



# Specification for the Certification of Welding Supervisors



**American Welding Society**

---



**AWS QC13:2006**

# **Specification for the Certification of Welding Supervisors**

**First Edition**

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

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 supervisors. The certification of visual welding supervisors requires documentation of experience, satisfactory completion of an examination, and proof of visual acuity. The examination tests the supervisor's knowledge of welding processes, welding procedures, destructive tests, terms, definitions, symbols, reports, safety and responsibilities.



**American Welding Society**

550 N.W. LeJeune Road, Miami, FL 33126

International Standard Book Number: 0-87171-040-4

American Welding Society

550 N.W. LeJeune Road, Miami, FL 33126

© 2006 by American Welding Society

All rights reserved

Printed in the United States of America

**Photocopy Rights.** No portion of this standard may be reproduced, stored in a retrieval system, or transmitted in any form, including mechanical, photocopying, recording, or otherwise, without the prior written permission of the copyright owner.

Authorization to photocopy items for internal, personal, or educational classroom use only or the internal, personal, or educational classroom use only of specific clients is granted by the American Welding Society provided that the appropriate fee is paid to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, tel: (978) 750-8400; Internet: <[www.copyright.com](http://www.copyright.com)>.

## Statement on the Use of American Welding Society Certification Standards

All standards (codes, specifications, recommended practices, methods, classifications, and guides) of the American Welding Society (AWS) are voluntary consensus standards that are developed through a consensus standards development process that brings together volunteers representing varied viewpoints and interests to achieve consensus. While the American Welding Society administers the process and establishes rules to promote fairness in the development of consensus, it does not independently test, evaluate, or verify the accuracy of any information or the soundness of any judgments contained in its standards. Further, given the rapid changes in the field, AWS cannot warrant that the certification standard will at all times reflect the most current knowledge.

Certification is achieved by satisfying a combination of defined education, experience, and/or examination requirements. Certification is not an assurance of future competence or ability.

AWS disclaims liability for any injury to persons or to property, or other damages of any nature whatsoever, including special, indirect, consequential or compensatory damages, directly or indirectly resulting from the negligent conduct or other acts or omissions of any individual certified by AWS.

In issuing and making this standard available, AWS is not undertaking to render professional or other services for or on behalf of any person or entity. Nor is AWS undertaking to perform a duty owed by any person or entity to someone else. Employers and other persons utilizing the services individuals certified by AWS are responsible for determining the qualifications, competence, and ability of those individuals.

This standard may be superseded by the issuance of new editions. Users should ensure that they have the latest edition.

Publication of this standard does not authorize infringement of any patent or trade name. Users of this standard accept any and all liabilities for infringement of any patent or trade name items. AWS disclaims liability for the infringement of any patent or product trade name resulting from the use of this standard.

Finally, the American Welding Society does not require that any member or other person become certified by AWS or utilize the services of one who is certified by AWS.

On occasion, text, tables, or figures are printed incorrectly, constituting errata. Such errata, when discovered are posted on the AWS web page ([www.aws.org](http://www.aws.org)).

Official interpretations of any of the technical requirements of this standard may only be obtained by sending a request, in writing, to the Managing Director, Certification Department, American Welding Society, 550 N.W. LeJeune Road, Miami, FL 33126. With regard to certification 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 Certification Committee. Comments (recommendations, additions, or deletions) and any pertinent data that may be of use in improving this standard are required and should be addressed to AWS Headquarters. Such comments will receive careful consideration by the AWS 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 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 Certification Committee. A copy of these Rules can be obtained from the American Welding Society, 550 N.W. LeJeune Road, Miami, FL 33126.

This page is intentionally blank.

# Personnel

## AWS Certification Committee

R. K. Wiswesser, Chair	<i>Welder Training &amp; Testing Institute</i>
S. L. Raymond, 1st Vice Chair	<i>International Training Institute</i>
G. G. Hlifka, 2nd Vice Chair	<i>Dresser-Rand Corporation</i>
P. Howe, Secretary	<i>American Welding Society</i>
R. L. Arn	<i>WeldTech International</i>
E. R. Bohnart	<i>Welding Education &amp; Consulting</i>
M. J. Brace	<i>WELSCO</i>
N. A. Chapman	<i>Entergy</i>
M. L. Deckard	<i>Parsons Brinckerhof Transit and Rail Systems, Incorporated</i>
G. J. Frederick	<i>Electric Power Research Institute</i>
J. E. Greer	<i>Moraine Valley Community College</i>
J. D. Hollison	<i>Performance Mechanical, Incorporated</i>
J. P. Kane	<i>Pennoni Associates</i>
A. J. Moore	<i>Marion Testing &amp; Inspection</i>
R. N. Munroe	<i>Ironworkers Local 15</i>
R. M. Nielsen	<i>Consultant</i>
T. Peshia	<i>Garbe Iron Works, Incorporated</i>

## AWS Subcommittee on Certified Welding Supervisors (CWS)

R. L. Arn, Chair	<i>WeldTech International</i>
P. Howe, Secretary	<i>American Welding Society</i>
J. Barckhoff	<i>Barckhoff and Associates</i>
E. R. Bohnart	<i>Welding Education &amp; Consulting</i>
D. Lynn	<i>Barckhoff and Associates</i>
J. Morris	<i>Bender Shipbuilding</i>

This page is intentionally blank.

