Asia Masters Center

Production Logistics Management

Asia Masters Centre (AMC), Suite 2 B, level 6, Office Block, Grand Millennium Hotel, Bukit Bintang Street, 55100 Kuala Lumpur, Malaysia. | Tel: +60327326992|Mobile: +601 8909 0379 | Fax: +60327326992
Website: http://www.asiamasters.org/ | Email: info@asia-masters.com

Asia Masters Center

Production Logistics Management

Course Objective

- Improve and evaluate products and production processes in order to attain and maintain a competitive edge.
- Pursue and achieve a great delivery capability and reliability with the lowest possible logistic and production costs.
- Depict the extent to which the promised dates for the placed orders can be met.
- Explain why the marketable production costs, delivery capability and delivery reliability are critical to a company's long-term market success.
- Monitor the interactions between the performance and cost objectives constantly so as to ensure the production's economic efficiency.
- Clearly demonstrate the mutual dependencies between the often contradictory logistic objectives.

Target Audience

- Anyone involved in Supply, production, distribution, and efficiency improvement of the company's logistical flows of materials, resources, capital and information.

Asia Masters Center

Course Outline

Day 1

Introduction

- Logistic Key Performance Indicators for Manufacturers
- Dilemma of Operations Planning
- Model Based Problem Solving Process
- Objectives of Production Logistics
- Logistic Operating Curves – an Explanatory Model for Production Logistics
- Basic Principles of Modeling Logistic Operating Curves
- Funnel Model as a Universal Model for Describing Production Processes
- Work Content and Operation Times
- Throughput Time
- Lateness
- Logistic Objectives in a Throughput Diagram
- Output Rate and Utilization
- Work in Process (WIP)
- Weighted Throughput Time and Range
- Little's Law
- Logistic Operating Curves for Production Processes

Day 2

Traditional Models of Production Logistics

- Queuing Models
- M/G/1 Model
- Using Queuing Theory to Determine Logistic Operating Curves
- A Critical Review of the Queuing Theory Approach
- Simulation
- PROSIM III Simulation System

Asia Masters Center

- Simulation as an Aid in Determining Logistic Operating Curves
- A Critical Review of Simulation
- Deriving the Logistic Operating Curves Theory
- Ideal Logistic Operating Curves
- Ideal Minimum WIP Level
- Maximum Possible Output Rate
- Constructing Ideal Logistic Operating Curves for the Output Rate and Time Parameters
- Deriving an Approximation Equation for Calculating an Output Rate Operating Curve
- Cnorm Function as the Basic Function for a Calculated Output Rate Operating Curve
- Transforming the Cnorm Function
- Parametrizing the Logistic Operating Curves Equation
- Calculating Output Rate Operating Curves
- Calculating Operating Curves for the Time Parameters
- Normalized Logistic Operating Curves
- Logistic Operating Curves Theory and Little's Law – a Model Synthesis
- Verifying the Logistic Operating Curves Theory
- Simulation Based Model Validation
- Validating the Model Based on Field Analyses
- Under load Operating Zone
- Extending the Logistic Operating Curves Theory
- Hierarchically Aggregating Logistic Operating Curves
- Manufacturing System Operating Curves
- Workstations with Common WIP Buffers
- Considering Overlapping Production
- Prerequisites for Applying Calculated Logistic Operating Curves
- Schedule Reliability Operating Curves
- Mean Relative Lateness Operating Curve

- Deriving an Operating Curve for Describing the Schedule Reliability
- Summarizing the Derivation of the Logistic Operating Curves Theory

Day 3

Basic Laws of Production Logistics

- First Basic Law of Production Logistics
- Second Basic Law of Production Logistics
- Third Basic Law of Production Logistics
- Fourth Basic Law of Production Logistics
- Fifth Basic Law of Production Logistics
- Sixth Basic Law of Production Logistics
- Seventh Basic Law of Production Logistics
- Eighth Basic Law of Production Logistics
- Ninth Basic Law of Production Logistics
- Applications of the Logistic Operating Curves Theory
- Developing and Analyzing Calculated Logistic Operating Curves
- Calculating the Logistic Operating Curves
- Applying Logistic Operating Curves for Analyzing a Simulated Manufacturing Process
- Evaluating Alternative Methods for Developing Potential for Logistic Improvement
- Varying the Work Content Structure
- Varying the Capacity Structure
- Calculating Logistic Operating Curves with Missing or Incorrect Operating Data
- Incorrect Work Content and Transport Time Data
- Missing or Incorrect Data for the Maximal Possible Output Rate
- An Incorrect Stretch Factor $\alpha 1$
- Impact of an Unsteady Process State on Developing and Interpreting Logistic Operating Curves

