23

CROSS DOCKING METHOD

Cross docking is defined as an operational tactic that moves objects through consolidation centres or cross docks without putting them into storage space. As the necessity to move inventory quickly increases, more logistics managers are turning to cross docking but the capability to implement such strategy well depends on superior planning, dynamic scheduling and coordination.

It is one of the techniques through which warehouses in India and across the globe can speed-up their distributing process by transporting inventory from a manufacturing plant directly to customers, and in this whole operation, the warehouse not only reduces the material handling, but also reduces the need to store the products in the warehouse.

LEARNING OUTCOMES

After studying this lesson the learner:

- assesses the use of cross docking in business;
- identifies types of cross docking;
- lists the advantages and disadvantages of cross docking;
- explains the use of Cross Docking Software in the warehouse.

23.1 INTROCUCTION

The name "cross docking' explains the procedure of receiving goods through an inbound dock and then transferring them across the dock to the outbound shipping dock. Cross-docking is an operational procedure where products are directly transferred from incoming to outbound transport. Unlike traditional warehousing, you do not typically handle or store any product. Cross-docking reduces inventory and operation costs by eliminating unnecessary handling and storage.

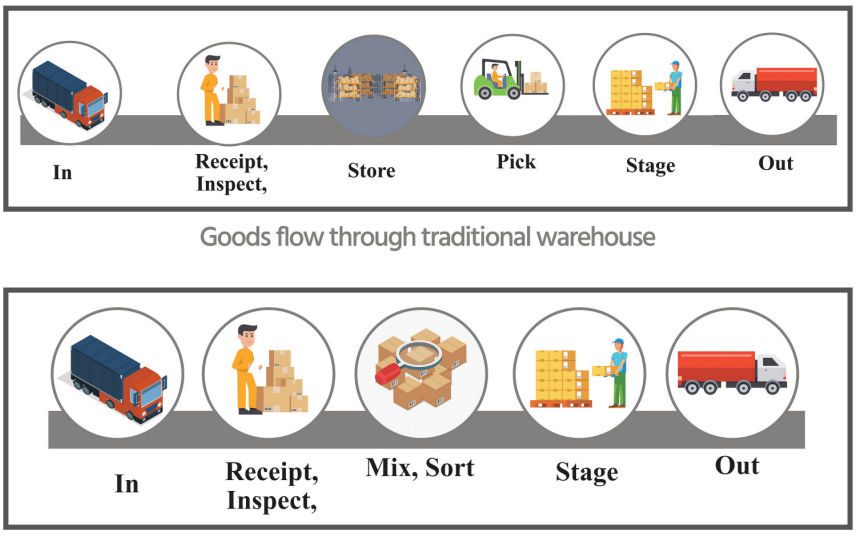


Fig. 23.1: **Cross Dock Operation**

In easy terms, inbound goods enter through transportation such as trucks/trailers and are allocated to a receiving dock on one side of the cross dock' terminal. Once the inbound transportation has been docked its products can be moved either directly or indirectly to the outbound destinations; they can be unloaded, sorted and screened to identify their end destinations. After being sorted, goods are transferred to the other end of the cross dock terminal via a forklift, conveyor belt, pallet truck or other means of transportation to their destined outbound dock. When the outbound transportation has been loaded, the products can then make their way to customers.

Cross docking takes place in the allocation docking terminal: usually consisting of trucks and dock doors on two (inbound and outbound) sides with nominal storage space. Cross-docking is also considered a just-in-time (JIT) shipping method that skips over the step of warehousing products after they leave the supplier. In practice, this means that raw materials, components, or finished products are dispatched directly for delivery to the next stakeholder in the supply chain. That may be a manufacturer, shipping and logistics partner, wholesaler or distributor, or even the end consumer.

23.2 METHODS FOR USING CROSS-DOCKING IN BUSINESS

A cross-docking system can be implemented in several ways, depending on the type of business and products it sells.

1. Continuous cross-docking

The simplest type of the three types, continuous cross-docking is designed so products

are nearly always in transit. In a central cross-docking terminal, inbound and outbound vehicles are scheduled, so one is available for transfer as soon as a new delivery arrives. Continuous cross-docking creates a non-stop logistics flow, with the only wait time being when products are loaded between vehicles.

