



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-1A¹ 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.