



CAN/CSA-Z150-98 (R2004)
Safety Code on Mobile Cranes

CAN/CSA-Z150-F98 (C2004)
***Code de sécurité sur les grues
mobiles***

Preface

This is the **second edition** of CSA Standard Z150, *Safety Code on Mobile Cranes*. It supersedes the first edition, published in **1974**.

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This Standard was developed by the **Technical Committee on Mobile Cranes** under the jurisdiction of the Standards Steering Committee on Occupational Health and Safety and has been formally approved by both these Committees. It will be submitted to the **Standards Council of Canada** for approval as a National Standard of Canada.

November 1998

About the Standards Council of Canada

Standards Council of Canada (SCC) is a federal Crown corporation that reports to Parliament through the **Minister of Industry** and oversees Canada's National Standards System. SCC also represents Canada's interests on standards-related matters in foreign and international forums e.g. ISO.

Organizations that are accredited to develop standards are:

Bureau de normalisation du Québec (BNQ)



Canadian General Standards Board (CGSB)



Canadian Standards Association (CSA)



Underwriters Laboratories of Canada (ULC)



Technical Committee on Mobile Cranes

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Uses of standards by regulators

Standards may be

- ◆ cited directly in an act or regulation; or
- ◆ inferred e.g. an act or regulation may require that a machine is safe to operate and that a worker is properly trained. Adhering to a current and applicable source such as a standard may be considered as having taken reasonable precautions.

Examples:

Ontario Construction Regulations

151. (1) No crane or similar hoisting device shall be subjected to a load greater than its rated load-carrying capacity. O. Reg. 213/91, s. 151 (1).

(2) The manufacturer of a crane or similar hoisting device or a professional engineer shall determine its rated load-carrying capacity in accordance with,

- (a) for a mobile crane, Canadian Standards Association Standard Z150-1974 Safety Code for Mobile Cranes....

Ontario Occupational Health and Safety Act

Duties of employers

25. (1) An employer shall ensure that,

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- (b) the equipment, materials and protective devices provided by the employer are maintained in good condition;

Current references to Z150 by major Canadian jurisdictions

Jurisdiction	Act	Regulation	Edition referenced
Federal	Canada Labour Code	Canada Occupational Safety And Health Regulations	Z150-1974
Yukon	OHS Act	General Safety Regulations	Z150
British Columbia	Workers Compensation Act	OHS Regulation	Z150-1974
Northwest Territories			
Alberta	OHS	OHS Code	Z150-98
Saskatchewan			
Nunavut			
Manitoba			
Ontario	OHS Act	Construction Projects	Z150-1974
Québec	An Act respecting OHS	Regulation Respecting OHS	Z150-1974
Québec	An Act respecting OHS	Safety Code for the Construction Industry	Z150-1974
New Brunswick	OHS Act	General Regulation - OHS Act	Z150-98
Newfoundland and Labrador	OHS Act	OHS Regulations	Z150
Nova Scotia	OHS Act	Occupational Safety General Regulations	Z150-98
Nova Scotia	Crane Operators and Power Engineers Act	Crane Operators Regulations	Z150-98
Prince Edward Island	Occupational Health and Safety Act	General Regulations	Z150

Changes under consideration for the next edition of Z150

Scope

Clarify that a Self-erecting tower crane is covered by the Tower crane standard (Z248); not the mobile crane standard.

Stability

Clarify load ratings for infinitely variable and unequally extended outriggers.

Load chart

Delete requirement to display low ambient temperature limit, size of outrigger pads, RV settings on the load chart.

Operational aids

Add requirements for design of aids and actions to be taken when aids are inoperative.

Load hoist drum

Require manufacturer to specify minimum wraps of rope on drum (shall be at least 3 – was previously 2).

Increase flange height.

Require a secondary drum holding device.

Rope

Clarify that rope safety factor includes allowance for end connector and termination efficiency.

Rope shall be recommended by OE crane manufacturer or rope manufacturer knowledgeable about mobile cranes.

Original rope spec shall be recorded in crane manual.

Fibre core ropes shall not be used.

Clarify requirements for rope fittings and terminations.

Sheaves

Aluminum sheaves shall not be used.

Inspection

Add sample crane log.

Require annual inspection following change of ownership.

Maximum telescopic boom structural inspection interval to be 15 years rather than 10.

Block/ball assemblies to be inspected at least every 10 years.

Add commercial truck chassis and boom support hydraulic cylinder mounts to annual inspection.

Remove details on rope inspection in deference to manufacturer's instructions.

Maintenance

Preventative Maintenance should include additional recommendations by a qualified person based on crane application and operation.

Use NDT to verify integrity of structural repairs.

Operations

Add details for operator qualifications.

Require a pre-lift meeting prior to multiple crane lifts.

Clarify requirements for personal lifting by pinned or suspended platforms and provide examples.

Recognize function of Work Area Definition System (WADS) when operating close to energized conductors.

Requirements for use of insulating jib or work platform.