LMR Global

Six Sigma – Statistical Process Control

Background

The Six Sigma – Statistical Process Control (SPC) Training is a comprehensive course that provides participants with the tools and methodologies to monitor, control, and improve manufacturing processes using statistical techniques. The course emphasizes data-driven decision-making, process capability analysis, and the effective use of control charts. Participants will learn how SPC integrates into the Six Sigma framework, enabling enhanced process stability, reduced variation, and improved quality assurance.

Learning Objectives

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

- Understand the principles and history of Statistical Process Control (SPC) within the Six Sigma methodology.
- Apply mathematical concepts and descriptive statistics to analyze process data effectively.
- Construct and interpret control charts for monitoring process stability and detecting variations.
- Conduct process capability analyses using Cp, Cpk, and other indices to assess performance.
- Normalize data and address challenges related to non-normal distributions and limited data.
- Utilize SPC tools to identify opportunities for continuous improvement and ensure compliance with industry standards.

Agenda

1. Introduction to SPC
2. Mathematical Concepts
3. Process Capability
4. Normalization of Data
5. Control Charts
6. Addressing Data Collection Challenges

Additional Information

- 1 Day