



American Welding Society

Founded in 1919 to Advance the Science,
Technology and Application of Welding

**AWS Certification is the welding
industry's most respected sign of approval.**

**AWS' Authoritative Seminars prepare
you for the CWI or CWE examination.**



About the American Welding Society

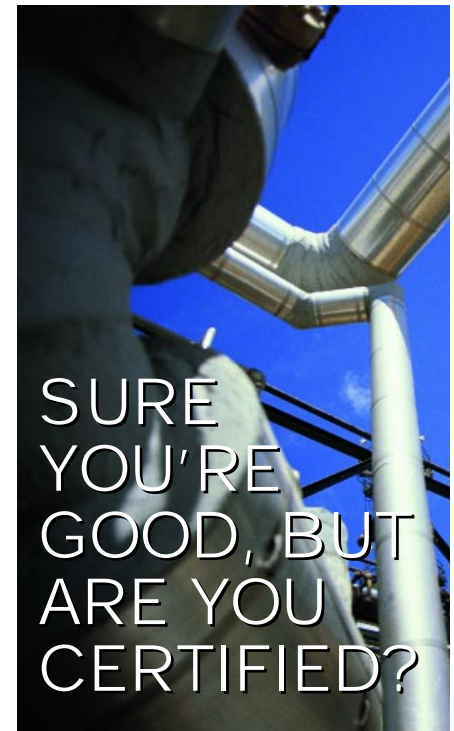
Established in 1919, the American Welding Society is a 501 (c) (3) nonprofit educational association. AWS is a member of the Non Destructive Testing Management Association, the Federation of Materials Societies, and The Steel Alliance.

AWS services over 50,000 members worldwide. Membership consists of engineers, educators, researchers, welders, inspectors, welding foremen, company executives and officers, and sales associates. Interests include automatic, semiautomatic and manual welding, as well as brazing, soldering, ceramics, lamination, robotics, and safety and health.

AWS is led by a volunteer organization of officers and directors, and is composed of 22 Districts with more than 160 local sections located throughout the U.S. and overseas. Headquartered in Miami, it is supported by a 100-member staff. AWS offers more than 200 books, charts, videos, replicas, proceedings, and software items. 160 AWS-developed codes, recommended practices, and guides are produced under strict ANSI procedures, and that includes one of the most consulted codes in the world, D1.1 *Structural Welding Code — Steel*. Contact Global Engineering Documents at (800) 854-7179 for a free copy of the annual 32-page, full-color AWS catalog, or see it on www.aws.org.

AWS' Certified Welding Inspector program has been in effect for 25 years and, to date, more than 36,000 professionals have been certified. CWIs help ensure the highest quality of welding.

What if every employee you hired came with an objective stamp of approval? You'd never have to worry about hiring someone under-qualified again.



By hiring employees who are AWS-Certified, you:

- Minimize failures and recall.
- Uniquely increase sales advantages over foreign and domestic competition.
- Save money on training and testing.
- Maximize product liability protection.

Improve quality, increase production and gain a unique advantage with AWS Certification, the welding industry's most respected stamp of approval. AWS Certification for industry professionals is highly regarded and sought after throughout the welding industry, because it attests to a highly documented level of skill and expertise.

AWS knows time is valuable. We want to make it easy on your budget by offering the seminar (pre-exam course) and the certification exam in the same city. Or, your employee can take the exam at a later date in another city more convenient to your company.



Successful exam candidates become AWS Certified Welding Inspectors, joining an elite group, that, worldwide, share a defined level of proficiency. CWIs are entered into the AWS National Register of CWIs; receive a wallet card, certificate suitable for framing, and a stamp; and are identified in *Inspection Trends* magazine. AWS-certified professionals also will automatically receive *Inspection Trends* magazine.

Because Now You Need Professional Upgrading Most

These days, it takes more than just experience to be successful. It takes proof. Proof of your worth and your ability.

AWS Certification programs are designed for welders, inspectors, technicians, and engineers. Earn the credentials you need for the opportunities you deserve.

