Module 6
Section A: Inventory Planning

Term
ABC classification

Module 6
Section A: Inventory Planning

Term
Aggregate inventory management

Module 6
Section A: Inventory Planning

Term
Anticipation inventories

Module 6
Section A: Inventory Planning

Term
Buffer

Module 6
Section A: Inventory Planning

Term
Cycle stock

Module 6
Section A: Inventory Planning

Term
Decoupling

Module 6
Section A: Inventory Planning

Term
Decoupling inventory

Module 6
Section A: Inventory Planning

Term
Distressed goods

Establishing the overall level (dollar value) of inventory desired and implementing controls to achieve this goal.

The classification of a group of items in decreasing order of annual dollar volume (price multiplied by projected volume) or other criteria. This array is then split into three classes [...]. The [first] group usually represents 10 percent to 20 percent by number of items and 50 percent to 70 percent by projected dollar volume. The next grouping [...] usually represents about 20 percent of the items and about 20 percent of the dollar volume. The [third] class contains 60 percent to 70 percent of the items and represents about 10 percent to 30 percent of the dollar volume. The ABC principle states that effort and money can be saved through applying looser controls to the low-dollar-volume class items than to the high-dollar-volume class items. The ABC principle is applicable to inventories, purchasing, and sales. Syn.: ABC analysis, distribution by value. See: 80-20, Pareto analysis, Pareto's law.

In theory of constraints, time or material that supports throughput and/or due date performance.

Additional inventory above basic pipeline stock to cover projected trends of increasing sales, planned sales promotion programs, seasonal fluctuations, plant shutdowns, and vacations.

Creating independence between supply and use of material. Commonly denotes allocating inventory between operations so that fluctuations in the production rate of the supplying operation do not constrain the production or use rates of the next operation.

One of the two main conceptual components of any item inventory, [this] is the most active component. [It] depletes gradually as customer orders are received and is replenished cyclically when supplier orders are received. The other conceptual component of the item inventory is the safety stock, which is a cushion of protection against uncertainty in the demand or in the replenishment lead time. Syn.: cycle inventory.

Products that are damaged or close to their expiration date and cannot be sold at full price.

An amount of inventory maintained between entities in a manufacturing or distribution network to create independence between processes or entities. The objective of [this] is to disconnect the rate of use from the rate of supply of the item. See: buffer.

Module 6
Section A: Inventory Planning

Term
Distribution inventory

Module 6
Section A: Inventory Planning

Term
Excess inventory

Module 6
Section A: Inventory Planning

Term
Finished goods inventory

Module 6
Section A: Inventory Planning

Term
Fluctuation inventory

Module 6
Section A: Inventory Planning

Term
Hedge inventory

Module 6
Section A: Inventory Planning

Term
In-transit inventory

Module 6
Section A: Inventory Planning

Term
Inactive inventory

Module 6
Section A: Inventory Planning

Term
Inventory

Any inventory in the system that exceeds the minimum amount necessary to achieve the desired throughput rate at the constraint or that exceeds the minimum amount necessary to achieve the desired due date performance. Total inventory = productive inventory + protective inventory + excess inventory.

Inventory, usually spare parts and finished goods, located in the distribution system (e.g., in warehouses or in transit between warehouses and the consumer).

Inventory that is carried as a cushion to protect against forecast error. Syn.: fluctuation stock. See: inventory buffer.

Those items on which all manufacturing operations, including final test, have been completed. These products are available for shipment to the customer as either end items or repair parts. Syn.: finished products inventory. See: goods.

Material moving between two or more locations, usually separated geographically; for example, finished goods being shipped from a plant to a distribution center.

A form of inventory buildup to buffer against some event that may not happen. [Planning] involves speculation related to potential labor strikes, price increases, unsettled governments, and events that could severely impair a company's strategic initiatives. Risk and consequences are unusually high, and top management approval is often required.

1) Those stocks or items used to support production (raw materials and work-in-process items), supporting activities (maintenance, repair, and operating supplies), and customer service (finished goods and spare parts). Demand for inventory may be dependent or independent. Inventory functions are anticipation, hedge, cycle (lot size), fluctuation (safety, buffer, or reserve), transportation (pipeline), and service parts. 2) All the money currently tied up in the system. As used in theory of constraints, inventory refers to the equipment, fixtures, buildings, and so forth that the system owns—as well as inventory in the forms of raw materials, work-in-process, and finished goods.

