





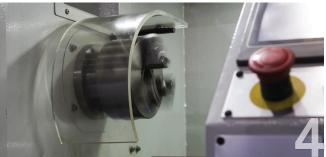
# **WAREHOUSE TO DOORSTEP**

MAKE SAFETY THE STRONGEST LINK IN THE CHAIN

SOLUTIONS TO HELP YOU NAVIGATE THE WILD WORLD OF SUPPLY CHAIN SAFETY & PRODUCTIVITY









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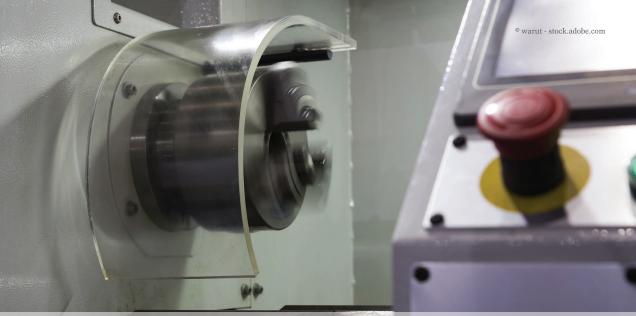
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# **Six Protective Guarding Best Practices** *for Warehouses and Distribution Centers*

By: Devin Partida, Contributor

Protective guarding — or machine guarding — involves using specific measures to reduce worker injuries caused by hazardous parts, functions or processes. That may include installing physical barriers such as gates, cages or nets. Keeping employees safe could also mean deploying presence-sensing technology or ensuring the operator remains a sufficient distance away from an active machine.

Here are six best practices to follow when applying protective guarding to warehouses and distribution centers.

#### Ensure the Guarding Does Not Create a New Hazard

Aspects like unfinished surfaces or parts of a guard that obstruct an operator's view may cause unintended consequences that bring risks of their own. People who install or maintain the guard must check that it's free from sharp edges and does not feature any unfinished surfaces that could cause lacerations.

Relatedly, any protective guarding must not interfere with a machine's operation. If it does, people may ignore or disable it, rendering the safety measures useless. Getting regular employee feedback can help facility managers verify that it works as it should and that machine operators understand its purpose.

## **2** Provide Manual Tools to Keep Employees' Hands Safe

The Occupational Safety and Health Administration (OSHA) provides general guarding standards, as well as some specific measures to take in particular industries. One of them discusses how the point of guarding is to keep any body part out of the danger zone during machine operation.

That also means employers may need to provide manual tools for people to use when placing or removing materials from dangerous parts of a machine. Those don't replace other protective guarding measures but should supplement them.

# 3 Investigate How to Minimize Noise Damage

Some machines used in warehouses and distribution centers emit loud noises over prolonged periods while operating. In such cases, it's necessary to install guarding to prevent hearing loss. Human ears can only tolerate 15 minutes of 100-decibel noise before suffering damage.

Using sound-dampening curtains is one commonly used option, particularly because they create moveable barriers that can go directly around a loud machine. It's also necessary to warn people before they approach an area of a facility featuring one or more loud pieces of equipment. For example, installing warning signs is a good way to remind passersby to put in their earplugs.

## Never Assume Machinery Is Safe on Arrival

Today's warehouses and distribution centers typically have numerous pieces of equipment that accelerate and improve operations. Many are robots that operate faster than a human could alone. Some of them work near people, but not without guarding measures in place.

For example, Amazon has its workers wear vests so mobile robots can detect and steer around them. Brad Porter, the company's vice president of robots, explained, "All of our robotic systems employ multiple safety systems, ranging from training materials to physical barriers to entry to process controls to on-board."

Many machines have built-in safety features. However, it's up to the people who implement them at a facility to check that they all work as expected and assess whether it's necessary or advisable to install other guarding devices to prevent injuries.

## Consider Having Outside Parties Perform a Risk Assessment

It's often advantageous to get a fresh perspective about how well a company adheres to protective guarding recommendations. One way to do that is to have an outside party come in to do a thorough inspection. They'll use a points system to check whether a machine includes certain safety measures.

For example, if the equipment has point-of-operation guarding, that's worth 40 points. Drop-out protection earns five points. Together, the areas examined add up to 100. Looking at the numerical figure at the end of the check helps facility managers see where weak points exist and address them.

