

AIAG Statistical Process Control



DURATION
Full Day



FORMAT
Trainer-led



AUDIENCE
Automotive



STANDARDS
SPC

BACKGROUND

Statistical Process Control (SPC) provides a data-driven approach for understanding process behaviour, controlling variation and supporting consistent manufacturing performance. Within the automotive industry, SPC helps organisations distinguish normal process variation from unusual conditions, assess whether processes are stable and capable, and use objective data to support quality improvement and effective production control.

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

LEARNING OBJECTIVES

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

- Explain the purpose and principles of Statistical Process Control.
- Interpret basic statistical measures and recognise common 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 data collection challenges and considerations when applying SPC.

AGENDA

Full Day Session – Statistical Process Control (SPC)

- Introduction to Statistical Process Control and Six Sigma
- 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 Low-Volume Processes
- 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