

Statistical Process Control

Background

Statistical Process Control is the use of statistical techniques such as control charts to analyze a process or its output to take appropriate actions to achieve and maintain a state of statistical control and to improve the process capability.

Learning Objectives

By the end of this course, participants will be able to:

- Learn proven questioning techniques for effective SPC implementation through developing an Operational Definition
- Demonstrate an understanding of the linkage between SPC and the larger scope of the core tools manuals (MSA, FMEA, APQP), along with the requirements of IATF 16949.
- Identify the sources of variation present and know how to categorize normal versus non nor- mal
- Differentiate between prevention and detection and illustrate their impact on the Cost of Poor Quality (CoPQ)
- Learn about the different tools that support SPC implementation
- Identify the correct and applicable tools for both variable and attribute data
- List best practices regarding implementation and taking action on out-of-control conditions to aid in effective implementation
- Calculate and Interpret acceptance criteria for process capability indices like CpK and PpK
- Apply methods for implementing the principles of SPC to manufacturing processes
- Apply software to the calculation of Control Limits and incorporation of measurement studies process to the selected Process Controls
- Demystify SPC by learning to carry out all calculations and interpretations following thensteps in the SPC reference manual

Who Should Attend

 Recommended for quality managers, quality team leaders, manufacturing managers and technicians, quality assurance and laboratory technicians and engineers, anyone involved in the implementation of IATF 16949:2016, individuals and cross functional teams interested in risk reduction and anyone who wants a better understanding of SPC

Additional Information

• 0.5 Days