# Implement Guardrails to Keep Heavy Machinery in Intended Areas

Most profitable distribution centers and warehouses are perpetually busy places full of foot and vehicular traffic. Thus, a crucial part of protective guarding involves ensuring unaware people never stray into the path of heavy machinery.

Sometimes it happens by accident, though. For example, if a forklift operator does not execute a tight turn carefully, the wheels or other parts may enter a designated safe zone.

Thoughtfully placed guardrails stop those incidents by creating physical barriers, which decreases the risks of collisions or similar accidents. These structures also often feature bright colors to draw people's attention to the boundaries in their surroundings.

#### A Thorough Approach Keeps People Safe

Distribution centers and warehouses are typically most productive when employees have few or no injuries. No single proactive measure will protect against all mishaps. However, these six protective guarding best practices will help managers make smart, applicable choices when deciding how to increase safety around machines. This will lead to a safe and productive working environment. **WMHS** 

Devin Partida is an industrial health and safety writer, business and technology blogger, and the Editor-In-Chief of ReHack.com. She lives in San Francisco, California.



For more articles about Warehouses and Distribution Centers visit www. workplacepub.com/dc-warehouse

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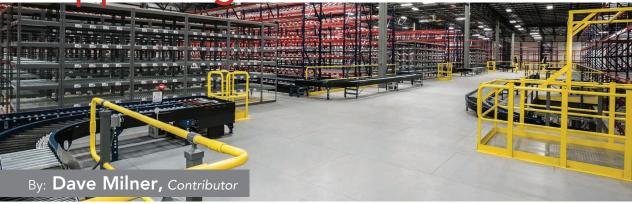






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**Industrial Mezzanines:**Supporting Fulfillment in 2021

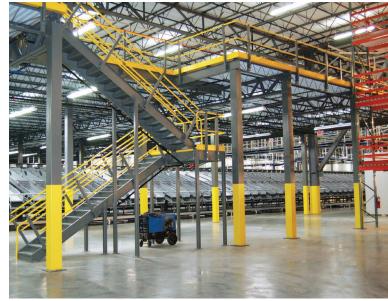


# Ecommerce giants are seeking out mezzanines to accommodate demand in the COVID-19 economy

In the wake up the global pandemic, the shift of consumer purchasing to online retail has accelerated. (Editor's note: According to the Census Bureau of the U.S. Department of Commerce, U.S. retail e-commerce sales for the second quarter of 2021 increased 9.1 percent over the second quarter of 2021, for a total estimated at \$222.5 billion.)

With the rapid expansion of ecommerce, distribution centers and manufacturing facilities are under constant pressure to keep up with these incoming online orders. One of the largest obstacles that these facilities face is how to manage the rise in demand with their existing footprint. What happens when new machinery is required to speed up throughput, but no space for that machinery exists? When it is time to expand, is it more cost-effective to acquire new land or to build upward within the existing facility? With the dollar value of commercial buildings expected to increase by 5%, and warehouse construction leading this sector, these are the questions that are being asked.

As ecommerce giants continue to build out their logistics infrastructure, they are seeking cost-effective methods of expansion as the solution. One of these most simple and cost-effective ways these facilities are improving capacity is by installing industrial steel mezzanines.



With a mezzanine, fulfillment centers can take advantage of the overhead space that they are already paying for and can do so without the high costs associated with new building construction. Photo courtesy of Wildeck

6 December 2021

#### What is a Mezzanine?

In industrial settings, a mezzanine is an elevated floor/platform that is installed between the floor and ceiling. Typically, these are freestanding structures, bolted together with structural steel components, that can be dismantled or relocated if needed. Industrial steel mezzanines are often custom designed to satisfy the various requirements that their application calls for. They may vary widely in their square footage, column spans, decking types, capacities, number of floor levels and more. In warehouse applications, a mezzanine is typically installed for the storage of machinery, equipment, inventory or other materials to free up space at the ground level. In fulfillment centers, mezzanines may be used for storage as well, but are more commonly installed to create additional working space for personnel and machinery

such as conveyor and sortation systems.

