

LOGISTICS - STORES

The aim of the lecture is to discuss importance of storage and different types of stores



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Logistics - Stores

Structure of the
lecture

Importance of the storage
Strategic and operational
decisions in the storage
Types of stores
Stock operations

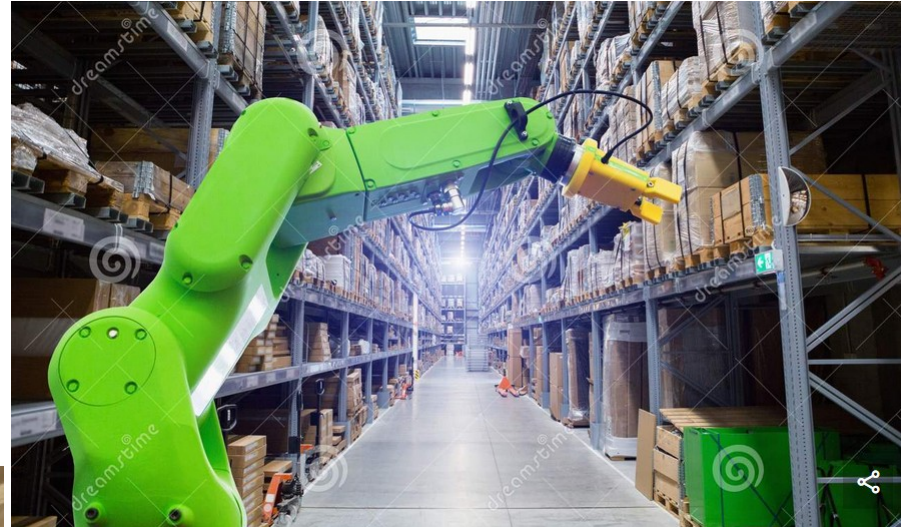


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IMPORTANCE OF STORAGE

- integral part of the logistics system - the link between production processes and the customer
- influence on the quality of CS
- modern store = competitive advantage
- importance of IT and automation in materials handling



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Why to store?

- Efforts to achieve transport cost savings
- Efforts to achieve savings in production
- Use quantity discounts or purchases to stockpile
- Efforts to maintain a supply source
- Business strategy support in customer service



- Responding to changing market conditions
- Bridging time and spatial differences between producer and consumer
- Just in Time support at the suppliers or customers
- Efforts to provide customers with a comprehensive range of products
- Temporary storage of materials to be disposed of or recycled



STORE

- general concept
- all kinds of products
- acceptance, storage, dispatching and loading
- classic store does not carry out operations adding value
- batch data collection
- minimizing operating costs



DISTRIBUTION CENTRE

- special kind of warehouse
- only goods with high demand
- only acceptance and dispatching
- high share of value added operations
- real-time data
- profit maximization by meeting requirements



STORAGE ALTERNATIVES OF ENTERPRISES

- direct deliveries from the manufacturer to the shops - elimination of local sales warehouses
- catalog sellers - central storage facilities at the point of dispatch of goods
- distribution mixing centers



STRATEGIC STORAGE DECISIONS

- allocation of logistics resources in the longer term in accordance with the overall strategy of the company and its general objectives:
 - choice of a logistics system type
 - unification of branch warehouses into a single regional distribution center



- use of own capacities vs. leased capacities
- transferring storage processes to logistics service providers (outsourcing)
- investment in new handling equipment
- increase in the number of labour force, etc.



OPERATIONAL DECISIONS IN STORAGE

- management or control of logistics performance
- usually decisions of a routine nature
- short time horizon
- higher degree of certainty than strategic decisions



STOCK OPERATIONS

- storage process has three basic operations:
 1. material and product transfer
 2. storage of materials and products
 3. transfer of information on stored materials and products



Material and product transfer

- **Acceptance:**
 - physical unloading or unpacking from the means of transport
 - updating of stock records (stock database)
 - condition check (damage)
 - recheck of the physical number of items with data on the accompanying documentation



- **Transfer and storage:**
 - physical transfer of products to the store
 - storage
 - transfers to special services (e.g. consolidation and shipping)



- **Assembly according to orders:**
 - regrouping in relation to the assortment and quantity required by the customer
 - creation of wrapping sheets