Stock designated as in excess of consumption within a defined period; stocks of items that have not been used for a defined period.

Module 6
Section A: Inventory Planning

Term
Inventory buffer

Module 6
Section A: Inventory Planning

Term
Inventory control

Module 6
Section A: Inventory Planning

Term
Inventory investment

Module 6
Section A: Inventory Planning

Term
Inventory management

Module 6
Section A: Inventory Planning

Term
Inventory policy

Module 6
Section A: Inventory Planning

Term
Lot-size inventory

Module 6
Section A: Inventory Planning

Term
Maintenance, repair, and operating (MRO) supplies

Module 6
Section A: Inventory Planning

Term
Obsolete inventory

The activities and techniques of maintaining the desired levels of items, whether raw materials, work in process, or finished products. Syn.: material control.

Inventory used to protect the throughput of an operation or the schedule against the negative effects caused by delays in delivery, quality problems, delivery of an incorrect quantity, and so on. Syn.: inventory cushion. See: fluctuation inventory, safety stock.

The branch of business management concerned with planning and controlling inventories.

The dollars that are in all levels of inventory.

Inventory that results whenever quantity price discounts, shipping costs, setup costs, or similar considerations make it more economical to purchase or produce in larger lots than are needed for immediate purposes.

A statement of a company's goals and approach to the management of inventories.

Inventory items that have met the obsolescence criteria established by the organization. For example, inventory that has been superseded by a new model or otherwise made obsolescent. [It] will never be used or sold at full value. Disposing of the inventory may reduce a company's profit.

Items used in support of general operations and maintenance such as maintenance supplies, spare parts, and consumables used in the manufacturing process and supporting operations.

Module 6
Section A: Inventory Planning

Term
Pipeline stock

Module 6
Section A: Inventory Planning

Term
Raw material

Module 6
Section A: Inventory Planning

Term
Rework

Module 6
Section A: Inventory Planning

Term
Safety stock

Module 6
Section A: Inventory Planning

Term
Scrap

Module 6
Section A: Inventory Planning

Term
Seasonal inventory

Module 6
Section A: Inventory Planning

Term
Semifinished goods

Module 6
Section A: Inventory Planning

Term
Service parts

Purchased items or extracted materials that are converted via the manufacturing process into components and products.

Inventory in the transportation network and the distribution system, including the flow through intermediate stocking points. The flow time through the pipeline has a major effect on the amount of inventory required in the pipeline. Time factors involve order transmission, order processing, scheduling, shipping, transportation, receiving, stocking, review time, and so forth. Syn.: pipeline inventory. See: distribution system, transportation inventory.

1) In general, a quantity of stock planned to be in inventory to protect against fluctuations in demand or supply. 2) In the context of master production scheduling, the additional inventory and capacity planned as protection against forecast errors and short-term changes in the backlog. Overplanning can be used to create [this]. Syn.: buffer stock, reserve stock. See: hedge, inventory buffer.

Reprocessing to salvage a defective item or part.

Inventory built up to smooth production in anticipation of a peak seasonal demand. Syn.: seasonal stock.

Material outside of specifications and possessing characteristics that make rework impractical.

Those modules, components, and elements that are planned to be used without modification to replace an original part. Syn.: repair parts, spare parts.

Products that have been stored in an uncompleted state and are awaiting final operations that will adapt them to different uses or customer specifications.

Module 6
Section A: Inventory Planning

Term
Shelf life

Module 6
Section A: Inventory Planning

Term
Stock keeping unit (SKU)

Module 6
Section A: Inventory Planning

Term
Transit inventory

Module 6
Section A: Inventory Planning

Term
Transportation inventory

Module 6
Section A: Inventory Planning

Term
Wall-to-wall inventory

Module 6
Section A: Inventory Planning

Term
Work in process (WIP)

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Absorption costing

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Activity-based cost accounting

1) An inventory item. For example, a shirt in six colors and five sizes represents 30 [of these]. 2) In a distribution system, an item at a particular geographic location. For example, one product stocked at the plant and at six different distribution centers would represent seven [of these].

The amount of time an item may be held in inventory before it becomes unusable.

Inventory that is in transit between locations. See: pipeline stock, transit inventory.

Inventory [moving] between manufacturing and stocking locations. See: transportation inventory.

