

THE WAREHOUSE MANAGEMENT OF "VITEBSK CARPETS"

E. ROMASHKO, JOHN BANZEKULIVAHO MUHIZI

Polotsk State University, Belarus

The article presents the materials of the analysis of the warehouse management system of "OAO Vitebsk Carpets", which is related to the enterprises of the light industry of the Republic of Belarus; the detailed description of the warehouse staff the enterprise is given and the job functions of some employees are presented; identified the main problems that decrease the quality of warehouse management of "Vitebsk Carpets".

The analysis of the warehouse management system plays an important role in the activities of an enterprise, as the warehouse is an important material and technical base of an enterprise. It provides the production with the necessary raw materials and materials for a rhythmic and uninterrupted production process and ensures a high level of customer service. Forehanded analysis, identification of shortcomings and their elimination in the warehouse management system will help to increase the efficiency and reliability of the functioning of not only the warehouse, but the enterprise itself as a whole.

"Vitebsk Carpets" is one of the largest enterprises of the light industry of the Republic of Belarus, for which the warehouse industry plays an important role in its activities.

The warehouse of "Vitebsk Carpets" includes the following warehouses:

- central warehouse for finished products;
- regional warehouse for finished products;
- central warehouse of raw materials;
- central material warehouse and warehouse of chemicals [1].

Warehouses on the territory of the enterprise are located near the factory of tufted carpets, for quick supply of raw materials for the manufacture of products and their delivery to the central warehouse of finished products. They are conveniently located near the railway, along the routes of all transport.

Warehouses of raw materials and materials are used to ensure the continuity of the production process.

Warehouses of finished products are important components of supply chain management, since all cargo flows of new (finished) goods pass through them, which are intended to be subsequently delivered to the market. A feature of the finished goods warehouse is that this warehouse does not serve for storing goods, the storage period for them should not exceed 1-3 days.

Finished goods warehouses are subordinate to the marketing and sales department, the raw material warehouse and material warehouse are subordinate to the material and technical supply department.

Table 1 shows the staff of the warehouse of "Vitebsk Carpets".

Table 1. – The staff of the warehouse of "OAO Vitebsk Carpets"

Category	Number, people	Specific weight,%
1	2	3
Central warehouse for raw materials		
Head of the central warehouse of raw materials	1	0.93
Storekeeper	4	3.70
Electronic computer operator	1	0.93
Commodity specialist	1	0.93
Loader	4	3.70
Forklift driver	2	1.85
Central material warehouse and chemical warehouse		
Head of the central material warehouse and chemical warehouse	1	0.93
Storekeeper	3	2.78
Electronic computer operator	1	0.93
Commodity specialist	1	0.93
Loader	3	2.78
Forklift driver	2	1.85

The ending of table 1

1	2	3
Central warehouse for finished products		
Head of the central warehouse for finished products	1	0.93
Storekeeper	24	22.22
Electronic computer operator	6	5.56
Commodity specialist in the stock	1	0.93
Loader	38	35.19
Forklift driver	4	3.70
Regional warehouse for finished products		
Head of the regional warehouse for finished products	1	0,93
Storekeeper	2	1,85
Electronic computer operator	1	0.93
Commodity specialist	1	0.93
Loader	4	3.70
Forklift driver	1	0.93
Total employees:	108	100.00
of them:		
managers	4	3.70
specialists	37	34.26
technical performers	9	8.33
workers	58	53.70

Note: authoring based on source [1]

Table 1 shows that the warehouse staff of "Vitebsk Carpets" includes a warehouse manager, a commodity specialist, a computer operator, a storekeeper, a loader.

All warehouses are fully staffed with workers, each fulfilling his duties, which are spelled out in the job descriptions. But, the enterprise does not have a general warehouse management system, since, as already written above, finished product warehouses are subordinate to the marketing and sales department, and warehouses of raw materials, materials and chemicals are subordinate to the material and technical supply department.

