

Inventory Planning and Management

Inventory management refers to the knowledge and practices of keeping the optimal amount of any amount of material in a given storage facility. When maintaining a storage facility, inventory management becomes an integral part of supply chain management. It is complementary to warehouse facility management and the physical management of stored material.

Correct inventory management helps ensure the timely delivery of supplies. Proper inventory management requires deep knowledge of both the acquisition process and consumption patterns, and is achieved broadly through three key activities:

- Accurate forecasting of demand.
- Close monitoring of stock levels and consumption.
- Timely ordering of the right amounts of goods.

In addition, the lack of inventory management can lead to increased holding costs, wasted stock or holding too much stock with the respective cost burden and risk increase.

Common Terms in Inventory Management

Bin Card	Document updated by the store keeper that tracks the inventory kept of a single product in a particular bin.
Buffer Stock	Amount of stock equivalent to the consumption during the standard replenishment period.
Committed Inventory	Particular items in the inventory which that committed to a particular order or transfer in the near future.
Demand Signal	Any form of request to remove stock from a warehouse or storage facility coming in any format.
Inventory	Any stored material, including both raw materials and finished goods. Also commonly referred as stock, though in the manufacturing sector, "stock" only comprises the finished products that are kept in the store.
Inventory Ledger	Accounting document or computer record that tracks inventory transactions (receptions and dispatches) in terms of quantity and value.
Lead Time	The time lapse between the moment when the order is placed and the moment of its reception.
Minimum Stock	The minimum quantity always available in stock to avoid shortage. This is important for products that are critical or difficult to re-supply, and where shortages can jeopardize a project plan. $\text{Minimum Stock} = \text{Buffer Stock} + \text{Safety Stock}$.

On Hand Inventory	Items in the stock that are available to be released.
Over-Stock	Situation in which too much inventory is kept in the store.
Physical Inventory	The process of physically counting and verifying goods in stock in order to reconcile data on record with reality.
Re-Ordering Cycle	Period of time between two successive regular orders for a particular item in stock.
Safety Stock	Level of extra stock that is kept to mitigate risk of stock-out caused by uncertainties in supply and demand.
Stock Card	Document updated by the store keeper that tracks the inventory kept of a single product in the storage facility.
Stock Keeping Unit (SKU)	A unique code or nomenclature that designates a single line item of a larger consignment. SKUs may be tied to a specific production run or expiration date, and may denote only a product of specific characteristics.
Stock-Out	Situation in which inventory levels cannot cope with the demand for a certain item and stock is fully depleted.
Vendor Managed Inventory (VMI)	Inventory management strategy in which suppliers manage physical inventory as part of their retailer's inventory.