

**SPC (AIAG)**  
**An Introduction to Statistical Process Control**  
**– a 2-day Workshop**

---



**Course ID: P2170**

**GENERAL DESCRIPTION:**

In this two-day course, participants will come to understand the concepts of variability, over-control, process capability, and statistical stability. They will use SPC techniques to manage their processes and to distinguish between "process control" and "inspection". The course is designed to enable compliance with the statistical aspects of elements 8.1, 8.1.1, 8.1.2 and PPAP requirements of ISO/TS 16949:2002. No prior statistical experience on the part of students is required.

**CONTENT OVERVIEW:**

Topics covered during the course include the following:

- Understand Variation
- Descriptive Statistics
- Difference between Inspection and Control
- Statistical Thinking
- The Normal Distribution
- The Concept of Stability - common causes and special causes of variation
- The Control Chart
- Steps for Implementing Statistical Process Control
- The Capability Study
- Control Charts for Variables
- Interpretation of Control Charts
- Tools for improving process capability
- Control Charts for Attributes
- Measurement Systems Analysis

Throughout the delivery of the course, the instructor will be using examples and material from the AIAG Statistical Process Control Reference Manual. Relationships with APQP/PPAP and ISO/TS-16949 requirements will be discussed.

# **SPC (AIAG)**

## **An Introduction to Statistical Process Control – a 2-day Workshop**

---



At the conclusion of the course, participants will be able to develop and interact with an effective Statistical Process Control Program. In addition, participants will have a good understanding of the background concepts employed in computerized SPC tools and popular SPC packages.

### **DURATION/SCHEDULE:**

- 2 days of instruction, discussion, and assignments/workshops
- Classroom hours are typically 8:00 a.m. -12:00 p.m. and 1:00 p.m. - 5:00 p.m.

### **STUDENT MATERIALS:**

- AIAG Reference Manual: Statistical Process Control
- Student workbook
- Additional handouts as appropriate