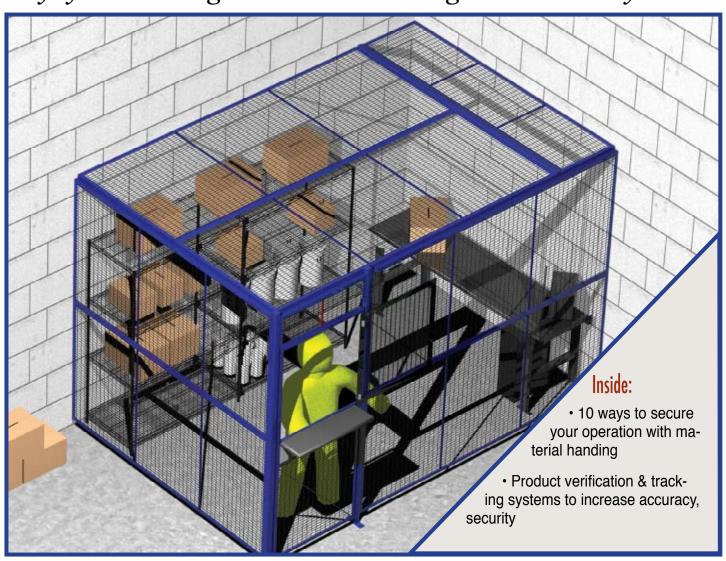
10 Ways to use Material Handling to Increase Security

Security is more than guards and cameras—it's about the ways you store, organize, track, and segment inventory





The way you store it is the way you secure it

Material handling is a particularly effective defense against pilferage, theft and incidental product damage...

(1) Store the most valuable, highest risk inventory & tools in secure areas

Inventory: It's common sense to store your most desirable inventory more securely than the rest. Store at-risk, high-value inventory away from the rest in wire security cages, protected pallet racks, security shelving, or lockable rooms. Even if it must be stored with less desirable items, it can be segmented into more secure media within the same space. If a stored item is particularly important to your operation, especially valuable, or highly sought after, it's worth storing in a more secure location.

If potential thieves might treat it differently, so should you.

Security and the high-value tool:

Tools are typically kept for long periods of time compared to regular components and inventory, so security storage for them is different. Secure tool cribs that incorporate bins, shelving, partitions, racks, and defined access processes can provide low-



cost protection. Tools in workstations should also be secured. Use lockable workbenches, storage cabinets, simple padlocks or lockers. Workers who own their own tools should be provided lockable solutions.

Securing work cells: Erect

shelving and racks to form a barrier that restricts entry into vital work cells or staging areas for valuable items or processes. You can more easily control access when cells involving high-security items are designed with security in mind.

(2) Secure palletized loads, even when stored in racks

Palletized loads are difficult to protect

because they're often stored in hard-to-monitor rack aisles. You might consider something on the third rack level safer than something on the floor—and it is, to a point. Racked pallets *are* safer, but not necessarily secure. A determined thief can easily reach a pallet with a ladder or forklift with little risk. A picker or restocker can quickly take extra items when picking legitimate orders from pallets (elevated or on the floor). Making the rack secure helps reduce opportunities for pilferers. Especially for

pallets of high value inventory stored on the floor, it's important to restrict access either to the bay or the aisle entirely.

Rack caging is a simple way to restrict access and enhance safety.



Racks can be secured with wire mesh panels that can be outfitted with lockable doors for access at the ground level. Besides security, this method can enhance safety by preventing product spillage.

(3) Tightly control dock door access

Dock doors are a frequent point of theft. Thieves use them to hand off stolen items to accomplices or hide them for later pick-up. You should control who, how, and when dock doors are accessed. Utilize expandable security gates, highspeed doors, or other barriers to help control access to dock doors. Leaving doors

> needlessly open is an invitation to thieves. You can secure your

dock doors and still comply with fire & safety codes. Security gates are excellent for times you want to leave the dock door open, but don't want to obstruct visibility or air flow. They can be quickly opened or closed without using a powered door mechanism.

For prices, tips, and tools, visit: www.cisco-eagle.com/security

Secure storage helps keep honest employees honest by removing temptation

Trackable, organized inventory storage is more important than ever because so much warehouse or factory based theft originates with employees, contractors, or service providers. In a University of Florida study, security managers attribute 48% of commercial facility theft to employees. Throw in contractors, drivers, and other service providers, and it skyrockets. Anyone who has access to your warehouse may have access to high-cost items that need protection.

