



Quality America, Inc.

TOPICS IN APPLIED SPC SEMINAR AGENDA

DAY ONE

- 9:00 Introduction / Goals** (1/4 hr)
- 9:15 SPC Fundamentals** (1-1/4 hrs)
- Enumerative vs. Analytical Data
 - Variation, Deming's Red Bead
 - Benefits of control charts
 - Requirements vs. control
 - Tampering
- 10:30 Morning Break** (1/4 hr)
- 10:45 X-bar Charts** (1-1/4 hr)
- Subgroup Formation
 - Interpretation
 - Range vs. Sigma
 - Run tests
- 12:00 Lunch** (1 hr)
- 1:00 Workshop Exercise** (1-1/2 hr)
- X-Bar Charts
- 2:30 Afternoon Break** (1/4 hr)
- 2:45 Attribute Charts** (1-1/4 hrs)
- Pareto Charts
 - Np & P Charts
 - C & U Charts
 - Interpretation

DAY TWO

- 9:00 Histograms/Capability** (1-1/2 hr)
- Types of distributions
 - Curve Fitting
 - Control vs. Capability
 - Capability Indices
 - Errors in Estimating Capability
 - Interpretation
- 10:30 Morning Break** (1/4 hr)
- 10:45 Individuals Data** (1-1/4 hr)
- Uses
 - Run Charts
 - Ind.-X / MR Charts
 - Moving Average Charts
- 12:00 Lunch** (1 hr)
- 1:00 Workshop Exercise** (1-1/2 hr)
- Capability
 - Individuals Data
 - Curve Fitting
- 2:30 Afternoon Break** (1/4 hr)
- 2:45 Workshop Exercise** (1-1/4 hrs)
- Attributes Analysis

DAY THREE (Optional Topics)

- 9:00 Scatter Diagrams** (1-1/4 hr)
- ANOVA
 - Interpretation
 - Workshop
- 10:15 Morning Break** (1/4 hr)
- 10:30 Serial Correlation** (1-1/2 hr)
- Why it Occurs
 - Characterizing Dependence
 - Methods for Control
 - Workshop
- 12:00 Lunch** (1 hr)
- 1:00 Measurement Systems Analysis** (1-1/2 hr)
- Stability Studies.
 - Linearity Analysis.
 - R&R Analysis.
 - Range Method Calculations.
 - Interpretation.
 - Using Control Charts.
 - Destructive Tests.
 - ANOVA Method.
 - Workshop
- 2:30 Afternoon Break** (1/4 hr)
- 2:45 Short Run SPC** (1-1/4 hr)
- Uses.
 - Calculations.
 - Nominals chart.
 - Stabilized Chart.
 - Workshop