



# Standard for AWS Certified Welders



**American Welding Society**

---



**Keywords** — AWS certified welders, welders,  
welder certification, welder  
qualification

**AWS QC7-93**

# **Standard for AWS Certified Welders**

Prepared by  
AWS Qualification and Certification Committee

Under the Direction of  
AWS Education and Certification Council

Approved by  
AWS Board of Directors

## **Abstract**

This standard describes a program administered by the American Welding Society (AWS) for the certification of welders. The AWS Certified Welder Program provides a means for the transference of welder qualifications from employer to employer without retesting. The standard defines the minimum requirements for welder participation in the program and the methods to be used by employers for adopting the program.



**American Welding Society**

---

550 N.W. LeJeune Road, P.O. Box 351040, Miami, Florida 33135

## Statement on Use of AWS Standards

All standards (codes, specifications, recommended practices, methods, classifications, and guides) of the American Welding Society are voluntary consensus standards that have been developed in accordance with the rules of the American National Standards Institute. When AWS standards are either incorporated in, or made part of, documents that are included in federal or state laws and regulations, or the regulations of other governmental bodies, their provisions carry the full legal authority of the statute. In such cases, any changes in those AWS standards must be approved by the governmental body having statutory jurisdiction before they can become a part of those laws and regulations. In all cases, these standards carry the full legal authority of the contract or other document that invokes the AWS standards. Where this contractual relationship exists, changes in or deviations from requirements of an AWS standard must be by agreement between the contracting parties.

International Standard Book Number: 0-87171-412-4

American Welding Society, 550 N.W. LeJeune Road, P.O. Box 351040, Miami, Florida 33135

© 1993 by American Welding Society. All rights reserved  
Printed in the United States of America

Note: The primary purpose of AWS is to serve and benefit its members. To this end, AWS provides a forum for the exchange, consideration, and discussion of ideas and proposals that are relevant to the welding industry and the consensus of which forms the basis for these standards. By providing such a forum, AWS does not assume any duties to which a user of these standards may be required to adhere. By publishing this standard, the American Welding Society does not insure anyone using the information it contains against any liability arising from that use. Publication of a standard by the American Welding Society does not carry with it any right to make, use, or sell any patented items. Users of the information in this standard should make an independent investigation of the validity of that information for their particular use and the patent status of any item referred to herein.

With regard to technical inquiries made concerning AWS standards, oral opinions on AWS standards may be rendered. However, such opinions represent only the personal opinions of the particular individuals giving them. These individuals do not speak on behalf of AWS, nor do these oral opinions constitute official or unofficial opinions or interpretations of AWS. In addition, oral opinions are informal and should not be used as a substitute for an official interpretation.

This standard is subject to revision at any time by the AWS Qualification and Certification Committee. It must be reviewed every five years and if not revised, it must be either reapproved or withdrawn. Comments (recommendations, additions, or deletions) and any pertinent data that may be of use in improving this standard are requested and should be addressed to: Director, Qualification and Certification Department, AWS Headquarters. Such comments will receive careful consideration by the AWS Qualification and Certification Committee and the author of the comments will be informed of the Committee's response to the comments. Guests are invited to attend all meetings of the AWS Qualification and Certification Committee to express their comments verbally. Procedures for appeal of an adverse decision concerning all such comments are provided in the Rules of Operation of the Technical Activities Committee. A copy of these Rules can be obtained from the American Welding Society, 550 N.W. LeJeune Road, P.O. Box 351040, Miami, Florida 33135.

