OSHA has made positive headway in the protection of those who work in and around rigging activity.

By Mike Riggs

■ Mike Riggs has worked in the crane and rigging industry for 35 years. He began his career as an ironworker/rigger in 1977. He has worked for I&I Sling, Inc/Slingmax since 1997. He has designed, developed and instructed crane and rigging programs for DOE, Slingmax Rigging Solutions, Rigging Institute, and the private industry. He is an affiliate member of ASME and a past president of the Association of Crane and Rigging Professionals (ACRP). Riggs is also the president of Rigging Institute, LLC and the author of the Complete Rigger's Reference Handbook.



THROUGHOUT THE PAST two years, OSHA has seen much activity concerning rules that govern crane and rigging activity. As one who is often

skeptical of government bureaucracy, I have seen OSHA making positive headway, specifically in the protection of those who work in and around rigging activity.

First, the final rule that requires verification of qualified signalpersons and riggers has propelled the need for companies involved in rigging to verify the qualification of their personnel. In many cases, additional training has been required to qualify signalpersons and riggers. This additional training, leading to added knowledge and skill of the workforce help to make for a safer job site.

Second, the 29 CFR 1926.251 final rule, which went into effect July 8, 2011, improves the standard concerning sling and hardware markings in places that have been lacking for several years. For many years, ASME B30 has been the standard bearer concerning identification of these lifting tools. With this new rule, there is support from OSHA that states the rigger must have the information required to assist in the safe lifting of loads with all types of slings.

In summary, these new changes require employers to only use slings with permanently affixed and legible identification markings as prescribed by the manufacturer that show the recommended load capacity for each sling. In like manner, the final rule also provides similar protection for shackles by requiring them to also show rated capacity.

Until this adjustment, some companies and sling fabricators did not require wire rope slings to have identification or rated capacity tags on the sling. "If it is not in OSHA, it is not law," would be the reply from these organizations when identification was questioned by workers, safety personnel, and inspectors. Now, with this change, ALL slings, including wire rope must be marked without exception. Wire rope slings shall have permanently affixed, legible identification markings stating size, rated capacity for the type(s) of hitch(es) used and the angle upon which it is based, and the number of legs if more.

OSHA tag

OSHA minimum requirements for wire rope slings, single and multiple legs.





OSHA 1926.251(c)(16) - Wire rope slings shall have permanently affixed, legible identification markings stating size, rated capacity for the type(s) of hitch(es) used and the angle upon which it is based, and the number of legs if more than one.

The load capacity tables previously designated in OSHA standards had been based on the 1971 ASME/ANSI B30.9 standard. These tables were based on a different grade of wire that is seldom used today and that no longer conforms to the load capacity tables of the updated B30.9 industry standards. The outdated tables are currently being replaced with a requirement that prohibits employers from loading slings in excess of the recommended safe working load (as shown on the permanently affixed identification markings).

As OSHA follows the lead of the ASME B30.9 sling identification, ASME has made a change to the identification requirements. Prior to the B30.9-2010 being released, ASME required the rated load for each type of hitch(es) and angle on which it is based. In the 2010 release, ASME has loosened their requirement as follows: "...rated load for at least one hitch type and the angle upon which it is based..."

ASME tag

ASME minimum requirements for wire rope slings, single and multiple legs.





ASME B30.9-2.7.1 a thru d - each sling shall be marked to show (a) name or trademark of manufacturer (b) rated load for at least one hitch type and the angle upon which it is based (c) diameter or size (d) number of legs, if more than one.

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Law and citations

According to Dave Johnson, a partner at the law firm SmithAmundsen LLC in Chicago, Ill., when it comes to the law and the potential for OSHA citations and penalties for crane and rigging accidents, reference must be made to the current edition of OSHA and if appropriate, all other standards incorporated into the current regulations. All are the law; therefore, violations can be cited by an OSHA compliance officer when conducting an investigation into an accident.

Consensus standards regarding cranes and rigging, such as those contained in ASME B30, are not the law unless incorporated into the current OSHA regulations. Violation of these standards cannot be cited by an OSHA compliance officer when issuing OSHA citations. They are voluntary and reflect the custom and practice in the industry. However, while the violation of voluntary standards do not result in OSHA citations, they are important in litigation.

In many states, a violation of an OSHA regulation or ASME standard is evidence of negligence. Even if a particular ASME standard was not in effect at the time of an accident and even if a particular state does not recognize a violation of a regulation or standard as evidence of negligence, such standards are reflective of years of industry practice. Crane and rigging experts, in litigation, when assigning blame for crane and rigging accidents will rely on these standards.



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In times past when ASME B30.9 took a stronger stance on sling identification and sling ratings, some companies refused to consider ASME. Though from the legal perspective, OSHA carries more weight than ASME, according to the comments of Dave Johnson regarding the validity of OSHA versus ASME, ignoring ASME standards was done at the company's own risk. This time around, OSHA requirements are heavier than ASME's. The important point that needs to be remembered is OSHA and ASME are recommended minimum requirements for the safe use of rigging gear. We, as professionals, should always strive to achieve better than minimum for our clients and ourselves.



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