#### Mezzanines vs Other Expansion Methods

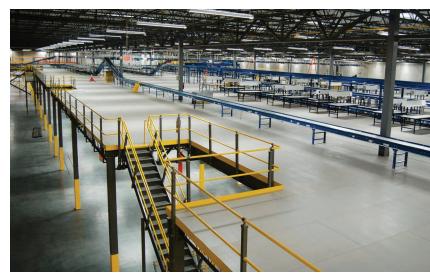
Ecommerce giants have plenty of options when considering ways of adding or freeing up floor space; however, mezzanines have gained attention as one of the most cost-effective methods. The reality is, permanent building floors typically require significant annual costs to maintain (e.g. HVAC, lighting, taxes). With a mezzanine, fulfillment centers can take advantage of the overhead space that they are already paying for and can do so without the high

costs associated with new building construction. Additionally, since mezzanines are identified as capital equipment, they can be depreciated in seven years -- offering significantly reduced taxable income over their lifetime when compared to 39-year depreciation for real property. In some states, mezzanines may even be exempt from property taxes as well. For fulfillment centers spanning hundreds of thousands of square feet, choosing between an additional floor/building expansion vs a mezzanine installation is often a multi-million-dollar decision.

#### Mezzanine Applications for Fulfillment Centers

Warehousing and fulfillment operations are outfitted with plenty of material handling/automated systems to store, retrieve, package, scan and sort goods. Raised platforms, such as mezzanines, are often installed to support these systems and free-up floor space. Common machinery found on mezzanines in fulfillment operations include:

- Automated conveyors used to sort incoming packages
- Scanners to properly identify package dimensions
- Automatic weighing scales for package weight verification
- Sorters to batch groups of packages to be sent to smaller distribution hubs for final customer delivery



Ecommerce giants have plenty of options when considering ways of adding or freeing up floor space; however, mezzanines have gained attention as one of the most cost-effective methods. Photo courtesy of Wildeck

This machinery consumes a considerable amount of floor space and can span over 1,000ft. in length, but mezzanines offer the level of design flexibility required to provide a stable elevated surface for them. This creates valuable floor space below for additional operations, such as other automated systems, forklift traffic and more. Most mezzanines can be designed to accommodate obstructions such as building columns, or to meet to specific requirements such as square footage, column spans and load ratings; however, the extent of these capabilities vary by manufacturer. *Continued on page 11* 

# **Actually Preventing Materials** Handling Injuries In the Warehouse

By: Robert Pater, Contributor

Do you have logistics/distribution/fulfillment center operations in the U.S? If so, you probably know you've been "on notice" from OSHA as one of their "primary targets" for 2021. But injuries in the warehouse have especially greater impacts, in addition to hurting people – and having to deal with regulating agencies.

Bear in mind the pressure on the world's supply chain, already at fever pitch, has been further ratcheted up by effects of the pandemic. The pulls on the chain come from two directions. As online orders rise, or people cautiously (or fearfully) stock up to fend off any oncoming unknowns - imagine running out of toilet paper with a young family? an already high-demand distribution network has become further stressed. All while distribution centers, many who were already working thin, lose workers to injuries or their working impaired, the walking (and lifting) wounded. And recent pandemic and other forces have further ratcheted up pressures on production - and on safety.

Not surprisingly, the number one injury plaguing distribution/warehouse workers continues to be

strains and sprains, according to the Bureau of Labor Statistics. Why? Distribution/fulfillment center work is physically demanding - often with minimal breaks: Moving heavy carts (in some cases weighing up to 650 pounds when loaded), case stacking, unloading and loading trucks, working fatigued/standing on their feet without rest for long shifts (ever longer when "asked" to work overtime due to coverage shortfalls), reaching into bins/picking/retrieving, break-in work when conveyors are down, being machine/conveyer-paced, using difficult-to-control pallet jacks, manually shrink wrapping smaller loads, twisting when driving forklifts or loading, lots of bending and lifting, up and down stairs, onto and off of forklifts - and more. Also mix in "experienced" workers (who are more physiologically prone to strains and sprains tied to aging) with younger workers (who don't know efficient ways to work while protecting themselves - and can be overconfident to boot.) All with time pressures; as one warehouse manager stated, "In distribution centers, people are the machine, you speed them up to speed up the line."



