NEW CHEM VISION

for Consulting & Supplies

STATISTICAL PROCESS CONTROL IMPLEMENTATION

Statistical process control implementation

Description

Program #: GQP-0001

Find out how SPC can be part of your integrated quality management system. Learn how to use charts that are in compliance with customer and (Quality, Environmental and OH&S standards). Roll up your sleeves for hands-on practice with SPC tools, including process capability indexes, normal probability distributions, and control charts for variables and attributes.

Who Should Attend ?

QA managers, quality engineers, manufacturing engineers, technical warranty managers, chemists, quality analysts, CQI coordinators, quality auditors, quality technicians, and SPC coordinators.

Content

- Scientific Material (**Hardcopy**)
- Attendance Certificate from **NCV**

Language

- Arabic / English

Learning Objectives

- Understand how SPC integrates into the total quality system
- Differentiate data reporting and SPC reporting
- Use charts in ways that are in compliance with customer and ISO 9000 requirements
- Select and use the best-suited control chart
- Establish control chart limits
- Establish rules for out of control occurrences
- Demonstrate an understanding of troubleshooting using SPC
- Recognize how SPC helps determine process capability
- Differentiate the implementation and management issues associated with SPC

Outcomes

- Be aware of the aims, objectives and benefits of SPC
- Be aware of SPC techniques including; BS6001 and Sampling, Process Capability Studies, Use of Statistical Process Control Charts, Attribute Charts, Variable Charts
- Be aware of techniques such as Short Run SPC. Applicable to:
  - small lot or batch sizes and
  - large runs or batch sizes, produced over short time period
- Identify the most appropriate SPC techniques to employ
- Identify the need for implementing SPC
- Understand the role of SPC in improving processes
- Be capable of completing an SPC study
- Coherently answer questions regarding SPC
- Provide the opportunity to make real major financial saving through QM&T's pre and post course supported assignment scheme
- Be QM&T validated and certificated Statistical Process Control practitioner

Prerequisites

- Understanding of Basic Algebra

Training Place

- In site training
- As NCV schedule

Duration

- 2 Days

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Agenda

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Day 1:

- Basic Statistics
- SPC Foundations
- Use of data in business management
- What is SPC?
- Common terms
- Sampling
- Principles of SPC Charts
- Standard deviation
- The normal distribution
- Other types of distributions
- Control chart set-up and prerequisites
- Types of Control Charts
- X-Bar and R chart
- X-bar and standard deviation chart
- IX and Moving Range chart

Day 2:

- P-chart
- np-chart
- c-chart
- u- chart
- Short Run Charts
- Process Documentation on SPC Construction and Use
- Automated Methods of Charting and Collecting Data
- How to Interpret Control Charts
- Out-of-control rules
- Specification Limits and SPC Charts
- Estimating Process Capability
- Process Capability Studies