SUBPART CC: NEW CRANE AND DERRICK STANDARD

Summary

SCOPE 1926.1400
This standard covers all cranes and derricks used in construction with many exceptions. The exceptions include tow trucks used to lift vehicles and clear wrecks, dedicated drilling rigs, tree trimming and removal work, gin poles for erecting communications towers, helicopter cranes, articulating "knuckle-boom" trucks (when used to transfer materials from a crane truck to the ground) and cranes used in railroad operations covered by the Federal Railway Administration.

DEFINITIONS 1926.1401
The standard contains over 100 definitions. Most importantly, it defines a qualified person as one who, by possession of a recognized degree, certificate or professional standing, or who, by extensive knowledge, training and experience, has successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work or the project.

GROUND CONDITIONS 1926.1402
The "controlling entity" (or employer in charge) must ensure that the ground conditions are safe to support crane use, inform the equipment users and operators of the location of any ground hazards (e.g., voids, tanks, utilities) and talk with the operator or assembly director about what must be done to assure safe ground conditions.

ASSEMBLY/DISASSEMBLY 1926.1403-1406
Manufacturers' procedures for assembly and disassembly must be followed, unless the employer can show that its procedures are safer (with the exception of the use of synthetic slings where the manufacturers' procedures must be used). Assembly/disassembly must be directed by a competent/qualified person also known as the A/D (assembly/disassembly) director. The A/D director must review the procedures before starting work and make sure that the crew members understand the tasks, the hazards and positions/locations to avoid.

Crew members must inform the operator before they go out of his/her view into an area where they could be hurt by movement of the equipment or load, and the operator cannot move the equipment or load until the crew members communicate that it is safe to do so. Employees are not allowed under the boom or jib when pins are being removed unless the employer demonstrates it is necessary and implements special procedures. Hazards that must be addressed include:

- ground conditions;
- blocking material and location;
- loads on assist cranes;
- rigging attachment points;
- supports for components when pins are removed;
- center of gravity identification;
- minimizing snagging of ropes on the boom or pins;
- supports for counterweights;
- testing of the boom brake;
- backward stability of the components; and
- wind speed/weather.
Manufacturers' limitations or those of a registered professional engineer on support of cantilevered booms must be followed. Component weights must be readily available. Components and their configuration must follow manufacturers' recommendations or those of a registered professional engineer. The crane must be inspected post-assembly. Shipping materials (pins, etc.) must be removed and stored to prevent a falling hazard. Pile driving equipment must not have a jib attached during operation.

Outriggers and stabilizers must be fully extended or deployed as per the load chart. Outriggers must remove the weight from the wheels. Floats, where used, must be attached to the outriggers. Specific requirements exist for blocking outriggers and stabilizers and for locomotive cranes.

Rigging used during assembly/disassembly must be done by a qualified rigger. Synthetic slings must be protected from sharp edges, etc., and according to the manufacturer's recommendations.

During dismantling, none of the pins can be removed when parts are in tension or not fully supported.

If an employer does not follow manufacturers' recommendations, it must use procedures that are developed by a qualified person and are as safe.

**POWER LINE SAFETY 1926.1407-1411**

Before assembly or disassembly of a crane, the employer must determine if it could come within 20 feet of a power line. If so, the employer must (a) confirm with the power company that the line is de-energized and visibly grounded at the worksite, (b) make sure no part gets within 20 feet of the power line or (c) follow Table A, which has minimum distances based on voltage. If the line is not de-energized, the employer must:

- conduct a meeting with the assembly/disassembly crew to review measures to prevent encroachment;
- use only nonconductive tag lines; and
- use a dedicated spotter, a proximity alarm, a range control warning device, an automatic limit device or an elevated warning line/barrier in view of the operator.

Cranes cannot be assembled/disassembled below an energized power line or within the minimum distances referenced in Table A of a power line. If Table A is used, the owner/utility must provide the voltage to the employer within two days of a request.

Power lines must be assumed to be energized until they are confirmed to be de-energized and visibly grounded. Warnings about electrocution hazards must be posted conspicuously in the cab (in view of the operator) and outside the cab (except for overhead gantry and tower cranes).

The work zones around equipment must be demarcated 360 degrees around the equipment to prevent encroachments within 20 feet of a power line. If the line is not de-energized, a meeting must also be held with the crew before operations begin to review the location of the lines and procedures to prevent encroachment. Measures similar to those required during assembly/disassembly must be taken to prevent encroachment, but an insulating link between the load line and load is also an option. Operators and crew members must be trained:
on the procedures to follow in the event of a contact;
that power lines must be presumed to be energized until confirmed and visibly grounded;
that power lines are presumed un-insulated until otherwise confirmed by the owner or a qualified person;
on the limits of insulating links and other devices (e.g. proximity alarms); and
on proper grounding procedures and their limitations.

Spotters must also get applicable training.

