



Standard for AWS Certification of Welding Inspectors



American Welding Society



AWS QC1:2007

Standard for AWS Certification of Welding Inspectors

Supersedes AWS QC1:2006

Prepared by the
American Welding Society (AWS) Subcommittee on Certified Welding Inspectors

Under the Direction of the
AWS Certification Committee

Approved by the
AWS Board of Directors

Abstract

This standard defines the requirements and program for the American Welding Society to certify welding inspectors. The certification of visual welding inspectors requires documentation of experience, satisfactory completion of an examination, and proof of visual acuity. The examination tests the inspector's knowledge of welding processes, welding procedures, destructive tests, terms, definitions, symbols, reports, safety, and responsibilities.



American Welding Society

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Foreword

This foreword is not part of AWS QC1:2007, *Standard for AWS Certification of Welding Inspectors*, but is included for informational purposes only.

The purpose of welding inspection is to determine if a weldment meets the acceptance criteria of a specific code, standard, or other document. The welding inspector must be thoroughly familiar with welding processes, welding procedures, welder qualifications, materials, the limitation of weld testing, be able to read drawings, prepare and keep records, prepare and make reports, and make responsible judgments. For welding inspectors to be effective, the activities performed should be consistent with the requirements, and technical and ethical principles.

AWS QC1, *Standard for Certification of AWS Welding Inspectors*, was first published in 1975. Subsequent editions were published in 1988, 1996, and 2006. This document, QC1:2007, *Standard for Certification of AWS Welding Inspectors*, replaces the 2006 edition. The first examinations for the certification of Welding Inspector were conducted in the spring and fall of 1976. Over 55,000 individuals have met the requirements of AWS QC1, worldwide, since the start of the program.

This edition contains revisions approved by the AWS Certification Committee on January 15, 2007. All amended or added text is identified by underlines. The following is a summary of the amendments:

- Statement on Use—a disclaimer paragraph was added to explain the use of endorsements.
- Definition of endorsement—the definition was revised to clarify the term.
- 6.2.2—the table in 6.2.2 was revised to include the requirements for endorsements.
- 6.2.5—amended to clarify the requirements for re-examinations.
- 16.3.1—amended to clarify that endorsements may be used for recertification.
- 16.7—amended to clarify the various options for recertification and the various scenarios that could result if one of the examination options is chosen.

Comments and suggestions for the improvement of this standard are welcome. They should be sent to the Secretary, AWS Certification Committee, American Welding Society, 550 N.W. LeJeune Road, Miami, FL 33126.

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Standard for AWS Certification of Welding Inspectors

1. Scope

1.1 This standard establishes the requirements for AWS certification of welding inspection personnel. It describes how personnel are certified, and the principles of conduct and practice by which certification may be maintained. Any oral or written claim of certification under the guidelines established herein shall be made only by those individual SCWIs, CWIs, and CAWIs who are, at the time of the claim, current and in compliance with all sections of this standard.

This standard meets or exceeds the requirements of AWS B5.1:2003, *Specification for the Qualification of Welding Inspectors*. This standard supersedes AWS QC1:2006.

1.2 The three levels of certification are Senior Certified Welding Inspector (SCWI), Certified Welding Inspector (CWI), and Certified Associate Welding Inspector (CAWI).

1.3 In the certification process, AWS conducts an examination to determine a person's general knowledge of welding inspection and related technical areas. No determination is made of an individual's capabilities in applying that knowledge within a specific work environment or under actual working conditions.

1.4 It shall be the responsibility of the employer to determine that the SCWI/CWI/CAWI is capable of performing the duties involved in his/her particular welding inspection assignment.

1.5 This standard is intended to supplement the requirements of an employer, code, or other documents and shall not be construed as a preemption of the employer's responsibility for the work or for the performance of the work.

1.6 Safety Precautions. This standard is not intended to address safety and health matters regarding certified welding inspectors. Safety and health requirements are provided in ANSI Z49.1, *Safety in Welding, Cutting, and*

Allied Processes, other safety and health standards, and federal, state, and local government regulations. This standard only covers the rules of certification.

1.7 Verb Usage. As used in this standard, the word *shall* denotes a requirement; the word *should* denotes a guideline, and the word *may* denotes an obligation to make a choice.

2. Levels of Certification and Endorsements

There are three levels of AWS certification of welding inspection personnel and specified endorsements. These levels are defined as follows:

2.1 Senior Certified Welding Inspector (SCWI). A person certified by AWS as meeting the qualification requirements of 5.3, 6.1, and 6.2 of AWS B5.1, *Specification for the Qualification of Welding Inspectors*, and 5.2 of this standard.

2.2 Certified Welding Inspector (CWI). A person certified by AWS as meeting the qualification requirements of 5.2, 6.1, and 6.2 of AWS B5.1, *Specification for the Qualification of Welding Inspectors*.

2.3 Certified Associate Welding Inspector (CAWI). A person certified by AWS as meeting the qualification requirements of 5.1, 6.1, and 6.2 of AWS B5.1, *Specification for the Qualification of Welding Inspectors*.

2.4 Endorsements. Endorsements may be added to the SCWI and CWI certifications as outlined in specific endorsement publications.

3. Definitions

The welding terms used in this standard are defined in AWS A3.0, *Standard Welding Terms and Definitions*. Other terms used in this standard are defined as follows: