



## “Certified” Best Practices

**WERC’s senior auditor picks top processes, procedures, practices**

WERC’s unique Warehouse Assessment and Certification Program is the first such program designed to “assess an individual warehouse facility’s capabilities and performance of core warehousing functions.” It is historic in that not only have warehouse facilities throughout the U.S. sought certification, but also those located in Europe and the Americas have been subjects of the on-site, two-day physical assessment by a third-party independent auditor.



WERC’s senior auditor, **Steve Murray**, who has conducted the vast majority of the on-site warehouse facility inspections and process assessments, stated, “As I have traveled the world performing assessments associated with the WERC Warehouse Assessment and Certification Program, I have found a variety of process actions which I consider to be examples of Best Practices in Warehousing.”

He concedes that “Best” Practice is situational, as what works in one situation may not apply or be appropriate in another. However, he believes through experience and observation that most of the best practices noted are “quite universal.”

### Receive, store, ship

While the facilities Murray has visited span a variety of industries across the U.S., the Americas and Europe, he has not yet been to any in the Asia Pacific region. Nevertheless, he insists that in his experience there would show no significant difference in general warehouse

operations and in how they compare to the practices as outlined in *WERC's Warehousing and Fulfillment Process Benchmark and Best Practices Guide* (see sidebar, page 7).

"Essentially, we all do three things: receive things; store things; and ship things," he maintains. "Where the 'things' come from, how they come, how they are packaged and unitized, how they should be stored and how they should be selected, packaged and shipped will vary depending on the industry, the product and local business requirements, but the same three processes apply throughout."

Before starting, Murray qualifies, "Some processes may require the use of a digital device, such as RF scanners. But just having a device doesn't make for a best practice." He explains: I have found that there are many instances where these devices are not used to their capabilities.

In addition, many will benefit from using voice-directed picking, but again Murray has seen this technology misused causing lower pick rates than might be possible." The following are Steve Murray's prime examples of the Best Practices in Warehousing, as he observed conducting many WERC's Certification assessments.

## OVERVIEW: Receiving

In today's constantly connected digital age, it is possible for receiving dock personnel to know in advance what will be delivered day-to-day, even hour-by-hour. "Not just that there will be a delivery, but what the delivery consists of down to the SKU level with quantities and even serial numbers, lot numbers and date specific information if required," he explains.

This should be available via an Advanced Shipment Notice (ASN) advisory, which could be a formal EDI message or something as simple as a structured email. IT systems today, he maintains, can decode and use this information during the receiving process to verify and record inbound shipments with little clerical effort.

Identifying products in many facilities Murray has visited, necessitates generating an internal "License Plate" for pallets and/or

labels for cartons. "Commonplace yes; best practice no," he insists.

There are international and industry standards for label formats and content such as those promoted by GS1. "Best practice organizations have incorporated these standards in their operations," he assures. For example, he has visited facilities using standardized and serialized labels (reference GS1-128 SSCC) and ASN data products and witnessed operations off-loading shipments and immediately putting them away with little additional effort--no clerical data entry beyond a scan, no printing and applying of internal labels.

There will continue to be situations where, for example, a floor-loaded container needs to be unitized (palletized) for storage and an LPN generated, but you should look at how to limit any steps that do not create value, he recommends. During one assessment at a fashion and apparel operation Murray observed that they had serialized labels for every carton coming from the supplier, all linked to the inbound ASN.

Putaway in best practice facilities eliminates the need for an associate on a forklift to "troll" the aisles looking for a place to store a pallet or carton. "Systems can dynamically determine the best location based on SKU characteristics, velocity of movement, available location capacity and other rules and immediately direct the operator to the selected location using dynamic storage algorithms and directed putaway," he explains. "Operators then simply scan to confirm placement into that location."

## OVERVIEW: Storing

Product is stored in a variety of types of "storage media" from open yards to floor bays, racks, shelving, even some automated storage devices, such as carousels and grid-based systems served by robots. Best practices, nevertheless, can be implemented in any media and do not require a high level of automation, he maintains.

Having a logical way of identifying locations is important. According to Murray, the

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## Don't try to "re-invent the wheel"

Always work to leverage existing standards for product ID, labeling, packaging, and so forth. "Standards provide commonality throughout the industry, improve collaboration between trading partners and can reduce costs in a variety of ways," according to Steve Murray, WERC certification program lead auditor. Adopt standardized item numbers where possible, such as using UPC codes instead of creating your own codes, he advises. Also, use standards for data formats to improve integration between systems, while standard label formats can eliminate the need to create in-house labels.

There's an old principle in quality control: Build quality in. For warehousing operations this can be interpreted as considering the process flow right from the start of the supply chain. He shares, "Work with suppliers and customers to deeply understand products, and work with all internal functions to focus on common goals where the warehouse is an integral part of providing value, and is not thought of as just a cost-centered storage facility."

Further, focus on the steps being performed and eliminate any that do not add value.

warehouse location ID should include the building (even if there is currently only one), area, aisle or row, section or column, level for racks and shelves (always start with the lowest number on the bottom), and space if there is more than one bin on a shelf. For example, A-04-B-12-4-2 indicates building A, section 04, aisle B, column 12, level 4, space 2.

