

Statistical Process Control (SPC)

Introduction

SPC can be thought of as the mother concept for Six Sigma. SPC can be used in virtually any situation where you need to understand and analyse a process from baselining current performance, through evaluating measurement systems, comparing before and after improvement to the provision of on going process controls. This course is aimed at giving delegates a thorough understanding of control chart principles, the different types of charts, their application and how to interpret control charts to identify common and special causes of variation.

Objectives

This two day course which includes a number of group exercises based on both manufacturing and service examples will enable Six Sigma Green and Black Belts to understand:

- The principles and application of control charts in a Six Sigma environment.
- How to develop a variety of control charts dealing with variable and attribute data.
- How to interpret control charts and identify common and special cause of variation.
- How to manage out-of-control processes.
- The steps required to implement control charts for a particular process.

Course Content

- Introduction and key principles
- Process control using variables
 - ⇒ X bar and R charts
 - ⇒ Individuals charts
 - ⇒ Multi-variate charts
 - ⇒ Moving mean, range and exponentially weighted moving average charts
 - ⇒ Charts for Standard Deviation
 - ⇒ Techniques for Short and Small Runs
- Process control for attributes
 - ⇒ np charts
 - ⇒ p charts
 - ⇒ c charts
 - ⇒ u charts
- Cumulative sum (cusum) charts
- Analysing control charts
- Managing out of control processes
- Control charts and process capability
- Implementing control charts

Duration and Who should attend?

This two day course is for in-house delivery. The course is for Six Sigma Green Belts and delegates undertaking a Six Sigma Black Belt programme who want to improve their knowledge and skills in developing and applying statistical process control techniques.

Follow on courses

The Six Sigma Black Belt programme consists of nine modules of which this is an optional component. The delegate has to complete two mandatory modules and has a level of choice of which of the other seven modules will be of most benefit to them and their organisation, see the Six Sigma Black Belt course overview.

Bookings

Please contact Denis Mahoney at Business Transformation (Training and Coaching) on 01903 784783 or 07766 333294 or be email at denis.mahoney@business-transform.co.uk. for further information.