M/s UltraTech Cement Limited, a part of Aditya Birla Group is India’s largest and World’s 10th largest manufacturer of cement with an installed capacity of 52 mio tons. Awarpur Cement Works (ACW), with 3.2 mio tons per annum clinkerization capacity is a major cement producing unit of UTCL.

**Objective of Consulting Services**

Preparation of a Deposit Block Model of Awarpur Limestone Mines in order to maximise the deposit life and also to establish an optimal and cost effective mining pattern for meeting the plant’s requirements.

**Scope of Consulting Service**

- Review of detailed geological investigation results including topographical survey, geological mapping, core/ DTH drilling, sampling and chemical analysis
- Preparation of a drill hole database from the prospecting data
- Preparation of a deposit block model for the total deposit and most potential block, BLOCK-A and B separately
- Fractional analysis study and its implementation
- Establishing optimum mining parameters in terms of Lime Saturation Factor, SO₃ and MgO
- Optimization of deposit life by implementation of screening system
- Preparation of an operational mining plan with screening system
- Preparation of practical 5 yearly, yearly and quarterly plans for first 5 years
- Identification of the resource requirement with scheduling
- Selection of crusher and its location with scheduling
- Reject handling and dumping

**Salient Feature**

The implementation of CADE & QSO followed by screening resulted into substantial increase in the reserves and a decrease in the cost of exploitation.