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STATISTICAL PROCESS CONTROL (SPC)
1 DAY

Course Description

The application of Statistical Process Control (SPC) as a tool to understand and control processes is essential in maintaining a cost effective manufacturing process. This course introduces the basic theory of SPC control charts and presents a simple step by step procedure for constructing the traditional SPC control charts using actual data from the electronics manufacturing industry. Through carefully designed "hands-on" exercises the students learn how to set-up, construct, and analyze SPC charts. Traditional charts for both variables and attributes data are presented.

How you will benefit:

- Learn how to set up, construct, and interpret traditional SPC control charts
- Reinforce the learning through classroom exercises
- Know how to use and apply both the X bar R, X bar S, and traditional attribute charts (np, p,c,u)

Who should attend:

The course is designed as a practical introductory level course for engineers, operators, and quality control personnel with limited exposure or background in statistics.

Course Outline

CLASSROOM LECTURE (DAY 1)

Introduction to fundamental SPC Concepts
    Basic Control Chart Theory
Process Control Tools and Techniques
Normal Distribution, Mean, Standard Deviation
    Classroom Exercise: Students compute a mean, standard deviation and draw a histogram
The X bar R chart . . . A step-by-step explanation
    Class Exercise: Construct X bar R chart
How to Interpret a Control Chart
Illustrated with examples from the microelectronics manufacturing industry
Control Charts for Attribute Data (optional)
    Classroom Exercise: Construct and interpret an attribute control chart

Course Fee: $695