

Material Handling Glossary

Accumulator Conveyor	Any conveyor designed to permit accumulation of packages, objects, or carriers. May be roller, live roller, belt, power-and-free, or chain conveyors.
AS/RS	Automated Storage and Retrieval System
Automated/Automatic Guided Vehicle	Vehicles equipped with electromagnetic, optical or other systems for guidance and employ various types of collision avoidance systems. AGVs can have reprogramming capabilities for path selection and positioning. An AGV is often referred to as a driverless vehicle because human intervention is not required to direct the AGV in automatic mode of operation.
Automated Storage/Retrieval System	A combination of equipment and controls, which handles, stores and retrieves materials with precision, accuracy and speed under a defined degree of automation. Systems vary from relatively simple, manually controlled order-picking machines operating in small storage structures to computer-controlled storage and retrieval systems, totally integrated into the manufacturing and distribution process.
Automatic Identification Systems	The application of various technologies, such as bar coding, image recognition, voice recognition and RF/MW transponders, for the purpose of data entry to a data processing system. AIS applications are characterized by data capture at the site of an event. Automatic identification systems combine machine-readable coding symbols to be read by strategically deployed code readers for purpose of automatic sorting, data handling in receiving and shipping, monitoring work in process, and verifying components.
Automatic Sortation	The electronic recognition of cartons by size or code enabling them to be sorted in groups.
Automatic Warehouse	A warehouse in which a substantial part of the receipt, storage and dispatch functions are performed without manual handling of the goods involved.
Automation	Automation is the use of computers and other technologies to control industrial machinery and processes.
Bar Code	An array of rectangular bars and spaces that are arranged in a predetermined pattern following specific rules to represent elements of data that are referred to as characters. A symbol.
Bar Code Reader	A device used to identify and decode a bar code symbol.
Bar Code Scanner	A moving beam used to identify and decode a bar code or other optical symbol.
Batch Manufacturing	The production of parts or material in discrete runs, or batches, interspersed with other production operations or runs of other parts or materials.
Batch Mode Processing	A type of processing in which information from a data collection method is not gathered immediately, but at discrete, non-continuous intervals.
Batch Picking	An operator picks one product for a group of orders at the same time; requires sortation and possible consolidation of products for the orders. Typically used when large numbers of orders contain the same SKUs.
Bed	The part of a conveyor upon which the load or carrying medium rests, rolls or slides while being conveyed.
Belt Conveyor	A continuous fabric, rubber, plastic, leather or metal belt operated over a suitable drive and tail end, and over belt idlers or slider bed for handling materials, packages or objects placed directly upon the belt.
Bi-Directional AGV	An AGV which does not have a dedicated front or back and which can automatically operate in the forward or the reverse directions.
Buffer Storage	The part of a warehouse in which back-up or reserve stock is stored awaiting transfer into active storage.
Bulk Storage	An area in the warehouse set aside for storage of multiple pallets of a given product. Storage in warehouses of any large quantity of supplies, usually in original containers. The area within a facility or warehouse devoted to the placement of large items, floor stocking of pallets and reserve material to re-supply forward picking areas.
Cantilever Rack	A rack consisting of arms cantilevered from columns. Most useful when there is need for a full clear shelf that can be loaded from the front without obstructing uprights.
Capacity, Rated	The rated or design capacity of the material handling equipment as stated by the equipment manufacturer.
Carousel, Horizontal	Carousels carry a number of storage baskets suspended at the top and bottom by a powered track system. Order picking takes place from the basket which is stopped at an operator station. Carousels are limited in height to approximately 7 to 10 ft., although greater heights can be obtained by installing additional units on mezzanine levels. Typical installations for carousel units have multiple carousels supporting a single operator station so that the operator does not have to wait on one machine to index the desired basket position. Can be manually or computer controlled with an integrated inventory control system.

Carousel, Vertical	Similar principal to Horizontal Carousel, but operates vertically with a gimbaled tray suspended between the traction chains.
