



Statistical Process Control (SPC) with Application

(Onsite - 3 Day, 6.5 Hour sessions - Optimum class size, 12 students)

Training Description:

This is the classic course on Statistical Process Control (SPC), which covers the basic principles of control charts. The principles are described in everyday terms for those who desire a thorough understanding of statistical process control without having to cope with elaborate mathematics. Control charts are based upon statistical principles, in particular the normal distribution. They are used to determine when the process being monitored is stable while it produces product. Improvement to a process comes from identifying and eliminating "special cause" variation. Participants will learn how to create, implement, interpret, and analyze control charts in production. This training takes a ground up approach in teaching Statistical Process Control. Its friendly and non-threatening style ensures everyone will learn SPC and confidently apply it back on the job. Included are hands-on exercises and practical application in real world processes.

Participants will understand how to use control charts and statistical process controls (SPC) to monitor and improve processes, even without any prior statistical knowledge. They will learn the underlying principles behind control charts, how to implement them effectively within their own production processes and how to identify special cause variation as it happens in real time. This course is designed for operators, supervisors, and quality inspectors, as well as engineering staff and is delivered in person.

Training Objective:

This 3-day SPC training class will teach students to determine how well their process is running (Cpk, Ppk) and how to use control charts to reduce the number of defects. The students will use Minitab Statistical Software to determine Process Capability and create Control Charts.

Skill Attainment:

Control Charts: Participants will learn how to create Control Charts (Variable and Attribute Charts), calculate Process Capability (Cpk, Ppk), identify Special Cause Variation within a process and create Action Plans.

These skills are transferable within the company, industry and are highly desirable for any manufacturer.

Recommended Prerequisites:

- Understanding of Basic Math.
- Minitab software installation on your own laptop computer
- Data Entry skills necessary