POKA YOKE to ACHIEVE ZERO DEFECT MANUFACTURING
POKA-YOKE to ACHIEVE ZERO DEFECT MANUFACTURING

INTRODUCTION

This course intends to explore the most effective method in ensuring quality. As defects are always created from manufacturing or operation errors, preventing errors is the best mean and approach to eliminate defect. In fact, Poka Yoke is one of the most effective and efficient method to achieve “Zero Defect” manufacturing and quality. We will conduct this workshop with examples from the production lines and real life application.

OBJECTIVES

After the training session, the participants should be able to:

- Know what Poka-Yoke is
- Apply Poka-Yoke concepts where applicable
- Apply source inspection techniques in manufacturing processes
- Differentiate the various quality control systems such as SPC, inspection, and Poka-Yoke
- Understand and expose to different function of Poka-Yoke such as orientation etc.

COURSE OUTLINE

MODULE 1: CHALLENGES FOR TODAY’S COMPANY
- Competition for survival
- Quality, Productivity and Profits
- Quality Control methods
  - Inspection
  - Process Control
  - Quality Systems

MODULE 2: INTRODUCTION TO POKA-YOKE
- Definition of Poka-Yoke
- Effect and characteristics of Poka-Yoke
- Types of manufacturing errors
  - Example

MODULE 3: ZERO QUALITY CONTROL SYSTEM
- Components of a zero quality control system
- Poka-Yoke techniques application

MODULE 4: IMPROVEMENT PROCESS
- Fundamentals of improvement process
- Application of statistics in improvement process
- Stratification and classification of defects
- Deriving improvement action items
COURSE OUTLINE (continuation)

MODULE 5: TYPES OF VALIDATION
- Self-validation
- Successive validation
- Source validation

MODULE 6: POKA-YOKE FUNCTIONS AND TECHNIQUES
- The orientation method
- The fixed value method
- The contact method
- Locking Mechanism
- Sensory method
- The motion step method

MODULE 7: SETTING UP A POKA-YOKE METHOD
- Choosing a validation method
- Setting up the validation method
- Incorporating the Poka-Yoke techniques in the production process

MODULE 8: EFFECT OF POKA-YOKE TECHNIQUES
- Reduce inventory
- Relationship of Product defects and equipment failures (Causes and effects)

MODULE 9: CASE STUDY
- IC Marking Process
- Shearing Operation
- Frame forming operation

EXERCISES, DISCUSSION AND CLOSING

METHODOLOGY

This session will be conducted in workshop manner. Real examples from the industries and also the participant lines will be used as case study and applied as working examples. Apart from the workshop, the course also will have some lectures and a lot of group discussions.

WHO SHOULD ATTEND

The target audiences include ALL Technical Executives, Engineers and Managers from Process, Quality, Planning and Production who are interested to know or need to apply Maintenance & Improvement Techniques.
**SABRINA LIM** has a Bachelor in Engineering (First Class Honours) from The University of Sydney. She was attached to well-known American MNCs where she had hands-on experience in the Quality, Quality Systems and Process Engineering.

Her success in her career include ISO9000 recertification, taking responsibility for product transfer from the US, troubleshooting new product quality problems and involvement in in-process yield improvement programmes, developing training materials, calibration systems, new product specifications and standard operating procedures.

She has been involved in teaching and training for the past nine years and has conducted trainings in quality, quality systems and technical areas. Her hands-on experience in manufacturing as well exposure in training personnel from diverse industries in Malaysia and Singapore enables her to provide a good insight to troubleshooting process problems and improving overall quality as well as latest developments in the quality arena.

Ms Jesslynn Lee Mee Lin, who has more than seventeen years of experience in training & development, is a corporate trainer for many organizations in Malaysia, Singapore, United States, Australia, China & Batam. She has lectured with various leading colleges and teaching institutes and her participants include Front-liners, Engineers, Executives and Supervisors from the corporate and private sector. She also conducts training programs for in-house and public programs for many organizations in Malaysia and overseas.

Ms Lee is currently a Global Learning and Development Manager for an international organization where she worked closely with all departments and all level of employees to ensure best quality product achieved to customers and all employees are fully trained. Ms Lee has been a HR practitioner for the last seventeen years.