2. Consolidation arrangements

It's common for a single shipment to be combined with other shipments. For example, if one shipment contains relatively few products, it wouldn't be efficient to use up an entire vehicle for delivery. In these cases, consolidation cross-docking includes setting aside a small area in the terminal for short-term storage. Once there are enough smaller shipments, they are then combined and justify moving to the next leg of delivery.

3. Deconsolidation cross-docking

As one can quickly guess, de-consolidation cross-docking is the exact opposite of consolidation cross-docking. In deconsolidation cross-docking, either a larger shipment is divided into smaller quantities and then shipped to their next destination, or individual products are immediately sent directly to the final customer.

- **A main reason cross docking is implemented is to:**

1. Provide a central site for products to be sorted and similar products combined to be delivered to multiple destinations in the most productive and fastest method. This process can be described as "hub and spoke"
2. Combine numerous smaller product loads into one method of transport to save on transportation costs. This process can be described as 'consolidation arrangements'.
3. Break down large product loads into smaller loads for transportation to create an easier delivery process to the customer. This process can be described as 'deconsolidation arrangements.
4. Inventory storage costs are one of the most significant expenses a company incurs during a product's life. In fact, storage costs can get as high as 67% of your total warehousing costs, especially if the product ends up as excess inventory or dead stock. This is where cross-docking comes in — saving you both time and money.
5. Cross docking can progress the supply chain for a diversity of precise products. For one, perishable or temperature-controlled objects such as food which require to be transported as speedily as possible can be benefitted by this method. Additionally, previously packaged and sorted goods prepared for transportation

to a particular customer can become a quicker and more competent practice through cross docking.

6. Speed and cost are important deliverables in Supply Chain. Cross docking is one such method to enable it. The inbound goods are immediately for outbound with minimal handling, storage and value addition, several situations or products make themselves convenient for cross docking to be practised.

23.2.1 Cross docking strategies

Cross docking strategies can be further categorised by the load level that outgoing shipments are broken into:

A. **Load Unit Level:** In load unit level cross docking, pallets are transferred intact from one form of transportation to another. There is little to no handling of the products at the facility and they are simply moved from one vehicle to another. It is simple, quick, and cost-effective with little overhead.

B. **Case Level:** Products are shipped out in cases or as individual cartons. Essentially, larger incoming loads arrive on pallets and are offloaded and broken down to individual boxes. They are then shipped out as individual parcels. The redistribution is determined by the individual Stock Keeping Unit (SKU) on the carton. This is the model that underlies most online retail sales and delivery, and final distribution is usually through parcel services.

C. **Mixed Case Level:** Cross docking at the mixed case level requires the most labour and equipment. Incoming pallet loads are not transferred as-is or merely broken up; instead, they are unpacked, sorted, and redistributed onto new pallets for final shipment to the end customer.

In most cases, cross docking as a supply chain strategy involves implementing all of the above methods, sometimes in the same facility. The biggest challenge is keeping those channels that are working with different load sizes connected without error. In addition to the size of the lots being transferred, there are also multiple methodologies used for cross docking at every individual transfer station that also need to be managed.

a. Cross docking in receiving and distribution

Cross docking distribution centres are essentially transfer stations with little to no storage space. However, cross docking also takes place at large warehouses and distribution centres that specialise in storing large quantities of products. In these cases, the practice of cross docking is usually applied only to a small proportion of the products that the

warehouse handles. Cross docking may be applied in different ways as the business model of a specific location dictates, such as:

- **Opportunistic Cross Docking:** In many distribution centres, cross docking only occurs when circumstances require it. Priority items for which a customer paid extra for urgent delivery or products that arrive late may skip the usual processing and proceed straight to the loading dock in order to meet a deadline. Cross-docked products may be shipped individually or be combined with inventory in the warehouse for the final shipment as needed to fulfil the order.

- **Hybrid Cross Docking:** In this model of cross docking, both long-term storage of products and quick throughput of products without storage are a normal part of operations. Cross-docked products are regularly combined with products that are stored long-term. The resulting mixed case loads are then shipped out.

- **Consolidated Cross Docking:** Distribution centres that combine incoming shipments from two forms of transportation are consolidating loads. The rapid throughput of these locations means that there is little need to store products for any length of time; they are effectively large-scale product transfer stations. They can be found close to manufacturing points, where they create consolidated loads for long-range shipment by rail or sea vessel.

