AWS B5.2:2026
An American National Standard

Specification for Establishing a Company Program for Qualification and Certification of Welding Inspection Specialists



American Welding Society®



AWS B5.2:2026
An American National Standard

Approved by the
American National Standards Institute
May 12, 2026

Specification for Establishing a Company Program for Qualification and Certification of Welding Inspection Specialists

3rd Edition

Revises AWS B5.2:2018

Prepared by the
American Welding Society (AWS) Qualification and Certification Committee

Under the Direction of the
AWS Technical Activities Committee

Approved by the
AWS Board of Directors

Abstract

This specification provides guidelines for a company to qualify and certify Welding Inspection Specialists for the purpose of recognizing an individual's ability to perform in-house welding inspection in accordance with contract or industry-specific inspection standards. The program is described in a Written Practice and is controlled by the company. The qualification requires documentation of experience, training, and satisfactory completion of an examination. The examination tests knowledge of welding processes, procedure and performance qualification, destructive testing, nondestructive examination, terms, definitions, symbols, reports, records, safety, and responsibility as specifically applied by the contract or industry standards applicable to the company. Certification as a Welding Inspection Specialist, as described herein, does not, in and of itself, qualify an individual to perform third-party welding inspection.

American Welding Society®

ISBN Print: 978-1-64322-465-7
ISBN PDF: 978-1-64322-466-4
© 2026 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.

Statement on the Use of American Welding Society Standards

All standards (codes, specifications, recommended practices, methods, classifications, and guides) of the American Welding Society (AWS) are voluntary consensus standards that have been developed in accordance with the rules of the American National Standards Institute (ANSI). When AWS American National 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.

AWS American National Standards are developed through a consensus standards development process that brings together volunteers representing varied viewpoints and interests to achieve consensus. While AWS 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.

AWS disclaims liability for any injury to persons or to property, or other damages of any nature whatsoever, whether special, indirect, consequential, or compensatory, directly or indirectly resulting from the publication, use of, or reliance on this standard. AWS also makes no guarantee or warranty as to the accuracy or completeness of any information published herein.

In issuing and making this standard available, AWS is neither undertaking to render professional or other services for or on behalf of any person or entity, nor is AWS undertaking to perform any duty owed by any person or entity to someone else. Anyone using these documents should rely on his or her own independent judgment or, as appropriate, seek the advice of a competent professional in determining the exercise of reasonable care in any given circumstances. It is assumed that the use of this standard and its provisions is entrusted to appropriately qualified and competent personnel.

This standard may be revised, corrected through publication of amendments or errata, or supplemented by publication of addenda. Information on the latest editions of AWS standards including amendments, errata, and addenda is posted on the AWS web page (www.aws.org). Users should ensure that they have the latest edition, amendments, errata, and addenda.

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.

AWS does not monitor, police, or enforce compliance with this standard, nor does it have the power to do so.

Official interpretations of any of the technical requirements of this standard may only be obtained by sending a request, in writing, to the appropriate technical committee. Such requests should be addressed to the American Welding Society, Attention: Director, Standards Committee Operations, 8669 NW 36 St, # 130, Miami, FL 33166 (see Annex E). With regard to technical inquiries made concerning AWS standards, oral opinions on AWS standards may be rendered. These opinions are offered solely as a convenience to users of this standard, and they do not constitute professional advice. 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 reaffirmed 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 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, 8669 NW 36 St, # 130, Miami, FL 33166.

Personnel

AWS Qualification and Certification Committee

R. E. Dines, Chair	*United Technical, Incorporated*
H. B. Craft, 1st Vice Chair	*Consultant*
M. T. Harris, 2nd Vice Chair	*International Training Institute*
C. Scheffer, Secretary	*American Welding Society*
E. A. Abbott	*Ironworkers International Union (Retired)*
W. A. Afflick	*Airgas*
T. J. Baber	*Santa Clarita Community College District*
S. Barrett	*Clover Field Services LLC*
J. S. Corder	*Ironworkers International Union*
I. A. Cross	*Valiant TMS*
R. D. Derby	*United Association International Training Fund*
C. H. Eskridge	*Becht Engineering*
K. M. Gilgenbach	*Matheson*
J. I. Johnson	*North Dakota State College of Science*
J. Leary	*Aquatherm LP*
T. E. Logan	*Atema*
J. A. Luppert	*Arizona Public Service*
A. L. Petroski	*Atema*
A. E. Smith	*International Training Institute*
S. J. Solomon	*Brink Advanced NDT*
T. H. Sumerix	*Muskegon Community College*
R. J. Tessier	*Consultant*
N. A. Virbitsky	*Borusan Berg Pipe*
C. Zanfir	*CWB Group*

