



American Welding Society

CWI Part C Codebook
English and Language-Assisted Examination
Information

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Examination Requirements

According to B5.1:2013- AMD 1, Clause 7, Candidates seeking the CWI certification must take three examination parts to earn the certification.

CWI Part C Codebook Applications examination is to test the candidate's ability to understand and apply requirements of a code, standard, or specification. They can also be taken as an endorsement after earning the CWI Certification.

Examination Delivery

The examination will be a computer-based test (CBT) delivered at a Prometric test center.

Test Specifications

Test Specifications are a breakdown of examination content areas along with proportion of the examination devoted to each content area. As specified in the B5.1 7.1, the CWI Part C Codebook Applications examination main content categories are composed the following domains and weights (minimum percent of questions on the examination).

Content Areas	Minimum Percent of Questions on Exam
Qualification	25
Fabrication	25
Inspection	25
Reports and Records	5
Materials and Design	5

Informative References for Self-education

Refer to the B5.1:2013 *Annex A Informative Reference Documents*.

Part C Codebook Applications or Endorsement Examination References

There are various types of codebook examinations available. The reference book(s) for each examination are specific to the exam candidates will be taking.

- AWS D1.1- Structural Steel Code: 2020 Edition
See the Program Description [here](#) for complete details of the exam.
- API 1104- Pipelines 22nd Edition
See the Program Description [here](#) for complete details of the exam.

- AWS D1.2- Structural Aluminum Code: 2014 Edition
See the Program Description [here](#) for complete details of the exam.
- AWS D1.5- Bridge Welding Code: 2020 Edition (including Clause 12)
See the Program Description [here](#) for complete details of the exam.
- AWS D15.1 - Railroad: 2019 Edition
See the Program Description [here](#) for complete details of the exam.
- AWS D17.1- Aerospace: 2017 w/ Amendment 1
See the Program Description [here](#) for complete details of the exam.
- ASME BPVC Section IX (2019), Power (B31.1) (2018) and Process (B31.3) Piping (2018)
See the Program Description [here](#) for complete details of the exam.
- ISO/EN Standards Exam/Endorsement
- Welder Performance Qualifier Endorsement
This is an endorsement only. See the Program Description [here](#) for complete details of the exam.
- Welding Procedure Qualifier Endorsement
This is an endorsement only. See the Program Description [here](#) for complete details of the exam.
- Magnetic Particle Testing (MT Dry Powder Yoke Method)
See the complete info about this endorsement [here](#).
- Penetrant Testing (PT Type II- Method C)
See the complete info about this endorsement [here](#).
- Welding Coordination and Quality Assurance Endorsement
See the complete info about this endorsement [here](#).
- Nondestructive Examination Coordination Endorsement
See the complete info about this endorsement [here](#).

A candidate who chooses to use a codebook edition that is not listed does so at his/her own risk. AWS bears no responsibility for a candidate's failure to obtain certification as a result of this choice.

Exam Type

CWI Part C is an open-book examination. Candidates can bring the specified exam reference books to the CBT testing centers. The electronic copies of the English references will also be provided at testing for most of the exams.

Pretesting

The unscorable questions are referred to as “pretest” questions that will not be scored and will not have an impact on the examination result. This is common practice within high stakes testing industry. It allows AWS to evaluate new items for content validity and statistical performance for potential use in future examinations and examination versions to have equivalent level of difficulty and quality. These items are randomly placed within the examination and are not identifiable as pretest items.

Total Number of Questions on the Examinations

The total number of exam questions in the scorable section of the examination varies by exam from 50 to 60.

For selected English exams, there are a small amount (5 or approximately 10%) of unscorable questions. Therefore, the total number of questions appearing on an examination is 55 to 65 for the English examination form.

Allotted time to complete the CWI Part C examination.

Candidates have a maximum of 135 minutes to complete the examination form for exams that have pretest items.

Candidates have a maximum of 120 minutes to complete the examination form for exams that do not have pretest items.

The Passing Score

Successful candidates must correctly answer 72% of the questions to pass the examination.

Examination Question Types

The examination consists primarily of multiple-choice items; some single correct answer items and non-multiple choice item types may appear as well.

CWI Part C Codebook Applications Examination Sample Questions

The following question is a typical multiple-choice item that appear on CWI Part C Codebook Applications examination. This is a sample questions for demonstration only. Answers and explanations can be found below.

Sample Question One

Which of the following welding procedure changes requires requalification testing for semiautomatic welding with E71T-1 electrode?

- A. A change from a single bevel to a V groove
- B. A change in the minimum time between passes
- C. A change in shielding gas flow rate over 15%
- D. An increase in the specified preheat temperature

Commentary on the Question

This question is asking about rules for requalifying a welding procedure and such rules are primarily found in codes and standards. This particular question is asking about the rules in the API Standard 1104 and the question appeared on the CWI Part C: API 1104 codebook exam. The reference to “welding procedure” in the question is a good clue that the answer will be found in Section 5 of the API Standard 1104. More specifically, the section 5.4.2 indicates the “Changes Requiring Requalification,” which is precisely what this question asks about. Because there are many changes listed in the text, it’s probably more efficient to consider the answer choices in the question one-by-one and compare them with the text. Under 5.4.2.3 the Standard indicates that major changes in the design of a joint would be an essential variable and thus require requalification, indicating that the best answer to this question is A. According to B5.1, CWIs are expected to understand the rules about the qualification of welding procedures and the performance qualification of welders, so test-takers can expect at least 25% of questions on codebook exams to deal with qualification.