Recognized throughout the industry as welding's leading authority, the American Welding Society is committed to bringing you the best and most reliable certification programs, tailored specifically for your needs — and the needs of your job. With practical training and exams offered in a variety

of programs — including Certified Welding Inspector (CWI) — you can be confident you're getting the specialized preparation you need to expand your knowledge base, improve your inspection skills, and work with diverse codes, standards and specifications, industry-wide.

With AWS Certification, you will never worry about losing your competitive edge, since proof of active practice or reexamination is required at the time of renewal or recertification.



GET THE NEW 2002 EDITION OF D1.1 STRUCTURAL WELDING CODE - STEEL

What's new for 2002

- Provides both U. S. standard and metric units of measure.
- Has a new section on responsibilities of engineers, contractors, inspectors and other personnel.
- Revises sections on design of welded connections to clarify Code intent, limits of fillet weld length in certain applications, definition of T-joints, fatigue limits of weld and joint types.
- Provides new data on through-thickness base metal loading.
- Offers clarification on matching filler metals to various construction materials.
- Provides new guidelines for Charpy V-notch testing and new commentary on ultrasonic testing.

Don't wait, order your copy now!

To ORDER call 800-854-7179,
fax 303-397-2740,

email global@ihs.com or order via the
Internet at www.global.ihs.com



American Welding Society

Founded in 1919 to Advance the Science,
Technology and Application of Welding

What others have said about AWS' Prep Courses

"Our instructor at the preparatory seminar did a great job and really helped us to have a much better understanding in all areas. The class is money well spent."

"The AWS CWI exam is an excellent test and it's a certification that I am proud to carry"

"I'll have anyone who reads this know I am proud and excited to have attained the CWI status."

"I deal with multiple client specifications on a daily basis and one requirement that has become more frequent is that a CWI be required to sign off on the visual inspection of our product, which is pipe fabrication."

"Dave Diaz was my instructor. I received very high marks on my test and attribute that to his abilities as a teacher."

"Thanks to Ken Jobs for the excellent seminar. What a great teacher!"

"The instructor, Scott Helzer, did an excellent job of preparing the candidates."

"Your staff responded quickly, courteously, and I felt that they wanted me to become a member and achieve CWI status. In short, they were great!"

AWS Welding Inspection Seminars

SUNDAY AFTERNOON – MONDAY MORNING

D1.1 Code Clinic



The eight hours of instruction provide a "road map" through the Code, emphasizing the ability to locate important paragraphs, charts and tables quickly, which is crucial to understanding the code when working under stressful deadlines. In addition to practice questions, a practice exam will be administered, and the instructor will illustrate the use of the Code under time constraints, creating deadline pressure similar to the test environment. If you're taking the CWI exam, this clinic has proven to be valuable test preparation. As a leading construction code, D1.1 is the ideal tool to teach effective code use.

By attending, you can learn:

- How to correctly interpret specifying documents.
- Sure-fire methods to avoid common pitfalls with any code.
- The proper terminology that gets you the right section of the code — quickly.
- How to use any code, standard or specification by understanding the core of the problem or question.



Register for the full week and receive your complimentary copy of D1.1 *Structural Welding Code-Steel*. Single-day registrants can purchase the D1.1 code at fifty percent off the list price – a savings of \$167. D1.1 codes and other materials will be distributed at the seminar site.

MONDAY AFTERNOON

API 1104 Code Clinic



This four-hour course covers general code provisions, including qualification of welding procedures for welds containing filler metal additions, design and preparation of the joint for production welding, nondestructive testing and acceptance standards, and automatic welding with and without filler metal additions. As in the D1.1 Code Clinic, attendees will practice open codebook testing under time constraints.

NOTE: Clinic fee does **not** include a copy of API 1104, *Welding Pipelines and Related Facilities* (19th Edition). API 1104 may be purchased from Global Engineering Documents, (800) 854-7179. Attendees will receive our study guide, *AWS API Code Clinic Reference Manual*.

By attending, you can learn:

- How to prepare your copy of the code for quick reference.
- API 1104 testing requirements and acceptance criteria.
- The proper terminology that gets you to the right section of the code – quickly.
- How to use any code, standard or specification by understanding the core of the problem or question.

Note: You **MUST** purchase your own copy of API 1104, *Welding of Pipelines and Related Facilities* (19th Edition). AWS does not supply this codebook.

Contact Global Engineering Documents at www.global.ih.com or phone (800) 854-7179 to purchase your copy of API 1104, 19th Edition.

TUESDAY – THURSDAY

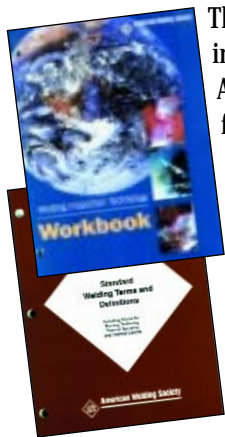
Welding Inspection Technology Course



Three days on all facets of welding processes and nondestructive examination. This course continues to be refined and sharpened through attendee evaluations and by examination performance.

The course covers:

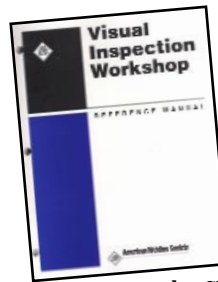
- Safe Practices.
- Metal Joining and Cutting Processes.
- Terminology and Weld Joint Geometry and Welding Symbols.
- Documents Governing Welding Inspection and Qualification.
- Metal Properties and Destructive Testing.
- Metric Practices.
- Welding Metallurgy.
- Evaluation of Weld and Base Metal Discontinuities.
- VT and Other NDE Methods and Symbols.



This course is a real aid for welding inspectors and welding educators seeking AWS certification or increased proficiency for job advancement.

FRIDAY

Visual Inspection Workshop



This workshop provides eight hours of expert instruction that includes approximately three hours of instruction in the use of inspection tools, followed by “hands-on” learning for the balance of the workshop. This hands-on training incorporates plastic replicas of welds and also includes a sample practical examination to prepare test candidates for the CWI practical exam.

By attending, you can learn:

- How to use weld measuring instruments.
- Compliance to a specific code.
- Do’s and don’ts of documentation.
- When a discontinuity is OK.
- When a defect is rejectable.
- Why visual inspection can be the most effective NDE technique.



Tools you’ll be using with a teammate during the visual inspection workshop.

SATURDAY

CWI Examinations

The Certified Welding Inspector (CWI) exams are held on the Saturday following the seminar week at the same seminar location. Sign-in for applicants begins at 7:30 a.m. with the Test Supervisor/Instructor beginning promptly at 8:00 a.m. A Photo ID is required of all exam applicants at the time of sign-in. All exam questions are multiple choice, and each part of the exam is two hours long. A description of each part follows:

Part A: Fundamentals

Closed book test; 150 questions.

Part B: Practical

Hands-on test; 46 questions; use Book of Specifications.

Part C: Open Code Book

Open book test; 46 questions on the code you previously selected.

Frequently asked questions about AWS Certification and Seminars

How do I know I'm ready to become a CWI?

The qualifications necessary to apply to become a CWI are explained in QC1-96 *Standard for AWS Certification of Welding Inspectors*. This document is free and can be viewed and printed from www.aws.org.

How do I apply to sit for the CWI exam?

You may download the CWI application form from www.aws.org or call (800) 443-9353, ext. 407, to have one mailed to you.

How long does it take to determine if I qualify?

Allow six weeks for application review and processing. Call (800) 443-9353, ext. 407, for specifics on fast-tracking your application.

Can I file my application electronically?

No, because several areas of the application must be notarized, and the results of a vision test must also be included. This means that the application must be submitted by mail.

What happens if I don't qualify?

You will receive a refund, less a \$75 processing fee.

How long will it be before I know if I passed the exam?

You will be notified in approximately four weeks on how well you performed. AWS will not divulge your test results by telephone to ensure privacy.

What about CEUs?

AWS is authorized to issue Continuing Education Units (CEUs), one CEU for each 10 hours of classroom contact. If you wish to earn CEUs from the Welding Inspection Seminar, or any of its component programs, you must pass a test at a 70% or higher level. Please notify the instructor if you wish to take the CEU verification test.

When is the exam scheduled?

Approximately 100 AWS certification exams are conducted in the U.S. annually. The 2002-2003 exam schedule listed on www.aws.org is most current. If you require a special exam site and time, including at your facility, call (800) 443-9353, ext. 273.