Cell	A manufacturing unit consisting of two or more workstations or machines and the material transport mechanisms and storage buffers that interconnect them.
Chain Conveyor	Any conveyor in which one or more chains act as the conveying element. A British term for trolley conveyor.
Clear Overhead Height	Distance from the floor to the lowest overhead obstruction (e.g., ceiling truss, sprinkler heads, heating pipes, etc.).
Clear Stacking Height	(Working Head Room) The distance from the floor to a point usually a least 18 in. below the lowest overhead obstruction. The clearance required between the top of the high load and the lowest overhead obstruction will vary depending upon local fire codes.
Cluster Picking	An operator picks to containers for multiple orders and will pick a product(s) for each order during a single pass through the pick area. Typically used when the total cube of multiple orders can be manually transported.
Computer-Aided Design	The use of an interactive-terminal workstation, usually with graphics capability, to automate the design of products and projects. CAD includes functions such as drafting.
Computer Simulation	The creation of a mathematical model, representing the operation under study, for purposes of testing the implications of possible operating scenarios without having to implement them. See Simulation.
Control System	A hardware/software system that has as it's primary function the collection and analysis of feedback from a given set of functions for the purpose of controlling these function: Control may be implemented by monitoring and/or systematically modifying parameters or policies used in those functions, or by preparing control reports that initiate useful action with respect to significant deviations and expectations.
Controller	<ul style="list-style-type: none"> • 1. A device or group of devices which serves to govern in some predetermined manner the power delivered to a motor to which it is connected. • 2. An electromechanical device or assembly of devices for starting, stopping, accelerating, decelerating a conveyor drive, or which serves to govern in some predetermined manner the electric power delivered to a drive.
Converging Section	A section of roller or wheel conveyor where two conveyors meet and merge into one conveyor.
Conveyor	A horizontal, inclined or vertical device used to move or transport bulk materials, packages or objects in a path predetermined by design of the device and having points of loading and discharge fixed, or selective; included are vertical reciprocating and inclined reciprocating conveyor.
Conveyor Belt	A belt used to carry materials and transmit the power required to move the load being conveyed.
Conveyor Chain	A chain used to drive the roller in a roller conveyor.
Conveyor Guard	A structure mounted below the conveyor path to protect personnel and equipment below from falling material or packages.
Conveyor Width	In unit handling conveyor, the dimensions inside-to-inside of frame rails.
Crab	Movement of an AGV in the lateral (sideways) direction, from 0° -90°.
Crane	A machine for lifting and lowering a load and moving it horizontally, with the housing mechanism an integral part of the machine.
Cross-Belt Sorter	High-speed sortation conveyor for small items, to 18 in. by 18 in., that powers the belt to transfer each item into a container or chute.
Cube	<ul style="list-style-type: none"> • 1. The product by length by width by depth. • 2. The total area inside a truck trailer. The length times the width times the height of the trailer is the cube space. • 3. The true storage capacity of a building: L x W x H.
Cube Utilization	The ratio of space occupied with material to total cubic space available, usually expressed as a percentage.
Curved Belt Conveyor	A unit load belt conveyor usually operating horizontally through 90° or 180° turn.
Cycle Time	<ul style="list-style-type: none"> • 1. Time for a material handling machine to perform one cycle (pick, store, move). • 2. The total time for a process from start to completion.
Decision Point	Branch(es) in the guide path or conveyor path (i.e., intersections, spurs).
Dedicated Aisles	An aisle in a warehouse serving only one function. This aisle can be for order selection, product storage, or both.

Dedicated Storage	A storage policy (usually contrasted with random storage) in which a warehouse location is dedicated to house a specific SKU or SKUs.
Discrete Picking	An operator picks one order, one product at a time. Typically used when order size, distance traveled, and number of total SKUs is small.
Distribution	The broad range of activities concerned with efficient movements of finished products from the end of the production line or receiving dock, to the consumer; in some cases it may include the movement of raw materials from the source of the supply to the beginning of the production line. These activities include transportation, warehousing, material handling, protective packaging, inventory control, order processing, market and sales forecasting, customer service, and attendant management information systems.