# Personnel

## AWS Qualification and Certification Committee

<i>C. E. Pepper, Chairman</i>	Oak Ridge Nat'l Laboratory
<i>J. F. Harris, 1st Vice Chairman</i>	Centerior Energy
<i>L. P. Connor, Secretary</i>	American Welding Society
<i>E. M. Beck*</i>	Law Engineering Incorporated
<i>W. F. Benke</i>	Ford Motor Sterlin Plant
<i>E. R. Bohnart</i>	Miller Electric Manufacturing Company
<i>H. Chapman</i>	Consultant
<i>H. F. Clark II</i>	Fluor Daniel, Incorporated
<i>A. L. Collin</i>	Consulting Engineer
<i>P. R. Evans</i>	B&W Nuclear Service Company
<i>H. W. Goser</i>	Stupp Bros. Bridge and Iron Company
<i>W. L. Green*</i>	Retired, Ohio State University
<i>J. E. Greer</i>	Moraine Valley Community College
<i>M. L. Houle*</i>	Consultant
<i>W. H. Kennedy</i>	Canadian Welding Bureau
<i>R. E. Long</i>	Consultant
<i>S. P. Martin</i>	General Dynamics Land Systems
<i>R. D. Messer</i>	Exxon Chemical
<i>A. L. Petroski</i>	Valmet Paper Machinery
<i>R. R. Picard</i>	ASEA Brown Boveri
<i>S. L. Raymond</i>	National Training Fund
<i>T. Schlafly*</i>	AISC
<i>S. W. Scott</i>	Westinghouse Hanford Company
<i>R. M. Simons</i>	Washington Public Supply System
<i>W. F. Urbick</i>	Welding Management Consultants
<i>R. F. Waite</i>	Consultant
<i>R. K. Wiswesser</i>	Welder Training and Testing Institute
<i>F. G. DeLaurier, Ex-Officio</i>	American Welding Society
<i>D. W. Dickinson, Ex Officio</i>	Ohio State University
<i>J. C. Papritan, Ex-Officio</i>	Ohio State University

\* Advisor

**AWS Certification of Welders/Welding Operators Subcommittee (QCE)**

<i>R. K. Wiswesser, Chairman</i>	Welder Training & Testing Institute
<i>J. H. Balch</i>	National Pipeline Welding School
<i>H. Chapman</i>	Consultant
<i>H. F. Clark, II</i>	Fluor Daniel Incorporated
<i>A. L. Collin</i>	Consulting Engineer
<i>D. H. Delk</i>	United States Air Force
<i>P. R. Evans</i>	B&W Nuclear Service Company
<i>H. W. Goser</i>	Stupp Bros. Bridge & Iron Co.
<i>R. L. Harris</i>	Consultant
<i>R. E. Long</i>	Consultant
<i>R. D. Messer</i>	Exxon Chemical
<i>J. S. Pawluk</i>	Western Nevada Community College
<i>C. E. Pepper</i>	Oak Ridge National Laboratory
<i>A. L. Petroski</i>	Valmet Paper Machinery
<i>L. C. Pratt</i>	Ingalls Shipbuilding
<i>S. L. Raymond</i>	National Training Fund
<i>M. L. Slaton</i>	The Pritchard Corporation
<i>W. E. Strate</i>	Strate Welding Supply Company
<i>W. F. Urbick</i>	Welding Management Consultants

# Foreword

(This Foreword is not a part of the AWS QC7-93, *Standard for AWS Certified Welders*, but is included only for information.)

The American Welding Society (AWS) Certified Welder Program is established to identify all elements necessary to implement a National Registry of Certified Welders. Four key elements are identified:

- (1) Welder Performance Qualification Standards criteria
- (2) Welding Procedure Specifications
- (3) Accredited Performance Qualification Test Facilities
- (4) AWS welder certification requirements

The purpose of this standard for AWS Certified Welders is to document the ability of welders to deposit sound welds and to impose controls on the documentation and maintenance of certification.

This standard contains the criteria for the AWS Certified Welder Program and the AWS National Registry of Welders. Public listing or disclosure is at the option of the individual welder. This standard will, in many cases, allow the transfer of welder qualification from employer to employer. This potential transfer of welder qualification may affect financial savings to the welding industry.

The 1993 revisions to the standard are a major change in format of the document. Some sections of the previous issue of AWS QC7-93 have been relocated into the Supplements rather than the standard. Some technical content changes were made and are marked with double bars in the margin.

*Comments and suggestions for the improvement of this standard are welcome. They should be sent to the Secretary, Qualification and Certification Committee, American Welding Society, 550 N.W. LeJeune Road, P.O. Box 351040, Miami, Florida 33135.*

Official interpretations of any of the technical requirements of this standard may be obtained by sending a request, in writing, to the Director of Qualification and Certification Department, American Welding Society. A formal reply will be issued after it has been reviewed by the appropriate personnel following established procedures.

