

# HDTC Training Center

**Provide**

**Technical proposal of the Training program**

## **Preventive & Emergency Maintenance**

## Introduction

This program provides practical knowledge and skills for maintaining ready-mix concrete plant equipment efficiently through preventive and emergency maintenance strategies to ensure uninterrupted production and reduce downtime.

It focuses on real operational scenarios commonly faced in concrete plants.

## Program Objectives:

### General Objective:

Enable participants to effectively apply preventive and emergency maintenance practices to ensure continuous plant operation, reduce breakdowns, and improve equipment reliability.

### Key Learning Objectives:

#### By the end of this program, participants will be able to:

- Understand the fundamentals of plant maintenance systems
- Distinguish between preventive and corrective maintenance
- Identify early warning signs of equipment failure
- Apply basic troubleshooting techniques for common plant breakdowns
- Reduce downtime and maintenance costs
- Follow safe maintenance procedures in industrial environments.

## Program Outlines:

### ★ Module 1: Fundamentals of Maintenance in Ready-Mix Concrete Plants

- Maintenance concepts and types
- Importance of maintenance in ensuring production continuity
- Main components of a concrete batching plant

### ★ Module 2: Preventive Maintenance

- Concept of preventive maintenance
- Maintenance planning and scheduling
- Routine equipment inspection procedures
- Maintenance records and their importance

### ★ Module 3: Emergency Maintenance

- Definition of emergency breakdowns
- Rapid response procedures
- Critical failure management
- Reducing downtime

### ★ Module 4: Common Failures in Concrete Plants

- Mixer breakdowns
- Conveyor system issues
- Control system failures
- Weighing system problems

### ★ Module 5: Safety in Maintenance Operations

- Safety procedures before and during maintenance

- Lockout/Tagout basics
- Safe handling of heavy equipment

## Target Audience:

- ✓ Maintenance technicians in ready-mix concrete plants
- ✓ Production and operations supervisors
- ✓ Mechanical and electrical engineers
- ✓ Plant operations staff and controllers

## Training Methodology:

- ✓ Technology-based learning.
- ✓ Simulation in Training.
- ✓ Trainer-Led Training.
- ✓ Work Teams and Roles.
- ✓ Films and Videos.
- ✓ Case Studies and Workshops.