Distribution Center	Intermediate warehouse(s) where products from different sources are assembled for shipment and distribution to specific customer locations.
Dock	A platform designed to align the floor of a building with the bed of a truck trailer.
Dock-To-Stock Time	The elapsed time measured for an inbound item from trailer docking to product put away.
Double-Deep Racks	Usually two rows of selective racks, one placed behind the other, on which pallets may be placed two deep by a double-deep reach truck. Fifty percent of all loads are immediately accessible and, in the worst case, it is necessary to remove the front pallet on any level to have access to the one immediately behind it. Applies to a storage requirement for many pallets of few SKUs.
Double-Deep AS/RS	Similar to Double-Deep racks with the pallets being stored and retrieved by an Automated Storage/Retrieval Machine.
Dwell Time	The time spent at the bin front or storage slot or any equipment waiting for a material handling transaction.
EDI	Electronic Data Interchange. The direct communication of data between the computers of two companies or institutions.
End-Of-Aisle Picking System	High-density mechanized binnable parts systems such as mini load or carousel units provide dense storage and maximize the use of available storage height. These systems are particularly useful when high transaction rates and large inventory levels result in unacceptably high travel times for man-to-part order picking methods. By delivering the part to the order picker, operator travel time is eliminated. These systems are also effective in situations requiring additional packaging, checking, or processing which would be impractical to provide on an order-picking industrial truck.
Extendable Conveyor	Used for packaged materials, objects or units. Conveyor may be one of several types including roller, wheel, or belt conveyors. Is constructed so the conveyor may be extended or shortened within limits to suit operation needs.
FIFO	First-In, First-Out
First-In, First-Out	An inventory valuation method, in which costs of material are transferred in chronological order.
Fixed Beam Bar Code Reader/Scanner	A bar code reader that uses a stationary beam and relies on the relative motion of an item to be read as it passes before the reader. Typically called Fixed Bar Code Reader.
Flat Belt Conveyor	A type of belt conveyor in which the carrying run of the conveyor belt is supported by flat belt idlers or by a flat, slider surface.
Flexible Manufacturing System (FMS)	An arrangement of machine tools, capable of stand alone operation that are interconnected by a work piece transport system and controlled by a central computer. Often consists of an AGV, conveyor or AS/RS delivering work pieces (machine tool pallets) and tools to machines. The transport subsystem, possibly including one or more robots, carries work to the machines or pallets or other interface units so that accurate registration is rapid and automatic. FMS may have a variety of parts being processed at one time.
Floor Loading Trucks	<ul style="list-style-type: none"> • 1. A technique used for packing a truck in which pallets and stretch film are not used. • 2. Hand carrying (conveyors are frequently used) a load on a truck and shipping the load by leaving it on the trailer floor unprotected.
Floor Loading	Measure of the load bearing capacity of a (warehouse) floor, defined in both area (psf) and point loading (psi) for storage rack and machines.
Floor Stacking	The stacking of unit loads directly on top of each other with the floor as a base.
Flow Analysis	The detailed analysis of the flow of either workers or material, from place to and/or from operation to operation. The examination seeks reasons for determining how the progressive travel or the operation may be changed or modified to achieve the utmost economies in both time and material.
Flow Process Chart	A graphic, symbolic representation of the work performed, or to be performed, on a product as it passes through some or all of the stages in the process.
Flow Rack	<ul style="list-style-type: none"> • 1. A technique used for packing a truck in which pallets and stretch film are not used. • 2. Hand carrying (conveyors are frequently used) a load on a truck and shipping the load by leaving it on the trailer floor unprotected.
Guidepath	Path over which an AGV travels. Often such a path contains a guidewire, tape or painted route. Required for communication with the guidance system.

I/O	Input/Output
Input/Output	<ul style="list-style-type: none"> • 1. All activities used to move data in and out of a processor computer. • 2. Also known as Pickup/Deposit station.
