



## CQE Training & Consultancy Plt (Reg No. : LLP 0003668 LGN)

Registered Office : No. 46, Lorong Bintang, Taman Tasik Permai, 34000 Taiping, Perak. Malaysia.

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# 7 QUALITY CONTROL TOOLS (IN-HOUSE / PUBLIC TRAINING PROGRAMME)

SBL  
Scheme



## INTRODUCTION

One of the standard clause in latest ISO 9001 : 2015 Edition Quality Management System standard is “Continual Improvement”. Arising from this, organizations are required to demonstrate continual improvement activities are conducted consistently in a proper and systematic manner. 7 QC Tools and PDCA is one of the common approach that being employed by many organizations in realizing this requirements. Furthermore in today competitive market place, management has to empower employees to be more proactive in dealing with quality and process issues for continual improvement. Therefore, they should be trained to master 7QC tools that can be applied for process and quality improvement in a cost competitive environment. Through this application and implementation, organization able to achieves quality and productivity improvement in various section and division which finally bring benefits and values to both the organization and their employees.

## LEARNING OBJECTIVE

Upon return to workplace, participants will be able to :

- Use effective problem-solving tools for quality and productivity improvement ;
- Understand simple statistic and common sense techniques ;
- Able to use 7 QC Tools to identify problem causes, analyse data, do evaluation and rectify problem.
- Learn the Plan-Do-Check-Action (PDCA) 12 steps in problem and project improvements



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### DAY 1

**Also available as  
in-house programme**

### CONTENTS

#### ● **Introduction to Plan-Do-Check-Action (PDCA) Methodology**

- ✚ Why improvements?
- ✚ Introduction to PDCA Deming Improvement Cycle
- ✚ Brief overview of various 7 QC Tools
- ✚ Differences between 7 QC Tools and 7 MP Tools

#### ● **Data Collection / Checksheets**

- ✚ Data collection introduction
- ✚ Why are data collected ?
- ✚ What kinds of data are collected ?
- ✚ Common mistakes and errors made in data collection
- ✚ Recording Checksheets, Checklist Checksheets and Location Checksheets
- ✚ Video – Data Collection / Checksheets

#### ● **Pareto Diagram**

- ✚ Pareto principle, Prioritization using 80/20 rules
- ✚ Why are Pareto Diagrams used ?
- ✚ When and How to use Pareto Diagrams ?
- ✚ Video – Pareto Chart

#### ● **Cause and Effect Diagram**

- ✚ Brainstorming techniques
- ✚ Importance of Cause and Effect Diagram
- ✚ When and How to use Cause and Effect Diagram ?
- ✚ How to develop and prepare Cause and effect Diagram
- ✚ Critical Factors to consider

### DAY 2

#### ● **Histogram**

- ✚ How to draw Histogram ?
- ✚ What information we can get / extract from Histogram ?
- ✚ Data characteristics - Central tendency, Dispersion and Spreadness and Shape / Pattern analysis
- ✚ Exercise – Using scientific calculator, MS Excel and Minitab Software



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### ● Scatter Diagram

- ✚ What is Scatter Diagram ?
- ✚ Relationship of data
- ✚ When and How to use Scatter Diagram ?
- ✚ Mutual correlation analysis using Simple Linear Regression and Coefficient Correlation
- ✚ Exercise - Using scientific calculator, MS Excel and Minitab Software
- ✚ Video – Scatter Diagram

### ● Charting / Graphs / Control Charts

- ✚ Common Graph and Charting
- ✚ Trend and pattern analysis
- ✚ Flow Charting
- ✚ Exercise - Using MS Excel and Minitab Software

### ● Stratification

- ✚ What is Stratification ?
- ✚ Stratification principle
- ✚ When and How to use Stratification ?
- ✚ Exercise

### ● 12 Steps in PDCA Cycle

- ✚ PDCA Deming Improvement Cycle concept
- ✚ Video showing – PDCA Cycle to illustrate a project start until completion

## TRAINING METHODOLOGY

The program would be conducted by using the following materials / aids:-

- ✚ Course Note
- ✚ LCD / OHP
- ✚ Group Activities / Workshop
- ✚ Video Showing
- ✚ Lecturettes

## DURATION

2 Days

## PARTICIPANTS



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**P**roduction, Operation, Quality and Supporting Department executives and supervisors who are involved in quality and productivity improvement projects execution and implementation.

### FACILITIES

**P**articipants to bring along calculator for exercises. LCD Projector, TV, VCR Player and White Board / Flip Chart.