AWS certification exams are scheduled on Saturdays, and the highly successful preparatory Welding Inspection Seminar precedes almost all scheduled exams.

AWS also conducts certification examinations overseas. Contacts for international exams can be found at www.aws.org or by calling (305) 443-9353, ext. 475.

What's the exam like?

The examination takes a full day and is made up of three parts: Open Book (based on a code such as D1.1 or API 1104); Closed Book (general knowledge); and Practical Weld Inspection test. You must present a photo ID to be admitted to the exam, and you will be registered and monitored by proctors.

What does the seminar registration fee include?

Eight hours of instruction each day, reference books and other handout materials, breaks, and lunches.

Do I really need the AWS Welding Inspection Seminar to help me prepare for the CWI exam?

Literally thousands of CWI candidates in the last 20 years have thought so! Our instructors are consistently rated as "excellent," the pass rate is unequalled by any other test-preparing organization (to our knowledge), and, as with all AWS products and services, your satisfaction is guaranteed.

Suppose I have to cancel going to the Welding Inspection Seminar — do I get a refund?

If you notify AWS of your need to cancel at least two weeks prior to the program for which you're registered, you will be refunded the registration fee, less \$75 administration/hotel attrition fees. If your cancellation notice is received less than two weeks prior to the program, you will be refunded your registration fee, less \$175 administration/hotel attrition fees. No-shows do not receive refunds.

What about an AWS Membership — is it included, too?

If you are a non-member seminar attendee who is not pursuing AWS certification (you have not paid application/exam fees), the seminar registration fee includes a year's membership in AWS. If you are pursuing AWS certification, your application/exam fees include three years of AWS membership.

What if AWS has to cancel the program?

AWS reserves the right to change or cancel scheduled seminars due to low registration, or other reasons, without financial obligations. Should that become necessary, AWS will attempt to verbally contact all course registrants no later than 10 days before the scheduled program.

If you have a question about a program for which you are registered, or would like to confirm your course's status before making final travel plans, call (800) 443-9353, ext. 229. If you are flying, we recommend refundable airline tickets.

Can I stay in the same facility where the seminar and exam will be conducted?

It's encouraged! AWS uses Business Travel Advisors at (888) 594-2929 to secure the most comfortable, convenient, and affordable hotels to stage the Welding Inspection Seminar and to run the CWI exam. Hotel information accompanies your seminar confirmation letter. We encourage you to identify yourself as an AWS customer to get the negotiated room rate.



Registration Information

- By Phone:** To order a book only, contact Global Engineering Documents toll free at (800) 854-7179, or (303) 397-2740, or at www.global.ihc.com.
To register for an exam prep course only, call (800) 443-9353, Ext. 229; to request an application for CWI exam qualification, call Ext. 407.
- By FAX:** Complete the exam prep course Registration Form and fax to AWS Education Department, (305) 648-2396.
- By Mail:** Complete the exam prep course Registration Form and send to AWS. Complete the CWI Application form and send to AWS Certification Department.
- At the Door:** On-site registration for the exam prep courses is available for an additional \$50. However, due to the six-week certification exam pre-qualification period, it is not possible to register on-site for an exam.

Everyone Can Benefit from Attending an AWS Exam Prep Course

All professionals can benefit from attending an AWS seminar. AWS examinations and seminars meet the highest standards for professionalism and technical expertise. These CWI examination preparation seminars are proven and sponsored by the American Welding Society, which publishes welding codes and standards used worldwide.

Discounts

A group discount is given to organizations that register three or more participants. Call for specifics at (800) 443-9353, Ext. 229.

Seminar and Exam Schedule

Course	Schedule
D1.1 Code Clinic	Sunday; 1 p.m. - 5 p.m. Monday; 8 a.m. - Noon
API 1104 Code Clinic	Monday; 1 p.m. - 5 p.m.
Welding Inspection Technology	Tuesday-Thursday; 8 a.m. - 5 p.m.
Visual Inspection Workshop	Friday; 8 a.m. - 5 p.m.
Exam	Saturday; report for exam at 7:30 a.m.

