

Regulatory Compliance

Protecting Workers From Falling Tools Goal of New Safety Standard

Brought To You By Lydia Baugh, ISEA | Mar 28, 2019

Reducing worker injuries from falling tools is the aim of a new voluntary safety standard (ANSI/ISEA 121-2018) developed by safety gear manufacturers.

The **standard** is a new step to deal with an old problem.

"Gravity has been around for a long time," said Nate Bohmbach, chairman of the International Safety Equipment Association committee that developed the standard.

For 2016, the Bureau of Labor Statistics estimates falling tools injured 3,860 workers seriously enough that they missed at least one day of work. Hammers and similar tools were the most commonly dropped, causing about 360 of the injuries.

The standard sets minimum design, performance, testing, and labeling requirements for gears designed to prevent tools and other small objects from falling, Bohmbach told Bloomberg Environment. He also is product director at gear manufacturer Ergodyne, a division of Tenacious Holdings Inc. in St. Paul, Minn.

The equipment includes tethers, straps attached to tools, and tool containers such as pouches and bags.

In addition to Ergodyne, other companies participating in drafting the standard included 3M Co., Guardian Fall Protection Inc., Hammerhead Industries Inc., Radians Inc., Ty-Flot Inc., and West Coast Corp.

Confidence in Equipment

Prior to the standard, manufacturers used different testing programs and didn't have consistent ways of describing how much weight and force a device could withstand. Two tethers labeled as having a 15-pound capacity may go through different testing procedures to determine the capacity.

The standard, approved July 2, 2018 by the American National Standards Institute, sets common testing method terms to describe the results. It also sets labeling requirements.

"When they purchase an item, they can feel confident it meets a certain criteria," said John Salentine, a committee member and vice president of marketing for Hammerhead Industries Inc., in Ventura, Calif., manufacturer of Gear Keeper Products.

The gear will have a label showing it meets the new standard's requirements.

While the approved equipment will come with instructions describing the correct use, decisions on when the equipment is needed will be up to customers, Bohmbach said.

The Occupational Safety and Health Administration doesn't have a specific rule for tying off tools carried by workers. The agency does have a rule requiring construction tools be stored so that they can't

fall (29 C.F.R. 1926.759(a)) and that guardrails and other barriers be in place to prevent tools from falling off floors (29 C.F.R. 1926.501(c)).

Workers Improvise

Protecting workers from falling objects has been a concern for decades, leading to the development of hard hats 100 years ago, Bohmbach said.

About a decade ago, oil and gas companies began looking at other ways to protect workers at drilling sites and refineries from falling objects, Bohmbach said. Some workers improvised their own devices, taping chords to hammers and attaching the chords to tool belts. Manufacturers took notice and offered small tethers, often able to absorb shocks, and devices to attach the tethers to tools and belts.

Today, industries using falling tool prevention devices include commercial construction companies where workers are often at heights, and companies looking to prevent tools from falling onto workers or into products such as aircraft engines, Salentine said.

With the standard in place, Bohmbach and Salentine hope that companies with safety programs will specify that tool restraints meet the standard's requirements and manufacturers will adhere to the code in order to have a share of the expanding market.

Previously featured on ISEA's Knowledge Center.

To learn more about how to best adopt the new ANSI/ISEA 121 standard into your work-at-heights safety program, visit the [ISEA Dropped Object Prevention Resources web page](#).

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