

Product Code: **IJM05**
Manufacturing
Improvement Training
Program

2-day Technical Training Course

Program: MANUFACTURING INSIGHTS SKILLS (MIS)

Session Topic: Mould Performance on Moulding
Quality & Productivity

By: Mr. William Lee

SBL TRAINING PROGRAM

Course Objective

The objective of this patented MIS program is to raise technical competency of technical employees from local manufacturing industry for product quality & productivity improvement through understanding of vital manufacturing variables. At the end of the MIS training, participants will realize the importance of technical details study & the introduction of science & engineering procedures to their existing practices for a profitable manufacturing operation.

Session Overview

A mould is a tool used for shaping a plastic product and is made in such a way that it can be run for a desired number of cycles without trouble. Injection mould generally cost about 20% of the overall moulding production cost but it has a tremendous influence on the moulding productivity & quality. Premature failure of mould is killing as it involves excessive overhead cost in the mould running such as frequent mould maintenance (replacing of worn or broken parts, re-polishing, cleaning and re-plating). Worst still, mould failure may also cause rejects in moulded parts, overtime payments, penalties in late-delivery and loss of company privileges. This course will also detail how common mould failures can affect dimensional accuracy, appearance & finishing of moulded products, mould deflection on cooling & venting efficiency and ways to maximize the life and performance of the production tool.

Benefits

1. Learn the impact of tooling economy on injection moulding productivity improvement.
2. Study the selection process of various mould materials.
3. Understand failure mechanism of common mould failures & how to troubleshoot the problems.
4. Examine the influence of mould failures on moulding quality.

Course Content

1. Moulding Economy & Productivity

Production & Productivity; Efficiency Measurement; Mould Cost; Machine Cost; Cost Saving; Mould Economy; Factors Influencing Productivity.

2. Mould & Cavity Materials Specification

Ferrous & Non-Ferrous Tooling Materials; Steel Brand Equivalent; Thermal & Mechanical Properties; Alloying Elements; Tooling Economy Calculation.

3. Mould Performance & Mould Life

Performance Factors; Thermal Stress; Deflection; Materials Defects & Refining; Mould Strengthening; Plastics & Mould Performance; Mould Life Factors.

4. Mould Quality & Processing Control

Examples of Poor Mould Quality; Tooling Materials Control; Hardening Control; Machining Control; Technological Properties; Mould Strength Check; Surface Roughness Control; Working Conditions Control.



Course Instructor



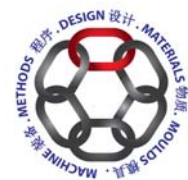
William Lee - Malaysian, Materials Engineer with an honorable Bachelor Degree awarded by The Engineering Council of London (EC, UK). He has over 25 years working & teaching experience in manufacturing industry. William possesses strong fundamentals knowledge in technical science & has special talent to communicate and explain to others the principles involved in various engineering fields. His ability to present and link the various engineering disciplines with real industrial use has made many of his course participants to appreciate the significant of technical details study for manufacturing improvement. Over the years, he has developed a series of patented Manufacturing Insights Skills (MIS) Training programs for various manufacturing industries. He is now a full time contract speaker for a few training organizers as well as professional associations in ASEAN & Australia. William will bring a wealth of teaching experience to this program along with his strong industrial background as a former engineering practitioner in tooling, materials, heat treatment, moulding & metal forming divisions. In addition, William is a versatile trilingual instructor who can instruct technical courses in English, Bahasa Malaysia or Mandarin (or a combination of the languages) to ensure full understanding of his presentation by his trainees from all levels.

Target Participants

This course is recommended for those who want to improve the moulding productivity & efficiency through better control of injection mould performance. The program will explain to molder the extensive process involved in mould making & how their quality & performance can affect the precision of moulded end product and the risk & costs in injection moulding production. Job titles may include molding engineers, product designers, mold designers, process engineers, project engineers, manufacturing engineers, mold makers and production engineers or anyone involved with plastic injection parts should gain a lot from this 2-day industry skills learning short course.

Administrative Details

1. Should public training not be scheduled for this program we will consider opening an ad hoc public training class if you've minimum guaranteed participants to attend this program.
2. We can bring this program to your premises as in-house training event for your in-house employees only. Interested participating company may contact us for an in-house training proposal.
3. In-house training can be conducted on weekdays or weekends (including public holidays) to meet the scheduling needs of your targeted staff.
4. For in-house training, a list of participants complete with their full name & designation must be presented to training provider one week prior commencement of each program. The total no. of training manual is supplied to the actual no. of turned out attendees only.
5. Substitute is allowed to replace the earlier registered person if he / she is unable to attend the training program (both public and in-house training). Participating company must inform us the details of replacement person.
6. All programs are of SBL (Skim Bantuan Latihan) type. Eligible company (Human Resources Development Fund contributor) must apply through themselves for the rebate of any eligible expenses (including training fees) from Human Resources Development Council. Training provider bears no responsibility for the approval of training grants or any form of rebates between participating company and HRDC.



Organized by:

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