with DMC started with project conceptualization and continues even today during plant operation beyond start of commercial production. Currently HOLTEC is assisting in monitoring the assets for their efficient utilization.

Owner

Derba Midroc Cement PLC



Project Consultant

Holtec Consulting Private Limited, India

Project Contractor

China National Building Materials Equipment Co (CNBM), China

Scope of Consulting Services

- Strategic location study to finalise project location
- Techno-economic Feasibility Study
- Raw Material Identification and investigation and Mines development
- Environmental Studies & Clearances
- Computer Aided Deposit Evaluation and Quarry Scheduling & Optimization
- Geo-technical Investigation
- Basic Engineering, Procurement, Detailed Engineering review & Inspection
- Project Implementation Management

CONCEPT TO COMMISSIONING

- Supervision of Construction, Erection, Trial Runs and Commissioning.

Special Features

- Biggest single integrated cement plant in Ethiopia
- Crushed limestone transport from mines to the plant by 6.3 km long cross country conveyor, consisting 4 nos. belt conveyors
- Use of pumice as additive for cement production
- Limestone crusher of 1000 tph capacity impactor from HAZEMAG
- 5 Stage twin string PH with inline PC
- Raw Mill from Gebr. Pfeiffer AG of capacity 420 tph
- Kiln is from China and is rated for 5,000 tpd
- Cement grinding is done by 3 nos. close circuit ball mills of 120 tph each
- Stringent pollution control measures comprising Bag House for Kiln/Raw Mill, Bag filter for Coal Mill & Cement Mills and other nuisance Bag Filters in the plant ($\leq 25 \text{ mg/Nm}^3$), ESP for Cooler ($\leq 50 \text{ mg/Nm}^3$),.

Key Project Data

Quantities

RCC	101,600 m ³
Reinforcement Steel	11,000 T
Structural Steel	12,000 T
Power Cables	700 Km
Control Cables	380 Km
Cable Tray	500 T
Utility Piping	15 Km

Main Equipment/Storages

Crusher	1,000 tph
Raw Mill	420 tph
Raw Meal Silo	24,000 T
Kiln	5,000 tpd
Clinker Silo	47,000 T
Coal Mill	40 tph
Cement Mills	3 x 120 tph
Cement Silos	3 x 10,000 T
Cement Packers	6 x 120 tph
Truck Loaders	9 nos.

Significant Accomplishments

- Clinker production 112-116% of the rated capacity
- Specific Power consumption 108 Kwh/t cement
- Specific Heat Consumption 735 Kcal/Kg clinker
- **SATISFIED CUSTOMER**