

Washington State's New Construction Crane Rule (Phase 1)







The New Construction Crane Rule

- The rule is divided into two parts;
- The first part deals with Crane Certification and Crane Certifiers; Also included in this first part is Operator Qualifications
- The second part will have the requirements for the employer to follow regarding maintenance, inspection, and operation
- Rigging and Personnel Lifting will also be addressed



Crane Certification and Crane Certifier Accreditation

- Rule Effective Date and the Required Date is January 1st 2010



Introduction to workers' comp rates and claims management.

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Business Links

- > What to do if your employees are injured
- > Find a safety rule
- > File Quarterly Reports
- > Find safety training materials
- > Electrical permits and inspections
- > Running a business: What you need to do
- ➔ more business topics

Worker Links

- > Worker's comp claims
- > Find out about breaks
- > Learn workplace safety requirements
- > Understanding overtime pay
- ➔ more worker topics

Medical Provider Links

- > Managing claims for injured workers
- > Medical treatment guidelines
- > Provider billing & payment
- > Check what needs pre-authorization
- ➔ more medical provider topics

Quick Links

- 2009 minimum wage is \$8.55
- Look up a contractor, plumber or electrician
- 2009 final rates
- Help for small business owners
- Report fraud
- News and media center

Office Locations



➔ listing of offices



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Information in Spanish

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Workplace Rights

Trades & Licensing

Find a Law (RCW) or Rule (WAC)

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Help

- The Basics
- Topic Center
- Training
- Hazard Prevention
- Research
- Rules & Policies

Safety

Workplace safety and health

en español

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The Basics

- > Core Rules
- > Steps to a Safe Workplace
- > Sample Programs
- > Assistance & Consultation
- > Small Business Basics

Topic Center

- > A-Z Safety & Health Topics
- > Certification & Permits
- > WISHA Advisory Committee
- > Safety & Health Grants

Hazard Prevention

- > Idea Banks
- > Hazard Alerts & Notices
- > Health & Workplace Diseases
- > Ergonomics
- > Chemical Safety

Research

- > What's New in SHARP
- > About the SHARP Program
- > SHARP Focus Newsletter
- > Projects



L&I adopts a new rule on construction crane safety.

> [Learn more about the new rule.](#)

Other Hot Topics

- > Safety and health grants
- > Voluntary Protection Program
- > Hospitalization reporting requirements
- > Diacetyl (food flavoring)

Related L&I Topics

- > Posters (required and recommended)
- > Teen Worker Safety
- > Employer Reporting Pilot Project

Other Web Sites



Exemptions

- Cranes with a maximum lifting capacity of one ton (2000 lbs) or less
- Power shovels, excavators, backhoes
- Automotive wreckers & tow trucks
- Service trucks (digger derricks) specifically designed for power line work
- Mechanic's truck when used for equipment maintenance or repair work
- Drilling rigs



Exemptions (cont.)

- Tree trimming and tree removal work
- Service trucks with booms that rotate manually
- Machines with booms that are limited to up & down movement only and does not rotate
- Conveyors
- Pump hoists with booms that do not rotate
- Cranes used in manufacturing facilities or powerhouses while used in routine maintenance and repair work



Crane Certifier Requirements

- Current accredited Maritime Crane Certifiers and accredited certifiers from other states may apply for a provisional accreditation to certify construction cranes until January 2012 (**WAC 296-155-53100 (2)&(3)**)
- Afterwards they must meet the same requirements established by the new rule



Crane Certifier Requirements

- A certifier cannot certify a crane that he/she has modified, altered, or repaired a load sustaining member on that crane within the same certification period (**WAC 296-155-53100 (4)**)



Crane Certifier Requirements

- Application Process: **(WAC 296-155-53102)**
 - Submit application and resume addressing knowledge, training, experience with verifiable references;
 - Applicants must have knowledge of our Construction Safety Standard (WAC 296-155) and
 - Nationally recognized safety standards for cranes & derricks (such as ASME) for which applicant desires to be accredited for



Crane Certifier Requirements

- Applicants must have at least 5 years of crane/derrick experience – of which 2 years must be actual crane inspection activities;
- the other 3 years may include experience as crane operator, crane mechanic, crane foreman, crane operation supervisor, or rigging specialist (**WAC 296-155-53102**)



Crane Certifier Requirements

- Written examinations:
 - Applicants must pass a general examination and specialty examinations for the type of crane they are applying for (**WAC 296-155-53102**)
- Note: we are working with NCCCO in developing written exams for crane certifiers – the compliance officers that will be working for **CHSO's in L&I's Crane Section will also have to pass these same exams.** (Exams should be available by Summer 2009)



Crane Certifier Requirements

- Accreditation will be valid for 3 years
- Reexaminations must be completed every 6 years
- Certifiers must complete at least 40 hours of crane related training every 3 years
- Certifiers must be actively certifying cranes during their accreditation period in order to be renewed – at least 21 cranes/derricks during 3 year period
(WAC 296-155-53108)



Crane Certifier Requirements

- L&I may suspend or revoke accreditation for such reasons as: **(WAC 296-155-53110)**
 - Performing certifications on cranes which he/she is not qualified to certify;
 - Obtained accreditation through fraudulent means;
 - Falsifies training documentation;
 - Gross negligence, gross incompetence, fraud in certification of a crane;



Crane Certifier Requirements

- Willful or deliberate disregard of occupational safety standards
- Failure to maintain records;
- Failure to report safety deficiencies affecting the safe operation of a crane



Crane Certification Requirements

- Cranes must be inspected, and load tested by a Crane Certifier annually and after any significant modification or significant repair of structural parts
- Tower Cranes must be inspected by Crane Certifier both prior to assembly and following erection – they must also be recertified after jumping (raising mast)



