

Quality Assurance & Cement Testing

Objective:

High quality of cement is the result of smooth process and quality of raw materials and economic utilization.

The course enables participants to understand the meaning of quality / cost relation by how to control the raw materials and clinker tests to ensure the quality of cement.

The course provides all the information of cement tests according to different standards.

Participants:

The course addresses professionals with some years of experience working in the field of Production, Laboratories, Process Engineering and Quality Control.

Course Outlines:

1. Definition of Quality in Cement Industry

2. Objectives of Quality Assurance :

Cement application

- Process
- Raw materials
- Environmental aspects

3. Activities in Quality Assurance :

- Quality planning
- Quality control
- Quality audit

4. Quality Costs

5. Quality in Raw Materials

Raw Materials:

- Grindability
- Fineness
- Moisture
- Granulometry of mill feed

Kiln:

- Energy consumption
- Burning behavior
- Materials related to operational

problems

- Clinker quality

Cement:

- Effect of clinker quality on the properties of cement
- Factors influencing grind ability of Cement
- Effect of grinding on the cement properties
- Gypsum during cement grinding

6. Cement Tests:

- Chemical analysis
 - Analytical methods
 - X-ray fluorescence
- Physical and mechanical tests:
 - Setting time
 - Surface area
 - Expansion
 - Compressive strength

7. Cement standards:

- ASTM
- B.S.
- EN