# Table of Contents

	Page No.
<i>Personnel</i> .....	iv
<i>Foreword</i> .....	v
<i>1. Scope</i> .....	1
1.1 Program .....	1
1.2 Exclusion .....	1
1.3 Limitations .....	1
1.4 Safety Precautions .....	1
<i>2. Definitions</i> .....	1
<i>3. Employers and AWS Responsibility</i> .....	2
3.1 Employers Responsibility .....	2
3.2 Employers Obligation .....	2
3.3 AWS Responsibility .....	2
3.4 Test Facility Responsibility .....	2
<i>4. Provisions for Testing</i> .....	2
4.1 Test Facility Accreditation .....	2
4.2 Arrangement for Testing .....	2
4.3 Restriction .....	2
4.4 Site Testing .....	2
<i>5. Certification Requisites</i> .....	2
5.1 Application .....	2
5.2 Weld Test .....	3
5.3 Physical Requirements .....	3
<i>6. Test Requirements</i> .....	3
<i>7. Retests</i> .....	3
<i>8. Documentation of elder Performance Qualification</i> .....	3
8.1 Reporting .....	3
8.2 Record Verification .....	3
<i>9. Period of Effectiveness</i> .....	3
<i>10. Identification/Certification Documents</i> .....	3
10.1 Cards .....	3
10.2 Card Care .....	3
<i>11. Maintenance of Certification</i> .....	3
<i>12. Renewal of Certification</i> .....	3
<i>13. Revocation</i> .....	3

## Forms

QC-WF4A Application for AWS Welder Certification

# Standard for AWS Certified Welders

## 1. Scope

**1.1 Program.** The rules for the American Welding Society (AWS) Certified Welder Program and the requirements for maintenance of certification are provided in this standard. This standard requires the use of accredited test facilities for qualification testing.

**1.2 Exclusion.** This standard does not prevent a manufacturer, fabricator, or contractor from continuing to qualify welders according to other standards. Employers may impose requirements in addition to this standard, as deemed necessary.

**1.3 Limitation.** Certification under the American Welding Society Certified Welder Program shall be limited to those welding performance variables provided in the applicable supplements to this standard.

**1.4 Safety Precautions.** This document is not intended to address safety and health matters regarding the training of certified welders. This document only covers the rules of certification.

## 2. Definitions

Terms used in this standard are defined in ANSI/AWS A3.0-89, *Standard Welding Terms and Definitions*, and as follows:

**Acceptance Criteria.** Specified limits placed on characteristics of an item, process, or service as defined in codes, standards, or other contract requirement documents.

**Applicant.** An individual who makes application for AWS certification.

**Certification.** The act of determining, verifying and attesting in writing to the qualification of personnel in accordance with specified requirements.

**Inspection.** Examination or measurement to verify whether an item or activity conforms to specified requirements.

**Inspector.** A person who performs an inspection function to verify conformance to specific requirements.

**NDE Level I, II, III.** Individuals qualified and certified by their employer to function as NDT Technicians within the limits as outlined in the Recommended Practice SNT-TC-1A<sup>1</sup> and company written practice.

**Q&C Committee.** The Qualification and Certification Committee of the American Welding Society. (Address correspondence to: Qualification and Certification Department, AWS, 550 N.W. LeJeune Road, Miami, Florida 33126.)

**Q&C Department.** The AWS Qualification and Certification Department, American Welding Society, 550 N.W. LeJeune Road, Miami, Florida 33126. Telephone 305-443-9353.

**Qualification.** Verification by testing of the characteristics or abilities gained through training or experience or both that enable an individual to perform certain functions.

**Qualification Standard.** Any standard that provides rules for welding procedure and performance qualification.

**Terminology Guidelines.** As used in this standard, the word *should* indicates a recommendation; the word *shall* indicates a mandatory requirement. The word *may* indicates a choice.

---

1. Copies of SNT-TC-1A may be obtained from the American Society for Nondestructive Testing, 1711 Arlingate Lane Caller #28518, Columbus, Ohio, 43228, (800) 222-2768.



**Testing.** An element of verification for determining that an item conforms to the specified requirements by subjecting the item to a set of physical, chemical, environmental, or operating conditions.