A warehouse or distribution centre may practise any or all of these forms of cross docking as its needs and circumstances dictate. While there are distribution centres that specialise solely in cross docking, they are in the minority. **Hybrid and opportunistic cross docking at warehouses is** the most common practice. The result is that for most logistics managers, cross docking as a supply chain strategy is a complicated and often attention- and resource-intensive task simply because it is an outlier operation. Since cross docking as a supply chain strategy is so unforgiving, it is advisable to make use of technology that supports the practice.

23.2.2 Cross Dock Warehouse

The cross docking process is profitable but will it suit all kinds of warehouses? What is important is to understand that it is beneficial for temperature controlled and unpreserved items like food that has short shelf life. The use of cross-docking for packed and sorted products, ready for transportation is best suited for cross docking. Informed decision is a must when a warehouse thinks of cross docking if this process will increase the productivity, customer satisfaction and cost for the business.

Cross-docking usually occurs at a warehouse or distribution docking terminal, where trucks can continuously come and go. There are often two separate sides for inbound

and outbound shipments, with a dedicated middle area to sort and pack inventory. Cross-docking requires a minimum of facilities. It just requires the staff for unloading and loading and the equipment and the space to segregate, label, or quality-check the goods as required. The space that is usually used for this in most warehouses is the marshalling yard.Most shipments typically spend less than 24 hours in a cross-dock before they are sent out to their final destinations.

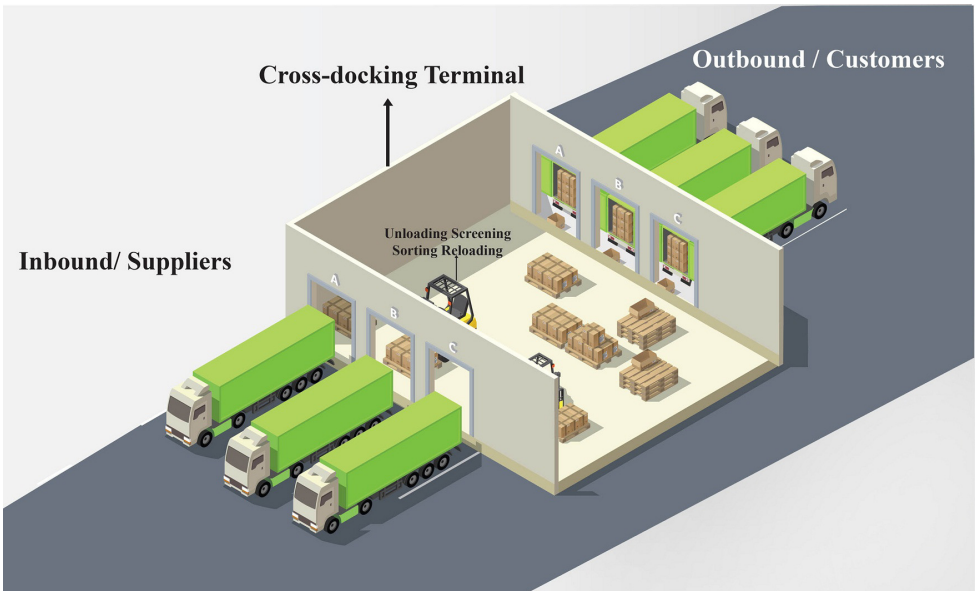


Fig. 23.2: **Cross docking in warehouse**

A. Direct Shipment vs. Cross Docking

Direct shipping differs from cross-docking because products are sent directly from the supplier to the consumer. In most cases, the customer will purchase an item directly from the manufacturer. This method greatly reduces transportation costs but requires extra logistical planning and storage space for the seller. This method is popular amongst most apparel brands and many types of online businesses because they have complete control over what happens to the item before shipping.

B. Cross Docking vs. Drop Shipping

Cross-docking and drop shipping are very different inventory management techniques that keep inventory from sitting in storage in your warehouse. With drop shipping, items are directly sold from your supplier to your consumer, meaning you will never touch any of the items yourself. In cross-docking, the product is shipped to your warehouse where it is sorted and immediately sent back out to the customers. Drop shipping is a popular inventory management technique because the seller doesn't have to pay for storage or any physical counts of inventory.

