



Certification of welding inspection organizations



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Preface

This is the sixth edition of CSA W178.1, *Certification of welding inspection organizations*. It supersedes the previous editions, published in 2008, 2002, 1996, 1990, and 1973 (as W178-73, *Qualification Code for Welding Inspection Organizations*).

This Standard provides industry and public authorities with a set of requirements to appraise the capability of organizations supplying services in the welding inspection field. It is to be used in conjunction with CSA W178.2, *Certification of welding inspectors*.

The requirements of this Standard are intended to be applied in conjunction with quality management system standards, such as the CAN/CSA ISO 9000 Standards, and with product category standards as listed in Annex A.

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 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.*
- 4) *To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include “Request for interpretation” in the subject line:*
 - 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) *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.

- 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 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.

W178.1-14

Certification of welding inspection organizations

1 Scope

1.1

This Standard specifies the requirements for establishing and maintaining the certification of welding inspection organizations.

1.2

This Standard specifies the requirements for the maintenance and calibration of inspection equipment, as well as the requirements for the management of records of its welding inspection personnel and inspection records and other documents.

1.3

This Standard includes specific clauses that integrate the requirements of certification with those of the Canadian General Standards Board (CGSB) with respect to personnel performing radiographic, ultrasonic, magnetic particle, liquid penetrant, and eddy current examinations.

1.4

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.*

1.5

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.

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 (nonmandatory) to define their application.