AWS Subcommittee on Welding Inspector Specialists

S. Barrett, Chair	*Clover Field Services LLC*
M. Ludmer, Vice Chair	*California Welding Institute LLC/Advanced Weldtec Inc*
B. L. Boddiger, Secretary	*American Welding Society*
W. L Alsman	*Raytheon*
R. J. Dixon	*USA Morgan Corporation*
R. J. Durda	*M.I.&T*
R. L. Holdren	*ARC Specialties Inc*
J. P. Kane	*Retired*
K. S. Nutt	*Enerfab*
O. C. Onwuama	*The Boeing Company*
W. A. Perry	*ECS Mid Atlantic*
K. L. Porter	*CenterPoint Energy*

Advisor to the AWS Subcommittee on Welding Inspector Specialists

J. W. Morris	*Morris Marine Consulting LLC*

Foreword

This foreword is not part of this standard but is included for informational purposes only.

This third edition of AWS B5.2 represents a complete revision of the standard, both in content and organization. The title of the standard has been revised to better reflect its scope. The first edition was published in 2001 and superseded QC2-93, *Recommended Practice for the Training, Qualification, and Certification of Welding Inspector Specialist and Welding Inspector Assistant.*

AWS B5.2 *Specification for Establishing a Company Program for Qualification and Certification of Welding Inspection Specialists* provides the framework for developing an in-house qualification and certification program for visual welding inspectors. To differentiate it from the central certification program of AWS supported by the AWS B5.1 and QC1 standards, B5.2 uses the nomenclature welding inspection 'specialist'.

This specification for the qualification of welding inspection specialists was developed to provide a qualification basis defining minimum requirements for a welding inspection specialist to demonstrate competence through a combination of education, experience, and examination.

Changes are widespread enough that clear markup of the changes is difficult and, therefore, not shown. The words *should* and *recommended* have been changed throughout this edition to *shall* to better set this document as a Specification than a Guide, by establishing minimum requirements that must be met.

The following is a summary of clause-specific revisions contained in B5.2:2026:

Summary of Changes	
Clause/Table/Figure/Annex	**Modification**
Clause 1 General Requirements	Informative references were removed to allow the end user to supply their own references through the addition of Clause 6, Company-Specific References.
Clause 3 Terms and Definitions	Terms & Definitions were revised and new terms were added.
Clause 6 Company-Specific References	The addition of company-specific references allows the end user to define their supplemental reference material.
Annex A Body of Knowledge	Additional references were added, and revisions better reflect present-day industry best practices.

Comments and suggestions for the improvement of this standard are welcome. They should be sent to the Secretary, AWS Qualification and Certification Committee, American Welding Society, 8669 NW 36 St, # 130, Miami, FL 33166.

Table of Contents

Page No.

Personnel v
Foreword vii

1. General Requirements 1
1.1 Scope 1
1.2 Units of Measurement 1
1.3 Safety 1

2. Normative References 1

3. Terms and Definitions 2

4. Written Practice 2

5. Responsibilities 3

6. Company-Specific References 3

7. Education and Experience 3
7.1 Education 3
7.2 Experience 3

8. Physical Requirements 3
8.1 Near Vision Acuity 4
8.2 Color Perception 4

9. Training 4

10. Examination Requirements 4
10.1 Proficiency Examination 4
10.2 Examination Criteria 4
10.3 Certification Records 4

11. Third Party Agencies 4

12. Certification 5
12.1 Documentation 5

13. Company Responsibilities 5

Annex A (Informative)—Body of Knowledge 7
Annex B (Informative)—Sample Outline for Written Practice 11
Annex C (Informative)—Visual Acuity Record 13
Annex D (Informative)—List of AWS Documents on Qualification and Certification 15
Annex E (Informative)—Requesting an Official Interpretation on an AWS Standard 17

Specification for Establishing a Company Program for Qualification and Certification of Welding Inspection Specialists

1. General Requirements

1.1 Scope. This specification provides guidelines for a company to establish an internal qualification and certification program to recognize individuals as Welding Inspection Specialists (WISs) capable of performing in-house visual welding inspection. The company is responsible for developing a Written Practice that describes the details of its in-house program for the examination, qualification, and certification of its inspectors.

