



# TOWER CRANE LOGBOOK

## Permanent Record

This is a guide to help meet the requirements of subsection 210(3) of *General Regulation 91-191* made under the *Occupational Health and Safety (OHS) Act*.

This permanent record is to be kept with the machine at all times. The data enclosed should be supplemented with the manufacturer's specifications for the specific model of tower crane.

**Tower Crane Owner** \_\_\_\_\_

**Make of Tower Crane** \_\_\_\_\_

**Unit N°.** \_\_\_\_\_

**Model N°.** \_\_\_\_\_

**Serial N°.** \_\_\_\_\_

**Max. Rating** \_\_\_\_\_

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# WorkSafeNB Regional Offices

## New Brunswick

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Phone: 506 547-7300

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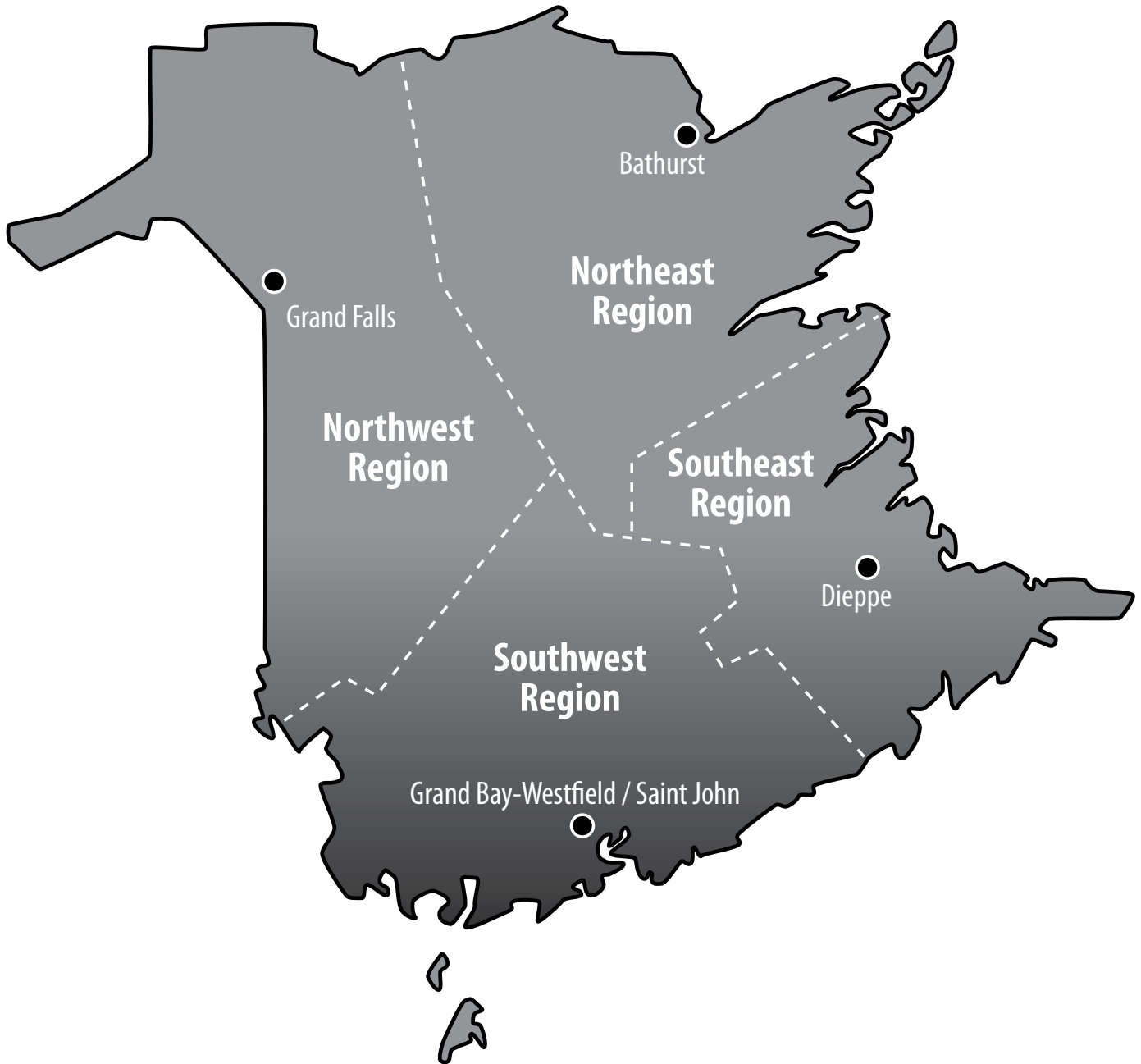
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**[www.worksafenb.ca](http://www.worksafenb.ca)**