Proper storage of high-value inventory, tools, components and equipment provides a persistent security upgrade

The more organized your facility is, the harder it is to steal from you. With proper layout, tracking systems, and equipment, your material handling operation can reduce risks, making your job easier and the job of thieves harder. Combined with

security best practices such as surveillance, careful hiring, and a strong company culture of honesty, material handling can enhance security at any industrial operation. You should trust your employees, but also protect your business with security-based storage procedures.



Locking things at this critical time eliminates an easily-exploited security hole.

Restrict access to shipping and receiving areas. Confusion and opportunity meet at the dock to create a point of great vulnerability.

let him loiter; provide a lounge area away from inventory and loading docks.

(5) Enhance security with automated material handling systems

Automated material handling systems such as carousels, sortation systems,

and ASRS can provide security benefits as well as faster throughput, better organization, and higher storage density. As you reduce human handling and increase picking accuracy, you reduce pilferage opportunities.

Carousels increase order picking throughput over traditional methods. They also keep unauthorized hands off the inventory and offer superior tracking information on what's in, what's out, and who took it. Knowing what you have, where it is supposed to be, and who accessed it helps

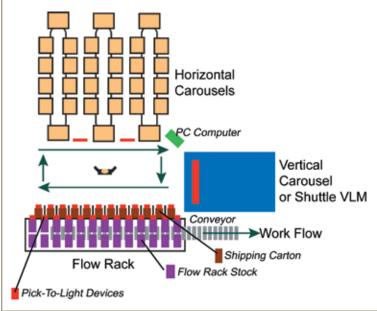
you detect and deter theft. Automated systems don't make sense for every operation, but when they do, the security advantages are a great side benefit.

(4) Secure valuable inventory quickly after receiving, prior to shipment

Pilferers know the best times to steal are directly before shipment or after receiving.

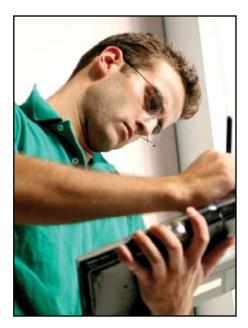
In the receiving process, It's important to quickly receive products into inventory to reduce the window of opportunity. Utilize lockable security cabinets, cages, and carts to quickly secure incoming product so it isn't an easy target. This works even in a cross-docking operation.

Outgoing shipments are easy prey because they're often placed at dock doors unmonitored after they've been sealed. Use a security cage, lockable carts, or other confinement media to guard packages until they ship.



Above: carousel system combined with flow racks illustrates the security advantage of automation. Fewer workers have access to inventory, in fewer "blind" spots than they might in a bin picking or rack picking operation. Points of access are controlled.

Be sure everyone in the area is *supposed* to be there. It's all about access; you must control who has it and who doesn't. If a trucker isn't involved in unloading, don't



Storage methods, layout, and WMS automation can all help you execute cycle counts and irregular inventory monitoring that helps detect and deter thieves.

(6) Lay out your plant with security considerations in mind

Most employees are honest, but internal pilferage is more common than outside theft because dishonest workers understand the rhythms of the workday and know the security holes. Facility layout can reduce those opportunities.

Separate the shipping docks from employee parking. This makes it difficult to remove inventory and hide it in cars, trash bins, or elsewhere for later pick-up. This is ideally done at the plant layout stage, but if it wasn't, fence off the parking lot and restrict access to it.

Lock dock doors when not in use, or using security gates if they must remain open. Optimally, only one door should be open at a time, but that isn't possible for many operations. During shipping & receiving, doors are usually monitored only as long as it takes to get things in and out. If fire regulations require more than one open door, use exit bars that set off an alarm.

Control visitor access to storage areas. Whiled being unloaded or loaded, drivers shouldn't have quick access to your inventory. Restrooms, coffee pots and breakrooms are often placed so that drivers can walk free through an entire warehouse. Lay out your facility so visitors can access these areas without access to inventory.

(7) Utilize cycle counts, irregular monitoring to detect & deter pilferage

It's impossible to stop a determined thief—especially one who works in your organization. Sometimes, you just can't.

The game becomes one of how fast a problem is detected. Spot inventory checks or full fledged cycle counting will tip you off to vanishing inventory earlier so that less damage is done and you can focus on preventing future theft. A robust WMS system and keenly-organized storage can help make the counting process faster and easier, delivering obvious inventory accuracy advantages as well as security benefits.

A product verification system (see back cover) can be very useful in tracking product throughout your system.