Not surprisingly, the number one injury plaguing distribution/warehouse workers continues to be strains and sprains. Photo courtesy of MoveSMART®.

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Further, consider many warehouses have design ergonomics issues – old or obsolete equipment (conveyors, unitizers, packing stations, etc.) that are difficult to upgrade without significant capital investment or shutting down operations – a big no-no for many. While again, with "throughput" being the prime directive.

#### **Best Practices**

These injuries rarely have just one "cause" - there are many forces that can contribute to workers breaking down. So, what can leaders do in these work environments to reduce straining their workers? Experience with warehouse/distribution operations over 30 years (Kimberly-Clark, Avon, MSC Industrial Supply, Anheuser-Busch, National DCP, HD Supply, etc.) have revealed there are practical keys to preventing these soft-tissue injuries. Practical, because they can be utilized with existing equipment, will help workers maintain their productivity, reduce fatigue, elevate engagement and potentially improve retention and more. Bear in mind, that especially in the warehouse, safety can't detract from productivity in the long term (though learning new methods may only initially/temporarily slow them until smoothly woven into their tasks).

What works? Turn around the approach to safety so that the vinegar of "forced" or "compliance" orientation of required rules, procedures and repercussions are, at very least, balance these requirements with the honey of creating enthusiasm and internal motivation for safety. Move from a "forced" or "compliance" approach to a more "personal" one. In other words, warehouse worker safety that grows from within, not solely from external management pressure (that often de-motivates or creates pushback.)

#### How?

• Place them more in actual control of their own safety. First, show them that, while the company is committed to creating a safe environment with effective equipment, safety is much more than what they may have thought. Then show how the same prevention methods for actually preventing strains and sprains – making very small, almost effortless changes in how they control their balance, position and



The recent pandemic and other forces have further ratcheted up pressures on production - and on safety. Photo courtesy of MoveSMART®.

attention – to boost their usable strength while reducing tension demonstrably and quickly in their body – can also benefit them in their favorite sports, hobbies and other activities that are important to them. Show at-home applications they can, in turn, pass along to their families.

- Make sure to ground methods in practical applications to their tasks, not just a "back school" that many report being too theoretical for them. Instead, enlist the power of discovery, where they "try it out and see for themselves." Lectures and showing videos are passive, minimally engaging and rarely change people's habitual methods of material handling. Instead, provide opportunities where they can personally explore and determine how a safety procedure, PPE, technique or new piece of equipment might best work for them. What minor adaptations they can employ for these to make sense, become comfortable and, above all, be used, daily.
- Communicate to warehouse workers they're valued. Of course, leaders should never

torpedo their own credibility; this has to go well beyond just lip service to what the company really does in action. Provide employees sufficient breaks to refresh, recover, rehydrate – even high-performance engines can't run without maintenance. Elicit their input on any prospective new equipment or procedures. Balance pressure with praise when deserved. Find out from them what the company can do so they feel more supported (while clearly stating you may not have the power to give them everything they'd most want.)

Oh, if you've gotten this far but don't directly work in distribution, we know from experience and data that these underlying principles and methods also apply well to manufacturing, utilities, services and many other sectors. Yes, I understand that these strategies require some downtime away from loading and unloading. But the right personalized approach has shown to have ongoing and significant payback, just as "investing" in the cost and time for changing a vehicle's oil and filter can avoid the higher price and downtime of a seized car engine. For example, MSC Industrial Supply, a Fortune 1000 supply chain company reported "a 57% reduction in material handling injuries overall (not just recordables)" within a year of implementing such methods. They are by far, not a one-off success story. If they can achieve this, so can you. *WMHS* 

Robert Pater is Founder/Managing Director of MoveSMART®. His clients include BMW, BorgWarner, BP, Cummins, DuPont, Hawaiian Airlines, HD Supply, Honda, Keolis, Kloeckner Metals, Marthon Oil, MSC Industrial Supply, ONE Gas, Rio Tinto, United Airlines, U.S. Steel and many others (www.movesmart.com).

#### Industrial Mezzanines: Supporting Fulfillment in 2021

Continued from page 7

Other storage solutions, such as platforms supported by rack or shelving, do not offer this same level of design flexibility.