Inventory Control	In a complete inventory management system, it includes stock levels, stock locations, reorder points, balance-on-hand, item physical description, rotation, etc.
Inventory Turnover Ratio	Measures the return obtained from inventory investments and provides an indication of the movement of materials. Usually expressed as the ratio of annual sales to average inventory investment on hand.
Last-In, First-Out	An inventory valuation method, in which costs are transferred in reverse chronological order.
Layout	<ul style="list-style-type: none"> • 1. A floor plan showing assignment of gross space for storage operations and supporting functions. • 2. A graphical representation to scale of a facility, usually in two dimensions, but sometimes in three.
LIFO	Last-In, First-Out
Load Capacity	The maximum total weight that can be handled by material handling equipment without sacrifice of any of the applicable published specifications of the equipment.
Load Height	Maximum overall dimension from the bottom of a pallet or load module to the top.
Load Length	Maximum overall dimension of a pallet or load module, measured in the direction perpendicular to the length of the aisle for conventional fork truck handling. Automated systems may store loads with length in parallel to the aisle length. Always note the standard in a warehouse. Load length may exceed the pallet dimension with product overhang.
Load Width	Maximum overall dimension of a pallet or load module and load in the direction parallel to an aisle for conventional fork truck handling, or perpendicular to the aisle for automated systems. Always check.
Loading Dock Platform	An area of a warehouse or other facility where merchandise is received or shipped. The height of the structure is usually designed to conform to the truck bed height on the truck side of a facility, and to rail car bed height at a rail dock.
Logistics	The science of planning and carrying out the movement and maintenance of operations. Deals with the design and development, acquisition, storage, movement, distribution, maintenance and disposition of material.
Machine-Readable	That characteristic of printed information that permits the direct transfer of information from a printed surface to a data processing system without operator intervention. Bar coding and optical character recognition are technologies of machine reading, as are imaging cameras.
Manifest	A document that captures information on the freight carrier, class of shipment, shipper, recipient, and other information pertinent to the shipment.
Manufacturing Cell	A collection of machines, grouped together with material handling systems for processing a family of parts or assembly.
Material(s) Handling	<ul style="list-style-type: none"> • 1. An aspect of materials management relating specifically to the physical transfer of materials. • 2. The movement of materials (raw materials, scrap, semi-finished and finished) to, through and from productive processes; in warehouses and storage; and in receiving and shipping areas.
Materials Control	The function of maintaining a constantly available supply of raw materials, purchased parts, and supplies needed for production - including requisitioning materials in economic quantities at their proper time; also includes receipts, storage, protection, etc.
Merging	A process of bringing together various parts of an order, which have been selected in different picking areas (zones). Also known as consolidation.
Mezzanine	A platform supported with structural members, used for storage or operations; constructed at a height which permits movement of people and equipment below.
Mini Load AS/RS	A storage and retrieval concept where materials are accessed by automatically bringing storage containers to an operator. The mini load storage/retrieval machine can be fully automated by using a dedicated computer.
Monorail	Describes automated and mechanical transport systems. An elevated conveying system consisting of a rail and load-transporting carrier. The rails typically enclose chain, driven by a motor with mechanisms to engage and transport carriers. Automated Electrified Monorail (AEM) and Electrified Monorail Systems (EMS) provide a supporting rail with continuous electrical feeds. The carriers and off-board controls provide responsive flexibility of pathing and load-handling including automated loading and unloading.
MTBF	<ul style="list-style-type: none"> • 1. Mean Time Between Failures. • 2. The average time between two failures and therefore is a measure of the trouble free time

MTTR	<ul style="list-style-type: none"> • 1. Mean Time To Repair. • 2. The average time to carry out a repair.
Narrow Aisle Truck	A self-loading truck primarily intended for right angle stacking in aisles narrower than those normally required by counterbalanced trucks of the same capacity. Narrow-aisle type equipment is represented by three basic categories of vehicle: straddle, reach, and side-loading trucks.