The minimum clearance distances are specified in Table A as:

<table>
<thead>
<tr>
<th>Voltage (kV)</th>
<th>Minimum clearance distance (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 50</td>
<td>10</td>
</tr>
<tr>
<td>&gt;50 to 200</td>
<td>15</td>
</tr>
<tr>
<td>&gt; 200 to 350</td>
<td>20</td>
</tr>
<tr>
<td>&gt;350 to 500</td>
<td>25*</td>
</tr>
<tr>
<td>&gt;500 to 750</td>
<td>35*</td>
</tr>
<tr>
<td>&gt;750 to 1,000</td>
<td>45*</td>
</tr>
<tr>
<td>&gt; 1,000</td>
<td>determined by the utility/owner</td>
</tr>
</tbody>
</table>

* According to 1926.1409, for power lines over 350 to 1,000 kV, the minimum distance is presumed to be 50 feet. Over 1,000 kV, the utility/owner or a registered engineer must establish the minimum distance.

Over 350 to 1,000 kV, the minimum distance is presumed to be 50 feet. Over 1,000 kV, the utility/owner or a registered engineer must establish it.

If work has to operate closer than the Table A values, then the following precautions must be taken:

- The employer must show that Table A is infeasible and that it is infeasible to de-energize and ground or relocate the line;
- Safe distances must be determined by the owner/operator of the line or a registered professional engineer who is a qualified person;
- A planning meeting must be held;
- Automatic reenergizing devices must be inoperative;
- A dedicated spotter must be assigned;
- An elevated warning line/barricade or an insulating link must be installed between the line and the load (additional provisions kick in one to three years after the effective date);
- Non-conductive rigging must be used;
- A range of motion limiting device must be used;
- Non-conductive tag lines must be used;
- Barricades at least 10 feet from the equipment (where feasible) must be established;
- Equipment must be properly grounded;
- Workers must be kept from touching the line above the insulating link;
- The owner and user must meet with the equipment operator and other workers to review procedures;


- One person must be identified who will implement the plan and can stop work if necessary; and
- Documentation of these procedures must be immediately available on site.

Equipment traveling under or near a power line must (a) have a lowered boom/mast and support system, (b) obey minimum clearance distances set in Table T, (c) reduce speeds to minimize breaching, (d) use a dedicated spotter if closer than 20 feet, (e) illuminate or identify the power lines at night and (f) identify and use a safe path of travel.

**Table T – Minimum Clearance Distances While Traveling with No Load**

<table>
<thead>
<tr>
<th>Voltage Range</th>
<th>Minimum Clearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 0.75 kV</td>
<td>4 ft</td>
</tr>
<tr>
<td>&gt;0.75 to 50 kV</td>
<td>6 ft</td>
</tr>
<tr>
<td>&gt;50 to 345 kV</td>
<td>10 ft</td>
</tr>
<tr>
<td>&gt;345 to 750 kV</td>
<td>16 ft</td>
</tr>
<tr>
<td>&gt;750 to 1,000 kV</td>
<td>20 ft</td>
</tr>
<tr>
<td>&gt; 1,000 kV</td>
<td>established by owner or registered professional engineer/qualified person</td>
</tr>
</tbody>
</table>

**INSPECTIONS 1926.1412**

Inspections by a qualified person are required after modifications, after repairs or adjustments and after assembly. Before each shift, visual inspections by a competent person are required of:

- the control mechanisms for maladjustments;
- the control and drive mechanisms for excessive wear or contaminants;
- pressurized lines for deterioration or leakage;
- hydraulic system for proper fluid level;
- hooks and latches for damage or wear;
- wire rope reeving for compliance with manufacturer's specifications;
- wire rope, electrical apparatus, tires for proper inflation and condition;
- ground conditions;
- equipment level position (before each shift and after each move and setup);
- operator cab windows for defects; and
- rail systems for equipment running on rails.

If any deficiencies are found, the competent person must determine if they present a safety hazard. If so, equipment must be taken out of service until the deficiency is corrected. Another monthly inspection must be made and documented with results, name and signature of the inspector. Documentation must be kept for at least three months. More in-depth annual inspections by a qualified person are also required. Some disassembly may be required for this inspection. Annual inspections must also be documented with records kept for at least 12 months. Severe conditions also trigger inspections by a qualified person. A qualified person must also inspect any equipment that has been idle for three months or longer. Any manufacturer's recommendations for more frequent inspections must be followed.

**WIRE ROPE 1926.1413-1414**

Wire rope must be visually inspected by a competent person before and during each shift. Apparent deficiencies are categorized in three categories: I – significant distortions or corrosion, II – visible broken wires and III – core failures. Special attention must be paid to terminal ends, reverse bends, pick up points, etc. Deficiencies found must be corrected or localized or the wire rope replaced before use. The wire rope must be tagged out until it is replaced.
Monthly and more in-depth annual inspections of wire rope by a qualified person are also required.