#### **Expectations Through 2021**

With the trend in ecommerce set to remain strong going into 2021, industrial steel mezzanines will continue to be identified as a strategic cost-saver for fulfillment centers that are in the planning stages of being built or in process of renovation. Their practicality and highly customizable nature make them a preferred solution for the most perplexing material handling challenges. For those looking to add floor space without unnecessary HVAC costs, and with significant tax benefits, look no further than a mezzanine. WMHS

Dave Milner is Wildeck's Vice President of Sales. In this role, Milner is responsible for overseeing the growth of Wildeck's distribution network and expanding the company's reach within the material handling marketplace. Milner's focused resultsdriven management style, along with his ability to lead a high-performance sales team across multiple channels, has allowed the company to sustain its position as a premier U.S. manufacturer of material handling equipment (www.wildeck.com).

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Want to contribute to Workplace Material Handling & Safety? Let us know if you have an interest in writing an article for an upcoming issue.

Contact: Maureen Paraventi, Chief Editor, maureenp@rdgmedia.net



Until 2020, the average person probably didn't spend much time thinking about the global supply chain. People go online and make their purchases — whether it be from Amazon, Walmart or any number of major retailers — and a package arrives as if by magic. But in recent months, as the pandemic has continued to challenge businesses and disrupt daily life, supply chain topics are in the mainstream news almost daily. We are seeing headlines about cargo ships sitting at anchor off the coast of California because there are no workers available to unload them ... and about the cost of shipping containers from China to the United States doubling ... and about driver shortages that are keeping badly needed trucks off the roads. And adding to the strain is a huge demand for products and perishables, fueled by more people working and vacationing at home. It's no wonder that Amazon added about 500,000 workers last year alone.

While I certainly can't promise that the holiday season's hottest gadgets will be easy to find this year, I can attest that the industry is making significant strides to develop leaner, more optimized systems and operations. By introducing new efficiencies to eliminate wasted time and excess miles, retailers, manufacturers and their partners are

helping offset some of the headaches caused by the ongoing pandemic.

#### **Adopting New Practices**

One of these efficiencies is the pallet pooling ecosystem. In an industry where ounces quickly accumulate to tons and minutes quickly add up to hours and days, any opportunity to streamline is a "win" for both businesses and consumers.

Just like any other asset, a shipping pallet must be stored, repaired and accounted for. While there may be advantages to certain companies owning a supply of pallets, there are also associated headaches:

- Pallets are costly assets that must be tracked.
- Pallets take up valuable storage space on trucks and in warehouses.
- Pallets have finite lifespans, which are shortened by increased trips and handling.
- Depending on the type of damage, broken pallets must typically be sent to a depot for repair.
- Pallets at the end of their lifespans must be disposed of and replenished.

Large enterprises that maintain their own supply of pallets are essentially in the business of operating an entirely separate supply chain: one to

### Buying and shipping one-way pallets is an extraordinarily wasteful and costly process. *Image courtesy of iGPS*.

manage their products, and another to oversee their fleet of pallets. Or perhaps they are buying and shipping one-way pallets that they'll never see again — an extraordinarily wasteful and costly process. In virtually all cases, there is a pallet depot between the retailer and the manufacturer, but this extra step requires additional truck miles on the road, which not only burns up time and fuel, but also contributes to increased climate change. Because the largest part of the average company's carbon footprint — by far — is generated by the supply chain, we as an industry have an obligation to create a more sustainable planet by shaving excess greenhouse emissions from this process.

This is why so many companies have embraced the pallet pooling model, in which pallets are rented. Companies that work with pallet poolers have a better chance of always having only as many or as few pallets as they actually need on hand, in accordance with the ebb and flow of their business. And this concept can be taken a step further with the implementation of "closed-loop" systems in which pallets travel between the manufacturer and the retailer in a continuous circle, introducing significant efficiencies into the process.

Here at iGPS, for example, we have partnered with retailers nationwide who act as pallet depots. In this model, the manufacturer sends the finished product to the retailer (such as Costco) on pallets. The retailer performs a quality inspection of the pallets and sets aside the small percentage that have reached the end of their lifespans (plastic pallets typically last about 100 trips, after which time they are simply recycled into new pallets.) The retailer receives a fee for this service, which creates a revenue stream and incentive to participate. The pallets are then shipped back to the manufacturer in a fully cubed-out truck, and the process begins again.