## Foreword

This foreword is included for informational purposes only.

Welding supervisors are found in every industry that uses welding as a core process in the manufacture, construction, or fabrication of their products. Welding supervisors know what factors influence welding quality and how monitoring welders can achieve that quality. Welding supervisors also understand all of the complementary factors in welding operations that lead to maximized productivity.

The AWS program for the certification of Welding Supervisors has been developed to define minimum standards for welding supervisors and to provide a means of recognition for those who demonstrate that they have the skills, knowledge, and experience in the field of welding supervision.

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.



This page is intentionally blank.

# Table of Contents

	<b>Page No.</b>
<i>Personnel</i> .....	v
<i>Foreword</i> .....	vii
<b>1. Scope</b> .....	1
<b>2. Normative References</b> .....	1
<b>3. Definitions</b> .....	1
<b>4. Functions</b> .....	1
<b>5. Education and Experience Requirements</b> .....	1
<b>6. Examination Requirements</b> .....	2
<b>7. Certification</b> .....	2
<b>8. Revocation</b> .....	2
<b>9. Reinstatement</b> .....	2
<b>10. Renewal</b> .....	2
<b>11. Recertification</b> .....	2
<b>12. Responsibility</b> .....	3
List of AWS Documents.....	5

This page is intentionally blank.

# Specification for the Certification of Welding Supervisors

## 1. Scope

**1.1** AWS QC13:2006 establishes the requirements for certification and maintenance of certification in accordance with qualification requirements stated in AWS B5.9:2006, *Specification for the Qualification of Welding Supervisors*.

**1.2** In the certification process, the AWS Certification Department performs the following functions:

1. Reviews the education and experience of each applicant to see that the minimum requirements of AWS B5.9 are met.
2. Administers the examinations, which cover the subject areas as stated in AWS B5.9.
3. Issues the certification credentials to successful applicants.

**1.3** Certification is the documentation that the specified qualification requirements have been satisfied, and should not be construed as an endorsement of the future performance of an individual in a particular job environment. It shall be the responsibility of the employer to determine that the certified welding supervisor is capable of performing all duties assigned.

**1.4** The applicable standards for this program do not address the assessment of capabilities regarding performance of personnel-related issues, such as hiring practices, discrimination, and other fair employment practices.

**1.5 Levels of Certification.** There is only one level of certification for welding supervisors.

## 2. Normative References

The standards listed below contain provisions, which, through reference in this text, constitute mandatory provisions of this AWS standard. For undated references, the latest edition of the referenced standard shall apply.

For dated references, subsequent amendments to, or revisions of, any of these publications do not apply.

AWS A3.0, *Standard Welding Terms and Definitions, Including Terms for Adhesive Bonding, Brazing, Soldering, Thermal Cutting, and Thermal Spraying*

AWS B5.9:2006, *Specification for the Qualification of Welding Supervisors*.

## 3. Definitions

The terms used in this standard are defined in AWS A3.0, *Standard Welding Terms and Definitions*. Other terms used herein are defined below. (Note: As used in this standard, the word *shall* denotes a requirement; the word *should* denotes a guideline; and the word *may* denotes a choice.)

**applicant.** A person who applies to the American Welding Society (AWS) for certification.

**certificate.** A document or credential issued to the applicant on successful completion of the requirements for certification.

**Certification Committee.** The Certification Committee of the American Welding Society.

**Certification Department.** The department of the American Welding Society that administers the certification programs for personnel in compliance with the AWS certification standards.

**welding supervisor.** An individual who, through education and training, performs an occupational role of directing welding activities and welding personnel.

## 4. Functions

The duties and responsibilities of certified welding supervisors are listed in Section 5 of AWS B5.9:2006, *Specification for the Qualification of Welding Supervisors*.

## 5. Education and Experience Requirements

**5.1** The education and experience requirements for certified welding supervisors are listed in Section 6 of AWS B 5.9:2006, *Specification for the Qualification of Welding Supervisors*.

**5.2** The AWS Certification Department shall review and/or verify the education and experience of each applicant based on the information submitted with the application. If the application is incomplete or the applicant does not meet the education and experience criteria, the applicant shall be notified that he/she does not qualify to take the examination.

## 6. Examination Requirements

**6.1** Applicants shall meet the applicable examination requirements to be considered for certification as an AWS Certified Welding Supervisor (CWS).

**6.1.1** CWS candidates shall pass (with a minimum of 70% correct answers) the CWS written examination(s) on the subjects and tasks listed in Annex A of AWS B5.9:2006, *Specification for the Qualification of Welding Supervisors*. Subject weights are listed in Annex A.