Design criteria are specified for original and replacement wire rope (citing ASME B30.5 – 2005 Section 5-1.7.1 as one reference) and rotation resistant rope. Special requirements exist for rope used in boom hoist reeving.

SAFETY DEVICES 1926.1415
All cranes (except for floating ones) must have:
- an operational crane level indicator;
- boom stops;
- jib stops (except for derricks);
- locking foot pedal brakes;
- integral holding device/check valve on hydraulic outrigger/stabilizer jacks;
- rail clamps and stops (if equipment is on rails); and
- a functional horn.

Equipment must be stopped and work must not begin unless all safety devices are in working order.

OPERATIONAL AIDS 1926.1416
The following operational aids must be in working order and are required on all equipment (with some exceptions based on age and type of crane):

- Category I (must be repaired within seven days after deficiency occurs) – boom hoist limiting device, luffing jib limiting device, anti two-blocking device.
- Category II (must be repaired within 30 days after deficiency occurs) – boom angle or radius indicator, jib angle indicator, boom length indicator, load weighing device, outrigger/stabilizer position sensor/monitor, hoist drum rotation indicator.

OPERATION 1926.1417
Employers must comply with all manufacturers’ procedures. If they are unavailable, they must develop and comply with their own procedures. Procedures for operations must be developed by a qualified person; procedures for capacity must be developed and signed by a registered professional engineer. These procedures must be readily available to the operator in the cab. If not (e.g., electric failure), operations must cease. Operators are not allowed to be distracted by other activities, such as use of cell phones. They cannot leave the controls with a suspended load (with some exceptions, such as for “working gear”). Out of service equipment must be tagged-out and not operated until tags are removed by an authorized person.

The operator must verify that the controls are working and that all personnel are in the clear before starting the engine. A competent person must determine if equipment must be secured when a local storm warning is issued. If any repairs or adjustments are made, notifications must be made in writing. Safety devices and operational aids are not a substitute for professional judgment by the operator.

A competent person must verify that rope is being reseated properly on the drum, if slack rope requires it. A competent person must also adjust the equipment or operations for wind, ice and snow conditions.
Equipment must not be operated in excess of its rated capacity, and operators cannot be made to do so. Operators have to verify that the load is within the equipment's capacity by calculation, use of a load weighing device or other means. The boom and equipment must not contact any obstructions. Loads cannot be pulled or dragged sideways. For wheel-mounted equipment, loads cannot be lifted over the front area (unless permitted by the manufacturer). Brakes must be tested each time a load that is 90 percent or more of the maximum line pull is lifted.

Operators cannot travel with a load if prohibited by the manufacturer. Traveling with a load must be supervised by a competent person who first determines if it is necessary. Rotation of the load during travel must be controlled. Operators must obey stop signals, no matter who gives them. Locomotive cranes must not swing in such a way that they could hit adjacent cars. Cranes (except tower cranes) must not be operated without the counterweights recommended by the manufacturer in place.

**STOP WORK 1926.1418**
Operators have the authority to stop work or refuse to handle loads until a qualified person has determined it is safe.

** SIGNALS 1926.1419-1422**
A signal person is required when the operator is not in full view of the load area or load travel, when the view is obstructed or whenever the operator or load handler determines one is needed. Signal persons can use hand signals (see Appendix A), voice, audible signals or "new signals." Non-standard hand signals must be agreed upon ahead of time. New signals must be equally effective and comply with a national consensus standard. Signals must be appropriate to the conditions and the ability to transmit them must be maintained at all times. Operations must stop if interference interrupts transmission. Only one person can give signals at a time, except when a safety problem requires an emergency stop. All signal directions must be given from the operator's perspective. If one signal person is signaling for more than one crane/derrick, they must be able to identify the one to which they are signaling. Signaling devices must be tested before operations and use dedicated channels. Operators must be able to receive signals hands-free. Voice signals must be coordinated and include three elements in this order: (1) function, direction; (2) distance and/or speed; (3) function, stop command. Communication must be in a common language. Hand signal charts must be posted near the operation or on the vehicle.

**FALL PROTECTION 1926.1423**
New equipment (manufactured one year after the effective date) with lattice booms must have walkways at least 12 inches wide if the boom is six feet or higher. Walkways on booms are not permitted to have guardrails or handrails if they could be snagged by the ropes or bars or if they are removable. New equipment must also provide for safe access and egress from the ground and have slip-resistant walking/stepping surfaces. SAE standards are referenced. Personal fall arrest systems (PFAS) must meet the fall prevention standard (1926.502 (d)) except that body belts are allowed. PFAS must be used when moving around on non-lattice booms, on non-horizontal lattice booms and on horizontal lattice booms 15 or more feet high and on assembly/disassembly work at that height except in the cab, on the deck or at or near drawworks (when running). Anchorage requirements follow 1926.502 (d)(15) and (e)(2) unless a competent person determines otherwise. Fall restraint systems must withstand twice the maximum load under reasonably anticipated conditions. PFAS can be anchored to the hook or load line after review by a qualified person if the operator has knowledge and no load is being suspended. Training is required.
WORK AREA CONTROL 1926.1424
Employees must be trained and protected from entering the swing radius zone of the equipment. They must inform the operator if they are moving out of his/her view, and the operator must not rotate the equipment until communication establishes that it is clear. When on a site with multiple cranes, a system to prevent cranes from colliding with each other must be established.