Non-Value Added Activity	Category or process task that does not add value nor move the product closer to the customer.
Occupied Slot	A storage location occupied by a unit load pallet or mini load tote/tray.
Order Allocation	A procedure used when insufficient inventory is available to ship all in-house orders. Management allocates the merchandise through a priority system.
Order Batch	An accumulation of orders released in a batch for order picking.
Order Picking	<ul style="list-style-type: none"> • 1. Selection and gathering of items for a customer. • 2. Selection of less-than-unit-load quantities of material for individual orders.
Over-And-Under Conveyor	Two endless chains or other linkage between which carriers are mounted and controlled so that the carriers remain in an upright and horizontal position throughout the complete cycle of the conveyor.
Pallet	A horizontal platform device used as a base for assembling, storing, and handling materials and/or products in a unit load. Usually made of wood, this platform supports the load when it is picked up by a forklift or pallet jack.
Pallet Storage Rack	A structure composed of two or more upright frames, load beams, and space/connectors, for the purpose of supporting palletized materials in storage.
Pallet Height	The total vertical dimension between the outer surfaces of the top and bottom decks.
Pallet Length	Horizontal dimension of the pallet in direction front-to-back stringer boards.
Pallet Loader	An automatic or semiautomatic machine consisting of synchronized conveyors and mechanisms to receive objects from a conveyor(s) and place them onto pallets according to prearranged pattern.
Pallet Rack Shelving	Standard pallet rack can be equipped with shelf panel inserts so that pallet rack can be used for storing binnable, rackable or palletized materials as needs change.
Pallet Storage Rack	A structure composed of two or more upright frames, beams, and connectors for the purpose of supporting palletized materials in storage. Among the common methods of assembly are welded, bolted, or clipped.
Pallet Width	Horizontal dimension perpendicular to stringers (pallet length).
Palletization	<ul style="list-style-type: none"> • 1. The building of a unit load on a pallet to facilitate storing and handling merchandise. • 2. The placing of material on a pallet to facilitate handling with a fork truck.
Palletizer/Depalletizer	Palletizer is an automatic or semiautomatic machine, consisting of synchronized conveyor(s) and mechanisms to receive cartons from a conveyor(s) and place them onto pallet according to a prearranged pattern. The depalletizer is an automatic machine consisting of synchronized conveyors and mechanisms to disassemble a pallet load and discharge single cartons.
Payload	See Capacity, Rated.
Pick Aisle	A pick aisle is any aisle in which an order selector can pick orders.
Pick Cart	A manually propelled order picking device with wheels, designed to hold small packages and tote boxes. May be powered.
Pick Time	The amount of time at a pick face required by an order picker to select material, place it into a picking container, completing the transaction by marking a picking list or entering task complete into a RF terminal or other device. Does not include travel time.
Pick-To-Light	A computer directed picking system using display technology to identify the bin and quantity of a line item to be picked. Generally applied to carousels, flow rack, and shelvin storage systems.
Pickup & Delivery (P&D) Station	A location at which a load entering or leaving storage is supported in a manner suitable for handling by the S/R machine, AGV, AEM or EMS. Also known as pickup & discharge station, transfer station, I/O station, feed/discharge station.
Piece	Unit that must be physically picked. See Unit of Issue (U/I).

Positioning Accuracy	The accuracy measured in inches or mm to which an automated vehicle or load on conveyor can stop at a given point (also called stopping accuracy). Measured in horizontal and vertical directions.
Power-And-Free Conveyor	A conveying system where a load is carried on a trolley or trolleys which are mechanically propelled through part of the system and gravity or manually propelled through another part. Provides a mean of switching the free trolleys into and out of adjacent lines. The spur of subsidiary lines may or not be powered. See Monorail.
Power Conveyor	Any conveyor which requires power to move its load. Powered pallet and package conveyor are general classifications, using roller, chain, and belt conveying surfaces.
