

American Welding Society®

Welding Coordination and Quality Assurance

Endorsement Description

Introduction

The AWS Welding Coordination and Quality Assurance (WCQA) Endorsement Description provides candidates guidance in the endorsement examination process. AWS strongly advises those who apply for the endorsement examination to read this endorsement description, paying particular attention to the test specifications and content areas to gain better understanding. The examination description is subject to change.

Scope of Endorsement

AWS QC1, *Standard for AWS Certification of Welding Inspectors*, provides for endorsements that may be added to the CWI and SCWI certifications. Endorsements are an indication of additional knowledge, skill or ability documented in writing and added to an individual's certification credential(s).

Endorsement Candidate Eligibility Criteria

This endorsement meets a portion of the requirements for SWI Alternative Qualification in AWS B5.1 and Alternative Certification for the SCWI in QC1. The inspector who seeks the Welding Coordination and Quality Assurance (WCQA) endorsement should be assessed to the following capabilities:

- An understanding of the definition of welding coordination, the tasks of welding coordinators in a company, and being able to assist companies in meeting the requirements of ISO 14731.

- An understanding of the basic elements necessary to establish a welding quality assurance program, principles of being an auditor as well as an auditee, the major features of the most common welding quality assurance programs, (i.e., ASME, AISC, ISO, and AWS programs).

- The capability of advising a manufacturer as to how to conduct the basic elements of manufacturing a welded product, including estimation, design, qualification, throughput, and process improvement.

Initial Certification or 9-year Recertification Eligibility

For existing CWIs, successful completion of this endorsement satisfies the examination requirements for a 9-year recertification, provided that the endorsement is taken during the immediate 9-year period.

IMPORTANT! For new candidates to the CWI program, this examination is not an option for initial certification. This is not a CWI Part C Codebook exam and thus does not meet the requirements of Clause 6.2.1 of the AWS B5.1:2013 AMD1- *Specification for the Qualification of Welding Inspectors,* nor does it follow the guidelines of Clause 7.1.

Training Requirements

This endorsement has no mandatory training requirements. Candidates are encouraged to attend an AWS seminar or to perform self-study to become familiar with exam information.

Examination Requirements

Candidates who hold an AWS CWI or SCWI and who wish to take this examination to add as an endorsement to their AWS credentials shall be current in their AWS certification status.

Successful candidates must correctly answer 70% of the questions to receive this endorsement. The reported scores are rounded down to the nearest lower whole percent number.

Test Specifications

Test Specifications are a breakdown of exam content areas along with proportion of the exam devoted to each content area.

Domain	Subdomain	Percent of Questions on Examination
Domain 01 Welding Quality Assurance and Welding Coordination	0101 Technical Elements	**40%**
	0102 Administrative Elements	
	0103 Welding Coordination	
	0104 Inspection and Testing	
	0105 Welding Program Assessment	
Domain 02 Welding Quality Programs	0201 AWS B5.17 and AWS Certified Fabricator Program	**30%**
	0202 AWS QC47 Accreditation of Welder Test Facilities (ATFs)	
	0203 ISO 3834 Quality Requirements for Fusion Welding of Metallic Materials	
	0204 ASME Boiler and Pressure Vessel General Requirements	
	0205 Quality Rules of National Board Inspection Codes	
	0206 Quality Rules for API Q1	
	0207 Quality Rules for Nadcap	
Domain 03 Auditing	0301 Principles of Conformity Assessments	**30%**
	0302 Audit Processes	
	0303 Audit Documentation	
	0304 Audit Closure	
	Total	**100%**

Examination Details

The closed-book examination consists of 75 questions. Of the 75 questions, 70 will be scorable questions, and five will be unscorable (pretest) questions.

The examination is comprised of four multiple-choice items. Each question has only one correct response.

IMPORTANT! A Chinese language-assisted version of the exam is available. For a list of available international Agents and test locations, please click HERE.

The language assisted version of the exam **also** will consist of 50 scorable traditional multiple-choice questions and 5 unscorable traditional multiple-choice questions.

Pretesting

The unscored questions are referred to as "pretest" questions. Including a small number of unscored test questions is common practice within the high stakes testing industry. It allows AWS to evaluate new items for both content validity and statistical performance. Items that perform well may be used in future examinations. This further helps future examination versions to have equivalent levels of difficulty and overall quality.

These questions are not scored and will not impact whether a candidate passes. These items are randomly placed within the examination and will not be identifiable as pretest items during testing.

Informative References for Self-education

The following is a list of informative reference books (latest editions) to assist those wishing to learn and understand the best practices to conduct, develop and qualify Welding Procedure Specifications.

