



OSHA's New Cranes and Derricks Standard

Don Jordan - October 14, 2010

OSHA's New Cranes and Derricks Standard

Process of Rulemaking

- The OSH Act of 1970 created a regulation for Cranes in 29 CFR 1926.550 adopting industry consensus standards like ASME B30.5 1968
- Back in 1992 OSHA publishes an advanced notice of a proposed rule for cranes after the Tower crane collapse in San Francisco
- In 1988 OSHA added provisions for personnel baskets
- In 1993 OSHA added language for all employees to keep clear of lifted and suspended loads
- In 2002 OSHA announced the use of negotiating rulemaking (NRA) to change the rules
- In July of 2003 23 members of the industry were selected and met 11 times until July of 2004 titled CDAC
- October 2006 ACCSH recommended that OSHA use the document CDAC created as a basis for the proposed rule
- OSHA issues a proposed rule in October 2008
- March 2009 a public hearing was held
- The process continues with SBREFA review, OMB, & etc. until August 2010 when OSHA

Where to find the documents?

- Go to www.osha.gov/home page
- http://www.osha.gov/FedReg_osha_pdf/FE_D20100809.pdf 273 pages... 41 pages are the rule starting at page 232
- Regulatory text only
<http://www.osha.gov/doc/cranesreg.pdf>

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Items that OSHA changed from the Federal Notice to the Final Rule

- Digger Derricks –expands the exclusion from Subpart CC for all pole-related activities involving electric utility and communications work. When digger derricks are used to perform these activities, they will be covered by §§1910.269 and 1910.268 respectively. {§1926.1400}
- Ground Conditions –expands the scope of information that the controlling entity must provide to the employer; it now includes all information known about ground conditions, including written information in possession of the controlling employer, whether on site or off site. {§1926.1402}
- Qualified Rigger –add requirements that employers must use a qualified rigger for rigging operations during assembly/disassembly and other activities when employers must be in the fall zone to handle a load.{§1926.1404 and §1926.1425}
- Synthetic Slings –adds requirements (i.e., padding) for use of synthetic slings in rigging. {§1926.1404(r)}

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Electric Utilities –employers, whose employees are qualified to perform power distribution and transmission work, are considered to be in compliance with §§1926.1407-1411 of Subpart CC (power lines sections) when performing Subpart V work in accordance with §1910.269. {§1926.1400(g)}

- Inspections –all documentation required by the inspection provisions must be available to all inspectors performing required inspections (including wire rope inspections). {§§1926.1412 & 1926.1413}
- Wire Rope Inspections –deletes alternative measures allowed for qualified person to monitor and continue to use wire rope with Category II deficiencies. Now the employer can only replace the rope, cut off bad sections (no splicing), or get the manufacturer's approval to continue using the damaged rope. {§1926.1413}
- Operations –adds a requirement that any necessary repairs or adjustments needed for the equipment must be communicated to all affected employees at the beginning of each shift. {§1926.1417}

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Operator Certification –Option C (audited employer program) now specifies that the audit must be conducted in accordance with nationally recognized auditing standards. {§1926.1427}

- Operator Certification –Test Administration and Language Requirements – modified the regulatory text to state that written tests may be administered in a language understood by the operator candidate. {§1926.1427(h)}

- Operator Certification –clarifies that when the operator's testing is based on a language other than English it must be noted on the certificate. {§1926.1427}

- Operator Certification Requirements Using State or Municipal Licensing Programs –now requires that employers must comply with local and state licensing regulations that meet requirements of §1926.1427(e) and (j).{§1926.1427(a)}

- Certification Costs for Operators –revises the regulatory text to state that employers must pay for certification or qualification of their currently uncertified or unqualified operators. {§1926.1427}

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Operator Certification –Military Option –preamble explains that if the military qualification is portable if it meets the criteria of Option 1 (independent accredited testing criteria). {§1926.1427}

