

## **SPC Fundamentals**

## **Course Outline**

- 1. Basic InfinityQS SPC Navigation
  - a. Opening projects
  - b. Configuring charts
  - c. Adding subgroups and responding to alarms
- 2. Creating Projects
  - a. Linking to a database
  - b. Data entry configuration
  - c. Special data entry options
- 3. Customizing Charts
  - a. Headers
  - b. Report section
  - c. Graphics
  - d. Templates
- 4. Structure Strategies
  - a. Groups and items
  - b. Best practice exercises
- 5. Toolbar Button Usage
- 6. Feature Selection (for test characteristics)
  - a. Variable
  - b. Defect
  - c. Defective
  - d. Using the appropriate chart
- 7. Database Navigation
  - a. Creating groups and items
  - b. Editing
  - c. Tracking edits
- 8. Dynamic Projects
  - a. Multiple parts and processes in one project
  - b. Multiple data entry configurations with a project



- 9. Limits
  - a. Specification limits
  - **b.** Control limits
- 10. Utilizing InfinityQS Tools to Address Alarms/Events
  - a. Assignable cause and corrective action codes
  - b. Process events report
  - c. Pareto chart for events
- 11. Importing Data
- 12. Using Equation Editor for Calculations
- 13. Descriptors
  - a. Hard-coded
  - b. User-defined
- 14. Reports
  - a. Box and whiskers
  - b. Pareto
  - c. SPC Monitor
  - d. Capability analysis (distribution curve)
  - e. Capability report (short term and long term capability)
- 15. Using Data Selection to Query Existing Data
- 16. Electronic Gage Set Up
- 17. Using InfinityQS Projects as a Navigational Tool
- 18. Case Studies
  - a. Measuring multiple test characteristics on a single part
  - b. Injection molding
  - Job shop (multiple parts, processes and test characteristics managed in a single InfinityQS project)
  - d. Self-directed project building
  - e. Building a checklist
- 19. Optional exercises and a checklist for getting started included with material