She holds a MBA from University Portsmouth, UK and is a certified trainer from IPD, UK. She is also a certified Safety & Health Officer from NIOSH and certified trainer of IPC Revision D from IPC, Australia. Her training expertise includes Leadership Skills, Teambuilding, Motivation, Time Management Skills, Technical Report Writing, 7 QC Tools, Presentation Skills, Supervisory Program, Interviewing Skills, Stress Management, 5S Program, English Literacy Program, IPC Training, Clerical and Personal Development, Communication Skills and Safety & Health Program among others. She presents her courses based on her many years of first-hand training experience with staff at various levels and conducts her courses in both Bahasa Malaysia and English with ease. Her training is always lively and fun.

**SIM LAM THONG** (TQC & TPM, 5S/6S, Project Management Consultant) has more than 23 years of vigorous involvement in TQC/TPM/5S/6S activities, Statistical Application, GD&T, Problem Solving and Project Management training. He has a lot of "Hands on" and practical experience on SPC/ SQC/ QCC/ TQC/ TPM/ TS16949 implementation, statistical application for industry’s measurement and part tolerancing, 5S/TQC/TPM audit and providing in-house consultation services to many local and overseas companies.

He specializes in Quality, GD&T, 5S/6S, TQC, SPC, 6σ quality implementation, Productivity and TPM training/consultation, Industrial Statistics Application and Design of Experiments Training and implementation. He has vigorously involved in implementing and developing 5S/TQC/QCC/TPM Activities in many local multinational and has presented many technical working papers in local and international Quality Conventions such as ICQCC in Hong Kong, Japan and others. He has been conducting training for many multinationals such as Renesas Semiconductor, Hitachi Metals, Hitachi Consumer Products (KL), ICI Products (M) S/B, Hewlett-Packard and others.
Packard, Acer Computers, Mabuci Motors, VDO, B Braun Medical Industries, Fairchild Semiconductor, Motorola Penang, ACM Chemical, Seagate Penang, Hong Yuen (Hong Kong) and many local companies such as Daibochi (M) S/B (Melaka), Malaysian Rubber Gloves, Belton Industries etc. He has also helped Hitachi Semiconductor and Hewlett Packard (M) S/B won the Malaysian National Champion in National QCC Convention in 1995, 1996 & 1997.

Prior to working as a consultant he has been working as a TPM/TQM Manager for a large multinational company for 12 years. He has been actively working with engineers to solve engineering and designing problems and application of statistics.

He is currently the TQC/TPM, 6σ Quality, Statistics, 5S and Management Consultants for Shin Etsu Handotai (Shah Alam), Osram, On Semi, Agilent, Samsung Corning, Unisem, Linear Semiconductor, Tessy Plastics (Shanghai), Diethlm Aluminium Works (Singapore), Matsushita Electronic Motor, Renesas, Seagate Penang, Carsem Semiconductors and TFP Plastics. Areas covered including Total Productive Maintenance (TPM), TQC, Measurement Uncertainty & Calibration implementation, Statistical application for 6 sigma and Continuous Improvement. He has also been a 5S consultant for Malayan Flour Manufacturing (MFM) Groups of companies.

He possesses a B.Sc. Ed. (Hons.) (Mathematics/Physics) and M. Sc. (Taguchi Experimentation) both from USM, Penang. He can communicate in English, Bahasa Malaysia and Mandarin with major dialects such as Cantonese and Hokkien.

**DURATION**

2 days

**COURSE FEE**

Program 100% Claimable under SBLK Scheme

PSDC Members:  RM 690/pax  
Non-Members:  RM 750/pax

*All prices listed above are subjected to GST effective 1st April 2015*
**Venue**
PSDC

**Payment**
Cross cheque made payable to “PENANG SKILLS DEVELOPMENT CENTRE” one week before commencement date.

**Registration**
Registration forms together with payment to be forwarded to:-
PSDC
1, Jalan Sultan Azlan Shah, Bandar Bayan Baru, 11900 Bayan Lepas, Penang.
Tel: 04-643 7909   Fax: 04-643 7929   Email: corpservices@psdc.org.my

**Cancellation**
PSDC reserves the right to cancel or postpone any program but with due notice to the company(s)

**Refund**
Fees will only be refunded in full for any cancellation of registration provided written notice is received 7 working days before commencement date. Substitute attendee(s) will be accepted at no extra charge.

For further information, please contact Elly Leong (ext. 523)
Email: ekyllong@psdc.org.my

Online registration: http://www.psdc.org.my