KEEPING CLEAR OF THE LOAD 1926.1425
Operators must use routes that minimize exposure to hoisted loads (consistent with public safety). No employees are allowed under a non-moving suspended load unless they are hooking, unhooking or guiding the load; initially attaching the load to a structure or component; or operating a concrete hopper or bucket. When hooking, unhooking or guiding a load, a qualified rigger must prevent unintentional displacement and use self-closing latches (except J hooks are allowed for wood trusses). When landing a load, only essential personnel are allowed in the fall zone and only when necessary to guide, monitor and/or detach/attach a load.

FREE FALL AND CONTROLLED LOAD LOWERING 1926.1426
Boom free fall and free fall of loads are prohibited if employees are in the fall zone, are being hoisted or if the load/boom is over a power line, a shaft (unless no one is in it) or a cofferdam or is in a refinery or tank farm. Boom free fall in other cases requires equipment older than November 1984 or floating equipment. Equipment to prevent boom free fall requires a secondary mechanism such as friction drums with a friction clutch or hydraulic drums with an integral brake. Hydraulic telescoping booms must prevent retraction if there is hydraulic failure.

OPERATOR QUALIFICATIONS 1926.1427
Employers must make sure that equipment operators are qualified or certified to operate the equipment. Operators can become certified through testing by a nationally recognized accrediting agency or through an audit by their employer. They may be qualified by the U.S. military. They can also be licensed by a government entity. Certification/licensing is through a written and practical test. Certification through a nationally accredited testing agency is portable and good for five years. Certifications by the employer or the military are not portable but are also valid for up to five years. Operators-in-training, who are not yet certified, must be continuously monitored, except for short breaks, by a certified operator (who has passed at least the written test). Several other restrictions apply. As necessary, tests may be administered verbally or in other languages. Certification is only good for a specific piece of equipment and a certain maximum capacity. This requirement has a four-year phase-in period.

SIGNAL PERSON QUALIFICATIONS 1926.1428
A signal person’s qualifications must be evaluated by either a third party qualified evaluator or by the employer’s qualified evaluator. Evaluations by an employer’s evaluator are not portable, while third party evaluations are. Documentation must be available on site and specify the type of signaling for which signal persons are qualified (e.g. hand signals, etc.). Evaluations must include both a written/oral test and a practical test.

QUALIFICATIONS OF MAINTENANCE & REPAIR PERSONNEL 1926.1429
Maintenance, inspection and repair personnel, if “qualified persons,” can only operate equipment as needed to do their work or under the direct supervision of an operator.

TRAINING 1926.1430
The employer must provide the following training:
• Training on overhead power lines;
• Training for signal persons;
• Training for operators;
• Training for Competent and Qualified Persons;
• Training on avoidance of crush/pinch points; and
• Training on tag-out and start-up procedures.

Training must be provided at no cost to employees and must include an evaluation. Refresher training is also required.

HOISTING PERSONNEL 1926.1431
Except for steel erection, use of a crane to hoist personnel is only allowed when other means are more hazardous or not possible (due to structural design or worksite conditions). The equipment must be set up properly (e.g., level). The total load must not exceed 50 percent of capacity. When stationary, all brakes must be engaged. Equipment must have properly functioning devices, that is, boom angle indicators, hoist limiting devices, anti two-block devices and controlled load lowering devices. Equipment must not be operated if these devices are not working. A personnel platform cannot be directly attached to a luffing jib.

The personnel platform system must be designed by a qualified person. The personnel platform must be kept within ten degrees of level and designed to minimize tipping. The platform must support its own weight and five times the maximum load and meet other structural requirements (e.g., guardrails, welds, grab rails, access gates/doors, headroom, and overhead protection). Its rated capacity must be conspicuously posted. Trial lifts must be made to each planned location before each shift, after equipment is moved and if the lift route is changed. A competent person must determine if the trial lift is done safely and conduct an inspection before and after the trial and proof lifts. Any deficiencies found during the trial must be corrected before personnel are hoisted. A proof test must be done prior to any hoisting (but can be the same as the trial lift).

