

## RECOMMENDED PRACTICAL ASSIGNMENTS BASED ON OBSERVATIONS AND INDIVIDUAL ACTIVITIES AS PART OF PRACTICAL CLASSES

### 1. Practical assignment

Based on a visit of the warehouse facilities of a real company (training tour), try to classify them from the viewpoint of logistics management and describe them using the modern ABCD classification, given the specific conditions.

CLASSIFICATION OF WAREHOUSES FROM THE VIEWPOINT OF LOGISTICS MANAGEMENT	
<b>1 Depending on the functional fields of logistics:</b> <ul style="list-style-type: none"> <li>• supply logistics system warehouses;</li> <li>• production warehouses;</li> <li>• distribution logistics system warehouses.</li> </ul>	
<b>2 Based on product types:</b> <ul style="list-style-type: none"> <li>• raw materials (I);</li> <li>• materials (M);</li> <li>• sets (K);</li> <li>• unfinished products (NR);</li> <li>• reserves (R);</li> </ul>	<ul style="list-style-type: none"> <li>• finished products (GP);</li> <li>• packaging (T);</li> <li>• residues and waste (A);</li> <li>• tools and instruments (Instr).</li> </ul>
<b>3 Based on ownership:</b> <ul style="list-style-type: none"> <li>• private and business warehouses;</li> <li>• leased warehouses;</li> <li>• government and municipal company warehouses (hospitals, police, border guard etc.);</li> <li>• warehouses of public and non-commercial organisations.</li> </ul>	
<b>4 Based on operations with stock:</b> <ul style="list-style-type: none"> <li>• sorting warehouses;</li> <li>• distribution warehouses;</li> <li>• seasonal warehouses (garden furniture) or long-term storage warehouses (wine, cheese, lumber etc.);</li> <li>• transit warehouse (cargo terminals);</li> <li>• production process supply warehouses (I, M, NR, R)</li> </ul>	
<b>5 Depending on the intermediaries in the logistics system:</b> <ul style="list-style-type: none"> <li>• manufacturer warehouses;</li> <li>• trade company warehouses;</li> <li>• trade brokerage company warehouses;</li> </ul>	

<ul style="list-style-type: none"> <li>• cargo processing companies (product sorting, packaging, marking, picking, grouping by area etc.)</li> <li>• transport and forwarding company warehouses (cargo terminals);</li> <li>• warehouses of other intermediary entities (customs warehouses etc.)</li> </ul>	
<b>6 Based on product specialisation:</b> <ul style="list-style-type: none"> <li>• specialised (for one product type, such as oil products, or for a narrow range of products, such as spare parts for vehicles);</li> <li>• non-specialised (for a broad range of products);</li> <li>• universal (various piece cargo);</li> <li>• mixed</li> </ul>	
<b>7 Based on equipment:</b> <ul style="list-style-type: none"> <li>• partially mechanised;</li> <li>• mechanised;</li> <li>• automated;</li> <li>• automatic</li> </ul>	
<b>8 Based on warehouse facility structure:</b> <ul style="list-style-type: none"> <li>• open storage areas;</li> <li>• roofed storage areas;</li> <li>• semi-indoor storage areas;</li> <li>• indoor facilities;</li> </ul>	<ul style="list-style-type: none"> <li>• multiple-storey facilities;</li> <li>• single-storey facilities up to 6 m tall;</li> <li>• for racks with a different height, in excess of 10 m.</li> </ul>
<b>9 Based on external transport connections:</b> <ul style="list-style-type: none"> <li>• with railway platforms and access tracks;</li> <li>• with access roads.</li> </ul> <p>It is worth noting here that the <b>delivery or dispatch of cargo</b> using railway or water transport is an important feature of a warehouse. Based on this parameter, warehouses are further divided into <b>railway station and port warehouses</b> (located on the grounds of a railway station or seaport), <b>access railway warehouses</b> (that have their own railway branch for preparing railway cars for dispatch) and <b>remote warehouses</b>.</p> <p>Road or other vehicles must be used to deliver cargo from a railway station, port berth, or port warehouse to remote warehouses.</p>	

#### ***Knight Frank modern warehouse classification, with Class A, B, C, and D.***

##### **A+ class warehouse facilities.**

- A modern single-floor warehouse building constructed out of light metal structures or sandwich panel
- s, preferably rectangular, without pillars, or an interval of at least 12 m between pillars, and bay spaces of at least 24 m.

##### **Class A warehouse facilities.**

- A modern single-floor warehouse building constructed out of light metal structures or sandwich panels, preferably rectangular, without pillars, or an interval of at