**Test Facility.** A welder testing operation that has been accredited by AWS in accordance with AWS QC4, *Standard for Accreditation of Test Facilities for AWS Certified Welder Program*.

**Test Facility Representative.** The individual(s) designated by the Test Facility, who can make legally binding commitments and statements on behalf of the facility.

**Test Supervisor.** An AWS Certified Welding Inspector (CWI) designated by the Accredited Test Facility.

**Verification.** The act of reviewing, inspecting, testing, checking, auditing, or otherwise determining and documenting whether items, processes, services, or documents conform to specified requirements.

**Welder.** One who performs a manual, machine, automatic, or semiautomatic welding operation. Whenever the terms *welder* or *welders* are used in this document, welding operator or welding operators are also intended.

**Welder Performance Qualification.** The demonstration of a welder's ability to produce welds meeting prescribed standards.

**Welding Procedure Specification.** A document providing in detail the required variables for specific application(s) to assure repeatability by properly trained welders and welding operators.

### 3. Employers and AWS Responsibility

**3.1 Employer's Responsibility.** The employers of AWS Certified Welders are responsible for the work performed by their employees. The employers may accept the AWS certification without additional testing or may add requirements as deemed necessary to meet a specific need. Some standards or contract documents may require the owner, engineer, or other individuals to approve the use of AWS Certified Welders (without requalification) on their work.

**3.2 Employers' Obligation.** Companies who employ AWS Certified Welders shall be fully aware of the provisions of this standard. The employers shall specifically note the extent of qualification as stated on the AWS welder identification/qualification limits card. The employers are responsible for all work performed by their employees; and therefore, should verify the employee's prior work history, or otherwise determine that the qualification(s) apply to the employer's work. The weld-

er's current status should be verified with the Q&C Department (call 800-443-9353, ext. 273).

#### 3.3 AWS Responsibility

**3.3.1** The AWS Q&C Department shall be responsible to maintain the following:

- (1) Application for AWS Certified Welder
- (2) Welder Qualification Test Record
- (3) Decertification action reports
- (4) Maintenance of certification records
- (5) National Registry of Welders
- (6) List of Accredited Test Facilities

**3.3.2** The Q&C Department will provide, upon request, individual welder verification of maintenance of certification.

**3.3.3** The Q&C Department will provide database searches upon request. These searches will include only those authorizing public disclosure on the application form.

**3.4 Test Facility Responsibility.** The Test Facility is responsible for safety and health matters during testing at that location in addition to other requirements stated herein.

### 4. Provisions for Testing

**4.1 Test Facility Accreditation.** Each test facility that participates in the program shall be accredited by AWS. The process of accrediting test facilities is defined in the latest edition of AWS standard QCa4.

**4.2 Arrangement for Testing.** A list of Accredited Test Facilities may be requested from the Q&C Department. Applicants shall arrange for a test appointment through the Test Supervisor at an Accredited Test Facility.

**4.3 Restriction.** An applicant shall not be tested by a Test Supervisor who conducted or was responsible for training the applicant.

For the AWS Welder Certification Program, testing by the applicant's current employer is allowed only if the employer's test facility is accredited by AWS as being a function independent from the training, fabrication, manufacturing, or construction operation(s).

**4.4 Site Testing.** Test Supervisors may conduct welder performance tests at an employer's place of business, if the Test Facility Quality Assurance System was approved for remote location testing.

### 5. Certification Requisites

**5.1 Application.** The applicant shall complete an application form (See form QC-WF4A). The application

form shall identify the performance tests selected from a supplement(s) for which certification is being sought. The applicant shall have photographic identification, such as drivers license or similar document, that has the photograph as an integral part of the document. The applicant shall submit the completed application form, with appropriate fees, to the test facility.

**5.2 Weld Test.** Each applicant shall comply with all requirements of the applicable Supplement(s) and this document. The Test Supervisor shall be provided with the applicant's Performance Test Description form(s), and the completed application form. Each applicant's test assembly(ies) shall pass the examination(s) described in the Supplements for which application has been made.

**5.3 Physical Requirements.** Physical requirements of the applicant shall be as specified in the supplement.

## 6. Test Requirements

Supplements to this standard provide test requirements for each welder qualification testing method in the AWS Welder Certification Program.