A good or goods in various stages of completion throughout the plant, including all material from raw material that has been released for initial processing up to completely processed material awaiting final inspection and acceptance as finished goods inventory. Many accounting systems also include the value of semifinished stock and components in this category. Syn.: in-process inventory.

An inventory management technique in which material enters a plant and is processed through the plant into finished goods without ever having entered a formal stock area. Syn.: four-wall inventory.

A cost accounting system that accumulates costs based on activities performed and then uses cost drivers to allocate these costs to products or other bases such as customers, markets, or projects. It attempts to allocate overhead costs on a more realistic basis than by using direct labor or machine hours. Syn.: activity-based costing, [...]. See: absorption costing.

An approach to inventory valuation in which variable costs and a portion of fixed costs are assigned to each unit of production. The fixed costs are usually allocated to units of output on the basis of direct labor hours, machine hours, or material costs. Syn.: allocation costing. See: activity-based costing.

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Activity-based management (ABM)

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Actual cost system

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Balance sheet

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Carrying cost

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Cash flow

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Cost accounting

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Cost control

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Cost object driver

A cost system that collects costs historically as they are applied to production and allocates indirect costs to products based on the specific costs and achieved volume of the products.

The use of activity-based costing information about cost pools and drivers, activity analysis, and business processes to identify business strategies; improve product design, manufacturing, and distribution; and remove waste from operations. See: activity-based cost accounting.

The cost of holding inventory, usually defined as a percentage of the dollar value of inventory per unit of time (generally one year). [This] depends mainly on the cost of capital invested as well as costs of maintaining the inventory such as taxes and insurance, obsolescence, spoilage, and space occupied. Such costs vary from 10 percent to 35 percent annually, depending on type of industry. [It] is ultimately a policy variable reflecting the opportunity cost of alternative uses for funds invested in inventory. Syn.: holding costs.

A financial statement showing the resources owned, the debts owed, and the owner's share of a company at a given point in time. See: funds flow statement, income statement.

The branch of accounting that is concerned with recording and reporting business operating costs. It includes the reporting of costs by departments, activities, and products.

The net flow of dollars into or out of the proposed project. The algebraic sum, in any time period, of all cash receipts, expenses, and investments. Also called cash proceeds or cash generated.

In activity-based cost accounting, a numerical measure of the demand placed on one cost object by other cost objects.

Applying procedures that monitor the progress of operations against authorized budgets and taking action to achieve minimal costs.

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Cost of goods sold (COGS)

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Cost variance

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Days of supply

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Direct costs

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Direct labor

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Direct material

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
First in, first out (FIFO)

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Fixed overhead

In cost accounting, the difference between what has been budgeted for an activity and what it actually costs.

An accounting classification useful for determining the amount of direct materials, direct labor, and allocated overhead associated with the products sold during a given period of time. See: cost of sales.

1) In traditional cost accounting, variable costs that can be directly attributed to a particular job or operation. Direct material and direct labor are traditionally considered [to be this]. 2) In activity-based cost (ABC) accounting, a cost that can specifically be traced and is economically feasible to track to a particular cost object (e.g., the units produced, a production line, a department, a manufacturing plant). In contrast, if the cost must be allocated across various cost objects, it is an indirect cost. Based on the cost object under consideration, the classification of direct and indirect can change. ABC accounting assumes that more costs traditionally viewed as fixed costs are variable and can be traced to cost objects.

1) Inventory-on-hand metric converted from units to how long the units will last. For example, if there are 2,000 units on hand and the company is using 200 per day, then there are 10 [of these]. 2) A financial measure of the value of all inventory in the supply chain divided by the average daily cost of goods sold rate.

Material that becomes a part of the final product in measurable quantities.

Labor that is specifically applied to the good being manufactured or used in the performance of the service. Syn.: touch labor.

Traditionally, all manufacturing costs—other than direct labor and direct materials—that continue even if products are not produced. Although [this] is necessary to produce the product, it cannot be directly traced to the final product.

A method of inventory valuation for accounting purposes. The accounting assumption is that the [oldest inventory is the first to be used], but there is no necessary relationship with the actual physical movement of specific items. See: first-come-first-served rule, average cost system.