Hoisting must be in a slow, controlled, cautious manner with no sudden movements. All body parts must be kept inside. Employees cannot stand on the guardrails or toe board or pull the platform out of plumb. The platform must be secured to the structure before it is exited or entered. Controls on the platform must be operated by a qualified person. The operator must remain at the controls while the platform is occupied (if controls are not in the platform) or must be on site and in view of the equipment. If wind speeds exceed 20 mph or other dangerous weather conditions are present, a qualified person must determine if it is safe to lift or stop a lift in progress. Employees being hoisted must be in direct communication with the operator or signal person.

The hoist must have a personal fall arrest system. No lifts can be made on other load lines while hoisting personnel, except factory-produced, boom-mounted personnel platforms with a winch. Hoisting cannot normally occur while equipment is traveling, except under specific conditions and never for derricks.

A pre-lift meeting of the operator, signal person employees to be hoisted and the person responsible must be held.

Hoisting personnel is generally prohibited near power lines. Special requirements exist for hoisting personnel in drill shafts, in pile driving operations, to and from a marine worksite and for
storage-tank, shaft and chimney operations. For some of these operations, boatswain chairs are allowed.

**MULTIPLE-CRANE/DERRICK LIFTS 1926.1432**

Multiple crane lifts must be planned by a qualified person and directed by a person who is both qualified and competent or a competent person assisted by a qualified person. The lift director must meet and review the plan with those involved with the lift.

**DESIGN, CONSTRUCTION AND TESTING 1926.1433**

Equipment that will lift more than 2,000 pounds must meet ASME B30.5 - 1968 or 2004 or meet prototype testing in BS EN 14439:2006 or BS EN 13000:2004. All equipment must have information in the cab on rated capacity, load capacities, a work area chart indicating the areas where no load is to be handled, etc. Load hooks and related equipment must be of sufficient weight. Hooks and balls must be marked with rated capacity and weight. Hooks generally cannot be used without latches which close at the throat and keep slings in while the rigging is slack. Posted warnings must be kept legible. A fire extinguisher must be accessible on the equipment. Cabs must have proper ventilation to maintain visibility and have doors that will not open inadvertently while operating or traveling, safety glass windows in front and both sides, guarded belts and gears, insulated/guarded exhaust pipes, protected hydraulic/pneumatic lines and exhaust directed away from the cab. Friction mechanisms must be sufficient for the loads.

If they have not modified the equipment, employers can rely on documentation that the manufacturer designed and built the equipment to meet this standard.

**EQUIPMENT MODIFICATIONS 1926.1434**

Equipment modifications are prohibited unless the manufacturer approves them or, if they refuse or are unavailable or unresponsive, a registered professional engineer who is a qualified person approves them.

**SPECIFIC CRANE TYPES**

Specific supplemental requirements are included for:

- Tower Cranes
- Derricks
- Floating Cranes/Derricks and land cranes/derricks on barges
- Overhead and Gantry Cranes
- Dedicated Pile Drivers
- Sideboom Cranes
- Equipment with a rated capacity of 2,000 pounds or less

**NOTE:** OSHA HAS DETERMINED THAT THE NEW CRANE STANDARD WILL NOT PREEMPT LOCAL AND STATE ORDINANCES AS LONG AS THEY MEET OR EXCEED THE NEW STANDARD.
To: KCA Members and Construction Industry Professionals

From: Kansas Contractors Association

Re: Crane Signalperson and Rigger Classes Scheduled
Defensive Driving Class scheduled in Topeka

Included in this e-mail:

- Defensive Driving Class in Topeka THIS Friday!
- Crane Signalperson and Rigger Classes. Must be OSHA qualified by November 8th of this year.
- Concrete Parking Area Design Seminar
- Concrete Sustainability Seminar
- KCA Annual Convention-Save the Date
- Get Active in KCA

Defensive Driving Class in Topeka this Friday!
Crane Signal Persons and Riggers Classes scheduled in 5 cities!

OSHA requires Crane Signalers and Qualified by November 8th!

CLICK HERE to register for the Defensive Driving Class the Ramada Inn this Friday, October 1st. Your insurance company will thank you!

CLICK HERE to read OSHA’s Cranes and Derrick in Construction Final Rule.
Defensive Driving & Crane Signalperson and Rigger Classes to Comply with OSHA Req...

- Kansas City
- Great Bend
- Manhattan

**CLICK HERE** to register.

One Spanish Class Available!

**CLICK HERE** to register!

Classes are free our discounted to KDOT Contractors.
All others...

$159 per person for KCA and AGC of Kansas Members

$189 per person for non-KCA and AGC of KS Members

Fee includes instruction, workbooks, copies of tests, wallet cards, certificates, lunch and beverages.

Classes are now scheduled. This one day class will provide your Crane Riggers, Signalers and Operators with the information they need for you to designate them as qualified. Class size limited to about 30 people. We need a 20 person minimum to hold each class.