The benefits of this model are numerous:

- Fewer trips/less handling increases pallets' lifespans
- Less handling also minimizes the potential for pallet loss, or worker injury

- Fewer "deadhead" truck miles
- Faster cycle times greater efficiency
- More cost-effective model helps combat rising product costs
- Less fuel consumption and fewer greenhouse emissions

The implementation of backend technology processes (for example, an online customer ordering and forecasting portal that enables pallet inventories to be monitored, along with scannable bar codes and embedded RFID chips to facilitate pallet tracking) introduces further optimizations into this model.

Let's face it: although the industry is doing its best to move beyond the challenges of the pandemic and accommodate ever-increasing consumer demand, the ripple effects of 2020 will be felt for some time. Meanwhile, whatever steps we can take to eliminate waste and create more closed-loop models in the supply chain will be well worth the effort. WMHS

Cory Lehman is the Director of Asset Management at iGPS Logistics, which provides pallet pooling (rental) solutions to over 100 leading manufacturers who ship to more than 2,000 locations at major distributors, wholesalers and retailers. For information about a sustainable shipping solution that eliminates the need to purchase and maintain pallets visit www.iqps.com.

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# Is Safety the Weak Link in Your Chain?

# PPE recommendations for navigating the wild world of supply chain safety and productivity.

By: Nate Bohmbach, Contributor

Global supply chain chaos has those in warehousing, distribution and retail operations under intense pressure to deliver—and sometimes looking for shortcuts to do so. This often comes at the expense of worker safety.

The irony, of course, is that a safe worker is unequivocally a more productive one. To oversimplify a bit: time lost to injury is productivity lost to injury. Mind blowing, right? So why is safety often seen as a roadblock to productive, quality work instead of an inextricable component of it?

Much of it comes from how we think about and teach safety in the workplace.

Abby Ferri may have answered the question best on a recent episode of the *Radio Free Tenacity* podcast when the safety consultant and author said, "I think the reason that safety is looked at as something difficult [...] is because they're looking at it as something else that they have to do, when really, it's just part of the job."

"If you're trying to get the job done right and be productive...safety is going to have to play some kind of role in that."

#### PERSONAL PRODUCTIVITY EQUIPMENT

When it comes to the PPE component, a similar mindset is at play with many. Something that has to be worn. Something to get in the way. "I can be more productive without it."

The reality is, properly selected, mindfully designed PPE is every bit a productivity consideration as it is a way to protect workers. Not only because it helps avoid lost time to injury, but because it actually enhances one's ability to do the job.

To that end, consider these PPE recommendations for safer, more productive workers at every link in the supply chain—warehouse to doorstep.

#### **Temperature Stress**

Hot or cold. Indoors or out. Fulfillment center or delivery person. Controlling core body temps is crucial to productivity. Consider a Lawrence Berkeley National Lab study that found worker performance begins to drop off when temperatures rise above the mid-70s. Or a 2018 Harvard study that linked extreme heat and lowered cognitive function.

Cold environments come with their own challenges and hazards... from brittle clumsy hands to cold-related illnesses such as frostbite and hyperthermia.

#### PPE recommendation for the heat:

Phase change cooling. Because it doesn't require airflow, it's an optimal solution for reducing the risk of indoor heat stress or mitigating the heat in humid outdoor climates (where evaporative cooling options don't perform as well). Commonly used in vests, this technology pulls heat from the body via cooling charge packs filled with non-toxic phase change liquids. Depending on what you have available (cooler, fridge or freezer), activation takes between 10-25 minutes and lasts up to four hours. Unlike ice or gel packs, phase change packs are not stiff or frosty—making them a more comfortable solution for long term wear.

#### PPE recommendation for the cold:

**Base layers.** Moisture is your enemy. Sweat and/or water on the surface of the skin will draw heat away from the body, cooling it rapidly. When the goal is to stay warm, productive and agile, a moisture-wicking, quick-drying layer is key. Venting underarms and a slightly loose, non-compression

fit garment also create a breathable layer of air insulation.

#### **Sprains and Strains**

Repetition, repetition, repetition. Match it with poor form and you're in for a world of hurt. In fact, sprains and strains continue to be the number one workplace injury in the U.S. year after year.

