

Certification of companies for fusion welding of aluminum



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Preface

This is the third edition of CSA W47.2, *Certification of companies for fusion welding of aluminum*. It supersedes the previous editions, published in 1987 under the same title, and published in 1967 under the title *Aluminum Welding Qualification Code*.

Technological advancements have made it necessary to provide a new edition of this Standard which deals with the certification of companies for fusion welding of aluminum. It is not a product Standard and cannot be used to evaluate or approve products. Furthermore, it is not intended to supersede Codes and Standards that govern specific products, e.g., CSA B51, *Boiler, pressure vessel, and pressure piping code*; the ASME *Boiler and Pressure Vessel Code*; the Rules of the American Bureau of Shipping; or the Standards of the American Petroleum Institute.

This Standard stipulates minimum requirements that a company must meet and adhere to in order to obtain and maintain certification. Certification is granted by the Canadian Welding Bureau, the administrative body for this Standard, to companies that comply with the requirements of this Standard. Certification of a company indicates that, consistent with the requirements of the Division in which the company is certified, it has the organization, personnel, welding procedures, and equipment required to produce satisfactory welds and weldments.

Production of satisfactory welds and weldments is the responsibility of the certified company. It is the responsibility of the purchaser to ensure, through adequate inspection, that the required quality is attained. Although the Bureau makes periodic inspections of certified companies to ensure that they continue to comply with the requirements of this Standard, these inspections do not eliminate the need for a certified company's quality control methods or a purchaser's comprehensive inspection program.

This Standard was prepared by the Subcommittee on Certification of Companies for Fusion Welding of Aluminum, under the jurisdiction of the Technical Committee on Certification of Companies for Welding of Steel and Aluminum and the Strategic Steering Committee on Welding and Structural Metals, and has been formally approved by the Technical Committee.

March 2011

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.
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 - (c) wording of the proposed change; and
 - (d) rationale for the change.

W47.2-11

Certification of companies for fusion welding of aluminum

1 Scope

1.1

This Standard provides the requirements for the certification of companies engaged in the fusion welding of aluminum and for the qualification of their personnel and welding procedures.

Note: *This Standard is not intended for applications governed by codes such as the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code and codes of the American Petroleum Institute (API).*

1.2

The requirements of this Standard are based on the principle that a certified company has full responsibility for the quality of the welded product it produces, and this responsibility cannot be transferred to its employed or retained personnel, or to the administrator of this Standard.

1.3

This Standard governs the certification of companies. Certification pertains to the capability of the company with respect to welding. Certification should not be construed as approving any products or services of the certified company.

1.4

This Standard stipulates requirements for

- (a) welding engineers;
- (b) welding supervisors;
- (c) tack welders, welders, and welding operators; and
- (d) documentation.

1.5

The qualification requirements for tack welders, welders, and welding operators specified in this Standard are intended to demonstrate an individual's basic welding skills and to provide a means of verifying that individual's continuing ability in the fusion welding of aluminum.

1.6

This Standard applies to the gas metal arc welding (GMAW), gas tungsten arc welding (GTAW), and plasma arc welding (PAW) processes.

1.7

For the qualification of welding procedure data sheets (WPDSs) that use welding processes or base metals, or other parameters beyond the range specifically covered by this Standard. See [Clause 9.2.2.5](#).

1.8

Provisions for recognition of personnel qualified to other standards are included in this Standard.