

BODY OF KNOWLEDGE

AWS Certified Welding Inspector

The following is an **approximate** breakdown of the examination categories and the number of questions drawn from each subject area.

PART A: FUNDAMENTALS	
Subject	Percentage
Welding Processes	10%
Heat Control & Metallurgy (carbon and low-alloy steel)	6%
Weld Examination	9%
Welding Performance	9%
Definitions and Terminology	12%
Symbols – Welding and NDE	10%
Test Methods – NDE	8%
Reports and Records	6%
Duties and Responsibilities	4%
Safety	5%
Destructive Tests	4%
Cutting	3%
Brazing	2%
Soldering	1%

PART B: PRACTICAL	
Subject	Percentage
Procedure and Welder Qualifications	30%
Mechanical Test and Properties	10%
Welding Inspection and Flaws	36%
NDE	10%
Utilization of Specification and Drawings	10%

PART C: CODE APPLICATIONS	
Subject	Percentage
Materials and Design	10%
Fabrication	30%
Inspection	25%
Qualification	30%

AWS – RECOMMENDED SELF-STUDY **Examination Preparatory Material**

Note: D1.1: 2010 edition may be used as study material.

AWS PUBLICATIONS	ORDER NUMBER
<i>Certification Manual for Welding Inspectors</i>	CM: 2000
<i>Welding Inspection Handbook</i>	WI: 2000
* <i>D1.1/D1.1M Structural Welding Code-Steel</i>	D1.1/D1.1M: 2010
* <i>D1.1 Code Clinic Reference Manual</i>	D1.1CCRM: 2008
* <i>API 1104 Study Guide for API Standard 1104 Welding of Pipelines</i>	API-M: 2008
* <i>Welding Inspection Technology</i>	WIT-T: 2008
* <i>Welding Inspection Technology (Workbook)</i>	WIT-W: 2008
* <i>Welding Inspection Technology Sample CWI Fundamentals Exam</i>	WIT-E: 2008
* <i>Standard Welding Terms and Definitions</i>	A3.OM/A3.0:2010
* <i>Standard Welding Symbols</i>	A2.4: 2007
* <i>Visual Inspection Workshop Reference Manual</i>	VIW-M: 2008
* <i>Guide for the Nondestructive Examination of Welds</i>	B1.10M/B1.10:2009
* <i>Specification for the Qualification of Welding Inspectors (errata 2007)</i>	B5.1: 2003
❖ Books are provided to participants at the AWS Seminars	

CODE SUBJECTS AVAILABLE	
AWS D1.1- Structural Steel Code: 2010 editions only	
* AP1104- Pipelines 20 th edition with 2007 errata/addenda	
** AWS D1.2- Structural Aluminum Code: 2003 or 2008 edition	
** ASME Section IX (2007 edition), B31.1 (2007 edition), & B31.3 (2006 edition)	
** AWS D15.1 - Railroad: 2007 edition	
** ASME Sections VIII (Div 1) & IX, (both 2007 editions with 2008 addenda)	
** AWS D1.5- Bridge Welding Code: 2008 edition	

* **Applicant must provide own codebook for the exam.**

** **Code Clinic not available. Applicant must provide own codebook for the exam.**

OTHER RECOMMENDATIONS	ORDER NUMBER
AWS Welding Handbook Series	WHB-ALL
Guide for the Visual Examination of Welds	B1.11: 2000
Safety in Welding, Cutting and Allied Processes	ANSI Z49.1: 2005

TO PURCHASE ANY OF THE AWS PUBLICATIONS OR THE API 1104 CODEBOOK:

- ❑ Contact WEX at 888-WELDING or 305-824-1177
- ❑ Or visit the website at www.awspubs.com