

# Reese's

## PIECES

RTS specializes in providing weld inspections, mappings, and condition assessment services to the tower & pole industries



## New Mobile Platform Safety Standard Takes Effect

By Scott Vim Voorhis, ENR.com, January 2020

A sweeping set of new standards from the American National Standards Institute, for supervisors and owners of boom and scissor lifts and underbridge inspection platforms, is now poised to go into effect March 1, more than a year after it was first rolled out.

The standards, which typically are adopted by or referenced in a wide variety of safety codes and regulations, deal with both operation and the training for use of the equipment.

New safety and fall protection standards and regulations usually take years to develop and sometimes get hung up in appeals or even litigation. The American National Standards Institute review board had previously pegged December 2019 as the effective date, but postponed the final implementation after a pair of appeals by a major equipment rental association and a large equipment distributor.

Even the name has been revised: ANSI now refers to the equipment formally known as aerial work platforms as mobile elevating work platforms (MEWPs).

The three new standards deal with equipment design, safety requirements and test methods. They also cover training requirements not only for operating the equipment, but also for inspecting, testing and maintaining it. Mark Gates, who works in training and product support for Toyota Material Handling in California, noted in a blog post that the new standards “are designed to enhance safety and shift North American equipment standards closer to international standards.”

The three standards involved A92.20, A92.22 and A92.24 are slated to replace predecessors that are now more than a decade old.

ANSI Standard 92.22 deals with the safe use of boom lifts, electric scissor lifts and vertical lifts.

Both owners and companies who simply rent mobile platforms are required under the new rules to draw up a site safety and risk assessment plan, which, in turn, must be shared with everyone at the jobsite. The risk assessment must include five different elements. They include scoping out the work, describing where it will be performed and when. The

(– continued on page 2)



## Welding Defects – Slag Inclusion

In this issue, we are going to continue our series high-lighting weld defects. One common issue for failing a non-destructive ultrasound weld examination is slag inclusions.

### What is a Slag Inclusion?

A slag inclusion is a discontinuity resulting from the entrapment of nonmetallic products within the weld metal during the welding process.

### What Causes Slag Inclusions to Occur?

Per AWS B1.10, slag inclusions result from the mutual dissolution of flux and nonmetallic impurities in some welding processes. In multi-pass welds the welder can entrap nonmetallic product within his weld deposit. Slag inclusions typically result from improper welding techniques, the lack of adequate access for welding the joint, or improper cleaning of the weld between passes.



### What Does the Code Say?

As previously discussed, the weld inspector uses AWS D1.1 Structural Welding Code – Steel (2020), Table 8.1, Visual Inspection Acceptance Criteria as their reference for visual weld quality. Typically, slag inclusions are within the deposited weld metal and are not visible to the inspector via visual techniques therefore Table 6.1 does not directly address slag inclusions. However, in the case of a complete joint penetration (CJP) weld that is inspected with ultrasound testing, the extent and severity of the slag inclusions within the deposited weld may result in a failing test. The only repair option is to remove the weld metal and re-weld the connection, so careful attention to cleaning between weld passes is very important. □



(- continued from page 1)

risk assessment must also include an explanation of the equipment chosen for the job – boom, scissor or vertical lift – followed by an evaluation of ways to reduce risks. Some examples include avoiding power lines, staying within the rated height of the equipment and keeping workers in the ground safe.

Additional requirements include a review by the project staff of safe work procedures, including fall safety systems and training. Communication is also required. This means checking whether the operator is trained and authorized to use the equipment and posting a supervisor nearby to oversee the operations. The new standards also require having a rescue plan ready if a worker falls or if the machine fails or the platform becomes entangled.

Further, the plan needs to be shared with workers on a jobsite. It must be written out and included in a company's training manual.

ANSI Standard A92.24 lays out extensive new training requirements, including for "occupants," defined as anyone on a platform who is not an operator and for supervisors.

Occupants must now learn about fall protection systems and steps to take if the operator is for some reason no longer able to run the lift. Operators, when using a new lift, now must also take steps to ensure they know how to use it, by reading the operating manual, understanding what the equipment can and can't do

and conducting a walk-around inspection.

Under the new training standard, supervisors who oversee one or more aerial lifts are now also required to have safety training as well, including how to decide what lift is right for what job and the potential safety hazards of each machine.

**New Design Requirements**

Meanwhile, the new ANSI A92 standards spell out several new design requirements for aerial lift manufacturers. They include a gated entrance to the work area. Platform railings now must be more than 43 in. high, compared with the 30 in. previously required. For some equipment, standard writers reduced lift and load speeds. Additionally, solid or foam-filled tires must be used in rough terrain.

The implementation of the new standards was delayed from December to this coming March in order to make the revisions, which deal with the way design modifications are proposed and the removal of a requirement that a manual of responsibilities be included with each machine.

"It's about a page of revisions," wrote DeAnna Martin, executive director and ANSI liaison for the Scaffold & Access Industry Association in a statement. "These are significant revisions. Our ballot passed and now we're in a 30-day appeals period."

The American Rental Association success-

fully appealed plans to require that each new work platform come with a manual of responsibility and that the manual be maintained by the owner.

"This is a huge win for the equipment and event rental industry," John McClelland, the rental association's vice president for government affairs, stated in Rental Pulse, the organization's official publication. Various sources charge from \$7 to \$8 per copy for the manual, according to industry websites. And with nearly 1 million work platforms owned by rental companies, the requirement [that each work platform have a manual of responsibility] on it amounted to a significant financial burden on the industry," said McClelland.

Equipment distributor Tutus Solutions successfully appealed a provision that would have restricted modifications or additions to mobile platforms to the manufacturer. Tutus argued the process would shut out the expertise of engineers with experience in aerial lifts but who are not employed by a particular manufacturer.

ANSI's Board of Standards Review "agrees with Tutus that the requirement that modifications or additions to a MEWP be made only with the permission of the manufacturer violates the Commercial Terms Policy," wrote Forrest Hester, an aerial lift safety expert who serves on some of the ANSI panels that developed the new standards. □

# Reese's MINIATURES IN TRADESHOW TRAFFIC



WITH APOLOGIES TO ELVIS AND 'VIVA LAS VEGAS'

BRIGHT LIGHT TRADESHOW  
GONNA SET MY SOUL,  
GONNA SET MY SOUL ON FIRE.

GOT A WHOLE LOTTA CLIENTS  
I AM READY TO MEET

SO GET THOSE SALES UP HIGHER.

THERE'S A THOUSAND PRETTY  
TRINKETS WAITIN' OUT THERE,

AND EVERY SINGLE VENDOR  
IS READY TO SHARE.

AND I'M AN ATTENDEE  
WITH MINUTES TO SPARE

VIVA LAS VEGAS  
VIVA LAS VEGAS

**THANK YOU.  
THANK YOU VERY MUCH.**

At RTS we appreciate you. That's just another reason we advocate safe working practices. For more information on safety and the expert services we offer, including weld inspections, mappings, and condition assessments visit us at:

**reesetowerservices.com**

WORDS & PICTURES by Scott and Kari Dolash