- Time Related Changes to the Work Content Structure
- Time Related Changes in the WIP Level
- Possibilities for Employing Logistic Operating Curves in Designing and Controlling Production Processes
- Logistic Positioning
- Implementing Logistic Operating Curves in Production Control
- Logistic Oriented Design and Parameterization of Planning and Control Strategies
- Logistic Oriented Production Design

Day 4

Practical Applications of Bottleneck Oriented Logistic Analyses

- Conducting a Bottleneck Oriented Logistic Analysis
- Determining Key Figures
- Determining Logistically Relevant Workstations
- Determining Measures
- Bottleneck Oriented Logistic Analysis in a Circuit Board Manufacturer
- Analysis' Objectives
- Data Compilation
- Order Throughput Analysis
- Workstation Analysis
- Quantifying the Potential for Logistic Improvement
- Experiences in Applying Bottleneck Oriented Logistic Analyses
- Applying the Bottleneck Oriented Logistic Analysis in a Circuit Board Insertion Department
- Determining Throughput Time Relevant Workstations
- Estimating Existing Potential for Logistic Improvement
- Deriving and Implementing Workstation Specific Measures
- Summary of Application Experiences
- Strategies for Implementing the Bottleneck Oriented Logistic Analysis

- Applying the Logistic Operating Curves Theory to Storage Processes
- Throughput Diagram as a Model for the Logistic Procurement Process Chain
- Storage Operating Curves
- Determining Storage Operating Curves Using Simulations
- Determining Storage Operating Curves Using an Approximation Equation
- Ideal Storage Operating Curve
- Integrating Plan Deviations
- Parametrizing the Approximation Equation
- Verifying Storage Operating Curves Using Simulations
- Possible Applications
- Fields and Limits of Application
- Examples of Applying Storage Operating Curves in order to Evaluate Suppliers

Day 5

Applying the Logistic Operating Curves Theory to Supply Chains

- Supply Chain Objectives
- Weighted Service Level
- An Approximation Equation for a Service Level Operating Curve
- Correlations between the Supply Chain's Logistic Parameters
- Example of a Supply Chain Logistic Analysis
- Logistic Oriented Storage Analysis of the Manufacturer's Finished Goods Store
- Conducting a Bottleneck Oriented Logistic Analysis of the Manufacturer's Production
- Logistic Oriented Storage Analysis of the Manufacturer's Input Stores
- Bottleneck Oriented Logistic Analysis of the Supplier's Production
- Supply Chain's Total Potential

Asia Masters Center

- Summary of Applying Operating Curves to the Supply Chain

- **The Feature Of Asia Master Training And Development Center**

- we pick up the customer from the airport to the hotel.
- we give the participant training bag includes all the necessary tools for the course.
- Working within groups to achieve the best results.
- All our courses are confirmed and we do not postpone or cancel the courses regardless of the number of participants in the course.
- We can assist you in booking hotels at discounted prices if you wish to book through us.
- We offer the certificate from Asia Masters Center for Training and Administrative Development.

The Cost Of The Training Program Includes The Following:

1) Scientific article on flash memory.
2) Training Room.
3) Training.
4) Coffee break.
5) The training bag includes all the tools for the course.

Asia Masters Center

Price (USD)
Communicate with the training department to know the participation fees ➢ There are offers and discounts for groups
The details of the bank account
Bank name: CIMB Bank Berhad Account name: Asia Masters Center SDN. BHD Bank account number: 80-0733590-5 Swift code: CIBBMYKL IBAN: Null

Asia Masters Centre (AMC), Suite 2 B, level 6, Office Block, Grand Millennium Hotel, Bukit Bintang Street, 55100 Kuala Lumpur, Malaysia. | Tel: +60327326992|Mobile: +601 8909 0379 | Fax: +60327326992
Website: http://www.asiamasters.org/ | Email: info@asia-masters.com