Productivity	The ratio of output to total inputs as pallets or picks per hour. Amount of work and rate of work attained individually and collectively by the work force.
PTL	<ul style="list-style-type: none"> • 1. Pick-To-Light • 2. Put-To-Light
Put-To-Light	A sorting technique that uses light displays to indicate a container or bin for an order. The operator places line items of the order into the bin matching quantity on display.
Queue	A line formed by loads or items while waiting for processing.
Queuing	Occurs when one or more vehicles or loads, held up behind another vehicle or load, are unable to pass and must wait for the vehicle in front to move on.
Rack-Supported Structure	A complete and independent load storage system in which the storage rack is the basic structural system.
Radio Frequency (RF) Transponder	A technology of automatic identification systems that operates on the same principle as security tags placed on clothing. Passive devices are commercially available that will encode and transmit information back to a computer system when in proximity of the RF transponder.
Radio Frequency (RF) Terminals	<ul style="list-style-type: none"> • 1. Used in conjunction with a Warehouse Management System (WMS) to direct a worker to perform a pick, store or cycle inventory task. • 2. Communicates with the WMS via low power radio frequency transmissions. • 3. Is real-time link between warehouse tasks and inventory control system
Rail	<ul style="list-style-type: none"> • 1. Longitudinal members in a conveyor frame • 2. Supporting surface under the wheels or rollers of a chain conveyor • 3. Supporting track for equipment mounted on wheels such as storage/retrieval machine
Random Storage (Floating Slots)	Any SKU may be placed in any unoccupied storage slot of adequate size. Enables strict control of FIFO inventory. Increases storage density above fixed location storage locatc methods
Rated Capacity	See Capacity, Rated.
Rated Load	See Load Capacity.
Read Area	Area covered by a scanner. Bar codes must reliably pass through the read area with the length of the symbol parallel to the scan plane.
Real Time	Computer communicates continuously with a device while the operation is performed.
Real Time Processing	The immediate and continuous processing of information gathered from a data collection method.
Receiving	The function of accepting, recording, and reporting material into a facility.
Receiving Area	Area used for checking, inspecting, and preparing incoming material (both new procurement and returns), prior to its delivery to storage areas.
Replenishment	The function of transferring stock from a reserve storage area, or directly from shipping, to a primary picking location which has become empty.
Roller Conveyor	A series of rollers supported in a frame over which objects are advanced manually, by gravity, or by power. The live roller conveyor is similar to the gravity roller, except that power is applied to some or all of the rollers to propel the loads. Roller conveyors can perform accumulation functions that belt conveyors cannot (e.g., the accumulation of tot boxes and cartons).
Safety Stock	Quantity of an inventory item carried in stores or stock as a hedge against stockout resulting from above-average or unexpected demand during procurement lead-time. Also known as minimum or protective inventory, buffer inventory, cushion or reserve.
Scan	The electronic, optical or magnetic search for a symbol that is to be optically recognized.
Selective Rack	Pallet rack that is one load (single) pallet deep. Implies all loads are equally accessible from the (fork truck) aisle. Contrast with Double-Deep Racks.

Shelving	Used for economical storage of small hand-stackable items that are not suited to mechanized handling and storage due to their handling characteristics, activity, or quantity.
Shipping Dock	An area reserved for the loading of delivery vehicles.
Shrinkage	An inventory adjustment because of pilferage, over or under shipment or receiving errors.
Shuttle	The load-supporting mechanism on the carriage that provides for movement of loads into or out of storage locations and P&D stations.
Single Deep Storage	Loads stored one deep in racking on each side of the aisle.
Sizing Station	A station where the profile of loads are automatically checked to ensure they are oriented correctly and are within the proper dimensions for storage. May incorporate a weight scale to capture load weight.
SKU	Stock Keeping Unit
Slider Bed	A stationary surface on which slides the carrying portion of a belt conveyor.
Sliding Shoe Sorters	A high speed sortation technology that diverts packages or objects into lanes or chutes. Automatically handles a variety of load lengths.