These Rigger and Signaling Classes are offered by KDOT/KCA CIT Program in association with the AGC of Kansas. (Non-program participants may also participate.)

Crane Rigging and Signaler Classes
1/2 day will be devoted to each topic per class.
Lunch is included. Classes are 8 a.m. - 5 p.m.

<table>
<thead>
<tr>
<th>Location</th>
<th>Date Information</th>
<th>Hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wichita</td>
<td>Tuesday, Oct 5</td>
<td>Best Western Airport Inn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Courtyard Marriott</td>
</tr>
<tr>
<td>Salina</td>
<td>Friday, Oct 8</td>
<td>Great Wolf Lodge</td>
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<tr>
<td>Kansas City, KS</td>
<td>Friday, Oct 15</td>
<td>Highland Hotel</td>
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<td>Spanish Instruction</td>
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<td>Tues Oct 19th</td>
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<td>English Instruction</td>
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<tr>
<td>Manhattan</td>
<td>Friday, Oct. 29th</td>
<td>Hampton Inn</td>
</tr>
</tbody>
</table>

**Signalperson Class**
- Proper hand signals
- Operations & Limitations

**Rigging Class**
- Slings
- Rigging Hardware

Offering your own in-house training? You may qualify for reimbursement of your expenses.

**CLICK HERE** to download the required sign in sheet and contact KCA for details prior to your class.

9/28/2010
· Signal Person Requirements  · Knots
· Regulations covering signal person  · Inspection's
· Review & Test  · Review & Test

Detailed outlines are available upon request. Candidates who successfully complete the class will receive a wallet card and certificate. Your company will receive a detailed outline of the course and a copy of the written exam for each student.

CLICK HERE to register.

Your crane signalers and riggers must be "qualified" by November 8th of this year to be in compliance with the new OSHA guidelines. KCA is working with two companies to set up classes for Qualified Signal Persons and Qualified Riggers. These classes will be one day in duration (morning signalperson and afternoon rigger). More extensive classes with equipment demonstrations are also available.

Questions? Send e-mail to kca4@ink.org OR call 785-266-4152. Classes are free or discounted to companies who did KDOT work in 2009.

Take note of these training opportunities and industry related events.

Save these dates to your calendar!

Concrete Parking Areas Design and Construction
Wednesday, September 22, 2010
Salina Bicentennial Center
8:30 a.m. - 3:00 p.m.
Sponsored by Kansas Ready Mixed Concrete Association

This seminar is designed to present the most up to date design and construction techniques to build quality concrete parking areas while at the same time reducing cost. CLICK HERE for information to register.

"Concrete Sustainability Impact"

$25.00 per person, October 6, 2010, Wednesday
E MAIL MEMO

TO: AGC of Missouri Members

FROM: Doug Smith, President

DATE: September 17, 2010

RE: Revised Cranes and Derricks Standard

As you know, on August 26, 2010, OSHA released a revised Cranes and Derricks Standard and related section of the Construction Standard.

On October 12, 2010, AGC of America will be hosting a Webinar regarding Contractor compliance in consideration of these revisions.

Dean McKenzie, Safety Specialist, Occupational Safety and Health Administration (OSHA), will be the guest presenter/speaker. Topics covered will include: Updates to the old standard, employer requirements on load capacity, work zone safety and equipment conditions, and employee training requirements.

For further information about this program, click on the link below.

Thank-you
On August 26, 2010, OSHA released its revised Cranes and Derricks Standard and related sections of the Construction Standard. Don’t miss this important webinar featuring guest speaker Dean McKenzie, Safety Specialist Occupational Safety and Health Administration (OSHA). Participants will have the opportunity to gain first-hand knowledge covering:

- Updates to the old standard
- Employer requirements on ground load capacity, work zone safety assessments and equipment condition
- Employee training requirements

The webinar will wrap up with 10-15 minute Q&A session with our OSHA representative.

State Laws and Legislation that Impact Your Construction Project: How to Navigate Everything from Licensing to Liens

Oct. 19, 2010 | 1:00 pm - 2:30 pm ET

Learn how to systematically navigate through state construction laws, including new legislation, as well as the legislative outlook going forward. Key topics addressed in this webinar include:

- Potential issues you need to investigate when considering any project including payment terms, liens, indemnification
- A checklist to “prequalify your project” to manage risks
- Learn how to use the AGC State Law Matrix as a tool to assist you with the risk identification process

AGC’s Supervisory Training Webinar Series
Understanding and Managing Project Costs for Supervisors

Next Program - Oct. 7, 2010 | 2:00 pm - 3:30 pm ET

Provides construction supervisors with the tools they need to gain a better understanding of project costs and how they influence the success of meeting the estimate. Following successful completion of this webinar you will have the ability to:

- Analyze the cost control process
- Differentiate among the causes of labor cost variance
- Apply problem-solving methods to manage cost variances
- Analyze labor cost overrun problems
- Review the methods for developing a cost control system

Facilitator: Mark Federle, P.E., Ph.D., CPC—Professor and McShane Chair of Construction Engineering and Management, Civil and Environmental
September 7, 2010

To Whom It May Concern:

SUBJECT: Information about the New OSHA Crane and Derrick Standard (1926.1400)

A new OSHA standard for Cranes in Construction goes into effect November 8, 2010. It requires operators of most cranes above 2,000 pounds capacity when used in construction to be either certified by an accredited crane operator testing organization or qualified through an audited employer program. The new standard does not require the rigger to be certified. The rigger must be qualified.

