

Problem Solving Tools - A Team Based Approach

OBJECTIVES

Upon completion of the Problem Solving Tools course, participants will be able to do the following:

- Create Process Flows with standard diagram symbols
- Perform an Affinity Diagram with hands-on exercise
- Perform in a brainstorming session to complete an Ishikawa Cause and Effect Diagram
- Understand various types of attribute data, construct check sheets and create Pareto Diagrams

WHO SHOULD ATTEND

This course is intended for those involved in design, test, analysis, or manufacturing who want a better understanding of advanced problem solving tools. Disciplines include Technicians, Supervisors, Operations Staff, Process Engineers, Quality Engineers, Quality Inspectors, Manufacturing and Industrial Engineers Engineers.

COURSE OVERVIEW

Problem Solving Tools provide you with the essential steps for an effective Team - based problem solving methodology. The course presents a number of problem solving techniques to identify key variables for process control and quality improvement. Basic quantitative and qualitative tools will be presented to help participants make sound decisions for implementing effective corrective action plans.

OUTLINE

INTRO. TO PROBLEM SOLVING TOOLS

- Benefits of Effective Problem Solving
- Quality Tools - Overview
- Problem Solving Strategy - PDCA

PROCESS FLOW ANALYSIS

- Overview of Process Flow Techniques
- Standardized Flow Charting Symbols
- Process Flows for Manufacturing Processes

CAUSE and EFFECT DIAGRAMS

- Sources of Variation
- Brainstorming techniques using an Ishikawa Diagram
- Resolving to Root Cause and Corrective Action

AFFINITY DIAGRAMS

- Benefits of Affinity Diagrams
- Organize a large number of Ideas
- Implementing a Business Plan: Case Study

CHECK SHEETS and PARETO ANALYSIS

- Simplify data collection with Check Sheets
- Prioritize problems with 80/20 Concept
- Create Pareto Charts (with cumulative %)

APPENDIX

- Terms and Definitions
- Formula Summary