

## Getting Ready for Operational Excellence and World Class Manufacturing

---

### COURSE OBJECTIVES

The purpose of the course is to make basic users aware of concepts & methodology and at advance levels to understand concepts, methodology and implements these methodologies at their manufacturing facility with some practical assignments.

### COURSE CONTENTS

#### Total Quality Management

- Introductions and concepts
- Customer (Internal, External and Satisfaction)
- PDCA Cycle (Plan, Do, Check, Analyze)
- 7 Conventional QC Tools
- 7 New Modern tools for quality control and decision making
- Statistical Techniques

#### Total Productive Maintenance

- Introduction, Concepts of TPM and 5 S methodology
- 16 loss types and Kaizen
- OEE (Overall Equipment Effectiveness)
- PQCDM (Productivity, Quality, Cost, Delivery and Morale)
- Autonomous Maintenance, Planned maintenance, Breakdown Maintenance
- Environment, Health and Safety

#### Lean Manufacturing

- 3M (Muri, Muda, and Mura), 7 Types of wastes, Single piece flow and Just in time.
- Continuous Improvement - Kaizen
- Heijunka - Production Stabilization
- Pokayoke, SMED (Single Minute Exchange of Dies) and Kanban

#### Others

- Quality Planning - Process flow chart, FMEA and Control Plan
- Audits and non conformities and CAPA - Corrective actions and preventive actions
- Cost of Poor Quality

#### International Standards

- ISO 9001, ISO 14001, QS 9000, TS 16949, OHSAS 18001

#### Six Sigma

- Introduction, Concepts, Six Sigma Methodology, Green, Yellow and Black Belt certifications

### DURATION

The Course duration is of 3 months of e learning.

### DELIVERY MECHANISM AND MEANS

This course utilizes a combination of Self Study and assignments for self implementation at participants work place. Participants will work either individually or in groups using the concepts and techniques to resolve an issue from their own work place or a suggested assignment. Training notes, case studies, exercises, samples and presentation slides are made available on line. English is the basic medium of instruction.