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
General and administrative expenses (G&A)

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Generally accepted accounting principles (GAAP)

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Gross margin

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Income statement

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Indirect costs

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Inventory accounting

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Job costing

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Joint replenishment

Accounting practices that conform to conventions, rules, and procedures that are generally accepted by the accounting profession.

The category of expenses on an income statement that includes the costs of general managers, computer systems, research and development, etc.

A financial statement showing the net income for a business over a given period of time. See: balance sheet, funds flow statement.

The difference between total revenue and the cost of goods sold. Syn.: gross profit margin.

The branch of accounting dealing with valuing inventory. Inventory may be recorded or valued using either a perpetual or a periodic system. A perpetual inventory record is updated frequently or in real time, while a periodic inventory record is counted or measured at fixed time intervals (e.g., every two weeks or monthly). Both recording systems use the LIFO, FIFO, or average costs inventory valuation method.

Costs that are not directly incurred by a particular job or operation. [These include certain utility costs, such as plant heating.] [It] is typically distributed to the product through the overhead rates.

Coordinating the lot sizing and order release decision for related items and treating them as a family of items. The objective is to achieve lower costs because of ordering, setup, shipping, and quantity discount economies. This term applies equally to joint ordering (family contracts) and to composite part (group technology) fabrication scheduling. Syn.: joint replenishment system.

A cost accounting system in which costs are assigned to specific jobs. This system can be used with either actual or standard costs in the manufacturing of distinguishable units or lots of products. Syn.: job order costing.

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Last in, first out (LIFO)

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Liabilities

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Managerial accounting

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Muda (waste)

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Mura

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Muri

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Non-value-added

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Nonconformity

An accounting/financial term (balance sheet classification of accounts) representing debts or obligations owed by a company to creditors. [These] may have a short-term time horizon, such as accounts payable, or a longer-term obligation, such as mortgage payable or bonds payable. See: assets, balance sheet, debt, owner's equity.

A method of inventory valuation for accounting purposes. The accounting assumption is that the most recently received (last in) is the first to be used or sold (first out) for costing purposes, but there is not necessarily any relationship with the actual physical movement of specific items. See: average cost system.

In lean manufacturing, costs are reduced by reducing [this] within a system. There are seven [categories]: (1) overproduction—excess or too early; (2) waiting—queuing delays; (3) transportation—unneeded movements; (4) processing—poor process design; (5) motion—activities that do not add value; (6) inventory—stock that is sitting and is accumulating cost without necessarily providing value; (7) defective units—scrap or rework.

A branch of accounting that uses techniques such as break-even analysis, cost-volume-profit analysis, make-buy analysis, and others to provide information used in day-to-day decision making.

A Japanese word meaning strain or overburden.

A Japanese word meaning unevenness or variability.

Failure to fulfill a specified requirement. See: blemish, defect, imperfection.

An activity that does not add value to a product; for example, moving the product from one work center to another inside a facility. One aspect of continuous improvement is the elimination or reduction of [these] activities.

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Operation costing

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Ordering cost

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Overhead

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Owner's equity

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Process costing

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Product cost

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Profit margin

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Risk pooling

The costs that increase as the number of orders placed increases. Used in calculating order quantities. Includes costs related to the clerical work of preparing, releasing, monitoring, and receiving orders; the physical handling of goods; inspections; and setup costs, as applicable. See: acquisition cost, inventory costs.

A method of costing used in batch manufacturing environments when the products produced have both common and distinguishing characteristics; for example, suits. The products are identified and costed by batches or by production runs, based on the variations.

An accounting/financial term (balance sheet classification of accounts) representing the residual claim by the company's owners or shareholders, or both, to the company's assets less its liabilities. See: assets, balance sheet, liabilities.

The costs incurred in the operation of a business that cannot be directly related to the individual goods or services produced. These costs, such as light, heat, supervision, and maintenance, are grouped in several pools (e.g., [department, factory, general]) and distributed to units of goods or services by some standard allocation method such as direct labor hours, direct labor dollars, or direct materials dollars. Syn.: burden. See: expense.

Cost allocated by some method to the products being produced. Initially recorded in asset (inventory) accounts, [this becomes] an expense (cost of sales) when the product is sold.

A cost accounting system in which the costs are collected by time period and averaged over all the units produced during the period. This system can be used with either actual or standard costs in the manufacture of a large number of identical units.

A method often associated with the management of inventory risk. Manufacturers and retailers that experience high variability in demand for their products can pool together common inventory components associated with a broad family of products to buffer the overall burden of having to deploy inventory for each discrete product.

