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**W178.2-14**

# **Certification of welding inspectors**

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# ***Standards Update Service***

***W178.2-14***  
***April 2014***

**Title:** *Certification of welding inspectors*

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# *W178.2-14*

## *Certification of welding inspectors*



*™A trade-mark of the Canadian Standards Association, operating as "CSA Group"*

*Published in April 2014 by CSA Group  
A not-for-profit private sector organization  
5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6*

*To purchase standards and related publications, visit our Online Store at [shop.csa.ca](http://shop.csa.ca)  
or call toll-free 1-800-463-6727 or 416-747-4044.*

*ISBN 978-1-77139-354-6*

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# Certification of Welding Inspectors and Inspection

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# Preface

This is the sixth edition of CSA W178.2, *Certification of welding inspectors*. It supersedes the previous editions, published in 2008, 2001, 1996, 1990, and 1982.

This Standard provides requirements for those seeking certification as welding inspectors. Individuals may be certified in accordance with this Standard regardless of whether they are employed by an inspection organization.

The effectiveness of welding inspection depends largely on the knowledge and integrity of the individual responsible for carrying out the inspection. Thus, there is a need for inspectors with both appropriate knowledge and the capability of exercising responsible judgment.

This Standard is not intended to replace an employer's final responsibility for the work or a supervisor's judgment of an individual's suitability to perform a given task.

This Standard was prepared by the Technical Committee on the Certification of Welding Inspectors and Inspection Organizations, under the jurisdiction of the Strategic Steering Committee on Welding and Structural Metals, and has been formally approved by the Technical Committee.

## 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 Standard was developed by consensus, which is defined by CSA's 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 Standard.
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  - b) provide an explanation of circumstances surrounding the actual field condition; and
  - c) where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at [standardsactivities.csa.ca](http://standardsactivities.csa.ca).

- 5) This Standard is subject to review five years from the date of publication, and suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to [inquiries@csagroup.org](mailto:inquiries@csagroup.org) and include "Proposal for change" in the subject line:
  - a) Standard designation (number);
  - b) relevant clause, table, and/or figure number;
  - c) wording of the proposed change; and
  - d) rationale for the change.

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](http://www.csa.ca).

# W178.2-14

## *Certification of welding inspectors*

### 1 Scope

#### 1.1

This Standard covers the certification of welding inspectors at three certification levels. It specifies the responsibilities and the basic technical functions associated with each level.

#### 1.2

This Standard specifies the requirements for the periodic review of welding inspector certification, including vision tests.

#### 1.3

This Standard, by including a code of ethics for the welding inspector, defines principles of practice and conduct for maintaining certification.

#### 1.4

To assist candidates in preparing for examinations, this Standard contains knowledge requirements (see Annex A) covering

- a) welding fundamentals;
- b) welding inspection; and
- c) welding metallurgy.

It also includes a list of relevant reference publications (see Annex B).

#### 1.5

This Standard does not address safety issues associated with welding. It is the responsibility of the users of this Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations.

**Note:** CSA W117.2 addresses safety in welding, cutting, and allied processes.

#### 1.6

This Standard does not address the certification of individuals performing non-destructive examinations using radiographic, ultrasonic, eddy current, magnetic particle, or liquid penetrant methods. CAN/CGSB-48.9712/ISO 9712 specifies the requirements for the certification of individuals performing these non-destructive examination methods.

#### 1.7

In this Standard, “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; and “may” is used to express an option or that which is permissible within the limits of the standard.