

SPC

SECTION 1 CONTINUOUS IMPROVEMENT

- Definition of Quality
- Taguchi Loss Function
- “Common” and “Special” Causes
- PDSA (Plan Do Study Act) Cycle
- Team Building

SECTION 2 INTRODUCTION TO CONTROL CHARTS

- Variable vs Attribute Data
- Stem and Leaf Diagram
- Run Charts: Description, Exercise
- Consistent versus Inconsistent Processes
- Overcontrol/Undercontrol: Funnel Experiment (video)
- Basic Description of Control Charts

SECTION 3 BASIC STATISTIC

- Video Tape: (“Statistic at a Glance”)
- Mean, Standard Deviation and Variance
- Normal Distribution
- Central Limit Theorem

SECTION 4 X-BAR (AVERAGE) AND R (RANGE) CHARTS

- Description, Construction and Interpretation
- Shewhart Bowl Exercise

SECTION 5 BASIC TOOLS

- Data Collection
- Pareto Analysis
- Flow Charts
- Cause and Effect Diagrams
- Histograms, Scatter Diagrams
- Tape: “Continual Improvement... U.S. Style”

SECTION 6 CHARTS FOR INDIVIDUALS

- Description, Construction and Interpretation
- Example

SECTION 7 CONTROL CHARTS FOR ATTRIBUTES

- p and np Charts
- c and u Charts

SECTION 8 SUMMARY AND REVIEW

- Control Chart Selection
- Project Assignment