

## Process Getting Out of Control? Attend "SPC Made Easy" To Solve Your Problems

"I really liked your practical approach to teaching statistics. Could you do the same for statistical process control? If so, you would be on the inside track to be our SPC trainer!"

This is a question we've often heard from graduates of our experiment design workshops. Now we can answer "Yes!". Stat-Ease announces availability of a two-part workshop: SPC Made Easy.

Statistical process control forms the foundation for experiment design, particularly in manufacturing areas.

"My first experiment design in a manufacturing area failed to point out any significant operating variables," says Mark Anderson, a Stat-Ease consultant, "But all of my experimental runs produced much better results than ever before achieved!"

"The process was not in statistical control. I realized that we needed SPC to eliminate special causes as the first step toward making major improvements."

"Later, after achieving statistical control, experiment designs succeeded."

There are many valuable lessons like this to be gained from a good SPC course. As shown by the course outlines below, Stat-Ease's workshops cover much more than just how to set up a control chart. Our intention is to provide graduates with all the tools needed to identify and eliminate special

causes for quality problems.

We suggest you ask for presentation of these two workshops in-house, which provides the benefit of confidentiality as well as significant savings in travel expense. Or plan to attend Stat-Ease's public SPC workshops next Spring.

*Call Stat-Ease (at 612/378-9449) for more details and pricing for SPC workshops (see outlines below for public course dates.)*

**"SPC MADE EASY" Part 1**  
Outline for Workshop  
April 9-12, '91 (St. Paul)

You will learn:

- Continuous Improvement
- Definition of Quality
- Taguchi Loss Function
- "Common" vs "Special" Causes
- Deming's PDCA Cycle
- Intro to Control Charts
- Run Charts
- Variables vs Attributes
- Overcontrol/Undercontrol:
- Basic Statistics
- Xbar and R Charts
- Basic Tools
- Team Building
- Data Collection
- Pareto Analysis
- Flow Charts
- Cause and Effect Diagrams
- Histograms
- Scatter Diagrams
- Charts for Individuals
- Charts for Attributes

## Dates Set for Public Workshops on SPC

Stat-Ease announces presentation of "SPC Made Easy", a two part series of public workshops that cover all practical aspects of statistical process control.

"SPC MADE EASY" Part 1 will be presented April 9-12, 1991 at the Embassy Suites Hotel in Saint Paul, Minnesota. "SPC MADE EASY" Part 2 will be presented May 7-10, 1991 at the same site. To register for the public workshops, just call Stat-Ease at 612/378-9449.

**"SPC Made Easy" Part 2**  
3 & 1/2 Day Workshop  
May 7-10, '91 (St. Paul)

You will learn about:

- Review of Control Charts
- Xbar/R, p/np, c/u
- Varying Subgroup Size
- Process Analysis
- Rational Subgroups
- Sampling Frequency
- Capability Indexes
- Other Charts for Variables
- Xbar and Standard Deviation
- Median
- Moving Average and Range
- Geometric Mean
- Cumulative Sum
- Advanced Statistics
- Confidence Intervals
- Comparing Two Means
- Tolerance Intervals
- The 7 Step "QC Story"
- The Measurement Process
- Accuracy & Precision
- Discrimination
- SPC for Short Runs