

Quality Control and Assurance For Concrete and Steel Structure Projects Training

Description

Course Description

This course is intended for structural and civil engineers who are interested in the quality control and QA with the most recent non-destructive testing for concrete and steel structure.

Course Objective

The participants will be familiar with all quality management technique and procedure and the available non-destructive testing for concrete and steel structure project.

Course Outline

- ISO 9001 requirement
- Total Quality management system
- Quality assurance
- Quality control
- Who will perform the quality control?
- Pareto chart
- Process chart for ready mix plant
- · Coefficient of variation
- Auditing the construction site quality

The nature of concrete variability

- Concrete materials properties
- Aggregate QC
- Cement QC
- Concrete mix QC
- Submitall steel sections QC
- · Check laminar and porosity in steel sections

Quality control for concrete forum

- Pouring concrete in hot and cold weather
- Workability test for concrete
- · Cube and cylinder test
- The replacement of the steel bars
- The permissible deviation in erection steel structure
- Comparison between different Non-destructive test
- Core test
- Rebound hammer
- Lok test
- Load test
- Ultrasonic test

Welding procedure

- eculearn.co.uk • Materials that is using in welding in steel structure
- Understanding the welding symbol
- The precaution in welding process
- The reasons of welding defects.

Differentiate between Non-destructive test

- Magnetic particle test procedure
- Penetration test procedure
- Radiographic test procedure
- · Radiographic test precaution
- How to define the defects from RT film
- Ultrasonic test procedure