

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 QC TOOLS & 7 NEW QC TOOLS

(IN-HOUSE TRAINING PROGRAMME)

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.

The 7 QC Tools are focused more on quantitative methodology for problem solving where else 7 New QC Tools are more towards qualitative approach. How often have we corrected a problem and yet the problem keeps happening again? If your answer is YES, then you need a proven method to problem solving. You need NEW QC TOOLS. New QC Tools has 7 scientifically proven methods to help you analyse, solve, evaluate and improve your results every time. They are so powerful such that you can practically improve, prevent and correct thorough and difficult issues and problems.

LEARNING OBJECTIVES

Also available as in-house programme

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
- Easy step-by-steps practical analysis and evaluation of all issues/problems using 7 New QC Tools;
- Enhances team cooperation and action through 7 New QC Tools application;
- Excellent for cross functional team intervention

Scheme



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CONTENTS

DAY 1

• 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

Pareto Diagram

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

Cause and Effect Diagram

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

Histogram

- **♣** How to draw Histogram?
- ♣ What information we can get / extract from Histogram?
- ♣ Data characteristics Central tendency, Dispersion and Spreadness and Shape / Pattern analysis
- Video Showing





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DAY 2

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
- Video Showing

Charting / Graphs / Control Charts

- Common Graph and Charting
- Trend and pattern analysis
- **♣** Flow Charting

Stratification

- What is Stratification ?
- Stratification principle
- **♣** When and How to use Stratification?

• 12 Steps in PDCA Cycle (Video Showing)

Introduction to 7 New QC Tools and Description

- ♣ Why improvements?
- ♣ Introduction to PDCA Deming Improvement Cycle

How do 7 New QC Tools Works Together in Actual Workplace Application

- ♣ 7 MP Tools work flows
- **♣** Integration

Affinity Diagram (KJ Method)

- **♣** Concepts & Application
- Card Game Workshop

• Interrelationship Digraph (ID Graph)

- Concepts & Application
- ♣ "The Essential Skills Needed for Managers" workshop



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DAY 3

- Tree Diagram
 - ♣ Concepts & Application
- Prioritization Matrices
 - **♣** Full Analytical Criteria Method
 - ♣ Consensus Criteria Method
 - **♣** Combination ID/Matrix Method
- Matrix Diagram
 - **↓** L Matrix / T Matrix
 - **♣** X Matrix / C Matrix / Y Matrix
- Process Decision Program Chart (PDPC)
 - Concepts & Application
- Activity Network Diagram (AND)
 - Concepts & Application

TRAINING METHODOLOGY

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

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

DURATION

3 Days



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PARTICIPANTS

Production, 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.