Course Title: STATISTICAL PROCESS CONTROL (SPC) USING MICROSOFT EXCEL   Course Code: HD 103

Course Background / Summary:

This course teaches participants the fundamental concepts and methods needed to establish effective control charts and estimate process capability. In addition to learning traditional control charts (e.g. xbar, r/s), participants will be exposed to other useful charts for handling multiple sources of variation (within/between) and short production runs. Practical aspects of implementing SPC on the shop floor are also discussed.

Course Objectives:

- Understand SPC fundamentals and the importance of reducing variation.
- Implement control charting in order to assess process stability.
- Interpret control chart signals and implement appropriate reaction plans.
- Determine appropriate sampling plans and sample sizes.
- Assess process capability training (for normal and non-normal data)
- Apply charting techniques for short production runs.
- Apply charting methods where multiple sources of variation may exist (e.g. multiple cavities, filling heads)
- Determine the appropriate type of chart for a given process.
- Avoid common misapplications of SPC in practice.

Target Audience:

- Quality Engineers, Quality Technicians, Industrial Engineers, Manufacturing Professionals.

Course Duration: 3 Days

Course Contents
1.0 Introduction to SPC
2.0 Variation Fundamentals
3.0 Control Charts
4.0 Process Capability
5.0 Specialized Charts

SKILL UPGRADING & DEVELOPMENT