

ELASTIC LOGISTICS

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Elastic logistics is the ability to be flexible in respond to the changing requirements of the supply chain by scaling warehouse resources so that they are efficient when demand peaks and bear no excessive costs in the periods with fewer shipping orders.

Inventory should be just sufficient not to exceed the actual demand. Otherwise, this can lead to significant additional costs for the company's logistics activities. On the other hand, underestimation and, thus, lack of necessary inventory can inevitably cause shortfalls.

Information is the key factor for elastic logistics. Usage of warehouse management software (LVS/WMS) or MES, is essential so that the logistics manager has enough data to make the right decision. The warehouse management system can analyze all the data generated in the warehouse to identify consumption trends, shortage, or even optimal stock quantity for each parking space. This all can help avoid excessive storage costs.

A flexible warehouse requires scalable storage systems that can adapt to the volume of warehouse inputs and outputs at any time. Automated solutions such as stacker cranes for pallets or order picking stations ensure maximum productivity of the processes.

The implementation of logistics methods such as just-in-time or lean manufacturing is essential to have elastic logistics capable of adapting to the demand forecasts for a product.

In short, elastic logistics takes advantage of these trends to make all the warehouse processes more efficient starting with drawing supplies to their storage, compilation, and dispatch of orders to end customers.

The concept of elastic logistics has been introduced to reduce personnel and inventory costs of an enterprise. Companies tend to implement warehouse management systems that allow synchronization with other links in the supply chain.