PPE recommendation for sprains and strains: Knee and elbow sleeves. Everybody knows (or at least should know) about the role back supports play in reminding workers of proper lifting form to reduce back injuries. Maybe less known are the benefits of compression sleeves for supporting hard working joints. Popular with athletes, knee and elbow sleeves compress the joint to improve blood flow and reduce swelling. It also lends support for improved joint stability.



Compression sleeves support joints, improve blood flow and reduce swelling. Image courtesy of Ergodyne.

#### **Hand Injuries**

Consider 70% of all hand injuries occur because gloves weren't being worn. The other 30%? Because the *wrong* glove was worn (Source: Labor of Bureau Statistics). Aside from cuts, punctures and other gruesome things you don't ever want to Google image search, the right pair of gloves can help you get a stronger grip on the task at hand with less effort; helping reduce hand fatigue.

#### PPE recommendation for hand injuries:

**Task-match your work gloves.** Finding the right pair of gloves is a balancing act of considerations. Some of the biggies to examine are:

- Personal preference. Fit, comfort and compatibility with the task at hand is priority one. Don't be afraid to lean on glove manufacturers to help run a trial to figure out what workers prefer.
- Hazard analysis. Cold environments, hot surfaces, sharp edges... take stock of all the dangers encountered during a day's work and balance it with personal preference/ability to do the job.
- Devices/tech. Touchscreenfriendly fingers remove another reason to take work gloves off.

#### Slips and Falls

Of 3.8 million disabling injuries each year, 15% are caused by slips, trips and falls (Source: National Safety Council). From loading docks to delivery, those frequently transitioning from outdoors to indoors are susceptible to slip ups, especially during wet, sloppy winter months.



Indoor/outdoor traction devices are easier to use, and won't damage vehicles and equipment. Image courtesy of Ergodyne.

#### PPE recommendation for slips and falls:

**Indoor/outdoor traction devices.** Worn over existing boots and shoes to allow easy and safe transition between indoor and outdoor environments while maintaining sure-footed grip on

water, ice or snow. Though traditional cleats offer great traction on ice, they're a pain for workers to take off and put back on as they go from outdoors to indoors and back again. Even more, they can cause damage to vehicles and equipment and actually can become a slip hazard themselves when stepping onto concrete or other hard surfaces.

#### Struck By

The obvious safety benefit to wearing high-visibility clothing is right in the name. But there's a pure productivity play here, too. For instance, using specific colors for specific jobs is a quick and easy way for managers to decipher what's what and who's who on a bustling warehouse floor. Other vests have convenient considerations built right in to help workers maximize every moment.

#### PPE recommendation for slips and falls:

**Surveyor style hi-vis vests.** These vests work harder so crews can work smarter. Added pockets, pen holders and mic tabs give regular ol' vests a shot of productivity by turning this tried-and-true safety staple into a mobile work station.

#### **Device Management**

Barcode scanners and mobile computers have become omnipresent across the entire supply chain, from fulfillment centers to curbside delivery. Ranging anywhere from \$800 to \$2,000 a pop, handheld scanner devices don't come cheap—a cost that's compounded every time they're dropped or left behind by workers.



Scanner harnesses are favored by fulfillment center pickers, where the device sits comfortably at their side for a quick draw while remaining tethered to the harness. Image courtesy of Ergodyne.

#### PPE recommendation for

#### device management:

Scanner harnesses, holsters and holders.

The idea is simple. Keep these costly devices safe, secure and at-the-ready. Scanner harnesses are favored by folks on the fly like fulfillment center pickers, where the device sits comfortably at their side for a quick draw while remaining tethered to the harness (but still allowing for full range of motion). For more customer-facing folks (like delivery workers or in-store stockers), holsters might be preferred as they're a bit less conspicuous and can be clipped onto a belt or piece of equipment (like a shopping cart). *WMHS* 

Nate Bohmbach is Product Director of Ergodyne, whose top flight, battle-tested work gloves, safety glasses, knee pads, supports, head protection and hi-vis clothing Make The Workplace A Betterplace™. Ergodyne's Tenacious Work Gear® is precision crafted to provide protection, promote prevention and manage the elements for workers on job sites the world over. www.ergodyne.com



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