MSA's V-TEC® iO1 SRL



A Solution for Warehouse Safety

According to an Injury Facts® report from the National Safety Council's website (nsc.org), warehousing and transportation is listed as one of the top four most dangerous industries in the United States.

If your business has a warehouse using order pickers for product fulfillment, or if you're a third-party logistics company (3PL), this may be of particular interest to you. In this article, we'll discuss:

- The intrinsic dangers and hazards of order picking
- Human error as a potential root cause of warehouse accidents
- A unique, yet familiar solution to dial down human error

Let's begin with the dangers and hazards

The intrinsic hazards of order picking

As mentioned, transportation and warehousing rank in the top four most dangerous occupations in the United States. In fact, a study done in 2019 placed that industry as number one in nonfatal injuries with a reported ratio of 202 injuries per 10,000 workers. The study's report, Injury Facts®, was presented by the National Safety Council.

It also ranked as the second highest industry for fatalities, with a total of 913 deaths. Two of the causes of deaths and injuries are falls on the same level and falling to a lower level, both potential hazards for order picker trucks (PITs).

The Occupational Safety and Health Administration (OSHA) takes fall protection seriously. Their Fall Prevention Campaign includes three elements:

- Plan ahead to get the job done safely
- · Provide the right equipment, and
- Train everyone to use the equipment safely

Because order picking involves workers at heights, with a potential for slips and falls, planning ahead involves ensuring effective safety equipment is available, as well as a properly maintained order-picking lift truck.

Educating the employee to use both the lift and the safety equipment correctly is paramount. It's normally included in the employee's orientation training.

Time spent on employee orientation training varies, but can run as high as one to two weeks for new hires.







Human error as a potential root cause of warehouse accidents

Nobody goes to work expecting to have an accident. In fact, for most of us, accidents are not top of mind.

While we like to think we conduct ourselves safely in all that we do, the fact is we get distracted by the task at hand. If you've ever driven somewhere while deep in thought, then suddenly realized you were at your destination, you know what that feels like.

As a task becomes more familiar, even second nature to us, we tend to focus more on what we're doing ... and less on how we're doing it. And as warehouses and 3PLs become busier— as is the current trend—PIT operators start to focus more on getting orders filled quickly and accurately. The potential for human error increases.

In order picking, that can lead to workplace injuries, even fatalities.

So is there a solution to minimize human error?

We may never eliminate it entirely. But we can dial it down ... significantly.

A unique, yet familiar solution to dial down human error

Of course, SRLs are issued to any worker using a PIT for fulfilling product orders. Yes, it's an OSHA standard. But it's also a logical choice. A no-brainer if you will.

For a well-trained worker, putting on the SRL is rarely an issue. They'll obtain it, go through the proper checks, and don the equipment correctly.

But on the busy warehouse floor, human error often rears its ugly head.

The first time, the SRL is snapped onto the PIT and work commences. But sometimes the worker must leave the truck for various reasons. Once unhooked, there is the potential for "forgetting" to hook up again.

In a hurry, pressured (whether real or imagined) to get the orders out, a worker may fail to reattach his or her SRL to the PIT.

Obviously, no product or any amount of training can promise to totally eliminate human error.

But what can you do to help workers avoid this type of error?

One thing you could do is make it obvious that the SRL isn't attached.

For example, the V-TEC® io1—a first-of-its-kind "smart" SRL—can help provide a solution.

The SRL works in tandem with an RFID-tagged D-ring extender attached to the Fall Protection harness. When movement is sensed, such as the worker mounting the PIT, the hook sets off an audible alarm to get their attention, and a flashing light on the hook draws that attention to the connection point. Once the SRL is attached properly to the worker's D-ring extender, the device beeps a successful connection tone, the light goes green, and the alarm is silenced.

Should the worker dismount the PIT, the alarm senses it and beeps, then goes to sleep after a short time if no movement is detected. The process repeats on the worker's return.

Because of its simple design, the product is easy to install. Additionally, PIT truck operators are already familiar with the audible and visual warnings the system uses to alert them. It's similar to seatbelt warnings used in automobiles and even rider fork trucks.

Not only does the system alert the operator when the SRL isn't attached, but also supervisors and other employees in the immediate area. They can monitor for SRLs that aren't attached, and remind the worker to 'snap up for safety.'

For many warehouses, this system has some hidden cost savings. For some companies, an employee that fails to use the SRL is disciplined, anywhere from retraining to termination. If terminated, a new employee must be trained to take over the work.

Either scenario costs time and money, and can put a strain on other employees to take up the slack until the new operator is properly trained. And putting them under pressure can have a snowball effect.

Dialing out as much human error as possible is important to safe, vet efficient warehouse operation.

Learn more about the V-TEC io1 here: https://us.msasafety.com/v-tec-io1

Sources cited:

Injury Facts®, National Safety Council – Most Dangerous Industries - Injury Facts (nsc.org)

OSHA Fall Protection Campaign – OSHA's Fall Prevention Campaign | Occupational Safety and Health Administration

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