The head of the warehouse manages the work of the warehouse for receiving, storing and dispensing, ensures the safety of finished products in warehouses for finished products, and raw materials, materials and chemicals in appropriate warehouses. At all warehouses of the enterprise, each warehouse manager draws up the established reporting, monitors the availability and serviceability of fire-fighting equipment, the condition of premises, equipment and inventory in the warehouse, ensures their timely repair, and also organizes loading and unloading operations in the warehouse in compliance with labour protection rules, safety, industrial sanitation and fire protection, collection, storage and timely return of loading props to suppliers.

The commodity specialists of the central and regional warehouses for finished products perform the following functions:

- the determination of requirements for goods, as well as the compliance of their quality with standards, technical conditions, concluded contracts and other regulatory documents;
- the control over the receipt of goods;
- the taking part in the preparation of data for the preparation of claims for the supply of low-quality goods and responses to customer claims;
- the control over the availability of goods in the warehouse;
- the communication with suppliers and consumers, paperwork for shipment and receipt of goods in accordance with the approved plans.

Functions of the commodity specialist of the central material warehouse and chemical warehouse:

- the determination of requirements for raw materials and material resources, compliance of the quality of these resources with standards, technical specifications, contracts and other regulatory documents;
- the determination of the compliance of accompanying documents with regulatory requirements;
- the maintenance of current reporting of operational and commodity accounting of the receipt and sale of resources;
- the study and analysis of the organization's activities for the reporting periods within its area of responsibility, the reasons for the formation of excessive excess and illiquid material resources.

Economics

Job functions of storekeepers of central and regional warehouses of finished products:

- the storage of finished products on racks, as free spaces appear;
- the compliance with the requirements of the instruction on labor protection;
- the control over the storage of finished carpets according to articles, patterns, colors, sizes in the warehouse;
- the formation and participation in the selection of carpets at the request of buyers;
- the reading the requisites of carpet products by a scanner and entering the requisites read by the loader

into the invoice;

- the checking and calculating the invoice and data from the scanner for the released products with computer operators.

Storekeepers in warehouses of raw materials, materials and chemicals perform the following functions:

- the implementation of acceptance, accounting of raw materials, materials and chemicals; checking with the submitted accompanying documents;

- the ensuring the safety of commodity units available in the warehouse;

- the keeping records of internal movements of valuables in the warehouse, reporting, observing the rules for the delivery and execution of receipts and receipts and other financial documents;

- the control of the availability, serviceability of the existing fire safety means, the technical condition of the warehouse and production equipment, if necessary, make repairs;

- the implementation of the issuance, acceptance of inventory items, the performance of loading and unloading operations, observing industrial safety techniques, sanitary standards, rules of internal labor protection, fire safety.

The duties of computer operators in different warehouses are similar and include:

- the monitoring the operation of electronic computers;

- the set of text materials using a text editor on electronic computers (personal electronic computers);

- the implementation of recording, reading and copying of information from one medium to another;

- the information output to print.

Loaders in warehouses perform such functions as:

- the loading, unloading and intra-warehouse processing of goods;

- the securing and sheltering goods in warehouses and vehicles;

- the carrying boards and ladders;

- the rolling of wagons in the process of work.

After analysing the functions of warehouse workers, a flaw was found. In finished goods warehouses, the storekeeper places finished goods on the racks as they are released. This can lead to an increase in the time for collecting the order, since products that are in high demand can be placed on racks away from the loading point.

Further, the degree of equipment of the warehouses of "Vitebsk Carpets" was studied.

At the central warehouse of raw materials, the main types of raw materials come on pallets, respectively, storage in the warehouse - in rows. Therefore, there is no technological equipment in this warehouse. Unloading and movement of raw materials is carried out using electric forklifts "Jungheinrich ETV-C16 SP GE" and a forklift "Komatsu".

In warehouses of materials and chemicals, various types of materials and chemicals are in a liquid state, so these resources are stored in tanks, containers and cisterns. There is also a chalk storage rack in the material warehouse. These warehouses use lifting and transport equipment such as an electric chain hoist and a lifting device.