23.2.3 Benefits of cross docking

By cross-docking, businesses can experience several benefits.

A. Cost savings

By cutting back unnecessary warehousing operations, businesses can reduce expenditures on warehouse real-estate and the associated costs, including climate control, lighting, maintenance, and labour costs. In addition, by delivering products in a just-in-time fashion, businesses avoid the age-old problem of inventory depreciation.

B. Improved material handling

By removing redundant picking and packing steps, businesses reduce the opportunities for product damage. Furthermore, with items remaining in open staging areas, workers can inspect orders to ensure damaged products are not sent out.

C. Speed of delivery

Cross-dock operations not only boost efficiency by eliminating unnecessary touches, but distribution centres are strategically located near customers for timely dispatch and delivery. With faster dispatch and delivery, businesses can achieve improved customer satisfaction.

D. Capacity

While cross-docking reduces the need for warehouse space, it brings the need for more terminal and dock space, as well as more transport vehicles. Distribution centres must have the facilities, know-how, and technology to make this work.

E. Precision

Trading bulk orders and bulk storage in favour of smaller JIT shipments requires a great deal more precision. Companies must be able to track individual items throughout the supply chain at the speed of travel. Getting the right products to the right place will require well-trained personnel, carefully planned storage space, and accurate order tracking software.

F. Control

Organisations that don't have a well-built shipping and logistics arm will find it necessary to entrust this function to a cross-docking operations services provider. This entails relinquishing some control after orders are handed off. A trustworthy partner with integrated systems will be key in maintaining the visibility of operations and quality of service.

INTEXT QUESTIONS 23.1

1. Define cross docking?
2. What are the major benefits of cross docking?
3. Items are directly sold from supplier to consumer is _____
   a. Drop shipping
   b. Direct shipping
   c. Cross docking
   d. All these

23.2 TYPES OF CROSS DOCKING

Cross-docking can be broken down into two basic types: Pre-Distribution and Post-Distribution.

23.2.1 Pre-Distribution vs. Post-Distribution Cross-Docking

A. Pre-distribution cross-docking is usually done earlier in the supply chain or is done by companies with vertically integrated supply chains. Under this method, goods are sorted and loaded before they leave the supplier, and already have customer delivery instructions. With Pre-Distribution, goods are unloaded, sorted, and repacked according to predetermined distribution instructions. In other words, the customer is identified before the goods even leave the supplier. Retailers like Wal-Mart, for example, receive all types of products to massive distribution centres and then sort the items for delivery to specific store locations.

B. Post-distribution cross-docking occurs at a dedicated distribution centre or cross-docking facility after goods have left the supplier. Disparate orders and items will be re-sorted and combined onto the appropriate transport vehicle at the dedicated facility. This type of cross-docking is used for less than truckload (LTL) orders, in which numerous smaller orders are put together. Alternatively, it breaks down larger bulk orders into smaller individual ones.

23.2.2 Other Cross-Docking Types

There are numerals of cross-docking scenarios that are existing to the warehouse management. Companies will use the sort of cross-docking that is appropriate to the

kind of goods that they are shipping.

A. **Manufacturing Cross-Docking**: This process involves the getting of purchased and inbound products that are required by manufacturing. The warehouse may receive the goods and organise sub-assemblies for the production orders.

B. **Distributor Cross-Docking:** This method consolidates inbound goods from diverse merchants into an assorted product pallet, which is delivered to the client when the final item is received. For example, computer parts distributors can buy their components from diverse vendors and merge them into one shipment for the client.

C. **Transportation Cross-Docking**: This operation combines shipments from a number of diverse carriers in the less-than-truckload (LTL) and small-package businesses to achieve economies of scale.

D. **Retail Cross-Docking:** This progression engages the receipt of goods from several vendors and sorting them onto outbound trucks for a quantity of retail stores. This method was used by Wal-Mart in the 1980s. They would acquire two types of goods, items they sell each day of the year, called staple stock, and bulky quantities of goods that are purchased once and not usually stocked again. This second type of procurement is called direct freight, and Wal-Mart minimizes any warehouse costs with direct freight by using cross-docking and keeping it in the warehouse for as little time as possible.