1.1.1 Responsibility. The company shall establish a Written Practice detailing the education, experience, training, and examination requirements for Welding Inspection Specialists. The company is responsible for training, examining, and certifying individuals meeting the qualification requirements specified in the Written Practice.

1.2 Units of Measurement. This standard does not require units of measure. Therefore, no equivalents or conversions are contained except when they are cited in examples.

1.3 Safety. Safety and health issues and concerns are beyond the scope of this standard and therefore are not addressed herein.

Safety and health information is available from the following sources:

American Welding Society:

(1) ANSI Z49.1, *Safety in Welding, Cutting, and Allied Processes*

(2) AWS Safety and Health Fact Sheets

(3) Other safety and health information on the AWS website

Material or Equipment Manufacturers:

(1) Safety Data Sheets supplied by materials manufacturers

(2) Operating Manuals supplied by equipment manufacturers

Applicable Regulatory Agencies

Work performed in accordance with this standard may involve the use of materials that have been deemed hazardous and may involve operations or equipment that may cause injury or death. This standard does not purport to address all safety and health risks that may be encountered. The user of this standard should establish an appropriate safety program to address such risks as well as to meet applicable regulatory requirements. ANSI Z49.1 should be considered when developing the safety program.

2. Normative References

The documents listed below are referenced within this publication and are mandatory to the extent specified herein. For undated references, the latest edition of the referenced standard shall apply. For dated references, subsequent amendments or revisions of the publications may not apply, as the relevant requirements may have changed.

ANSI Z49.1, *Safety in Welding, Cutting, and Allied Processes*

AWS A3.0M/A3.0, *Standard Welding Terms and Definitions, Including Terms for Additive Manufacturing, Adhesive Bonding, Brazing, Soldering, Thermal Cutting, Thermal Spraying, and Nondestructive Examination*

AWS A2.4, *Standard Symbols for Welding, Brazing, and Nondestructive Examination*

Company-Specific References. See Clause 6.

3. Terms and Definitions

AWS A3.0M/A3.0, *Standard Welding Terms and Definitions*, provides the basis for terms and definitions used herein. However, the following terms and definitions are included below to accommodate usage specific to this document.

certification. A credential attesting to the type, method, technique, or level of qualification for inspection.

certifying official. An employee of the company responsible for administering requirements of the Written Practice, including certification and revocation of certifications.

company. A corporate, private, or public entity employing personnel for wages, salary, fees, or other considerations. As used in this specification, the company is the entity responsible for establishing and administering an in-house program for qualifying and certifying Welding Inspection Specialists.

qualification. Demonstration of an individual's ability to perform the duties of a specified job or function, typically demonstrated by successfully passing an examination.

specification. Document stating requirements.

training. An organized program developed to impart the knowledge and skills necessary for qualification.

visual welding inspection (VWI). Quality control activities performed before, during, and after welding to verify compliance with applicable standards.

Welding Inspection Specialist (WIS). An individual meeting the requirements of a company's program for the qualification and certification of welding inspection personnel in accordance with its Written Practice.

Written Practice (WP). A document specifying methods, requirements, examination, records, certifying official, etc., for a company's welding inspection personnel qualification program.

4. Written Practice

The company shall establish a Written Practice (WP) detailing the job functions for their WISs. In addition to detailing job functions for the WIS, the WP shall:

(1) Describe the education, experience, and training required for company certification. A sample outline of a WP is included as Annex B.

(2) Include topics, subjects, and training related to the inspection of weldments fabricated to a code, specification, or other standard as applied by the company.

(3) Provide details of the examination requirements for the qualification of its WISs.

(4) Define the company representative authorized to certify inspectors and revoke certification.

(5) As a minimum, the WP shall stipulate the applicable requirements for the in-house program as described in Clauses 5 through 13.

Fewer or additional topics may be included, depending on the specific needs of the company. The ability to stipulate those requirements applicable for a given product or contract is one of the benefits of a WIS qualification and certification program.