- Training Costs –clarifies that employers are responsible for the cost of training each employee. {§1926.1430}
- Pre-Erection Inspection for Tower Cranes –adds a requirement to include inspection of crane components after transportation to the work site and prior to erection of the crane. {§1926.1435}
- Economic Analysis –the cost analysis accounts for the administration of operator-certification tests in a language that the operator candidate understands, and for the requirement that employers pay for operator certification

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You Must Read the Final Rule

•The rule has so many requirements that you need to take the time to review the details. This presentation was just a quick review of the highlights...additional areas not covered are:

- Wire Rope
- Tower Cranes
- Work Area Controls
- Multiple Crane Lifts
- Floating cranes and land cranes on barges
- Equipment with capacity less than 2000 pounds

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1926.1417 Operations

- Operations procedures must be developed by a qualified person when the manufacturer's procedures are unavailable.
- Procedures related to the capacity of the equipment must be developed by a registered professional engineer (familiar with the equipment) when the manufacturer's procedures are unavailable.
- This information must be readily available in the cab of the crane.

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1926.1417 Operations

Operators cannot be engaged in activities that distract her or his attention while operating the equipment (for example, no cellular phone use unless used for signaling).



1926.1418 Authority to stop operation.

Whenever there is a concern as to safety, the operator must have the authority to stop and refuse to handle loads until a qualified person has determined that safety has been assured.

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1926.1423 Fall protection.

- For non-assembly/disassembly work, the employer must provide and ensure the use of fall protection equipment for employees who are on a walking/working surface with an unprotected side or edge more than 6 feet above a lower level as follows:
 - (1) When moving point-to-point:
 - (i) On non-lattice booms (whether horizontal or not horizontal).
 - (ii) On lattice booms that are not horizontal.
 - (iii) On horizontal lattice booms where the fall distance is 15 feet or more.
 - (2) While at a work station on any part of the equipment (including the boom, of any type), except when the employee is at or near draw-works (when the equipment is running), in the cab, or on the deck.

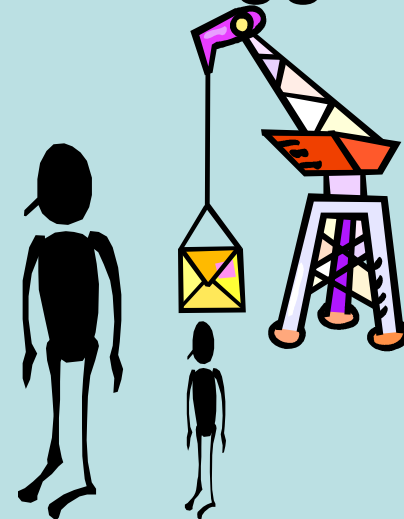
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1926.1425 Keeping Clear of the Load

When workers must be in the fall zone to handle a load, the load must be rigged by a qualified rigger.



1926.1431 Hoisting Personnel

Warrants a Careful Read !

It is very detailed!

1926.1432 Multiple-Crane/Derrick Lifts

Plan must be developed by a
Qualified Person.

If the qualified person determines
that engineering expertise is
needed, the employer ensures
that it is provided.

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1926.1435 Tower Cranes

Supplemental Requirements

Foundations & structural supports

Design & Inspection

Plumb tolerance

Specification & verification

Climbing procedures

Host structure strength verification

Wind

Post-erection load test

Monthly Inspection: tower mast bolts, upper-most tie-in, braces, floor supports, floor wedges

1926.1435 Tower Cranes

Required Documentation Includes

Monthly & annual inspection reports for the equipment and wire rope

Modifications that affect the safe use of the equipment

Operator and signal person qualifications

Tower crane foundation/support design

When repairs or adjustments of the equipment are needed

1926.1435 Tower Cranes

Required Documentation Includes

Employer-developed procedures (i.e., assembly/disassembly, operational, and other procedures related to the safe operation of the equipment)

Power line encroachment
procedures/plan

Thank you
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