1) The difference between the sales and cost of goods sold for an organization, sometimes expressed as a percentage of sales. 2) [In traditional accounting for a product, this] is the product selling price minus the direct material, direct labor, and allocated overhead for the product, sometimes expressed as a percentage of selling price.

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Seven wastes

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Shojinka

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Specific identification

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Standard cost accounting system

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Standard costs

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Stockout costs

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Transfer pricing

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Unit cost

Continually balancing the number of workers in a work center to meet demand with a minimum number of workers to improve flow. It requires a line design—for example, U-shaped—that supports varying the number of workers.

Shigeo Shingo, a pioneer in the Japanese just-in-time philosophy, identified seven barriers to improving manufacturing. They are the waste of overproduction, waste of waiting, waste of transportation, waste of stocks, waste of motion, waste of making defects, and waste of the processing itself.

A cost accounting system that uses cost units determined before production for estimating the cost of an order or product. For management control purposes, the standards are compared to actual costs, and variances are computed.

This method keeps track of the units of the beginning inventory and the units purchased[...]. This may be done through a coding method or serial number identification.

The costs associated with a stockout. Those costs may include lost sales, backorder costs, expediting, and additional manufacturing and purchasing costs.

The target costs of an operation, process, or product including direct material, direct labor, and overhead charges.

Total labor, material, and overhead cost for one unit of production (e.g., one part, one gallon, one pound).

The pricing of goods or services transferred from one segment of a business to another. See: interplant transfer.

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Value added

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Variable costing

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Variance

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Velocity

Module 6
Section B: Inventory and Product Costs, Value, and Metrics

Term
Waste

Module 6
Section C: Itemized Inventory Management

Term
Cold chain

Module 6
Section C: Itemized Inventory Management

Term
Economic order quantity (EOQ)

Module 6
Section C: Itemized Inventory Management

Term
Fixed order quantity

An inventory valuation method in which only variable production costs are applied to the product; fixed factory overhead is not assigned to the product. Traditionally, variable production costs are direct labor, direct material, and variable overhead costs. [This] can be helpful for internal management analysis but is not widely accepted for external financial reporting. For inventory order quantity purposes, however, the unit costs must include both the variable and allocated fixed costs to be compatible with the other terms in the order quantity formula. For make-or-buy decisions, [this] should be used rather than full absorption costing. Syn.: direct costing.

1) In accounting, the addition of direct labor, direct material, and allocated overhead assigned at an operation. It is the cost roll-up as a part goes through a manufacturing process to finished inventory. 2) In current manufacturing terms, the actual increase of utility from the viewpoint of the customer as a part is transformed from raw material to finished inventory; the contribution made by an operation or a plant to the final usefulness and value of a product, as seen by the customer. The objective is to eliminate all non-value-added activities in producing and providing a good or service.

1) The rate of change of an item with respect to time. See: inventory turnover, lead time. 2) In supply chain management, a term used to indicate the relative speed of all transactions, collectively, within a supply chain community. [The maximum of this] is most desirable because it indicates higher asset turnover for stockholders and faster order-to-delivery response for customers.

1) The difference between the expected (budgeted or planned) value and the actual. 2) In statistics, a measurement of dispersion of data. See: estimate of error.

A term referring to the storage, transfer, and supply chain of temperature-controlled products. Industries in the cold chain include food and agriculture, pharmaceuticals, and chemicals.

1) Any activity that does not add value to the good or service in the eyes of the consumer. 2) A by-product of a process or task with unique characteristics requiring special management control. [The] production [of this] can usually be planned and somewhat controlled. Scrap is typically not planned and may result from the same production run as [this term]. See: hazardous waste.

A lot-sizing technique in MRP or inventory management that will always cause planned or actual orders to be generated for a predetermined fixed quantity, or multiples thereof, if net requirements for the period exceed [this].

A type of fixed order quantity model that determines the amount of an item to be purchased or manufactured at one time. The intent is to minimize the combined costs of acquiring and carrying inventory. [To calculate this find the square root of ((2AS)/(iC)) where A = annual usage in units, S = ordering costs in dollars, i = annual inventory carrying cost rate as a decimal, and C = unit cost.] Syn.: economic lot size, minimum cost order quantity. See: total cost curve.