<ul style="list-style-type: none"> <li>• Developed area: 40–50%.</li> <li>• Flat concrete floor with an anti-dust surface and a max. load of no less than 5 t/m<sup>2</sup>.</li> <li>• High ceilings, at least 13 m, suitable for installing multilevel racks (6–7 levels).</li> <li>• Adjustable temperature settings.</li> <li>• Presence of a fire alarm and automatic fire suppression system.</li> <li>• Presence of a ventilation system.</li> <li>• Security alarm and video surveillance system.</li> <li>• Autonomous electric power supply and heating supply.</li> <li>• Sufficient number of automatic dock shelters (at least one per 500 m<sup>2</sup>) with adjustable dock levellers in the loading/unloading areas.</li> <li>• Presence of parking spaces for lorries and cars.</li> <li>• Presence of reversing areas for large-capacity lorries.</li> <li>• Presence of offices at the warehouse.</li> <li>• Presence of utility rooms at the warehouse (staff toilets, showers, changing rooms, other utility rooms).</li> <li>• Presence of a staff records and supervision system.</li> <li>• High-tech communications.</li> <li>• Fenced-off, well-lit, developed grounds with 24-h security.</li> <li>• Location near key main roads.</li> <li>• Professional management system.</li> <li>• Branch railway line.</li> </ul>	<p>least 9 m between pillars, and bay spaces of at least 24 m.</p> <ul style="list-style-type: none"> <li>• Developed area: 45–55%.</li> <li>• Flat concrete floor with an anti-dust surface and a max. load of no less than 5 t/m<sup>2</sup>.</li> <li>• High ceiling, at least 10 m, making it possible to install multilevel racks.</li> <li>• Adjustable temperature settings.</li> <li>• Presence of a fire alarm and automatic fire suppression system.</li> <li>• Presence of a ventilation system.</li> <li>• Security alarm and video surveillance system.</li> <li>• Sufficient number of automatic dock shelters (at least one per 700 m<sup>2</sup>) with adjustable dock levellers in the loading/unloading areas.</li> <li>• Presence of a parking space for lorries and cars.</li> <li>• Presence of reversing areas for large-capacity lorries.</li> <li>• Presence of offices at the warehouse.</li> <li>• Presence of utility rooms at the warehouse (staff toilets, showers, changing rooms, other utility rooms).</li> <li>• Presence of a staff records and supervision system.</li> <li>• High-tech communications.</li> <li>• Fenced-off, well-lit, developed grounds with 24-h security.</li> <li>• Location near key main roads.</li> <li>• Autonomous electric power supply and heating supply.</li> <li>• Professional management system.</li> <li>• Branch railway line.</li> </ul>
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### **Class B+ warehouse facilities.**

- A single-floor warehouse building, preferably rectangular, new or renovated.
- Developed area: 45–55%.
- Flat concrete floor with an anti-dust surface and a max. load of no less than 5 t/m<sup>2</sup>.
- Ceiling height: 8 metres.
- Adjustable temperature settings.
- Presence of a fire alarm and automatic fire suppression system.
- Presence of a ventilation system.
- Sufficient number of automatic dock shelters (at least one per 1000 m<sup>2</sup>) with adjustable dock levellers in the loading/unloading areas.
- Security alarm and video surveillance system.
- Road vehicle loading ramp.
- Presence of a car park and reversing areas for large-capacity lorries.
- Presence of offices at the warehouse.
- Presence of utility rooms at the warehouse (staff toilets, showers, changing rooms, other utility rooms).
- High-tech communications.
- Fenced-off, well-lit, developed grounds with 24-h security.
- Location near key main roads.
- Professional management system.
- Presence of a staff records and supervision system.
- Autonomous electric power supply and heating supply.
- Branch railway line.

### **Class B warehouse facilities.**

A warehouse building with one or two floors, preferably rectangular, new or renovated.

- In the case of a two-floor building: a sufficient number of lifts/hoists with a capacity of at least 3 t (no less than 1 unit per 2000 m<sup>2</sup>).
- Ceiling height: 6 metres.
- Floor: asphalt or concrete without coating.
- Heating system.
- Presence of a fire alarm and automatic fire suppression system.
- Road vehicle loading ramp.
- Presence of a car park and reversing areas for large-capacity lorries.
- Grounds security.
- Telecommunications.
- Security alarm and video surveillance system.
- Presence of utility rooms at the warehouse.
- Presence of a ventilation system.
- Presence of offices at the warehouse.
- Presence of a staff records and supervision system.
- Autonomous electric power supply and heating supply.
- Branch railway line.

### **Class C warehouse facilities**

- Production premises or heated hangar.
- Ceiling height: 4 metres.
- Floor: asphalt or concrete tiles without coating.
- In the case of a multi-floor building: presence of cargo lifts/hoists.
- Presence of a gate at zero elevation.
- Presence of a car park and reversing area for large-capacity lorries.
- Ventilation system.
- Heating system.
- Presence of a fire alarm and automatic fire suppression system.
- Presence of offices at the warehouse.
- Road vehicle loading ramp.
- Grounds security.
- Telecommunications.
- Presence of utility rooms at the warehouse.

### **Class D warehouse facilities**

- Basement premises, non-heated production premises or hangars.
- Presence of a car park and reversing area for large-capacity lorries.
- Presence of a fire alarm and automatic fire suppression system.
- Heating system.
- Ventilation system.
- Presence of offices at the warehouse.
- Grounds security.
- Telecommunications.

## **2. Practical assignment**

Based on a visit of the warehouse facilities of a real company (training tour), name the risks of the warehouses. Write them down in a simple table, describe the measures for eliminating or minimising these risks.

Risks:	Measures to reduce risks:
<ul style="list-style-type: none"> <li>• changes in demand;</li> <li>• reduction in prices;</li> <li>• technical progress;</li> <li>• changes in tastes and fashions;</li> <li>• currency rate fluctuations;</li> <li>• environmental risk;</li> <li>• loss of products;</li> <li>• damage of products;</li> <li>• fire safety;</li> <li>• risk of flooding;</li> <li>• risk of theft;</li> <li>• etc.</li> </ul>	