

STATISTICAL PROCESS CONTROL (SPC)

Statistical Process Control (SPC) is an essential tool that comprises of seven quality control tools for improving services and manufacturing quality. It will help to reduce manufacturing cost, improve productivity and moving forward the company into the better prospects. SPC is a systematic approach to help you monitoring process behavior and detect any assignable causes exist in the system.

Proper use of SPC generate complete confidence in your product and avoiding unnecessary adjustment to the process. Improper data input for SPC study will create wrong decision making. Thus, the poor judgement will lead to Producer Risk or Consumer Risk.

LEARNING OBJECTIVE

After seriously committed to this course, the trainee should be able to do the following:

- Understand what SPC is and why is it important.
- Use the quality control tools to establish the SPC plan and problems solving.
- Help teams use the Seven QC tools to decide which parameters to control over their processes
- The importance of data collected for SPC study
- Construct variable and attribute control charts
- Interpret control chart and what to do when a control chart shows abnormality.
- Use control charts to detect any assignable cause exists in processes.
- Understand and compare control limits and specification limits
- Perform Capability Study and understand Capability Indices such as Cp, Cpk, Pp, Ppk.
- Judge the capability of a process.

TARGETED INDUSTRIES

All type of industries

TARGET GROUP

All personnel involving data collection for SPC study / team members directly involved in continuous improvement / quality improvement initiatives from manufacturing and services. It can serve as a refresher for experienced technicians; or it can be used in orientation for new hires.

~ Participants must have basic knowledge for statistics, probability distribution concepts and simple algebra formulas, comfortable using a scientific calculator and knowledge using Microsoft Excel will be added advantage.

METHODOLOGY&LANGUAGE USE

Training slides, Training Material, Review Questions, Exercises, Case Study, MS Excel and Q&A.

Test Before & After Training.

Training Manual – English

Course deliver language – Can be mix of English, Bahasa Malaysia and Chinese

COURSE OUTLINE

- Introduction to Quality and TQM
- Basic Statistics and Normal Probability Distribution
- Type of Data
- Introduction to Statistical Process Control
- Statistical Process Control Tools (7 QC Tools)
- Control Charts
- Interpretation of Control Charts (Case Studies)
- Process Capability Study (Workshop)