**6.1.2** The examinations shall consist of an open book examination on fundamentals of welding supervision, consisting of 150 multiple-choice questions, and an open book examination on welding practices and economics, consisting of 30 multiple-choice questions. Two hours of time are allowed to complete each of the examinations.

**6.2** The weighting for the subject areas specified in Annex A of AWS B5.9:2006, *Specification for the Qualification of Welding Supervisors*, are listed below expressed in terms of approximate percentage of questions used on the written examinations.

1. Knowledge of welding supervision – 5%
2. Understanding of drawings and specifications – 10%
3. Knowledge of base material and welding materials – 5%
4. Familiarity with welding, brazing, cutting equipment, theory, and application – 5%
5. Knowledge of safety requirements – 10%
6. Welding instructions – 10%
7. Knowledge of welding practices and production controls – 10%

8. Welding inspection – 5%

9. Work reports and records – 5%

10. Understanding the general applications of welding standards – 5%

11. Productivity and performance – 30%

## 7. Certification

**7.1** The American Welding Society shall issue to each CWS applicant who meets all requirements of this standard a serialized certificate and wallet card stating the applicant has met the AWS certification requirements. The initial period of certification shall be valid for three (3) years.

**7.2** Certification becomes effective on the first day of the month following the date that the examination is scored, and expires on the first day of that month, 3 years later. For purposes of renewal and recertification, an expiration grace period of 30 days exists from the expiration date.

## 8. Revocation

**8.1** The Certification Committee shall have the power to suspend, refuse the renewal of, or revoke the CWS certification for misrepresentation of facts regarding personal qualification and status relating to certification as a welding supervisor whether such misrepresentation was made at the time of application or on subsequent applications, renewals, and so forth.

**8.2** The Committee may apply to any court of competent jurisdiction for further enforcement of its administrative decisions and rulings.

## 9. Reinstatement

Reinstatement of a revoked certificate shall be allowed with no penalty or prejudice to the individual, provided the cause for such revocation has been rectified to the committee's satisfaction.

## 10. Renewal

**10.1** The period of validity for the AWS CWS credentials is three (3) years.

**10.2** Prior to the end of three years, certificate holders shall renew the certification if they wish to maintain their CWS credentials. Renewal requires written documenta-

tion to support evidence of continued activity in the occupational position of welding supervisor.

**10.3** If the certification is allowed to lapse beyond the grace period, renewal is not permitted. A new application for certification shall be submitted, and the educational and examination requirements of Section 5 and 6.1 shall be met.

## 11. Recertification

**11.1** After two (2) consecutive renewals (total of nine (9) years of continuous certification), the certificate holder is required to recertify to maintain CWS credentials by meeting the requirements of 11.1.1 and 11.1.2.

**11.1.1** Documentation to support evidence of continued activity in the occupational position of welding supervisor shall be provided.

**11.1.2** The certificate holder shall successfully pass the CWS written examinations as defined in 6.1 or be exempt from the exam by applying 11.2.

**11.2** As an alternative to 11.1.2, the certificate holder may demonstrate continued education in subject areas identified in Section 4 of AWS B5.9 equivalent to 80 professional development hours (PDH) over the nine (9)

year period of certification with 20 PDH being completed in the immediate three (3) year period preceding the 9-year recertification.

## 12. Responsibility

**12.1** The responsibility for the maintenance (renewal and recertification) of AWS certification is solely with the certificate holder. Failure to maintain a current address<sup>1</sup> with the AWS Certification Department and subsequent failure of notification shall not be considered adequate justification to allow an extension of the certification validity date.

**12.2** As a courtesy, the AWS Certification Department will attempt to notify each CWS of the expiration of the certification and the requirements of renewal or recertification. Notices shall be mailed approximately 90 days in advance of the expiration date of the certification.

---

<sup>1</sup>NOTIFICATION OF ADDRESS CHANGE(S) TO AWS: Notify the AWS Certification Department directly as *Welding Journal* subscription or AWS membership activity does not automatically notify the AWS Certification Department. It is the responsibility of the CWS to maintain an accurate address with the AWS Certification Department.

This page is intentionally blank.

**List of AWS Documents**

<b>AWS Designation</b>	<b>Title</b>
QC1	<i>Standard for AWS Certification of Welding Inspectors</i>
QC4	<i>Standard for Accreditation of Test Facilities for AWS Certified Welder Program</i>
QC5	<i>AWS Standard for Certification of Welding Educators</i>
QC7	<i>Standard for AWS Certified Welders</i>
QC13	<i>Specification for the Certification of Welding Supervisors</i>
QC15	<i>Specification for the Certification of Radiographic Interpreters</i>
QC17	<i>Standard for Accreditation of Welding Fabricators for AWS Certified Welding Fabricator Program</i>
QC19	<i>Standard for AWS Certification of Robotic Arc Welding Personnel</i>



This page is intentionally blank.