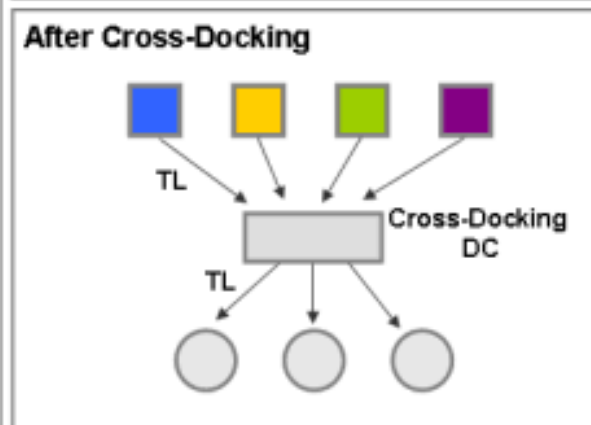
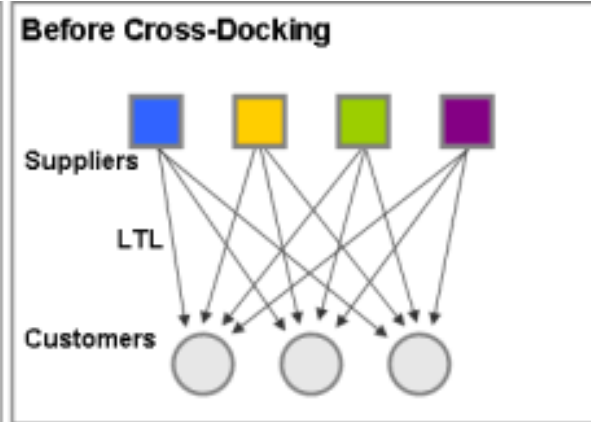
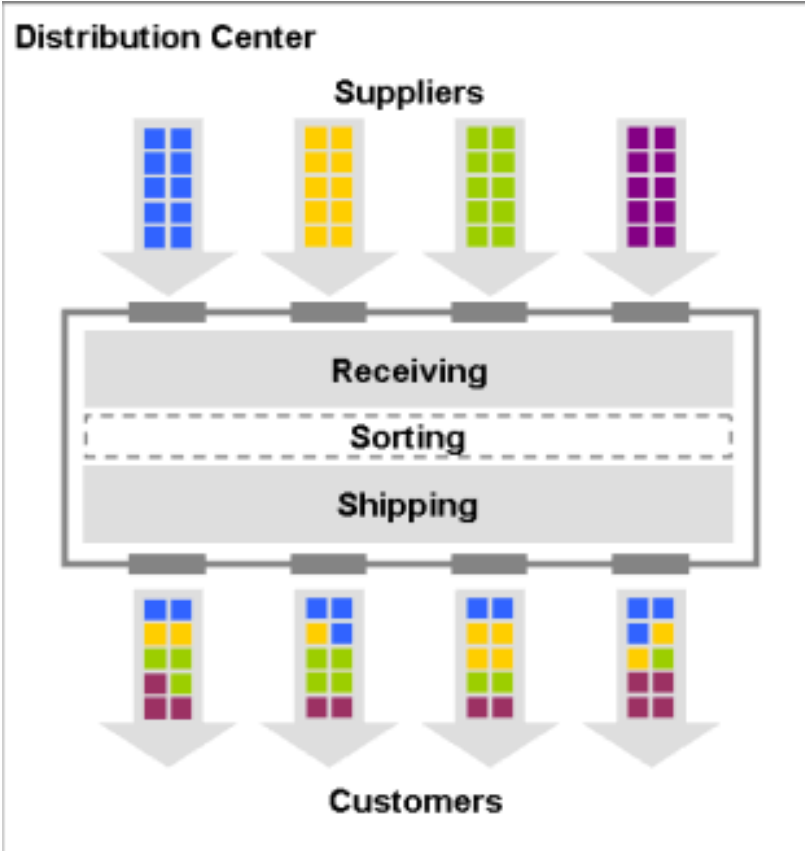




- **Transshipment:**

- bypassing the product storage function
- goods are transferred from the place of receipt directly to the place of dispatch





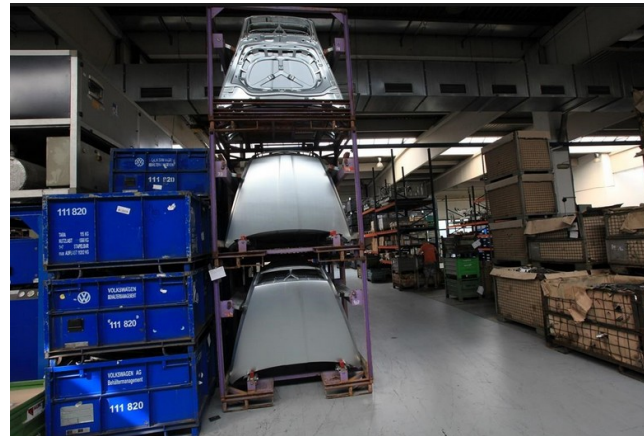


When can we consider cross-docking?

