

Guides to International Logistics

The Practitioner's
Definitive Guide

3rd edition

Warehouse Practices

The Singapore Logistics Association
with
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REFERENCE

About the SLA

Established in 1973, the Singapore Logistics Association (SLA) champions the causes of the logistics and freight forwarding industry in Singapore. Its vision is to be a major contributor towards promoting Singapore as a world-class hub while its mission is to promote professionalism and excellence in the logistics industry. The association, in close collaboration and consultation with government agencies, trade organisations, logistics professionals, academia and international organisations, crafted its objects as:

- to promote, protect and develop a sound logistics industry;
- to develop, promote and enhance Singapore as a premium regional and international logistics hub with a reputation for reliability, integrity and high standards in logistics practice and management; and
- to represent, protect and promote the general interests of its members.

SLA has a membership of more than 510 companies. These are corporations that are drawn from a wide spectrum of the freight forwarding and logistics fraternity ranging from major global companies to local smaller service providers. Membership is voluntary. Ordinary membership is for Singapore-incorporated companies which are actively engaged in the provision of logistics services for a period of not less than two years. Associate membership is open to incorporated or registered organisations which are actively engaged in the provision of logistics and/or ancillary services.

SLA is one of the industry associations that have been successfully awarded the Local Enterprise and Association Development (LEAD) funding in 2007. The award was presented at the third LEAD Forum held on 26 September 2007 by Mr Lim Hng Kiang, Minister for Trade and Industry.

For SLA, LEAD also encapsulates the key characteristics of the initiatives: Leadership, Excellence, Advancement and Dynamism. SLA will be implementing 11 projects over the next three years. These projects support the association's four strategic thrusts, namely, Industry Branding and Benchmarking; Education and Training; Resource and Competence Development; and Business Facilitation and Development. SLA's initiatives will promote the growth of the logistics industry and help Singapore to maintain its leadership position as a regional logistics hub. SLA will commit a total of \$7 million to these projects.

Under the thrust of Resource and Competence Development, one of the projects identified is adoption of best practices. Through the development and publishing of a set of comprehensive books on best practices in logistics, the association endeavours to help logistics companies to upgrade their process capabilities through a cost-effective medium. *The Practitioner's Definitive Guide: Warehouse Practices* is the first publication to be launched under the LEAD project, followed by *The Practitioner's Definitive Guide: Safety & Security* in 2009, now available in second edition. These publications add to the association's publication series of *Guides to International Logistics*, namely, *The Practitioner's Definitive Guide: Airfreight Forwarding* (2005), now available in third edition; *The Practitioner's Definitive Guide: Seafreight Forwarding* (2006) and *The Practitioner's Definitive Guide: Multimodal Transport* (2006), both currently available in third edition; *The Practitioner's Definitive Guide: Process-Driven Warehouse Operations* (2011) and *The Practitioner's Definitive Guide: Land Transport* (2013).

Preface

The focus of the industry today is on logistics and supply chain management. Warehousing is often perceived as a less important area of expertise. Many hold the view that managing warehouses is less challenging because the activities are repetitive and performed within a confined area. It is deemed less challenging because "what can be seen, can be managed". Even in adult continuing education, there is more interest in logistics and supply chain management courses than warehouse-related courses.

The reality is that the warehouse has evolved from a simple storehouse to one which offers a high level of sophistication. The role has changed from simple stock-keeping to one that is featured prominently as an important part of the supply chain strategy. Because the supply chain is never seamless, the warehouse is always needed to ensure that customers' needs are met.

In writing this book, we hope to answer two key questions: First, is managing warehouses really less challenging compared to other components of logistics? On a superficial level, it appears so. However, if one were to examine more closely, a well-run warehouse requires a warehouse manager to have not just the technical expertise and some engineering knowledge, but also a wide range of skills set, including people skills, process skills, IT skills and project management skills.

With the trend towards outsourcing, more warehouses are now operated by 3PL providers which leads to our second question. What are the differences in managing warehouses from the perspective of a 3PL provider and from a manufacturer's or goods owner's perspective? Although the fundamental principles of warehousing are applicable to both, it is our view that a 3PL warehouse is more challenging to operate. This is because it is run as a profit centre and not as a cost centre. The focus is on maximising profit and not simply on operating at the lowest possible cost. It is a showcase of the 3PL provider's operational capabilities and is often featured prominently in their marketing effort to win the confidence of potential customers. The customers' requirements are often varied since the customers may be from different industries. The products stored and handled are different in configuration and they change when the customer changes. One standard process may not fit all customers. A 3PL warehouse manager has to continually learn

and re-learn the customers' requirements whenever there is a customer change. Each time the company gains a new customer, it is a new project for the warehouse manager as he needs to phase in the new customer. All in all, a warehouse manager operating a 3PL warehouse needs to continually balance between maximising utilisation of storage space and optimising resource utilisation and yet meeting customers' expectations.

This is the fourth book in SLA's series of *Guides to International Logistics*. It covers the various dimensions of warehousing and provides a comprehensive discussion on the operational and management issues faced by a warehouse manager. The book is organised into four parts.

Part 1: Two initial chapters give an overview of the warehousing industry and the changing roles of the warehouse. This part attempts to highlight the importance of warehousing and how it has re-invented itself to support the trend towards supply chain management.

Part 2: The next four chapters summarise the fundamental warehousing knowledge for any person who is interested to know about warehousing. Part 2 covers the storage systems and the material handling equipment (MHE) commonly used in warehouses today and the selection considerations for each of these systems. The subsequent two chapters of Part 2 focus on how the warehouse is laid out for operations and the various types of activities performed in the warehouse.

Part 3: The five chapters in this part cover the management and operational issues that a warehouse manager has to contend with when organising the warehouse for optimal performance. This is written very much from the perspective of a 3PL provider managing a warehouse. It covers the organisational aspects, safety and security, methods of pricing and costing, IT technologies used in the warehouse and how to measure and track warehouse performance.

Part 4: The final part with two chapters addresses the warehousing scene in Singapore and the important role that the Singapore government plays in promoting the industry. We also attempt to share our experiences in managing local warehouses by highlighting some of the common pitfalls.

We would like to express our sincere thanks to Mr Chan Hwa Loon for editing the final manuscript. Last but not least, we would like to thank the members of SLA Training Committee for taking time to provide invaluable comments on the book.

Bill Chua and Teo Kee Boon

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