Crane Certification Requirements

- Before installation on a nonstandard Tower Crane Base, the engineering design of that base must be reviewed and accepted by a second independent Registered Professional Structural Engineer
- The Certifier must notify L&I and the crane owner if the crane does not meet safety standards
- All corrected deficiencies must be verified by an accredited certifier prior to certifying the crane



Crane Certification Requirements (WAC 296-155-532)

- Certifiers must review maintenance and inspection records
- Certifiers will be checking items outlined in the new crane rule
- Mobile Crane Proof Load Tests are required annually in the as configured condition
- No major component on a mobile crane may be used unless it has been proof load tested within the last 4 years



Crane Certification Requirements

- Temporary or Final Certificate must be posted in operator's cab or station
- Crane Certifications are valid for one year



Crane Certification Requirements

- A crane's certification becomes invalid should any of the following occur: (WAC 296-155-53214)
 - Contact with an energized power line;
 - Any overload, other than proof load testing;
 - Any significant modification or significant repair of a load sustaining/bearing part

Crane Operator Qualifications

What does it take for a person to operate a crane at a construction site here in Washington State?





Crane Operator Qualification Requirements

- Employers are prohibited from allowing a person who does not meet the requirements of this rule to operate a crane without direct supervision by a qualified crane operator



Crane Operator Qualification Requirements

- Crane operators must obtain a valid operator's certificate issued by a crane operator testing organization that is accredited by a nationally recognized accrediting agency
 - Currently there are 4 that meet this requirement —
 - **NCCCO , CIC, NCCER, and Local 12 of the Operator's Union in CA**
- Candidates must successfully pass written and practical examinations for the type/class of crane to be operated



Crane Operator Qualification Requirements

- Operators must have up to 2000 hrs of documented crane operator experience, based on the type of crane they operate (*This is a one time requirement.*) (upcoming slide will show how this is broken down for the types of cranes)
- Crane operators must recertify at least every 5 years
- Crane operators must successfully pass a substance abuse test conducted by a recognized laboratory



Crane Operator Trainee Requirements

- Trainees must be provided sufficient training prior to operating the crane to enable the trainee to operate the crane safely under limitations outlined in the rule
- Trainee must be continuously supervised by a qualified operator
- The qualified operator is not allowed to perform any tasks that would detract from their ability to supervise the trainee



Crane Operator Trainee Requirements

- The qualified operator must be in direct line of site of the trainee, except for tower cranes and then they must be in direct communications with each other



What the Trainee Cannot do

- Cannot place any part of crane or load within 20 ft of a power line (up to 350 kV), or no closer than 50 ft of a power line that is over 350 kV;
- Cannot hoist personnel;
- Cannot perform a multiple-crane lift; or
- Multiple-lift rigging or Critical Lifts unless the qualified operator determines the trainee's skills are sufficient for this high-skill work



Crane Operator Qualification Requirements

- Crane Operators Must have documented hours of experience per Table 1:
 - Actual Crane Operating Experience
 - Crane Related Experience



Hours of Experience

■ Mobile Cranes

— Crawler & Truck Lattice Boom

	Operating	Related
• 300t & above	1000 Hrs	1000 Hrs
• Under 300t	500 Hrs	500 Hrs

— Lg Telescopic Boom Cranes (Swing Cab)

• Over 130t	750 Hrs	750 Hrs
• Over 40t & up to 130t	250 Hrs	250 Hrs
• Up to 40t	40 Hrs	40 Hrs



Lattice Boom Cranes

Truck Mounted

Crawler





Large Telescopic Boom (Swing Cab)





Hours of Experience

– Sm Telescopic Boom Cranes (Fixed Cab)

	Operating	Related
• Over 15t	40 Hrs	40 Hrs
• Over 5t to 15t	20 Hrs	20 Hrs
• 5t & under	8 Hrs	16 Hrs

– Articulating Cranes (Knuckle Boom)

20 Hrs	20 Hrs
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– Derricks

20 Hrs	500 Hrs
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Small Telescopic Boom (Fixed Cab)





Articulating Cranes



Note: NCCCO is currently developing written and practical exams for these cranes.



Hours of Experience

– Tower Cranes

- Hammerhead
- Luffing
- Self-Erecting

Operating

500 Hrs
500 Hrs
50 Hrs

Related

500 Hrs
500 Hrs
50 Hrs

– Overhead/Bridge Cranes

- Cab Operated
- Pendant / Remote

40 Hrs
40 Hrs

40 Hrs
40 Hrs



Hammerhead



Luffing



Self-Erecting



Actual Operating Hours

- **For All Cranes:**
 - Time while the operator is at the controls of the crane; and/or has direct control of the crane; or a combination of operating hours within the same crane type



Actual Operating Hours

- **For Mobile cranes:**
 - This includes time while installing/removing boom sections, luffing boom, jib, extending and retracting outriggers/stabilizers, leveling crane, and replacing hoisting rope



Actual Operating Hours

- **For Tower cranes:**
 - This includes time while jumping (increasing the height of the tower/mast)



Related Crane Experience

- Time as a signalman/bellman, oiler, crane mechanic, crane inspector
- Formal classroom training, crane simulator operation, and
- a combination of operating hours on other categories of cranes



Crane Operator Documentation

- For experience obtained prior to January 1, 2010 or experience obtained outside L&I's jurisdiction, the employer may accept a declaration from the crane operator attesting to actual hours of crane operator experience and crane related experience separated out by crane type and capacity



Crane Operator Documentation

- Beginning January 1, 2010, crane operator experience and related crane experience must be documented and separated out by crane type and capacity and accessible to the operator upon request



Questions?

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