- customer is already known when goods are received in the warehouse
- customers are ready to receive the goods immediately
- more than 70% of the goods can be transported on the belt
- we accept large amounts of separate items
- goods we accept are already labelled
- some types are time sensitive items
- our distribution centre is busy almost to full capacity



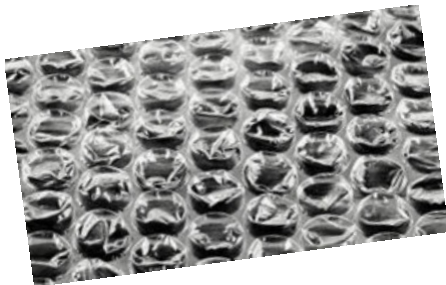
- **Dispatch:**
 - packaging
 - physical loading into a means of transport





FOUR BASIC TYPES OF STORED STOCK

- raw materials, components and parts (supply phase)
- stocks of goods in production (production phase)
- finished products and packaging (distribution phase)
- materials for disposal or recycling (mostly small share of total stock)





TYPES OF STORES

- choice on the basis of important financial and CS aspects
- private store
- public store
- customs store
- own store vs. contractual storage



General commercial warehouses:

- the most common type
- for manufacturers, distributors or customers
- for almost all kinds of packaged products





Temperature controlled warehouses:

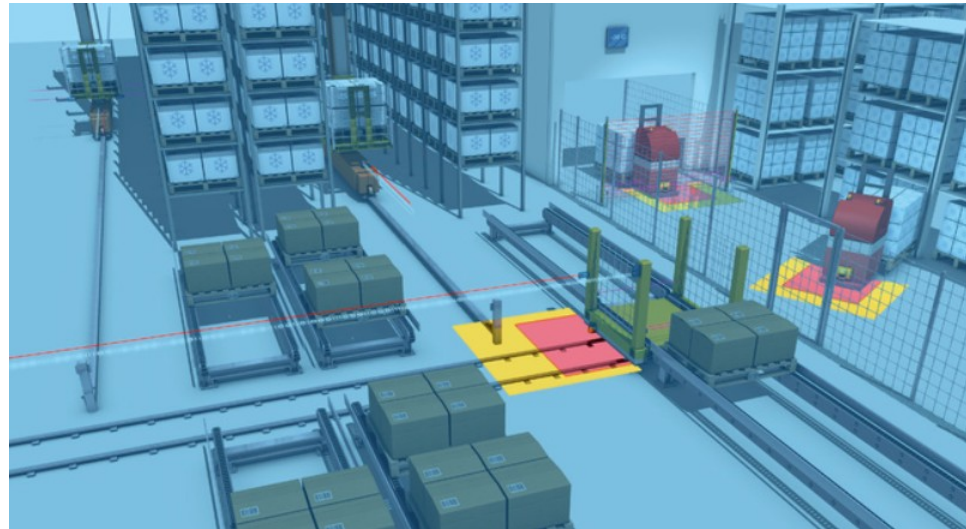
- **Deep freezing tunnels**
 - freezing up to -35°C
 - suitable for all food of animal or vegetable origin (finished products, semi-finished and raw materials)





- **Freezing warehouses**

- controlled freezing temperature from -18°C to -27°C
- frozen foods, some pharmaceuticals, photo paper and camera films, furs, archival materials





- **Refrigerated warehouses**

- rooms with temperature control from 0 ° C to + 15 ° C
- perishable goods such as fruits and vegetables, meat, dairy products





Customs store

- their facilities and spaces are supervised by a representative of the Ministry of Finance
- customs duties and excise duties are paid only after sale
- goods are controlled by the state until they are distributed to the market (e.g. tobacco products, alcoholic beverages, etc.)



Stores for the public

- storage of private property, not goods
- storage options:
 - open space (in open area of store)
 - private room
 - safe
 - container



Special commodity stores:

- specific agricultural products (grain, wool, cotton,...)
- usually one store = one type of product + special services related to the nature of the product





Storage of bulk substrates:

- liquid products (e.g. chemicals, oil,...) in tanks and loose substrates (e.g. coal, sand) in an open or covered place
- another services:
 - filling of barrels (from tanks)
 - production of new compounds and mixtures by mixing different kinds of chemicals



<https://www.youtube.com/watch?v=-LDIs7EvAKg>

<https://www.youtube.com/watch?v=1p2ITDbuJj4>



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Summary of the lecture



You can:

- Explain the importance of the storage
- Describe strategic and operational decisions in the storage
- Distinguish between classic store and distribution center
- Explain the essence of Cross-Docking
- Describe types of stores
- Characterize stock operations