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Sustainable Human Resource Development in logistics services for ASEAN Member States

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Introduction to Unitization and Cargo Packaging





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Why the need for unitization of goods for transportation?

1. Packaging, handling, and shipping methods and facilities have changed drastically over the last decade. Today, most products are individually packaged and then combined into unitized loads for more efficient handling, storage, and shipping.
2. The information here will provide basic understanding of the many factors involved in selecting an optimal method of unitizing goods and the reasons behind it.
3. Whenever practical, individual products are combined and shipped as larger unitized loads. Unitizing has significant advantages. The cost of labour arising from manual handling is reduced appreciably by use of mechanical equipment handling larger unitized loads.
4. Through unitization of cargo, required shipping time can be met and losses by pilferage are greatly reduced.
5. Unitized handling equipment also produces a mechanically milder shipping environment, so that the goods generally need less protection en-route to their destination.



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Chapter 1 Unitization of Cargo

Objectives & Introduction

1.1 Bulk Cargo

1.2 Project Cargo

1.3 Pre-slinging

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Objectives

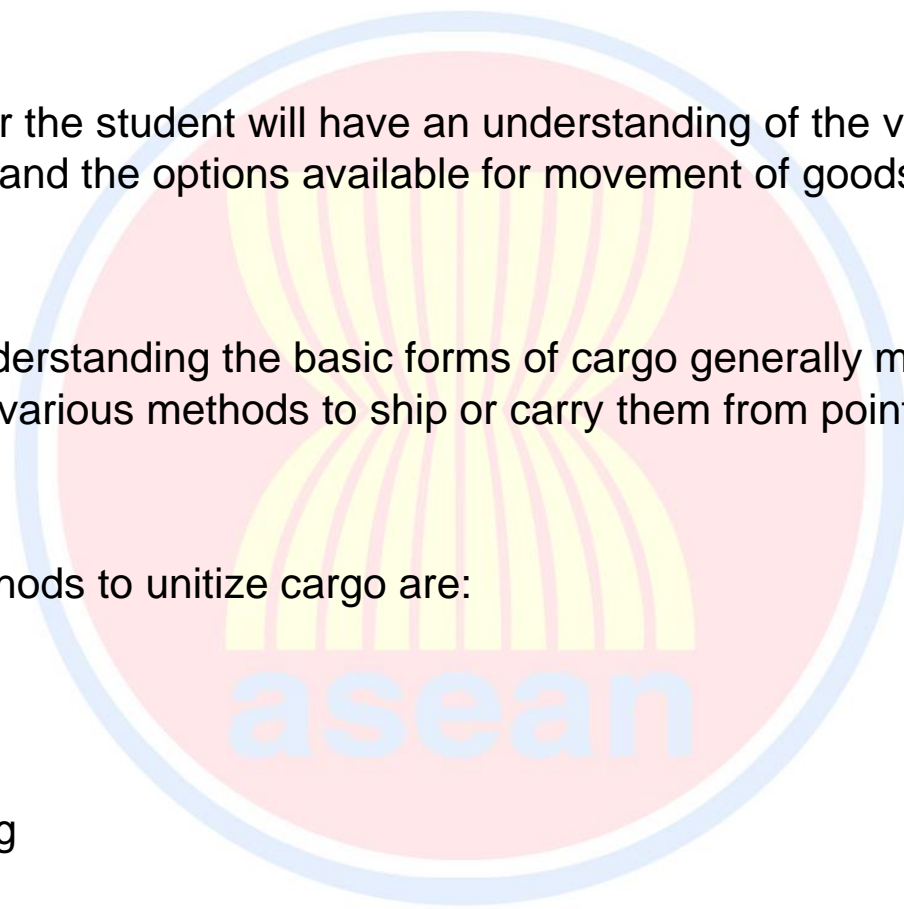
By the end of this chapter the student will have an understanding of the various types of cargo that is being transported and the options available for movement of goods.

Introduction

Here we will look into understanding the basic forms of cargo generally moved throughout the world. We will study the various methods to ship or carry them from point of origin to point of destination.

Typically the form or methods to unitize cargo are:

- Palletizing
- Pre-slinging
- Containerization
- Crating or Casing





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1.1 Bulk Cargo

Bulk cargo is commodity cargo that is transported unpackaged in large quantities. It refers to goods that are either liquid or granular, particulate form, as a mass of relatively small solids, such as petroleum, grain, coal or gravel. This cargo is usually dropped or poured, with a spout or shovel bucket, into a bulk carrier ship's hold, railroad car or tanker truck/trailer/semi-trailer body. Smaller quantities (still considered "bulk") can be boxed, drummed or palletised. Bulk cargo is classified either as liquid or dry.

Examples of dry bulk cargo are: coal, grain, cement, fertilizers, wood chips, iron, scrap metals etc.
Examples of liquid cargo are: LPG, chemicals, oil, petroleum, juices, vegetable oil and etc.



Shoreham employs a giant hydraulic grab on its biomass cargoes - See more at:
<http://www.portstrategy.com/news101/port-operations/cargo-handling/gift-of-the-grab#sthash.O14EVHst.dpuf>



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1.2 Project Cargo

Project cargo refers to cargo that will not fit into a standard ocean container. It also refers to cargo that are either too big or too heavy for normal handling and requires extra care and handling.

General terms for Project Cargo are oversize or over dimension, OOG or Out Of Gauge, Big and Heavy Haul. Special equipment needed for handling special cargo are typically FR or flat racks containers, OT or Open Top containers, bulk or break bulks, roll on/roll off services.

Examples of project cargo are: earth moving equipment, mining equipment, heavy machinery or machineries, industrial machineries, generators, transformers, transport vehicles, boats/yachts on trailers or cradles, cranes, motor homes, plant assemblies, energy equipment such as wind turbines, oil and gas producing and manufacturing equipment and etc.

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1.3 Pre-slinging

Pre-slinging refers to cargo shipped already in a cargo sling or net. They are usually prepared and loaded at the pier ready for the vessel's arrival and subsequent loading (e.g. coffee beans in bags, coconut shells, etc).

Pre-slinging increased loading and discharging rate, reduce labour cost and suitable for open type ships. However, slinging equipment maybe costly and periodical certification for slings poses problems.





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Conclusion:

When dealing with your client's goods, the freight forwarder should be able to differentiate the type of cargo that his client is moving or shipping and the different methods of transport available.

The freight forwarder should then be able to work out with the client the best method to move the cargo.