## LEGISLATIVE INTERPRETATIONS

Topic:	Interpretations of Act / Regulation	Issued by:	Legal Department
Statute:	<i>General Regulation 91-191</i>	Date Issued:	June 15, 2001
Section, subsection or paragraph:	Competent Person - Yearly Inspection	Date Revised:	

**210.01(1)** An employer shall ensure that a hoisting apparatus is inspected every 12 months by a competent person to ensure that the apparatus meets the manufacturer’s specifications.

**Question:**

How will you know if a person is competent to certify the hoisting apparatus?

**Answer:**

Competency requirements will vary with each type of equipment. However, since the regulation makes reference to several Canadian Standards Association (CSA) standards that address this issue, WorkSafeNB will reference the requirements outlined in these standards for guidance.

Other standards such as the American National Standards Institute (ANSI) and the American Society of Mechanical Engineers (ASME), which cover types of hoisting apparatus not covered by CSA, may also be used for guidance in determining competency.

It is recommended that employers who are responsible for appointing competent inspectors, also follow these guidelines to help them ensure their appointments are appropriate.

## LEGISLATIVE INTERPRETATIONS

Topic:	Hoisting apparatus – Visual inspection before use	Issued by:	Legal Department
Statute:	<i>General Regulation 91-191</i>	Date Issued:	December 18, 2002
Section, subsection or paragraph:	211(2) (a)	Date Revised:	

**211(2)** An operator of a hoisting apparatus shall:

(a) visually inspect the hoisting apparatus before use to verify that it is in safe working order.

### Question:

To meet the requirements of this section, must each operator visually inspect the hoisting apparatus before use if more than one operator operates the unit during a shift?

### Answer:

Not all operators are required to visually inspect the hoisting apparatus before use during a shift, provided the employer puts in place a system that allows for one of the operators to visually inspect the hoisting apparatus at the beginning of each shift and allows the remaining operators to easily verify that the designated person performed the visual inspection.

For this system to be acceptable, the employer must address this through a written procedure that sets out:

- how a person is selected to be the designated person
- a means of identifying the designated person
- the duties of the designated person
- the duty of the remaining users to confirm checks were performed

The visual inspection confirmation must be posted at or near the equipment controls so other operators can readily verify the inspection was made.

The person designated to perform the visual inspection before use can be rotated through the operator group, provided that the designated person knows the procedure and that the other operators can determine who the designated person is at the time of use.

Notwithstanding the above, users who wish to visually inspect the hoisting apparatus shall be permitted to do so by the employer.

# Tower Crane Inspection Requirements

## Daily / Shift Inspection

When in use, tower cranes must be inspected by operators on a daily basis as specified in paragraph 211(2)(a) of *General Regulation 91-191*. The results of the inspection must be recorded in a logbook as specified in subsection 210(3) of *General Regulation 91-191*.

## Annual Inspection

As specified in subsection 210.01(1) and 210.01(2) of *Regulation 91-191*, a competent person shall inspect a tower crane every 12 months and certify in writing that the apparatus meets the manufacturer's specifications. This inspection must be completed in accordance with clause 6.4.2 of CSA standard Z248-75 or 6.4.7 of CSA standard Z248-04, "*Code for Tower Cranes*."