Some facts of which to be aware:
- It requires qualified riggers and qualified signalpersons to meet the qualification requirements by November 8, 2010. Riggers and signal persons need to be qualified not certified.
- Crane operators have until November 8, 2014, to meet the certification requirements.
- Cranes must be inspected each shift, monthly and annually with documentation.
- Employers must provide certification and/or qualification at no cost to the employee.

Definitions of which to be aware in the new OSHA standard 1926.1400:
- Qualified Rigger - a rigger who meets the criteria for a qualified person. A qualified rigger is required during the assembly/disassembly of cranes, and when employees are engaged in hooking, unhooking or guiding the load, or in initial connection of a load to a component or structure and are within the fall zone.
- Qualified Person - a person who by possession of a recognized degree or certificate of professional standing, or who, by extensive knowledge, training and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter and work.
- Fall Zone - the area (including but not limited to the area directly beneath the load) in which it is reasonably foreseeable that partially or completely suspended materials could fall in the event of an accident.


See list of common questions and answers about Crosby training attached.

Regards,

Danny Bishop

Attachment: Common Questions

products of uncompromising quality . . .
CROSBY Clips & Fittings, LEBUS Load Binders, McKISSICK Blocks & Sheaves, CROSBY - WESTERN Blocks, NATIONAL Swaging Systems

Plants and facilities in: Jacksonville, Arkansas - Los Angeles, California - Atlanta, Georgia - Chicago, Illinois - Tulsa, Oklahoma - Harrisburg, Pennsylvania
Dallas, Texas - Longview, Texas - Seattle, Washington - Toronto (Brampton), Ontario - Barnsley, England - Mechelen (Putte), Belgium - Derry St. Christophe, France
Common Questions

Does Crosby offer rigging training courses (Train the Trainer type courses) to assist companies in their training efforts to qualify riggers in their employment?

Yes. Crosby does offer a two-day Rigging Trainer Development course at no charge to full line Crosby Distributors and end users of our products. Day one is designed for those product users who need fundamentals of rigging only. Day two is designed for trainers or individuals that need more advanced information. Students who wish to attend day two must have attended the day one 24 hours prior. List of what successful day two attendees receive from Crosby:

* PowerPoint files provided by Crosby that can be utilized by end user trainers in their classroom training sessions for educating their employees on fundamentals of rigging while using Crosby rigging hardware in conjunction with slings.
* All day one attendees receive a certificate for attending the "Fundamentals of Rigging" class and successful day two attendees receive a certificate stating that they are authorized to use Crosby training materials for 48 months from date of issue.
* Successful day two attendees also receive a certificate stating they have earned 1.9 "CEUs"
* Authorization to purchase Crosby classroom training materials at discounted rates for their in-house rigging training needs.
* CD ROMs for computer based rigging training sessions. Those individuals who successfully complete a Crosby CD ROM computer based training program can request a Certificate of Achievement from Crosby for documentation of education achieved.
* CD ROM with PowerPoint files for 30 – 45 minute refresher rigging training sessions.

Note: Interested parties working in manufacturing or construction environments should request the ASME/OSHA Rigging Trainer Development Schedule from Crosby. If working in Land Based Oil or Gas environments please request the Land Based Rigging Trainer Development Schedule. If working in offshore environments, please request the API Rigging Trainer Development Schedule. Seminar schedules for the two-day Rigging Trainer Development courses can be downloaded from the Crosby website: www.thecrosbygroup.com. Click onto "Training" and select "Seminar Schedule."

Does attendance at a Crosby rigging seminar make the attendee a certified rigger?

No! Crosby does not certify riggers. Certification normally requires passing a written and hands on practical exam administered by a third party. Crosby however does provide educational seminars that greatly help individuals in their endeavors to become a competent or qualified rigger. The time spent in our seminars and certificate of training received goes a long way in proving rigger qualifications when using Crosby rigging products in conjunction with slings. The education achieved can also prove useful in preparing for the written and practical exams to be a certified rigger. See information later in this memo on how to become a certified rigger. To request an "On Site" 4 or 8 hour Crosby seminar please sign onto the Crosby website www.thecrosbygroup.com. Click onto "Training" and select "Request for On Site Seminar". Proper paperwork must be submitted and reviewed by Crosby before training can be confirmed.

