

AWS B5.4:2005
An American National Standard



Specification for the Qualification of Welder Test Facilities



American Welding Society



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Specification for the Qualification of Welder Test Facilities

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Prepared by
AWS B5J Subcommittee on Test Facilities

Under the Direction of
AWS Personnel and Facility Qualification Committee

Approved by
AWS Board of Directors

Abstract

This specification defines the requirements to qualify welder test facilities. It details the methods of qualification, test facility requirements, and the assessment requirements.



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Specification for the Qualification of Welder Test Facilities

1. Scope

1.1 Requirements. This specification defines minimum requirements to enable welder qualification test facilities to consistently conduct welder qualification testing to meet the requirements of codes and other standards.

This specification may be used by all welder qualification test facilities. Test facilities may be part of an independent laboratory, manufacturing plant, educational institution, or other party. This document becomes mandatory when invoked by a referencing document such as a specification or contract document. It should also be noted that this specification does not establish welder certification requirements.

1.2 Procedure. This specification establishes procedures that allow welder qualification test facilities to consistently perform welder qualification testing.

1.3 Safety Precautions. 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 other sources, including, but not limited to, ANSI Z49.1, *Safety in Welding, Cutting, and Allied Processes*, and applicable federal and state regulations.

1.4 Terminology Guidelines. As used in this specification, the word *shall* denotes a mandatory provision; the word *should* denotes a nonmandatory provision but is recommended as good practice; and the word *may* denotes an optional provision. Additionally, *welder* shall be construed to include welder, welding operator, tack welder, brazer, and brazing operator; *welding* shall be construed to include both welding and brazing.

2. Referenced Documents

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

(2) AWS QC1, *Standard for AWS Certification of Welding Inspectors*¹

(3) AWS A3.0, *Standard Welding Terms and Definitions*¹

(4) AWS A5.01, *Filler Metal Procurement Guidelines*¹

(5) AWS B4.0, *Standard Methods for Mechanical Testing of Welds*¹

(6) AWS B5.15, *Specification for the Qualification of Radiographic Interpreters*¹

(7) ASNT SNT-TC-1A, *Recommended Practice: Personnel Qualification and Certification in Nondestructive Testing*²

3. Definitions

Terms used in this specification are defined in AWS A3.0, *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, other standards or other contract documents.

accreditation body. Any organization qualified to certify test facilities as acceptable suppliers of services including but not limited to AWS Certification Committee.

assessment. A systematic review and verification of a facility and operations in accordance with its Quality Control Manual.

assessor. A third party who is qualified for the task of performing assessments. (See Annex B.) In the case of self-assessing test facilities, the agent designated and trained by the test facility.

1. Available from Global Engineering Documents, an Information Handling Services (IHS) Group company, 15 Inverness Way East, Englewood, CO 80112-5776; telephones: (800) 854-7179, (303) 397-7956; fax: (303) 397-2740; Internet: www.global.ihs.com.

2. Available from the American Society for Nondestructive Testing, Inc., 1711 Arlingate Lane, Columbus, OH 43228-0518.