At the central and regional warehouses of finished products, goods are stored in rolls on racks 5 m high and 3 m wide, and 2 to 4 m deep, racks are located in 3 floors in the central warehouse and in 2 floors in the regional warehouse. One rack holds up to 100 carpets.

Finished products are transported using various carts, forklift trucks, electric forklift trucks and electric pallet trucks.

The work of a warehouse of any enterprise is impossible without high-quality software. In "Vitebsk Carpets" they use the software product "1-C: Enterprise, 7.7".

The software product "1C: Enterprise" is intended for the automation of accounting and management accounting (including payroll and personnel management), economic and organizational activities of the enterprise.

For the warehouse of finished products, accounting is carried out in the program "1C: Trade Management" ("1C: Trade and Warehouse") version 7.7.

This software product is a component of "Operational accounting" of the "1C: Enterprise" system. The component "Operational accounting" is designed to account for the availability and movement of material and monetary funds. It can be used both autonomously and in conjunction with other 1C: Enterprise components.

At the warehouse of finished products of "Vitebsk Carpets", barcodes and scanners are used to read them.

All finished products are packed in plastic wrap with a barcode on it. The shop workers send the products (scan the barcodes) through the conveyor belt to the finished product warehouse on the waybill (from the shop to the conveyor belt).

Further, from the conveyor belt to the finished product warehouse, the storekeeper arrives (scans the barcodes) products according to the movement document (from the conveyor belt to the finished product warehouse), registers the document in the automated accounting system.

As a result of the study and analysis of the warehouse management system of "Vitebsk Carpets", a number of problems were identified, namely:

- the absence of the unified warehouse management system at the enterprise;
- the irrational placement of finished products for storage;
- the absence of the automation system for many warehouse processes;
- the outdated warehouse equipment.

1. The absence of the unified warehouse management system at "Vitebsk Carpets". To improve the efficiency of the company's warehouses, a unified warehouse management system is needed. This problem is caused by the fact that the central and regional warehouses of finished products are subordinate to the marketing and sales department, and the warehouses of raw materials, materials and chemicals are subordinate to the procurement department, as a result of which there is no overall coordination of the warehouses.

2. The irrational placement of finished products for storage. This problem lies in the fact that in the warehouse, finished products are placed on the racks as they are released. That is, products that are in great demand can be put at the end of the warehouse, and those that are less demanded by consumers can lie for a long time on racks near the loading area, thereby increasing the number of intra-warehouse movements and the time for order collection. Rational placement of goods will speed up the process of placing orders by reducing the number of movements of storekeepers. Accordingly, an indicator such as the number of processed orders per unit of time will increase, and the amount of time spent on processing consumer orders in general will decrease, which in turn will lead to an increase in the level and quality of customer service.

3. The absence of the automation system in the warehouses of "Vitebsk Carpets". All processes at the warehouses of "Vitebsk Carpets" are carried out practically by hand. This leads to an increase in labor costs for employees (wages and deductions), to errors associated with the human factor, to a low speed of performance of warehouse operations and processes. Also, the warehouses of "Vitebsk Carpets" do not have a corresponding software product that will help in automating warehouse accounting to reduce the time for working with documentation.

4. The outdated warehouse equipment. All warehouses of "Vitebsk Carpets" have technological and handling equipment, the service life of which exceeds the standard. This is due to the fact that the company does not have free working capital to upgrade warehouse equipment. Such a fact can lead to a disruption of the uninterrupted operation of warehouses, which will negatively affect the efficiency of the functioning of the warehouse economy and the entire enterprise as a whole.

From the analysis of the warehouse management system of "Vitebsk Carpets" it is clear that the identified problems will adversely affect not only the activities of its warehouse, but also the enterprise as a whole, therefore, their urgent solution is required. As a result of their solution, the efficiency of the functioning of the warehouse and the entire enterprise will undoubtedly increase, which will lead to an increase in competitiveness and an increase in the income of "Vitebsk Carpets".

REFERENCES

1. Ofitsial'nyy sayt OAO «Vitebskiye kovry» [Electronic resource]. – Mode of access: <http://vitcarpet.com>. – Date of access: 2021.04.09.