NOTE: CROSBY STANDS READY TO ASSIST COMPANIES IN THEIR ENDEAVORS TO HAVE "QUALIFIED" RIGGERS IN THEIR EMPLOYMENT!
What is required to become a "Certified" rigger?

Normally one must pass a written and a practical "hands on" exam. The organizations below administer or offer rigger certification.

NCCCO – National Commission for the Certification of Crane Operators – www.nccco.org

NCCER – National Center for Construction Education and Research – www.nccer.org

Contact ACRP (Association of Crane and Rigging Professionals) – www.acrp.net for other possible sources of testing.

*Some cities, states or employers may have special requirements.

What training does Crosby offer?

- Crosby offers 4 and 8 hour rigging seminars at no charge for end users of our products. (Certain criteria must be met.)
- Crosby offers two-day Rigging Trainer Development courses at no charge in selective cities nationwide.
- Crosby provides all seminar attendees complete set of training materials at no charge.
- Crosby offers computer based rigging training programs via CD ROM.
- Beginning November 2010, all two-day seminar attendees will receive at no charge "prep" materials for the NCCCO Level I rigger exams.
- Crosby issues Certificate of Achievement to all seminar attendees. This certificate provides proof of attendance as a means to document one's education on the subject matter provided.
- Crosby has trained over 250,000 individuals since 1991.
- Most Crosby end user seminars are conducted by "certified" riggers.

Special Note: Classroom training as provided by Crosby is only one element in becoming a qualified, competent, or certified rigger. Crosby strongly encourages that seminar attendees also obtain "hands on" training and appropriate on the job experience as well.

How do I contact Crosby in regards to training or training materials?

By Phone: Primary contact is Julie Wilson at 918-834-4611 ext. 235 or secondary contact is Toni Vestal at ext. 357.

Via E-mail: Seminar schedules for the two-day Rigging Trainer Development courses can be downloaded from the Crosby website: www.thecrosbygroup.com. Click onto "Training" and select "Seminar Schedule."

**NOTE: Many Crosby distributors offer rigging training as well.**

If preferred, please feel free to contact your local Crosby distributor for your training needs.
NEW OSHA STANDARD

The new crane law, OSHA 29CFR 1926.1400 Crane Construction Standard, that was released on August 9, 2010 for the construction industry with most provisions becoming effective November 8, 2010 incorporates many changes that affect employer Responsibilities. In an effort to assist organizations, employers, and supervisors, following is a brief list of some of the major requirements:

Employers are required to provide the qualification or certification training to employees so that for qualified persons such as Signal Persons, Riggers and Crane Operator they can become qualified or certified as applicable at no cost to the employee.

Operator - Qualification and Certification - The employer must ensure that, prior to operating any equipment covered, the person is qualified or certified to operate the equipment under this regulation. Operators have until November 8, 2014 to become qualified.

Signal Person - The Employer of the signal person must ensure that each signal person meets the qualification requirements prior to giving any signals. In order to demonstrate that he/she meets the requirement of the new crane standard, they must pass an oral or written test, and a thorough practical test. Signal Persons have until November 8, 2010 to become qualified.

Rigging - Qualified Riggers must be used for any hooking, unhooking or guiding a load, assembly, disassembly of equipment, and other tasks. Riggers have until November 8, 2010 to become qualified.

Refresher Training - must be provided by the employer in relevant topics for each employee when, based on the conduct of the employee's knowledge, there is an indication that retraining is necessary.

Maintenance and Repair Personnel - The employer must ensure these personnel have been trained and evaluated, prior to operating equipment in the performance of the assigned duties, when working on equipment.

Assembly/Disassembly of Lattice Boom or Tower Cranes - must be directed by a person, who meets the criteria of both a competent person and qualified person, or by a competent person, who is assisted by one or more qualified persons.

Before beginning Multi-Crane/Derrick Operation, in which the operation will be provided by one or more cranes/ derricks, the operation must be planned and directed by a person who meets the criteria for both a competent person and a qualified person, or by a competent person who is assisted by one or more qualified persons (lift director).

Working around Power Lines requires that the employer must evaluate each employee to confirm that the employee understands the information provided in the training. In addition, dedicated spotters who are trained in accordance with safe crane operations around power lines are required in general as spotters when operating near power lines.

The new regulations on Crane Inspections, now requires that Mobile and Tower Cranes require Daily, Monthly and Annual Inspections. Each shift a Competent Person must visually inspect the crane. Monthly, a Competent Person must visually inspect the crane and the inspection must be documented. Annually, the equipment must be inspected and documented by a Qualified Person which is a more stringent requirement than a competent person. Similarly, any equipment that has been modified or repaired and all equipment post-assembly must be inspected by a qualified person.

For the complete text of OSHA 29CFR 1926.1400 visit www.eich.com and follow the link on the home page.