Module 6
Section C: Itemized Inventory Management

Term
Fixed reorder cycle inventory model

Module 6
Section C: Itemized Inventory Management

Term
Hazardous materials

Module 6
Section C: Itemized Inventory Management

Term
Hazardous waste

Module 6
Section C: Itemized Inventory Management

Term
Inventory ordering system

Module 6
Section C: Itemized Inventory Management

Term
Level of service

Module 6
Section C: Itemized Inventory Management

Term
Lot size

Module 6
Section C: Itemized Inventory Management

Term
Lot-for-lot (L4L)

Module 6
Section C: Itemized Inventory Management

Term
Maintenance, repair, and overhaul (MRO)

Any material that a country's relevant government agency has classified as a risk to human, animal, or environmental health or to property—either on its own or due to interaction with other elements. A government's transportation authority may allow transportation only when proper permits and safety precautions are implemented. Similarly, a government may regulate or supervise hazardous material disposal. Categories include explosives, flammable or corrosive liquids or gasses, biohazards, and radioactive materials.

A form of independent demand management model in which an order is placed every n time units. The order quantity is variable and essentially replaces the items consumed during the current time period. If M is the maximum inventory desired at any time and x is the quantity on hand at the time the order is placed, then in the simplest model, the order quantity equals M minus x. The quantity M must be large enough to cover the maximum expected demand during the lead time plus a review interval. The order quantity model becomes more complicated whenever the replenishment lead time exceeds the review interval, because outstanding orders then have to be factored into the equation. Syn.: fixed-interval order system, fixed order quantity system, order level system, periodic review system, time-based order system. See: fixed reorder quantity inventory model, hybrid inventory system, independent demand item management models, optional replenishment model.

Inventory models for the replenishment of inventory. Independent demand inventory ordering models include fixed reorder cycle, fixed reorder quantity, optional replenishment, and hybrid models, among others. Dependent demand inventory ordering models include material requirements planning, kanban, and drum-buffer-rope.

Waste, such as chemicals or nuclear material, that is hazardous to humans or animals and requires special handling.

The amount of a particular item that is ordered from the plant or a supplier or issued as a standard quantity to the production process. Syn.: order quantity.

A measure (usually expressed as a percentage) of satisfying demand through inventory or by the current production schedule in time to satisfy the customers' requested delivery dates and quantities. In a make-to-stock environment, [this] is sometimes calculated as the percentage of orders picked complete from stock upon receipt of the customer order, the percentage of line items picked complete, or the percentage of total dollar demand picked complete. In make-to-order and design-to-order environments, [it] is the percentage of times the customer-requested or acknowledged date was met by shipping complete product quantities. Syn.: measure of service, service level. See: cycle service level.

An item for reprocessing in the remanufacturing industry.

A lot-sizing technique that generates planned orders in quantities equal to the net requirements in each period. See: discrete order quantity.

Module 6
Section C: Itemized Inventory Management

Term
Mean time between failures (MTBF)

Module 6
Section C: Itemized Inventory Management

Term
Mean time for failures (MTFF)

Module 6
Section C: Itemized Inventory Management

Term
Mean time to repair (MTTR)

Module 6
Section C: Itemized Inventory Management

Term
Min-max system

Module 6
Section C: Itemized Inventory Management

Term
On-time schedule performance

Module 6
Section C: Itemized Inventory Management

Term
Order point

Module 6
Section C: Itemized Inventory Management

Term
Order point system

Module 6
Section C: Itemized Inventory Management

Term
Period order quantity

Average time for failure of a nonrepairable product (expected life) or average time to first failure of a repairable product. See: reliability.

The average time interval between failures for repairable product for a defined unit of measure (e.g., operating hours, cycles, miles). See: reliability.

A type of order point replenishment system where the minimum (min) is the order point, and the maximum (max) is the “order up to” inventory level. The order quantity is variable and is the result of the max minus available and on-order inventory. An order is recommended when the sum of the available and on-order inventory is at or below the min.

The average time that it takes to repair a product.

A set inventory level where, if the total stock on hand plus on order falls to or below that point, action is taken to replenish the stock. [It] is normally calculated as forecasted usage during the replenishment lead time plus safety stock. Syn.: reorder point, statistical order point, trigger level. See: fixed reorder quantity inventory model.

