

Six Sigma – Statistical Process Control



DURATION
Full Day



FORMAT
Trainer-led



AUDIENCE
Automotive



STANDARDS
Six Sigma SPC

BACKGROUND

Statistical Process Control (SPC) is an important data-driven technique used within Six Sigma and automotive manufacturing to understand process behaviour, control variation and support consistent product quality. By monitoring process performance and distinguishing between normal and unusual variation, organisations can make better decisions, identify emerging issues and improve confidence that manufacturing processes remain stable and predictable.

This course introduces the statistical principles that underpin SPC before exploring data distribution, process capability and the practical use of control charts. Participants will consider common and special cause variation, capability indices, normal and non-normal data, variable and attribute control charts, chart selection and the challenges associated with collecting sufficient data in manufacturing environments.

LEARNING OBJECTIVES

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

- Explain the purpose of SPC and its relationship with Six Sigma.
- Interpret basic statistical measures and recognise different data distributions.
- Distinguish between common and special causes of process variation.
- Explain the relationship between process stability and process capability.
- Select and interpret appropriate variable and attribute control charts.
- Recognise practical data collection challenges when applying SPC.

AGENDA

Full Day Session – Six Sigma Statistical Process Control

- Introduction to Six Sigma and Statistical Process Control
- Basic Statistical Concepts and Data Distribution
- Process Variation, Stability and Capability
- Data Normalisation and Non-Normal Data
- Variable and Attribute Control Charts
- Data Collection Challenges and Practical SPC Application
- Practical activities, discussion, knowledge check, summary and close

 To discuss this course or request a tailored version please contact us at:

 enquiries@lmglobal.co.uk