Demand analysis of material reserve optimization

Jian Gao¹², Shuming He³, Xing Song¹ and Liang Zhang²

¹ Department of Equipment Command and Administration, Army Engineering University, Shijiazhuang, China
² Unit 65153 PLA, Chaoyang, China
³ Unit 32134 PLA, Tianjing, China
863872761@qq.com

Abstract. Material reserve is an important task in the nation construction and military development. On the basis of analyzing the significance of modern logistics reserve and the present situation of the storage industry, this paper mainly combs and summarizes the problems existing in the storage industry of our country, puts forward the pertinent optimization measures and strategies, and points out the optimal demand for material reserve. The paper will lay a solid foundation for the next stage of material reserve construction and development.

1. Importance of optimizing material reserves

1.1. Reduce transportation and production costs
Although material reserve will increase the cost of warehousing products, it can also improve the efficiency of transportation and production, relatively reduces the cost of both. If the market demand is uncertain, unpredictable circumstances, the reserve of a certain amount of products can effectively prevent the production of shortage costs, and also to a certain extent to ensure production. The rhythm of operation makes the production plan well implemented and the production cost can be reduced. At the same time, warehousing can concentrate and integrate the small batch and scattered product transportation tasks, which is conducive to forming the overall optimization of the whole transportation and transportation routes, thus reducing the transportation cost.

1.2. Regulating supply and demand
The significance of warehousing for modern logistics has been mentioned before. For example, the production of certain products has seasonal characteristics due to raw materials and other reasons, but the demand for products is continuous. So warehousing here helps to adjust the contradiction between supply and demand. For example, when the price of a raw material needed for the production of a product is lower at a certain time, the manufacturer of the product can purchase a certain amount of raw material in advance and store it for future production.

1.3. Production needs
Storage is not only needed in the process of product circulation, but also exists in the process of product production. For example, in the production logistics, we often mention the temporary storage of products in process, the storage of raw materials and so on.
1.4. Marketing needs
In order to win consumers and obtain long-term loyalty of consumers, modern enterprises usually adopt the strategy of rapid customer response, and the implementation of this strategy must rely on the role of warehousing. Storing products close to customers can effectively prevent out-of-stock and shorten the delivery time, thus effectively improving the quality of customer service[2].

2. The status quo of material reserves

2.1. Management system based on departmental management
The long-term formation of this division of departments, regional division, their own warehouse for their own use, closed to each other, the situation of repeated construction has not yet completely changed. The low degree of socialization of the warehouse industry, as a result of this decentralized and self-governed management system, resulting in decentralized funds, backward management, outdated equipment, low warehouse utilization. It is understood that the average utilization rate of warehouse area in China is less than 40%. Some warehouses are idle for a long time, but some are not enough to continue to invest in building new warehouses. Because of blindness and disorderly construction of warehouses, market competition is excessive and warehouse prices are in disorder[3].

2.2. Not suited to the requirements of market economy development
Existing warehouses are bungalows, whose function is simply to store products. Coupled with the current situation, warehousing market is not standardized, unequal competition. The vast majority of state-owned warehouses economic benefits are not good, have many long-term losses, not only lacks stamina, and even have survival problems.

2.3. Warehouse equipment is old and backward
Many of the warehouse equipments are still in the primitive state of manual work. Even though people lift their shoulders, their work efficiency is still very low. Many warehouses goods can not go in and out smoothly. Goods in the warehouse stay too long, or improper storage and damage, mildew, serious losses, increased logistics costs. With the rapid development of China's economy and the deepening of the reform of logistics system, as well as the continuous expansion of opening up and the development of foreign trade, logistics should have a rapid development, especially the warehousing industry, to meet the needs of this new situation[4].

3. Measures to optimize material reserves

3.1. Strengthen storage infrastructure construction
Investments should be intensified to upgrade the infrastructure of existing warehouses, constantly renovate obsolete and aging warehouses, and update and use modern warehousing equipment. We should learn from the advanced experience and technology both at home and abroad, but also combined with the actual situation of various regions, can not be greedy, to form a scientific and reasonable network of storage facilities.

3.2. Introducing competition mechanism and establishing market system
In order to ensure the healthy development of the warehousing industry, it is necessary to standardize the market order, speed up the introduction of competition mechanism, and establish a unified open, fair competition, standardized and orderly modern warehousing system. Abolish all kinds of relevant provisions that do not conform to the provisions of national laws and regulations, and create a relaxed external environment for the operation and development of warehousing enterprises.
3.3. **Strengthening resource integration and improving storage standards**

The storage and transportation facilities of warehousing enterprises in different industries in China cannot be shared, which affects the ability of enterprises to rationally co-ordinate the storage resources. In order to meet the requirements of modern logistics, we must strengthen the integration of resources and establish a storage network. Storage standardization is not only to achieve close cooperation between storage links and other links, but also an effective means to improve operational efficiency within the warehouse. Therefore, warehousing enterprises should constantly improve their standardization system\(^5\).

3.4. **Building information platform to realize storage informatization**

To improve the utilization rate of warehouse and realize effective inventory control, it is necessary to establish an effective information network, realize the sharing of warehouse information, and actively promote the informationization of enterprise warehouse management. Using modern information technology to build a public information platform, to achieve effective combination of public information network and storage network, improve the level of enterprise warehousing information.

3.5. **Cultivating warehousing talents and improving training system**

Talents are important resources of enterprises. To develop warehousing enterprises, we must have technical and managerial talents. Warehousing enterprises should make full use of all kinds of resources, actively introduce relevant talents from colleges and universities, and strengthen the on-the-job training of employees in logistics enterprises, and strengthen the training and training of warehousing professionals.

3.6. **Establishing warehouse management laws and regulations**

Establishing and improving the rules and regulations with the responsibility system as the core is a basic work of warehousing management. At present, China lacks a relatively complete legal and policy system, so it is necessary to speed up the formulation and improvement of warehouse management laws and regulations, standardize the industrial competition order, adjust the policies to help enterprises better management.

4. **Summary**

The ultimate goal of logistics activities is to shorten the time of commodity circulation, to reach the destination quickly, to ensure the quality of commodities intact, to reduce the cost of commodities in circulation and to achieve social benefits. To sum up, one sentence is to spare no effort to use less mileage, less links, less inventory, less time and less cost to achieve the goal of “timely, accurate, economic and safe” and to provide customers with satisfactory quality of service.

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