(8) Separate staging areas from loading & shipping docks

Staging areas are a fertile area for pilferage. When they are close to docks, a thief can easily put something into a docked truck. Staging areas are sometimes lightly staffed or not staffed at all for long periods of time. Put a physical wall or a long distance between these two areas. Consider allowing only designated personnel to stage, and others to load, with a process separation that makes it difficult to cross the line.

(9) Secure inventory "where it sits" during receiving operations

Cargo is at the greatest risk when it's being loaded and unloaded. If it is high in a rack system, locked into a security cage, sitting in bins with lots of pickers around, or snug inside a carousel, access isn't as easy. But on the receiving dock, it's vulnerable. It can be carted off while a driver's attention is diverted. "Short" orders can be loaded, or loose cargo can be concealed for later removal. This time frame is particularly chaotic; people are concerned with getting the truck unloaded and away from

the dock, not with security. Problems arise when products are at the dock, or ready to ship, but not out the door yet. Utilize cages or lockable security carts to contain and limit access. If it is palletized, re-shrinkwrap it to make it more difficult to remove items, or move it into more secure storage.

(10) Erect a barrier between shipping and receiving doors

If your receiving dock and shipping dock are too close together and there is no barrier between them, you've made the pilferer's job easy. He can take things from one truck and put them into another in the blink of an eye. The best situation is to not have these doors next to each other. If your shipping and receiving doors adjoin, erect a barrier between them. Many inexpensive fencing and partition solutions are available to segment these areas off.

Security services & hardware

- · Wire partitions & cages
- · Barriers and rails
- Security cabinets, carts & lockers
- Automated storage systems
- Folding security gates
- Rack & shelving enclosures
- Slotting and inventory systems
- WMS integration

Want assistance? Contact us for help with secure storage equipment and systems.



Utilize Cisco-Eagle Product Verification Systems to improve security, accuracy and customer service in your distribution operation

Do you know where every product in your operation is, every minute of every day?

Can you find out if you need to? If it's in a carton, wouldn't you like to know if it's the right item and quantity? Wouldn't you like to know these things without manual interference?

Cisco-Eagle's Product Verification System incorporates leading-edge technologies to achieve high levels of accuracy, safety, and security in order fulfillment and supply chain operations. These modular, pre-engineered systems function "off the shelf" or are ideal for customized applications. Systems can consist of barcode scanners, RFID readers, advanced vision systems, in-motion weighing & dimensioning, application software, controls and host interface. This level of control helps you close the loop on security, from receiving to shipping, and even after.

Typical System Operation

Prior to cases arriving at the *Product* Verification SystemTM, data is obtained from the warehouse management system (WMS). Based on that data, it anticipates specific characteristics for a case and its contents. An infeed conveyor* creates



a gap so cases can enter the system individually. The system confirms information such as weight, dimension, data from a barcode and/or RFID tags, or data from vision systems. Based on the data, the case is accepted or rejected, and a number of exception process steps can occur based on your needs.

Modularity Delivers Results

Solutions can be deployed as single or multiple-module systems, based on data collection options, analysis, and process requirements to fully meet your



security, safety, and accuracy needs. Example: Our typical high-speed, modular dimensioning system measures products (length, width, height, and volume) on the fly and adapts easily to existing conveyors. If required, it can be combined with barcode scanners and an in-motion scale to capture carton size and weight.

Knowledge is security

It's smart to deal with errors and exceptions before they move downstream, where costs increase.



It's as much a customer service issue as it is a security one. And it isn't as costly as the errors it prevents. These kinds of systems can provide an accurate audit trail for traffic flowing through your supply chain. Case data and operator actions are easily retrieved for viewing shipment history.

*Hytrol E24, 24vdc powered roller conveyor. These are simple modular units that operate quietly, efficiently, and safely. Plug and play controls reduce installation and maintenance to a minimum. Built in zero pressure, dynamic zone accumulation control adjusts for varying carton lengths, producing the highest throughput available while managing product gap.

Typical System Benefits

- · Increase plant security
- · Satisfy compliance regulations
- Reduce customer risk
- Reduce order fulfillment errors
- Identify problematic process areas
- Increase order accuracy
- · Increase customer satisfaction
- Increase supply chain efficiency
- · Increase profitability

Let's talk security

For assistance, contact us today. We can help you make your facility more secure, more agile, more accurate. We can give you more control.



We Provide Comprehensive Life Cycle Services

Consulting, process definition and design Application engineering, controls and design services Equipment and service sales Implementation engineering, controls, and integration

Service and maintenance