Canadian Standards Association International  
CSA International, Sales Department  
178 Rexdale Boulevard  
Etobicoke, ON M9W 1R3  
Phone: 1 866 797-4272, Standard Sales  
Fax: 416 747-4149  
Email: sales@csa.org  
**[www.shopcsa.ca/onlinestore/welcome.asp](http://www.shopcsa.ca/onlinestore/welcome.asp)**  
**<http://ohsviewaccess.csa.ca/>**

The results of the annual / periodic inspection including repairs, adjustments and other findings shall be included in the logbook and made available to an officer upon request (subsection 210(3) of *General Regulation 91-191*).

*General Regulation 91-191* defines competent as:

- (a) qualified, because of such factors as knowledge, training and experience, to do assigned work in a manner that will ensure the health and safety of persons,
- (b) knowledgeable about the provisions of the Act and the regulations that apply to the assigned work, and
- (c) knowledgeable about potential or actual danger to health or safety connected with the assigned work.

# Tower Crane Inspection Requirements

## Daily Tower Crane Inspection

The items listed are intended as a guide for performing daily visual inspections on components that have a direct bearing on the crane safety and whose status may change with day-to-day use. The items listed, but not necessarily restricted to, shall be inspected for defects and observed during operation for defects potential defects.

For a complete inspection list of the unit in use, please consult the manufacturer's recommendations.

### Daily inspections by operator

Wedges	Ensure all wedges in slab openings are tight and in place.
Guy wires	Check guy wires and connections for proper application and safety.
Limit switches, signal lights, audio and visual indicators and brakes	Ensure all limit switches (except line pull limit switch), signal lights, audio and visual indicators, and brakes function properly.
Rail clamps	Inspect rail clamps, if used.
Water accumulation	Check locations where the water accumulation could result in damage and ensure water is drained.
Mast bolts and anchor bolts	Inspect mast bolts and anchor bolts.
Load hoist and boom hoist ropes	Inspect load hoist and boom hoist ropes according to Clause 6.5.
Distortion of rope	Check rope for distortions, such as kinking, crushing, unstranding, birdcaging, main strand displacement, or core protrusion.
- Rope diameter	Check rope diameter for local decreases or increases.
- Strands	Check outer strands for unevenness.
- Corrosion	Check ropes for general corrosion.
- Broken wires	Check the number, distribution, and type of broken wires (see Clause 6.5.2.2 for further guidance).
- Rotation-resistant ropes	Check rotation-resistant ropes for localized core deterioration.
- Heat damage	Check ropes for damage due to heat or electric arcing.
- Sheave inspection	Inspect sheaves whenever there is evidence of premature wear and damaged or broken wires in the rope installations.
- Sheave flanges	Inspect sheave flanges for any deformation, cracks, chips, breaks, or other damage.
- Sheave bearings	Check sheave bearings to ensure free-wheeling and that there is no excessive play due to wear.

# Tower Crane Inspection Requirements

## Daily Tower Crane Inspection

Grounding connections	Inspect grounding connections.
Tracks	Inspect tracks for loose connections, proper drainage, subsidence, and bogie wear on traveling cranes.
Travel limit switches	Inspect travel limit switches on tracks and ensure they are set at a distance in feed from the end of the track equivalent to 10% of the maximum crane travel speed in fpm.
Track stops	Inspect track stops for effectiveness.

### Daily inspections by rigger

Slings and rigging	Check all slings and rigging used with the crane before use.
Test block-lifting hardware	Inspect the test block-lifting hardware before lifting the test block.
Load block and hook	Inspect the load block and hook.





# Tower Crane Inspection Requirements

## Daily Visual Inspection

Operator must visually inspect the tower crane daily in accordance with paragraph 211(2)(a) of *General Regulation 91-191*.

Indicate inspected items with a check. ✓

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**By Rigger** \_\_\_\_\_

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Slings and rigging																															
Test block-lifting hardware																															
Load block and hook																															

Comments	Initials	Date

Comments	Initials	Date