Document	URL
AISC Standard for Certification Programs	https://www.aisc.org/aisc/publications/current-standards/aisc-207/
API Q1, 9th Edition	https://www.apiwebstore.org/standards/Q1?edition=9
ASQ CQA Body of Knowledge	https://www.asq.org/cert/resource/pdf/certification/2026%20CQA%20Body%20of%20Knowledge.pdf
ASQ Quality Resources: Auditing	https://asq.org/quality-resources/auditing (free website info)
AWS B2.1:2021	https://pubs.aws.org/Download_PDFS/B21-2021-Final-Web%20-%202nd%20Printing_PV.pdf

AWS B5.17	https://s3.amazonaws.com/pubs-www.aws.org/docs/AWS_B5.17-2014_SPECIFICATION_FOR_QUALIFICATION_OF_WELDING_FABRICATORS.pdf
AWS QC17	https://pubs.aws.org/content/free_downloads/AWS_QC17-2015_Standard_for_Accreditation_of_Welding_Fabricators_for_AWS_Certified_Welding_Fabricator_Program.pdf
AWS QC47	https://aws-p-001-delivery.sitecorecontenthub.cloud/api/public/content/qc47-2016-amd2
BPV-GUI-03 Issue 1, Rev. 2	https://www.asme.org/getmedia/0cd8732b-fdfb-4c09-94ac-12a730a0c3cb/bpv-certification_form_checklist-accreditation_1-(2)_1.pdf
INPO Engineering Program Guide: Welding Program	https://www.inpo.info/
Introduction to Quality Assurance in Welding	https://aws-p-001-delivery.sitecorecontenthub.cloud/api/public/content/Introduction-to-Quality-Assurance-in-Welding *A subject matter expert in the field has provided some guidance on QA issues that may be useful for applicants seeking to earn the WCQA credential*
ISO 14731-2019	https://www.iso.org/standard/68893.html
ISO 15607 - 2003	https://www.iso.org/standard/71495.html
ISO 19011	https://weld.ng/ISO-19011-2018-guidelines-for-auditing-management-systems
ISO 3834-1	https://www.iso.org/standard/81650.html
ISO 3834-2	https://www.iso.org/standard/81651.html
ISO 3834-5	https://www.iso.org/standard/80112.html
ISO 9001	https://www.iso.org/iso-9001-quality-management.html
Nadcap Supplier Support Committee Handbook	https://weld.ng/Nadcap-Supplier-Handbook
NB-57 National Board and ASME Guide	https://www.nationalboard.org/SiteDocuments/NB-57.pdf
NBIC	https://www.nationalboard.org/index.aspx?pageID=4
Quality Auditor Certification CQA Pamphlet	https://www.asq.org/cert/quality-auditor

Reference Requirements for ASME NQA-1 Certification	https://www.asme.org/wwwasmeorg/media/resourcefiles/shop/certification-accreditation/nqa-certification/nqa-requirements-for-nqa.pdf
Welding Handbook, Volume 1	https://pubs.aws.org/p/1918/whb-110-welding-handbook-volume-1-welding-and-cutting-science-and-technology-aws-whb-101
Welding Quality Assurance and Inspection Manual (1998)	https://aws-p-001-delivery.sitecorecontenthub.cloud/api/public/content/SCWI-Study-Guide

Exam Delivery

The examination is a computer-based test (CBT) delivered at a Prometric testing center.

CBT Exam Timing Information

The overall seat time allotted is 166 minutes (2 hours and 46 minutes) from check-in to check-out at the test center. The time that can be used to answer questions is 150 minutes (2-1/2 hours).

Section of Testing	Time in Minutes
Candidate Confirmation Page	2
Non-Disclosure Agreement (NDA)	2
Introduction & Tutorials	10
Exam Question Answering	150
Finish Page	2
Total Duration	166

Sufficient information to answer the question will be provided at the stem of the question; consulting a reference standard will not be necessary.

IMPORTANT! For a list of self-study references, please refer to the last page of this document.

Endorsement Fee Structure

For candidates in the United States and Canada, exam fees are due at time of registration and are paid directly to AWS. For the AWS exam price list, click HERE.

For international (outside of the US and Canada) candidates, exam fees are due at time of registration and paid to the International Agent representing AWS. Agents can provide pricing information regarding international exams.

Endorsement Credential

Endorsements earned will be updated in the AWS certification profile. Status can be checked via the QR code on the back of the CWI wallet card or via the **Quikcheck web link**.

Renewal Requirements as an Endorsement

This endorsement does not have any requirement for renewal. It will automatically be renewed at each CWI renewal or recertification. The endorsement will continue to be listed in an approved manner.

Professional Development Hours

PDHs are not currently approved for this endorsement and will be added soon. Check back often for the updated information.