A measure (percentage) of meeting the customer’s originally negotiated delivery request date. Performance can be expressed as a percentage based on the number of orders, line items, or dollar value shipped on time.

A lot-sizing technique under which the lot size is equal to the net requirements for a given number of periods (e.g., weeks into the future). The number of periods to order is variable, each order size equalizing the holding costs and the ordering costs for the interval. See: discrete order quantity, dynamic lot sizing.

An inventory replenishment system based on the stock on hand plus on order. Syn.: statistical order point system. See: order point, reorder point, fixed reorder quantity inventory model, hybrid inventory system.

Module 6
Section C: Itemized Inventory Management

Term
Periodic replenishment

Module 6
Section C: Itemized Inventory Management

Term
Perpetual inventory record

Module 6
Section C: Itemized Inventory Management

Term
Point of sale (POS)

Module 6
Section C: Itemized Inventory Management

Term
Reorder quantity

Module 6
Section C: Itemized Inventory Management

Term
Replenishment lead time

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Section C: Itemized Inventory Management

Term
Safety data sheet (SDS)

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Section C: Itemized Inventory Management

Term
Safety lead time

Module 6
Section C: Itemized Inventory Management

Term
Sawtooth diagram

A computer record or manual document on which each inventory transaction is posted so that a current record of the inventory is maintained.

A method of aggregating requirements to place deliveries of varying quantities at evenly spaced time intervals rather than variably spaced deliveries of equal quantities.

1) In a fixed [type of this] system of inventory control, the fixed quantity that should be ordered each time the available stock (on-hand plus on-order) falls to or below the reorder point. 2) In a variable [type of this] system, the amount ordered from time period to time period varies. Syn.: replenishment order quantity.

The relief of inventory and computation of sales data at the time and place of sale, generally through the use of bar coding or magnetic media and equipment.

A document that is part of the materials information system and accompanies the product. Formerly referred to as the manufacturing safety data sheet (MSDS). The document is prepared by the manufacturer and provides information regarding the safety and chemical properties to downstream users and (if necessary) the long-term storage, handling, and disposal of the product. Among other factors, the SDS describes: the hazardous components of a product; how to treat leaks, spills, and fires; and how to treat improper human contact with the product.

The total period of time that elapses from the moment it is determined that a product should be reordered until the product is back on the shelf available for use. Syn.: reorder cycle.

A quantity-versus-time graphic representation of the order point/order quantity inventory system showing inventory being received and then used up and reordered.

An element of time added to normal lead time to protect against fluctuations in lead time so that an order can be completed before its real need date. When used, the MRP system, in offsetting for lead time, will plan both order release and order completion for earlier dates than it would otherwise. Syn.: protection time, safety time.

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Section C: Itemized Inventory Management

Term
Service-level agreement (SLA)

Module 6
Section C: Itemized Inventory Management

Term
Stockout percentage

Module 6
Section C: Itemized Inventory Management

Term
Two-bin inventory system

Module 6
Section C: Itemized Inventory Management

Term
Visual review system

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Section D: Inventory Control

Term
Advance ship notice (ASN)

Module 6
Section D: Inventory Control

Term
Blockchain

Module 6
Section D: Inventory Control

Term
Certificate of manufacture

Module 6
Section D: Inventory Control

Term
Certificate of origin

A measure of the effectiveness with which a company responds to actual demand or requirements. The stockout percentage can be a comparison of total orders containing a stockout with total orders or of line items incurring stockouts with total line items ordered during a period. One formula is stockout percentage = (1 – customer service ratio) × 100 percent. Ant.: customer service ratio.

A document that represents the terms of performance for organic support.

A simple inventory control system where the inventory reordering is based on actually looking at the amount of inventory on hand. Usually used for low-value items, such as nuts and bolts. See: two-bin inventory system.

A type of fixed-order system in which inventory is carried in two [containers]. A replenishment quantity is ordered when the first [container] (working) is empty. During the replenishment lead time, material is used from the second [container]. When the material is received, the second [container] (which contains a quantity to cover demand during lead time plus some safety stock) is refilled and the excess is put into the working [container]. At this time, stock is drawn from the first [container] until it is again exhausted. Also used loosely to describe any fixed-order system even when physical [containers] do not exist. Syn.: bin reserve system. See: visual review system.