## 7. Retests

If an applicant fails to meet the requirements of one or more test welds, rules for retesting shall be according to the applicable supplement.

## 8. Documentation of Welder Performance Qualification

**8.1 Reporting.** For those applicants who have successfully completed all requirements, the Accredited Test Facility shall provide the Q&C Department with the following:

- (1) Completed records as required by the supplement
- (2) The original application (Form QC-WF4A) accompanied by the application fee

**8.2 Record Verification.** Each Welder Performance Qualification Record shall be signed and dated by the welder, Test Supervisor, and the test facility representative.

## 9. Period of Effectiveness

The AWS certification of a welder shall be effective for a period of time defined in the applicable supplement to this standard.

## 10. Identification/Certification Documents

**10.1 Cards.** AWS will issue a certification card to those qualified under this program.

**10.2 Card Care.** Welders certified under this program shall maintain the card in good condition. The cards are the property of the AMERICAN WELDING SOCIETY and shall be returned on demand. If the card becomes illegible, a new one must be requested. The welder shall, as soon as possible after it is discovered, report lost or stolen cards to the Q&C Department.

Evidence of tampering with the card shall require return of the card to the Q&C Department for investigation. An investigation by the Q&C Committee may result in dismissal of the charges, suspension, revocation of certification, or renewal qualification, depending upon circumstances. The Committee will provide an explanation for its actions.

## 11. Maintenance of Certification

The welder shall be responsible for the following:

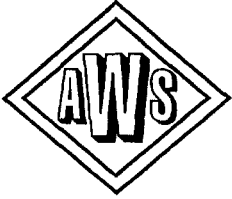
- (1) Completing the forms required in the supplement(s) to maintain each certification
- (2) Obtaining the signature of the employer, customer, or Test Supervisor of the test facility
- (3) Returning forms to Q&C Department postmarked prior to expiration date of certification

## 12. Renewal of Certification

When a welder's certification has expired, renewal of qualification for each specific welding process shall be through testing as outlined in each supplement. Testing shall be accomplished and verified by an Accredited Test Facility.

## 13. Revocation

The Q&C Committee has the authority to refuse, suspend, refuse renewal, or revoke a welder's certification for due cause. The methods to be used by the Q&C Department and Q&C Committee in proceeding with revocation action are defined in the *Administrative Procedures for Alleged Violations of AWS Certification Programs*. Copies of the document are available on request from the Q&C Department.



# APPLICATION FOR AWS CERTIFIED WELDER

---

AWS USE ONLY	
1. Check# _____	
2. Date Rec'd _____	
3. Amount _____	
4. Account# _____	
5. Test Record: _____	
CHARGE MY: <span style="margin-left: 50px;">VISA</span> <span style="margin-left: 50px;">MC</span>	
<span style="margin-left: 50px;">AMEX</span> <span style="margin-left: 50px;">DIN</span>	
CARD # _____	
EXP. DATE: _____	

## Personal Information (To be completed by applicant.)

Name: \_\_\_\_\_ Social Security # \_\_\_\_\_

Last First Middle Initial

Home Address: \_\_\_\_\_

Street Apartment Number

\_\_\_\_\_

City State Zip email

Telephone: Home: (\_\_\_\_) \_\_\_\_\_ Business: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_

Check here to Send Results to Employer

Company Name: \_\_\_\_\_

\_\_\_\_\_

Street City State Zip

## Test Information (To be completed by Facility Test Supervisor).

Accredited Test Facility Certificate No. \_\_\_\_\_ Date Tested \_\_\_\_\_

Welding Procedures Specification \_\_\_\_\_

(If Supplement G-Indicate WPS Number as assigned by employer.)

Qualifications: Place the appropriate abbreviation in each category box

Supplement	Code	Process	Gas (optional)	Filler Metal	Base Metal	Position	Thickness

## Applicant Authorization

yes, I want AWS to release information about my certification

no

Welder (Signature) \_\_\_\_\_ Date \_\_\_\_\_

## Reviewed:

Facility Test Supervisor \_\_\_\_\_

Signature Date

\_\_\_\_\_

Print Name CWI Certification Number Expiration Date