E. **Opportunistic Cross-Docking**: This can be used in any storehouse. It involves shifting a product straight from the receiving dock to the outbound shipping dock to meet a client sales order.

23.2.3 Products Suitable for Cross-Docking

A. Which type of business and products are a good fit for cross-docking?

Cross-docking is based on the just-in-time principles to pull materials into production only as needed. Many automobile companies were early adopters of cross-docking within their manufacturing plants and distribution systems. Beyond heavy industries like automobile production, cross-docking is highly effective for high-volume, high-demand items and perishable goods. Consider these product categories for cross-docking implementation:

- Perishable items with low shelf-life
- Cold food chain items

- Food and beverage
- Staple retail products with consistent demand
- Promotional items and new product releases
- Chemicals

Of course, items like perishable goods and cold food chain products cannot sit on the receiving dock for too long—otherwise, they would spoil and need to be recalled. To make sure items move swiftly through the supply chain, your organisation will need to have advanced item tracking capabilities with barcoding, QR codes, or RFID tags that automatically submit real-time data to your order management system for end-to-end fulfilment visibility

There are resources that are healthier suited to cross-docking than others. The list beneath shows a number of kinds of material that is further appropriate to cross-docking.

- Perishable items that require immediate shipment
- Superior objects that do not need quality inspections during goods receipt.
- Products that are pre-tagged (barcodes), pre-ticketed, and ready for sale
- Promotional objects and items that are being launched
- Staple retail goods with a constant-demand or low-demand variance
- Pre-picked, pre-packaged client orders from another manufacture plant or warehouse Information required for coordinating Cross Docking

23.2.4 Companies That Use Cross-Docking

Cross-docking can be an extremely beneficial operational system. However, specific industries reap more rewards from cross-docking than others. Here are the most common types of companies that use cross-docking:

- **Food and Beverage Industry:** Restaurants need a steady stream of supplies to operate smoothly. Cross-docking decreases the chances of any food spoilage because products move quickly through the supply chain, with no storage involved.
- **Consumer Goods:** Due to big-named brands like Amazon and Walmart, most consumers expect goods in hand immediately. Businesses now need to keep up and offer the same services consumers have grown accustomed to. Cross-docking helps companies move items faster and avoid costly storage fees.

- **Automotive Industry:** Cross-docking has been a staple of the automotive industry for decades because it relies on just in time delivery. This means that the production process only begins when a customer places an order and inventory stock is delivered as needed.
- **Chemicals:** Chemical products have specific storage requirements, making them both expensive and dangerous to ship. They should be handled as minimally as possible and be sent directly to the customer, which cross-docking allows.

23.2.5 Checklist for proper cross docking

- Ensure the proper coordination of freight coming into the warehouse operations and the outbound freight is properly loaded and coordinated to deliver at the intended destination.
- For the efficient and timely coordination of freight to reach its final destination proper maintenance of all required communications to dispatch, load planners, load validators, and designated management.
- Work with the Cross Dock Supervisor to develop, monitor and manage a component ace of assigned drivers/equipment to monitor schedules, track and execute cross dock functions
- For the efficient and timely entry of all company and customer related data into the company Cross dock software and/or related software in the Cross dock department.
- Coordinating and training drivers and material handlers in the cross-dock function to perform duties: planning, assigning, and directing work, addressing grievances and resolving troubles.
- Ensure all department required forms and documents are accurate and completed in a timely manner.
- Responsible for monitoring and obtaining KPI and Productivity goals as established by the Cross Dock Supervisor and determined by the company and/or their customers.
- Follow all workplace processes and standards in support of the ISO-9001 Quality certification program.
- Report all safety and performance issues to management immediately.
- Other duties as assigned.

