8-D Problem Solving

Description: This 8-hour training provides problem solving expertise and training in the 8-D methodology. Participants will gain the knowledge, skill and ability to understand why problem solving and process improvement is necessary, as well as lead a team-based problem solving effort, using the 8D Problem Solving Methodology.

Target Audience: Design and manufacturing engineering personnel, quality and reliability/test engineers, program managers, and anyone else who needs to understand the concepts of 8-D Problem Solving.

Prerequisites: None

Delivery Method: Classroom-style lecture with PowerPoint slides and in-class discussion to encourage questions and participation.

Course Contents:

D1: Team Formation and Team Building
- Select a team that has the knowledge, time, authority and skill to problem solve and implement corrective actions
- The team must have an effective leader with clear goals and objectives

D2: Describe the Problem
- Specify the internal/external customer problem in measurable terms

D3: Implement and Verify Interim Containment Actions
- Define and implement containment (temporary) actions that will protect the customer from the problem until permanent corrective action is implemented
- Understand the importance of data, charting and reporting

D4: Identify and Verify Root Causes
- Identify all possible causes that could explain why the problem occurred
- Use an appropriate, systemic approach
  - Brainstorm
  - 5W (Who, What, When, Where &Why)
  - Cause and Effect
  - Pareto Principle
  - Process Flow Chart
  - Looking for Change
  - Confirming Most Likely Cause
- Test each possible cause against the problem description and data
- Identify actions to eliminate root cause

**D5: Choose and Verify Corrective Actions**
- Identify various solutions that will resolve the customer problem and will not cause undesirable side effects
- Define contingency actions, if necessary, based on risk assessment

**D6: Implement and Validate Permanent Corrective Actions**
- Develop, commit and implement the best permanent corrective actions
- Choose ongoing controls to ensure root cause is eliminated
- Monitor long-term effects and make adjustments as necessary

**D7: Prevent Recurrence**
- Review and implement steps to prevent recurrence of the problem and any similar problem in the future
- Modify necessary management systems, operating systems, practices and procedures, such as ISO/QS, Quality Stream and Standard Operating Procedures
- Review and update trainings and workflow

**D8: Congratulate Your Team**
- Recognize and reward the collective efforts of your team/Analyze the importance of rewards
- Report results and recommendations

**Textbook:** None; presentation notes will be provided