A continuously growing list of records, called blocks, which are linked and secured using cryptography. Each block typically contains a cryptographic hash of the previous block, a timestamp, and transaction data. The data in any given block cannot be altered retroactively without the alteration of all subsequent blocks, inherently making it resistant to modification.

An electronic data interchange (EDI) notification of shipment of product.

A document attesting to a shipment’s country of origin.

A certificate that attests that the goods were manufactured in the exporter’s country. It is provided and signed by the exporter’s chamber of commerce.

Module 6
Section D: Inventory Control

Term
Cut-off control

Module 6
Section D: Inventory Control

Term
Cycle counting

Module 6
Section D: Inventory Control

Term
Electronic commerce (e-commerce)

Module 6
Section D: Inventory Control

Term
Free-on-board (FOB)

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Term
Incoterms

Module 6
Section D: Inventory Control

Term
Inventory accuracy

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Term
Inventory adjustment

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Term
Inventory shrinkage

An inventory accuracy audit technique where inventory is counted on a cyclic schedule rather than once a year. A cycle inventory count is usually taken on a regular, defined basis (often more frequently for high-value or fast-moving items and less frequently for low-value or slow-moving items). [the most effective of these] systems require the counting of a certain number of items every workday with each item counted at a prescribed frequency. The key purpose of [this] is to identify items in error, thus triggering research, identification, and elimination of the cause of the errors.

A procedure for synchronizing cycle counting and transaction processing.

A shipping term which indicates at what point respective obligations, costs, and risk involved in the delivery of goods shift from the seller to the buyer.

The use of computer and telecommunication technologies to conduct business via electronic transfer of data and documents.

When the on-hand quantity is within an allowed tolerance of the recorded balance. This important metric usually is measured as the percent of items with inventory levels that fall within tolerance. Target values usually are 95 percent to 99 percent, depending on the value of the item. For logistical operations (location management) purposes, it is sometimes measured as the number of storage locations with errors divided by the total number of storage locations.

A series of pre-defined commercial terms published by the International Chamber of Commerce relating to international commercial law. These terms do not cover property rights.

Reductions of actual quantities of items in stock, in process, or in transit. The loss may be caused by scrap, theft, deterioration, evaporation, and so forth. Sometimes referred to as shrinkage.

A change made to an inventory record to correct the balance in order to bring it in line with actual physical inventory balances. The adjustment either increases or decreases the item record on-hand balance.

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Section D: Inventory Control

Term
Lot control

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Term
Lot traceability

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Term
Obsolescence

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Section D: Inventory Control

Term
Periodic inventory

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Term
Physical inventory

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Section D: Inventory Control

Term
Recalls

Module 6
Section D: Inventory Control

Term
Record accuracy

Module 6
Section D: Inventory Control

Term
Shipper’s export declaration (SED)

The ability to identify the lot or batch number of product in terms of one or all of the following: its composition, purchased parts, manufacturing date, or shipped items. In certain regulated industries, [this] may be a legislative requirement.

A set of procedures (e.g., assigning unique batch numbers and tracking each batch) used to maintain lot integrity from raw materials from the supplier through manufacturing to consumers.

A physical inventory taken at some recurring interval (e.g., monthly, quarterly, or annual physical inventory). See: physical inventory.

1) The condition of being out of date. A loss of value occasioned by new developments that place the older property at a competitive disadvantage. A factor in depreciation. 2) A decrease in the value of an asset brought about by the development of new and more economical methods, processes, or machinery. 3) The loss of usefulness or worth of a product or facility as a result of the appearance of better or more economical products, methods, or facilities.

A step in the reverse logistics process where parts or products are returned due to a product defect or potential hazard resulting from government regulations or liability concerns.

1) The actual inventory itself. 2) The determination of inventory quantity by actual count. [It] can be taken on a continuous, periodic, or annual basis. Syn.: annual inventory count, annual physical inventory. See: periodic inventory.

An export/import document prepared by the shipper before a shipment can be exported and presented to a government authority of the country in which the shipper resides. Specifies details on the goods to be shipped, including their value, weight, and destination.

A measure of the conformity of recorded values in a bookkeeping system to the actual values; for example, the on-hand balance of an item maintained in a computer record relative to the actual on-hand balance of the items in the stockroom.

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Term

Traceability

1) The attribute allowing the ongoing location of a shipment to be determined. 2) The registering and tracking of parts, processes, and materials used in production, by lot or serial number.