

# Lean Material-Handling

(for both Services and Manufacturing Sector)

The implementation of continuous flow implicitly means that all supplies, tools, materials, information, documents and so on must be made available to the work cell/work group for use on a continuous basis. These need to be available at the right time, at the right place and in the right amounts. If the flow of these materials is erratic or routinely interrupted, the output from work cells becomes uneven and often unpredictable. This applies to both services and manufacturing industries whenever materials are involved in delivery of their products/services.

Precise methods for material-handling are required to run it like 'clock-work'. Applicable to both services and manufacturing industries, this workshop begins with a journey in which a plan is made for every 'part' (PFEP). Locating and creating the purchased-parts market is next ensuring correct amounts of each 'part (or material/supply)' and sufficient storage space is allocated. Establishing an enhanced delivery route with the signaling system to pull in the 'parts' at the right time, to the right place and in the right amounts is next. Teams then search for ways to sustain and improve the newly established system. Through class room exercises you will learn about the lean techniques for material-handling. This is a practical 'how-to' oriented workshop based in part on the classic 'Making Materials Flow' by Rick Harris, Chris Harris and Earl Wilson available from the Lean Enterprise Institute supplemented by additional material to illustrate concepts.

## Course Outline

- 1. Need for Reliable Material-handling**  
The cause of 'operational' interruptions, the result of unreliable supply and material-handling
- 2. Analysis for Every Part (or Material)**  
The cornerstones of a successful material-handling operation and the need to have a Plan for Every Part (PFEP), building of the PFEP database
- 3. Establish the Materials Market**  
How to locate the Materials Market in a facility and identify the right amounts for each part. Determine the space requirement for the inventory
- 4. Operating the Materials Market**  
Apply the placing, picking and packing techniques, and how to determine the minimum inventory levels and reorder points, and rapid response procedures

## 5. Delivery Route and Milk Runs

How to design picking routes and ways to get the parts/material to where it needs to be, select stops and delivery points and proper use of point-of-use racks

## 6. Pull Signaling System

The steps to establish the pull system and to decide delivery frequency, to set-up the kanban system and whether to de-couple or couple loading with the delivery process

## 7. Methods to Sustain and Improve the material-handling system

How to keep an eye on the system by checking it regularly, spotting the waste in the system, with management involvement and taking action

## Learn from Workshop Exercises

A large number of exercises are used to illustrate concepts and the application of these concepts throughout the workshop. A practice exam is held at the end of the workshop.

## > You'll learn:

- > How and Why to build a Plan for Every Part (PFEP)
- > How to establish the Materials Market in your facility
- > How to determine the right amount of 'parts'
- > How to establish minimum inventory levels and reorder points, and the need to escalate earlier
- > How to design the best routes, the milk run process, and to identify the stop points, delivery points and the need for POU racks
- > How to setup the pull signaling (kanban) system
- > What other potential improvement areas remain

**Course Duration:** 2 days

**Hours:** 9am to 5 pm

**Course Fee:** S\$800 nett

**Course Instructor:** Robert Oh

Robert Oh is the founder of Eagles Wings, a regional management consulting firm helping clients adopt 'Lean tools and practices' to transform businesses to become more agile, leaner and competitive. He has 23 years of experience in industry. As the Regional Vice President responsible for Asia Pacific and Japan region, Robert led an ambitious world-wide performance improvement project for 4 years using the Lean Management approach to drive customer service levels to 'Best in Class' standards. Turn-around time for technical queries world-wide fell to a quarter of what it was before the project began and customer reference-ability rose to 90% in Asia Pacific. This was one of the first organizations world-wide to apply Lean tools and principles to a service operation. He currently holds an MBA from Henley Management College and a graduate diploma in Business Administration from SIM. His first degree was in Electrical Engineering from the National University of Singapore.

## Register Today!

E-mail your registration to: [robert@eagles-wings.info](mailto:robert@eagles-wings.info)

Or call Tel: +(65) - 9735 1136 for more information

**Only limited places are available.**