INTEXT QUESTIONS 23.2

1. List the types of cross docking
2. Which companies are suitable for cross docking?
3. _____ products are suitable for cross docking
   a. Perishables
   b. Cold food chain items
   c. Food and beverage
   d. All these

23.4 ADVANTAGES AND DISADVANTAGES OF CROSS DOCKING

A. Advantages of cross docking are:

a. Reduces Storage Space: Companies generally spend less amount per square foot of warehouse space. Cross-docking allows you to reduce your storage space, contributing to overall cost savings.

b. Reduces Inventory Carrying Costs: It costs money to store, manage, count, secure, and insure inventory. Further, when inventory spoils or is damaged, you lose out on more money. Cross-docking reduces inventory costs because items are going immediately from inbound to outbound transport, with little to no holding involved.

c. Increases Overall Product Quality: Cross-docking reduces the risk of damage to your products because most items aren't stored in a warehouse. Damage tends to occur when you are continuously moving products in and out of storage, and this logistical process eliminates that.

d. Decreases Shipping Time: Cross-docking dramatically reduces the time it takes to ship items. As soon as inventory reaches your warehouse, you move it swiftly from one truck onto another and ship it out to the customer. Products reach the distributor, and customer, faster

B. Disadvantages of cross docking are:

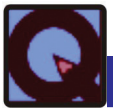
a. Process Is Time-Consuming: To be successful, cross-docking needs to be properly planned and executed. This can help prevent any scheduling conflicts and other mishaps

that can happen when warehouse management systems are not in place. Shipments should not spend more than 24 hours in a warehouse or distribution centre.

b. **It's Expensive:** Setting up a cross-docking operation isn't cheap. You would have to have access to a lot of capital to set up dock terminals and purchase a large number of transport vehicles to service your business.

Because products aren't put away in the company's prescribed fashion during cross-docking, there's an increased risk related to loss of inventory control by using the method in the long term.

Understanding the advantages and disadvantages of cross-docking and identifying how they fit with business or organisation is important. It is a significant factor for assessing and increasing productivity in the network cycle. So make sure to comprehend these critical factors. For instance: High Volume products, fast selling items, and Perishable goods are a perfect fit for Cross-Docking.



INTEXT QUESTIONS 23.3

1. Give any two advantages of cross docking
2. What is the major disadvantage of cross docking
3. An increased _____ related to loss of inventory control occurs by using cross docking.

   a. risk b. appeal

   c. rewrd d. delay

23.5 USING CROSS DOCKING SOFTWARE

In order to run a successful cross-docking operation, you should invest in a warehouse management system. The right software will analyse your data and create a management plan from scratch. Most warehouse management software has the following capabilities:

A. **Electronic Advance Ship Notice Transmission**: Transmits data in real-time for inbound and outbound products

B. **Barcode Scanning:** Provides inventory accuracy by integrating data from computers and UPC barcode scanners

C. **Inbound and Outbound Freight Management Systems:** Input data from received and shipped products

D. Workforce Planning: Helps track and schedule shipments to ensure all operations run smoothly

The advantages of leveraging a WMS solution for executing cross-docking that led to cost optimization are as follows:

- A considerable reduction the labour overheads
- Reduced material handling hazards and time
- Reduction in the time required to ship the product to the customers
- Greater control and visibility over the distribution process
- Reduced warehousing costs as well as ancillary costs like insurances
- Overall improvement in warehouse management efficiency
- Reduced risk of proliferation
- Increase in the warehouse facility's utilisation rate
- Reduction in transport costs as multiple packages with common destinations are shipped together

Most enterprise resource planning (ERP) systems and warehouse management software (WMS) solutions struggle with the automation of cross-docking steps for both planned and reactive back-order fulfilment cross docking. These processes tend to be quite manual, which can make them prone to errors. While a distribution centre may be saving the labour and travel time associated with putting the product away and then re-picking it, the steps involved in using cross-docking as a receiving process can be cumbersome, manual, and verification intensive.

The ideal cross-docking software solution processes the receipt of the item, just as any other received products are processed, updates the ERP with what's been received so the vendor can be paid, and then immediately processes the fulfilment of an order or multiple orders with that product, routing those orders to staging for shipping, with nominal, if not any additional steps required.

INTEXT QUESTIONS 23.4

1. Give the use of cross docking software?
2. Which is an ideal cross docking software?

3. Transmits data in real-time for inbound and outbound products is _____

   a. Electronic ASN transmission
   b. Barcode scanning
   c. Freight management system
   d. None

WHAT YOU HAVE LEARNT

Cross docking

- operational tactic that moves objects through consolidation centres or cross docks without putting them into storage space
- explains the procedure of receiving goods through an inbound dock and then transferring them across the dock to the outbound shipping dock.
- reduces inventory and operation costs by eliminating unnecessary handling and storage.
- also considered a just-in-time (JIT) shipping method that skips over the step of warehousing products after they leave the supplier

Continuous cross-docking: Creates a non-stop logistics flow, with the only wait time being when products are loaded between vehicles

Consolidation cross-docking: Includes setting aside a small area in the terminal for short-term storage.

