CSA Group

B167-08
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Overhead travelling cranes — Design, inspection, testing, maintenance, and safe operation

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The Technical Committee would like to dedicate this Standard to Mr. Rolf Lovgren, former chair of the ISO TC 96/Cranes Subcommittee, who passed away in 2005. Mr. Lovgren played a key role in developing this edition of CSA B167. The Committee would not have been able to complete this Standard without the knowledge and experience Mr. Lovgren brought to this project. His dedication to the development of international crane standards will remain a valuable contribution to the field of standardization.

Preface

This is the third edition of CSA B167, *Overhead travelling cranes — Design, inspection, testing, maintenance, and safe operation*. This edition supersedes the second edition, entitled *Safety Standard for Maintenance and Inspection of Overhead Cranes, Gantry Cranes, Monorails, Hoists, and Trolleys,* published in 1996, and the first edition, entitled *General Purpose Electric Overhead Travelling Cranes,* published in 1964.

In addition to the inspection and maintenance requirements covered in the second edition, this new edition has an expanded scope, which includes the design, testing, and operation of overhead travelling cranes and hoists. This edition also references several new international standards.

This Standard incorporates selected material from ISO 4301-1 and ISO 4301-5 and outlines the requirements that are applicable to Canadian industry.

This Standard also incorporates excerpts from ASME B30.2 and ASME B30.9, which are reprinted by permission of The American Society of Mechanical Engineers. All rights reserved.

This Standard was prepared by the Technical Committee on Overhead Travelling Cranes, under the jurisdiction of the Strategic Steering Committee on Occupational Health and Safety, and has been formally approved by the Technical Committee. It will be submitted to the Standards Council of Canada for approval as a National Standard of Canada.

October 2008

Notes:

(1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*

(2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*

(3) *This publication was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this publication.*

(4) *CSA Standards are subject to periodic review, and suggestions for their improvement will be referred to the appropriate committee.*

(5) *All enquiries regarding this Standard, including requests for interpretation, should be addressed to Canadian Standards Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6.*

Requests for interpretation should

(a) define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;

(b) provide an explanation of circumstances surrounding the actual field condition; and

(c) be phrased where possible to permit a specific "yes" or "no" answer.

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization *and are published in CSA's periodical* Info Update*, which is available on the CSA Web site at www.csa.ca.*

B167-08
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1 Scope

1.1
This Standard specifies minimum requirements for the design, inspection, testing, maintenance (modifications and repairs), and safe operation of overhead cranes, monorails, hoists, trolleys, jib cranes, gantry and wall cranes, and other equipment having similar characteristics.

1.2
The following are not covered in this Standard:
(a) mobile cranes and tower cranes (they are covered in CAN/CSA-Z150 and CAN/CSA-Z248, respectively);
(b) personnel hoisting and elevating devices (they are covered in ASME A17.1/CSA B44 and CAN/CSA-Z185);
(c) supporting building structures (see provincial building codes and CAN/CSA-S16); and
(d) below-the-hook lifting devices, e.g., slings and rigging hardware (they are covered in other ISO and ASME Standards).

1.3
In CSA Standards, "shall" is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; "should" is used to express a recommendation or that which is advised but not required; "may" is used to express an option or that which is permissible within the limits of the standard; and "can" is used to express possibility or capability. Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material. Notes to tables and figures are considered part of the table or figure and may be written as requirements. Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

2 Reference publications
This Standard refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto.
Note: *The publications listed in this Clause can be obtained through the issuing organization or from standards distribution agencies.*

CSA (Canadian Standards Association)
ASME A17.1-2007/CSA B44-07
Safety code for elevators and escalators

C22.1-06
Canadian Electrical Code, Part I