



Quality-One International

DOE Course Outline

- Introduction to Design of Experiments (DOE)
- Why Do We Perform DOE
- Full Factorial and Fractionated Factorial Experiments
- Taguchi Techniques
- Interactions and Factors
- Selecting Levels
- Ten Step Process
 1. Define Objective
 2. Form the Team
 3. Determine Response Variable
 4. Measuring System Capability
 5. Factors
 6. Levels
 7. Experimental Plan
 8. Run Experiment
 9. Analysis
 10. Actions and Validation
- Tools Used in DOE
 - Effects Plots
 - Interaction Plots
 - Calculations of Response Variables
 - Coded Plan
 - Orthogonal Arrays
 - Response Plots
 - Daniel Plots
 - Predictive Equation
 - Confounding
 - Contrast Matrix
- Analysis of Data
- Adjustments to Process
- Verification of Direction
- Calculate Best Combination
- Validation Experiment