AWS B5.17:2025-AMD1
An American National Standard

Specification for the Qualification of Welding Fabricators



American Welding Society®



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American National Standards Institute
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Specification for the Qualification of Welding Fabricators

6th Edition

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

Under the Direction of the
AWS Technical Activities Committee

Approved by
AWS Board of Directors

Abstract

This standard establishes the minimum requirements necessary to qualify as a Welding Fabricator. The qualification is determined based on an examination of the implementation of the fabricator's Quality Manual to verify compliance with the requirements defined in this specification. This document also defines the Welding Fabricator's functions and lists the minimum reference materials that the Welding Fabricator should possess.

American Welding Society®

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Foreword

This specification was developed by the AWS Qualification and Certification Committee in response to an industry demand for a qualification document for welding fabricators. This specification establishes the qualification requirements from which a central certification agency or an employer may develop a certification program for welding fabricators.

This is the fifth edition of this specification. Previous editions of the document are as follows:

ANSI/AWS B5.17:2000 *Specification for the Qualification of Welding Fabricators*

ANSI/AWS B5.17:2004 *Specification for the Qualification of Welding Fabricators*

ANSI/AWS B5.17:2008 *Specification for the Qualification of Welding Fabricators*

ANSI/AWS B5.17:2014 *Specification for the Qualification of Welding Fabricators*

Several clauses have been updated to reflect current titles, document numbers, publication dates, etc. Corrective Action was modified to allow for action(s) to be performed by the Fabricator in accordance with their procedure.

Underlined text in the clauses and subclauses indicates a change from the 2014 edition.

The following is a summary of the most significant changes contained in B5.17:2025:

Summary of Changes	
Clause	**Modification**
Clause 3 Terms and Definitions	"Welding fabricator" is defined.
Clause 6 Quality Manual Requirements	Requirements of the Quality Manual and personnel requirements were revised; additional explanation is provided for revisions; the requirement to log contract documents was eliminated; evidence of review of material certifications or material test reports was clarified; NDE subcontractor qualification and review must be signed/documented; and corrective action was revised.

This amendment to AWS B5.17 includes updated language to 6.7.2.

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

Amendment

The following amendment has been identified and are incorporated in this reprint.

AWS Standard: B5.17:2025-AMD1

Amendment Number: 1

Subject: Subclause 6.7.2

Revision: Update subclause 6.7.2

6.7.2 NDE Inspector Qualifications. The Quality Manual shall designate those qualified to perform NDE (e.g., MT, PT, RT, UT) to the requirements of the applicable specifications. Personnel performing NDE shall be certified in accordance with the employer's written practice, with no variances except as described in 6.7.3.1, on the current edition of ASNT SNT-TC-1A or the current edition of ASNT CP189. The employer's written practice may allow the acceptance of ~~ASNT ACCP Level II~~ ASNT 9712 or internationally recognized equivalent certifications, provided a process for review and acceptance for this type of certification is described.

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AWS Specification for Qualification of Welding Fabricators

1. General Requirements

1.1 Scope. This specification establishes the minimum requirements for the Welding Quality Program for welding fabricators. This specification is intended to be used by welding fabricators regardless of the welding processes or materials used. This specification does not cover weldment design or nonwelding-related fabrication processes, such as bolting and coatings. This specification is intended to offer assistance to the customers of welding fabricators who purchase weldments in various industry sectors in assessing the firm's capability to satisfy project quality needs.

The welding fabricator may be accredited by AWS as an AWS Certified Welding Fabricator, provided the fabricator meets the requirements of AWS QC17, *Specification for AWS Accreditation of Certified Welding Fabricators*.

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.

1.4 Terminology Guidelines. As used in this specification, the word 'shall' denotes a requirement; the word 'should' denotes a guideline or recommendation; and the word 'may' denotes a choice. The word 'welding' includes brazing, and the word 'welder' includes welding operators, brazers, and brazing operators.

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 since the relevant requirements may have changed.

American Welding Society (AWS) standards:

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

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

AWS A3.0M/A3.0, *Standard Welding Terms and Definitions*

AWS B1.11M/B1.11, *Guide for the Visual Examination of Welds*

AWS B2.1/B2.1M, *Specification for Welding Procedure and Performance Qualification*

AWS B5.15, *Specification for the Qualification of Radiographic Interpreters*

AWS *Safety and Health Fact Sheets*

AWS QC1, *Specification for AWS Certification of Welding Inspectors*

AWS QC17, *Specification for AWS Accreditation of Certified Welding Fabricators*

The American Society for Nondestructive Testing (ASNT) standards:

ASNT CP189, *ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel*

ASNT SNT-TC-1A, *Recommended Practice: Personnel Qualification and Certification in Nondestructive Testing*

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.

Certified Welding Inspector (CWI). A welding inspector certified by the AWS as meeting the requirements of AWS QC1, *Specification for AWS Certification of Welding Inspectors*.

contract documents. Plans, specifications, and other documents necessary for the fabrication of a product, assembly, or structure.

corrective action. Disposition of nonconforming product (e.g., accept as-is, repair/rework, scrap) and the action taken to determine and eliminate the root cause of nonconformance(s) in order to prevent or reduce recurrence of the nonconformity.

nonconformance. A deficiency in items, materials, or process that does not conform to the Quality Manual, approved procedures, and applicable codes or specifications.

quality assurance (QA). All the planned and systematic activities that are implemented within the quality system, and demonstrated as needed, to provide adequate confidence that an entity will fulfill requirements for quality.

quality control (QC). Operational techniques and activities that are used to fulfill requirements for quality. The act of examination, testing, or measurement that verifies compliance to processes to specific criteria (i.e., detection and measurement of weld discontinuities or the supervision of individuals so involved).

quality control personnel. Individuals responsible for verifying compliance with the fabricator's quality control program.

quality management system. A management approach to quality improvement based on the participation of management in improving processes and products provided to the fabricator's customer.

Quality Manual. Document stating the quality policy and describing the quality management system of an organization.

quality record. A report, list, or other documentation showing the results of a measurement, event, or decision. It attests to either the achievement or failure to achieve the required quality.

supplier. Organization that provides a product or service to the customer (e.g., vendor, material supplier, nondestructive examination (NDE) test facility).