Deconsolidation cross-docking: Either a larger shipment is divided into smaller quantities and then shipped to their next destination, or individual products are immediately sent directly to the final customer

Pre-distribution cross-docking: Goods are sorted and loaded before they leave the supplier, and already have customer delivery instructions.

Post-distribution cross-docking: Occurs at a dedicated distribution centre or cross-docking facility after goods have left the supplier.

Manufacturing Cross-Docking: Involves the getting of purchased and inbound products that are required by manufacturing.

Distributor Cross-Docking: Consolidates inbound goods from diverse merchants into a assorted product pallet, which is delivered to the client when the final item is received

Transportation Cross-Docking: Combines shipments from a numeral of diverse carriers in the less-than-truckload (LTL) and small-package businesses to achieve economies of scale

Retail Cross-Docking: Engages the receipt of goods from several vendors and sorting them onto outbound trucks for a quantity of retail stores

Opportunistic Cross-Docking: Involves shifting a product straight from the receiving dock to the outbound shipping dock to meet a client sales order.

KEY TERMS

Cross Docking
Pre-Distribution Cross-Docking
Post-Distribution Cross-Docking
Just in time
Direct shipping
Drop shipping
Opportunistic cross docking
Flow-through cross docking
Distributor cross docking
Manufacturer cross docking
Food & Beverage
Cross docking terminal

TERMINAL EXERCISE

1. Define cross docking.
2. Give the types of cross docking.
3. What is post distribution cross docking?
4. What is the major benefit of cross docking?
5. Which products are suitable for cross docking?
6. How do companies use cross docking?
7. Discuss the benefits of cross docking.
8. Explain the procedure involved in cross docking.
9. List the advantages and disadvantages of cross docking.
10. What is cross docking software?

11. What is deconsolidated cross docking?

12. Discuss the main reasons to use cross docking and what strategies are used in this?

13. Brief about Direct Shipment vs. Cross Docking and Cross Docking vs. Drop Shipping.

14. Discuss about the cross docking software in WMS.

15. HowBusinesses use cross-docking to improve their supply chains? Illustrate an example?

16. Describe the products that are suitable for cross docking and also the different users?

ANSWERS TO INTEXT QUESTIONS

23.1

1. Cross docking is defined as an operational tactic that moves objects through consolidation centres or cross docks without putting them into storage space.

2. Cross-docking reduces inventory and operation costs by eliminating unnecessary handling and storage.

3. Choice a.

23.2

1. Pre-distribution cross-docking and post-distribution cross-docking

2. Companies suitable for cross docking

   - Food and Beverage Industry
   - Consumer Goods
   - Automotive Industry
   - Chemicals

3. Choice d.

23.3

1. Advantages of cross docking are:

   - Reduces Storage Space & Reduces Inventory Carrying Costs

2. Disadvantages of Cross Docking

   - Process Is Time-Consuming and Expensive.

3. Choice a.

23.4

1. In order to run a successful cross-docking operation, you should invest in a warehouse management system. The right software will analyse your data and create a management plan from scratch.

2. The ideal cross-docking software solution processes the receipt of the item, just as any other received products are processed, and updates the ERP with what's been received so the vendor can be paid.

3. Choice a.

DO AND LEARN

Cross docking implementation requires a variety of needs. To understand this new concept the students could assume any type of perishable commodity and try to perform in groups or take up the various activities in the cross docking operations as done at warehouses to learn the intricacies in this technology

ROLE PLAY

Cross docking is very beneficial to manufacturers and retailers handling bulk and perishable goods that require quick movement to various points. Now, assume that Anand, branded coconut chips producer and Parthiban, retailer of P Mart chain stores are interested in using cross docking operations to reduce costs and time in their businesses. Assume the role of these two people and come out with chats towards the use of cross docking technology.

Anand: ……

Parthiban: …..