Best practice would be the application of barcoded labels to identify each location with floor bays using overhead labels to avoid damage by traffic on the floor. "Do not include the ID of the product located there, just the location, as product IDs at a location restrict efficient slotting," he advises.

Systematically record the cubic capacity and weight bearing characteristics of each location, and the dimensions/weight of each product to be stored. "Having this information can prepare you for dynamic directed putaway and re-slotting," he offers.

Further, Murray recommends slotting (locating) products based on the number of times you expect to pick it with most frequently-picked nearest the packing and shipping areas. And as product movement changes over time or seasonally, re-slot/move the products as necessary to maintain pick efficiency. Slotting should take into consideration the size and weight as well as products that are commonly picked together, he reminds.

Another consideration from Murray: Establish a cycle counting program that ensures SKU on-hand counts are verified frequently using an "ABC" strategy based on their volume of movement and value. More frequently picked items have a greater opportunity for error so count them at least once per month. Lowest frequency could be counted once per year.

According to Murray, proper slotting is the most important best practice for picking because best practice operations focus on reducing the time spent traveling to pick locations. They slot products according to how frequently they are picked and/or counted, with high movers near the pack/ship stations and low movers placed further

back. In best practice operations slotting also considers the size and weight of a product so that it can be picked and placed on a pallet or in a carton first.

Additionally, best practice facilities "have systems that can allow for counting during regular operations through the use of real time data capture where the systems know to the second what should be in the bin."

## OVERVIEW: Shipping

Shipping includes all of the processes involved with outbound operations from order release to picking, packaging, load consolidation, carrier scheduling and pickup.

"Picking operations and tasks are highly situational and are currently the subject of a great deal of change as picking processes become increasingly automated," he observes. "Over the past 10 years we have seen the growth of 'goods-to-person' operations, automated guided vehicles, and so forth. As the volume of installations grow, the cost of acquiring the technology will come down making it more widely affordable."

While all of this new technology can be very exciting it does not currently apply to the majority of warehouse facilities, and even where automation applies there are some basic best practices, notes Murray.

Shipping (or delivery to a production unit) always begins with an order. As he explains: Best practice facilities can plan operations better because they have a higher degree of visibility into future shipments through actual orders and/or good forecasting practices. For example, high velocity direct-to-consumer operations where orders ship minutes after placement benefit more from having good forecasts. Organizations that have orders which will not ship immediately benefit from both, but have the added benefit of time to plan operations.

Best practice operations have systems and processes that allow orders to be released just-in-time to be staged for pickup

by date, time and carrier. No order should be released to the pickers before its time to be picked, especially in situations where paper picking is used. Pick tickets can get lost if held for days in an office.

Best practice operations also consider ergonomics to reduce the potential for injury to associates by placing products onto shelves in pick areas using the “Golden Zone” rule to cut down on the need to bend or reach as much as possible.

Facilities that use a pick-to-cart method with multiple orders picked concurrently

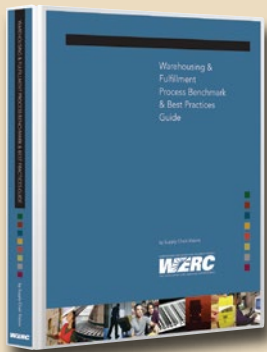
may benefit from a “multi-pick, multi-put” technique where the operators are directed to pick multiples of a product and then instructed into which tote(s) on the cart they should be placed.

Best practice companies also work with carriers to plan pickups at appointed times. This can include a regular daily pickup time. Picking operations can then be scheduled to coincide with pickup times.

As Murray mentions, best practice operations pick and stage orders for shipment so

that they will be ready for pickup when the carrier is scheduled to arrive, but not too soon. “Space on the shipping dock is always limited and best practice teams don’t want to consume this valuable space with staged orders that won’t be shipping for many hours or even days,” he shares.

Finally, Murray recommends. “And always capture a baseline set of values before making any process improvements.” Otherwise, how else will you know if the changes are having a positive effect? 🌟



## SIDEBAR

### Focus on HOW the work is done

WERC’s *Warehousing and Fulfillment Process Benchmark and Best Practices Guide* focuses on how the work is done, while the *Annual DC Measure study* lists KPIs and industry values to measure performance. Here’s an example of just one of the attributes and how it can be measured on the 1- to 5-scale.

The *Receiving & Inspection* section, as an example, covers, among others, Dock/Yard Management: visibility and appointments:

Receiving & Inspection Process Group					
Attributes	Poor Practice	Inadequate Practice	Good Practice	Common Practice	Best Practice
	Major Opportunity	Disadvantage	Average	Advantage	Best-in-Class
Dock / Yard Management					
<b>Visibility</b>	Warehouse personnel have little or no access to shipment data before arrival	Shippers and carriers supply inbound shipment information on a limited basis	Warehouse personnel can get information on inbound shipments on demand only	Warehouse personnel receive data on inbound shipment information from shippers and carriers	Warehouse personnel and systems use inbound shipment status for planning operations in hourly segments
<b>Appointments</b>	Little or no effort to get information about inbound deliveries	Shippers and carriers may notify of pending deliveries, but times not scheduled	Receiving appointments manually tendered, shippers given broad delivery window	Manual scheduling of deliveries to maximize utilization of available labor and dock space. Shippers given a delivery time in hours and minutes	Dock appointments are made and systems are used to manage and monitor that appointments are kept