*Webinar on*

# Introduction To Statistical Process Control

# Learning Objectives

*Know how variation (as reflected by the process standard deviation) and accuracy (process mean) affect quality, and how these parameters are reflected visually on SPC charts. Undesirable changes in the process are often announced by points outside the control limits long before they can result in the production of nonconforming work.*

*SPC tells us when the process needs adjustment, and when it should be left alone. This allows production workers to react to processes that are out of control but avoid over-adjustment (tampering) of processes that are performing correctly.*

*Apply the concept of the rational subgroup to ensure that the sample reflects all the various sources in the process. Batch processes and autocorrelated processes do NOT meet the underlying assumptions and must be treated appropriately.*

*Know how to handle processes that do not follow the normal (bell curve) assumption. Textbook control charts will often have excessively high false alarm risks for such processes. Generally accepted methods are, however, available for such processes to create control charts whose false alarm risks are the same as Shewhart control charts for normally-distributed quality characteristics.*

This webinar will introduce attendees to the foundations of statistical process control (SPC), including the effects of variation and accuracy on process quality.

**PRESENTED BY:**

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On-Demand Webinar

Duration : 60 Minutes

Price: $200

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# Webinar Description

This webinar will introduce attendees to the foundations of statistical process control (SPC), including the effects of variation and accuracy on process quality. The definition of a Six Sigma process will be illustrated. Attendees will learn how to construct SPC charts that provide visual controls (easily understood signals) that tell production workers when the process requires adjustment to prevent the manufacture of nonconforming work. The issue of non-normal (non-bell-curve) processes also will be addressed with control charts that reflect accurately the underlying statistical distribution.

Attendees will receive a Visual Basic control chart simulator that works in Windows 7 (it has not been tried in other versions) that illustrates variation and accuracy side by side with the corresponding control charts. This is useful for teaching the underlying concepts to production workers and technicians very quickly.

Statistical process control (SPC) is a widely used and well-established quality management method whose purpose is to detect undesirable process changes and allow corrective action before the process generates nonconforming work. It is a basic part of the body of knowledge for the quality management profession, and it is sufficiently important in the automotive sector that the Automotive Industry Action Group publishes a manual on the subject. Most references omit, however, the issue of non-normal (non-bell-curve) processes that do not follow the textbook normality assumption, although the AIAG manual does address this issue.

# Who Should Attend ?

*Quality engineers, technicians, and inspectors with responsibilities for statistical process control.*
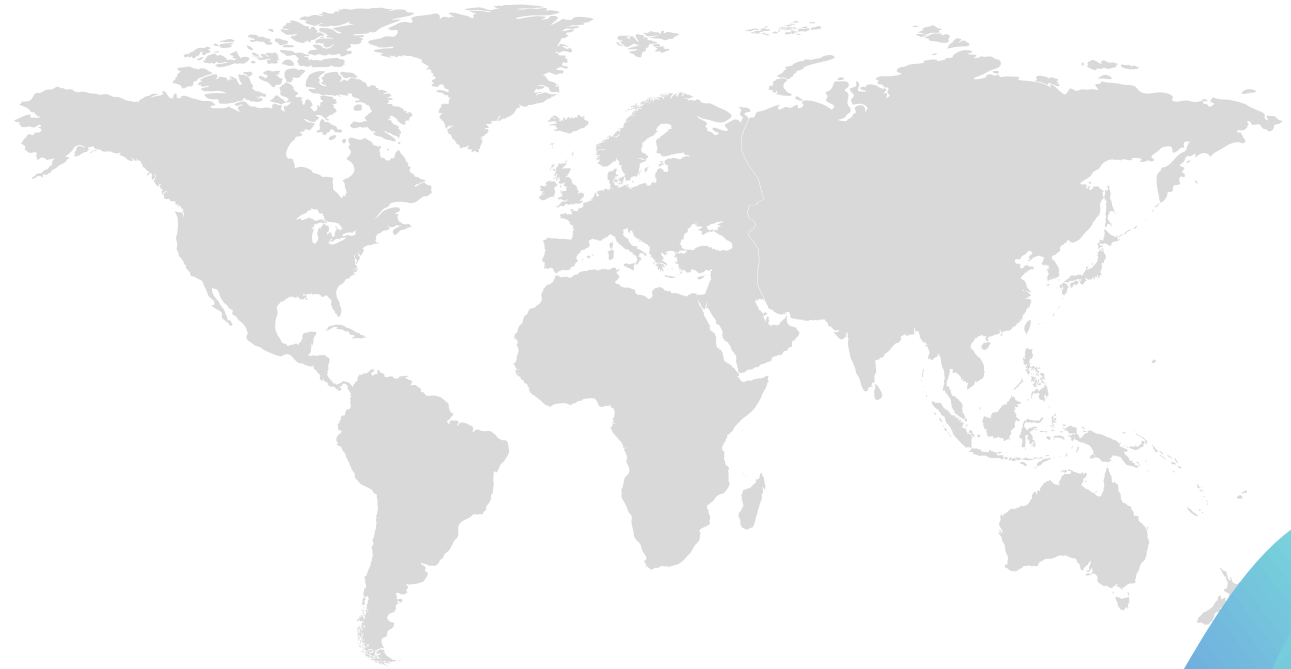
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