

# World Class Manufacturing

World class companies have the ability to compete with the best companies and have the desire to be the best. World Class Manufacturing is a way of organizing manufacturing operations for improved quality and productivity. This unit introduces participants to the basic concepts and benefits of World Class Manufacturing.

## Workshop Objectives:

- Discuss the organization required for World Class Manufacturing.
- Discuss Deming's Fourteen Obligations of Management and their effect on business practices.
- Explain the importance of employee involvement.
- Identify the principles of Total Quality Management to recognize and meet customers' needs and expectations.
- Describe the purpose and examination criteria of the Malcolm Baldrige Quality Award.
- Explain the goals, concepts, and principles of Lean Manufacturing.
- Explain six of the most commonly used Lean tools.
- Explain how these lean tools eliminate manufacturing waste.
- Explain the principles and benefits of Total Productive Maintenance concepts.
- Explain the ISO 9000 quality standards. List and describe the principles of 5S.

## Course Outline:

1. Deming's Fourteen Obligations of Management
2. Employee Involvement
  - a. Employee Empowerment
  - b. Team Synergy
  - c. Error Detection and Prevention Models
  - d. Problem Solving Tools
3. Total Quality Management (TQM)
  - a. Definitions of Quality
  - b. David Garvin Identifies Eight Dimensions of Quality
  - c. Six Sigma Quality
  - d. The Malcolm Baldrige Quality Award
  - e. TQM Customer Orientation for Continuous Improvement
4. Lean Manufacturing
  - a. Background of Lean
  - b. Lean vs. Traditional Manufacturing
  - c. Lean Manufacturing and Waste
  - d. Building a Lean Organization
5. Lean Tools
  - a. Value Stream Maps
  - b. Continuous Flow
  - c. Production Flow Cells
  - d. Pull Systems
  - e. Production Leveling
  - f. Five-S
6. Total Productive Maintenance (TPM)
7. ISO 9000–9004 Standards
  - a. ISO 9001