Sortation	Generic act of organizing items into a higher level kit or order. Can be manual or automated.
Sorting Conveyor	A conveyor which receives mixed unit loads or packages and discharges them to segregated spaces or conveyors in response to an automatic dispatch control. Automatic identification systems are capable of sorting products by shape, color or size.
Spur	A path off the main route. A continuous spur is a looped path that rejoins the main path.
SRM	Storage/Retrieval Machine
Staging Areas	Areas between different warehouse operations where goods are temporarily stored awaiting processing by the next operation.
Stock Keeping Unit	Represents one unique inventory item. Example: one style of skirt in six colors and five collar sizes would be 30 different SKUs
Storage/Retrieval Machine	A machine operating on mounted rail(s) used for transferring a load from a storage compartment to a P&D station to a storage compartment. The SRM is capable of moving a load both vertically and parallel with the aisle and laterally placing the load in a storage location. Common types of SRM are mini load and unit load. Usually computer-controlled, used for rapid storage and retrieval of merchandise.
Stringer	The spacing boards of a pallet, normally 2 in. by 4 in. in size and two to three in number. Top and bottom boards are fastened to the stringers. Coincide with length dimension of pallet.
System Configuration	An iterative design process consisting of the evaluation of the factors affecting products and production tasks, selection of a design concept based on these factors, and evaluation of the performance of the selected concept. Following the results of the evaluation, a system can be refined and reevaluated, or discarded.
Systems Integrator	A vendor or consultant hired to provide or sub-contract for all equipment/hardware and software needed for an installation.
Terminal	Any device into which an operator enters or receives information from a computer.
Throughput	<ul style="list-style-type: none"> • 1. The amount of merchandise processed through a system or warehouse in a given time. This is referred to in cases, lines or tons of product per hour/day/week • 2. The rate of movement of material through a system
Travel Time	The time for moving material, industrial truck or a person from one location to another. Often used as the total travel time in a larger operation, as order fulfillment.
Tilt-Tray Sorters	A high-speed, continuous-loop sortation conveyor using a technique of tilting a tray at a chute to slide the object into the chutes. Used for consolidating line items of an order.
U/I	Unit of Issue
UM	Unit of Measure
Unit of Issue	The picking quantity (e.g. each, box, bag, etc.)
Unit of Measure	The unit of measure (i.e., weight, length, volume)
Value-Added Activity	<ul style="list-style-type: none"> • 1. Any change to a product to make it more valuable to the end customer • 2. Any activity that actually makes money for the manufacturer • 3. Any change to the product that the customer is willing to pay for

Very Narrow Aisle (VNA) Fork Trucks	Generic category of side-loading fork trucks, using turret and other mechanisms to store and retrieve (pallet) unit loads.
Warehouse Management System	A computer-based inventory management system for material in the warehouse. Uses RF and computer terminals to guide and support receiving, storage, picking, cycle inventory, and shipping operations. Improves inventory accuracy, productivity and customer service.
Wave Picking	An operator picks one order one product at a time for a group of orders. Typically used when orders are released to be picked during a specific time period.
Weigh Check Station	A weigh scale in line with conveyor that weighs a passing load and checks that the weight is within acceptable limits. Typically used in packing and shipping systems as a quality check station to detect shortages and overages.
WIP	Work-In-Progress
WMS	Warehouse Management System
Work-In-Progress	Material that is in a manufacturing or assembly classification between raw material and finished goods.
Zone Batch Picking	An operator is assigned a zone and picks a part of one or more orders, depending on what products are stored in the zone.
Zone Batch Wave Picking	An operator is assigned a zone and picks all line for orders stocked in the zone, picking for more than one order at a time and for multiple scheduling periods during a shift.
Zone Picking	Picking is organized into zones (i.e., sections of flow rack or shelving) with one operator per zone and picking to all orders. Typically used for high speed picking for limited SKUs is needed.
Zone Wave Picking	An operator is assigned a zone and picks all products for all orders stocked in the zone during a specific time period.