Please allow up to 6 weeks for the Certification Department to assess your exam application. If you're eligible, you become an exam candidate, and a test site and date will be confirmed. The three-part exam includes: a closed-book exam on fundamentals, an open-book exam on the requirements of a fabrication standard, and a hands-on weld inspection test.

Confirmation

You'll receive a registration confirmation indicating prep course or exam date, site and hotel information. *Check it for accuracy.* You will also receive an exam confirmation. *Check it for accuracy.*

Special Hotel Rates

The hotel registration information will be included in your seminar or exam confirmation package. Please call the hotel and refer to the AWS room block to ensure you receive the contracted rates negotiated by the AWS travel agency, Business Travel Advisors.

Complimentary Meals

Complimentary group luncheon is included each day, a valuable opportunity to network with your peers.

Special Considerations

In accordance with the Americans with Disabilities Act, AWS strives to accommodate all participants with special needs. Please inform the AWS Education Department at (800) 443-9353, Ext. 229, if you require assistance.

CWI Exam

Please note that registering to attend one of the exam prep courses does not automatically qualify you to take the AWS certification exam. The exam application must be submitted separately to the Certification Department six weeks prior to the exam date you have selected. Call to request an application to qualify for the exam at (800) 443-9353, Ext. 407, or download the CWI application from our web site (www.aws.org).

Tax Deductible

The IRS grants an income tax reduction for educational expenses, cost of travel, meals and lodging if the purpose is to maintain or improve skills required in one's employment, trade or business; or to meet specific requirements for an employer or law imposed as a condition for employment.

AWS Membership

Your AWS Membership will become active after the completion of the exam prep course and/or exam.

REGISTRATION FORM

YES!

JJO21ED

I want to put my money where my future is!
Sign me up for the following AWS Seminar and Exam at the location and date I have selected below.

Name _____

Title _____

Organization _____

Address _____

City/State/Zip _____

Birth Date _____ SS# _____

Business Phone () _____

Business Fax () _____

E-Mail Address _____

- I would like to take the exam only.
- I would like to take the seminar only.
- I would like to know more about bringing AWS training to my facility.
- This is one of multiple registrations from my company.

LOCATION/DATE	PRICE	QTY	TOTAL

To mail your payment:
American Welding Society
P.O. Box 440367
Miami, FL 33144-0367

AWS USE ONLY	
1. Check # _____	
2. Date Rec'd _____	
3. Amount _____	
4. Account# _____	

SUBTOTAL	
TOTAL	

YOU CAN FAX THIS ORDER TO (305) 648-2396

Bill me (must be AWS member) Member No. _____

Bill my Company's P.O. No. _____

Check AMEX VISA Mastercard

Carte Blanche Diners Club Discover

Card No. _____ Expiration Date _____

Signature: _____

Duplicate for multiple registrants.

Exceed your expectations with our faculty

ED BOHNART (SCWI) is the principal of Welding and Education Consulting in Winneconne, Wisconsin. He launched his consulting practice after a successful career with Miller Electric Mfg. Co., where he directed its welding school. He is an AWS Distinguished Member and Past President. Bohnart has been active in the VICA program and instrumental in the organization of the AWS Welding Trials as an IIW USA Technical Expert. For six years, Bohnart was the Chair of the AWS C5 Committee on Arc Welding and Cutting and remains an Advisor.

KEN CORYELL's experience includes welding quality assurance, quality control, nondestructive examination, and welding engineering for the electric utility, petrochemical, aerospace, shipbuilding, and structures industries. He is an ASNT Level III certificate holder in radiography and liquid-penetrant testing, an AWS-Certified Welding Inspector and a registered Professional Engineer. For ten years, Coryell's 12-hour video course, "Welding Inspection Technology," has been used to prepare candidates for the CWI examination. He earned both his bachelor's and master's degrees in welding engineering from The Ohio State University. His professional affiliations include AWS, ASNT, ASME, ASM International, and the National Society of Professional Engineers. He is currently a welding and quality consultant based in the Cleveland, Ohio, area, and is a frequent seminar leader and author for AWS.

DAVID DIAZ is an SCWI, CWE, API Lead Auditor, and ASNT-TC-1A in five methods, and continues to maintain his welding certifications in piping and plate for SMAW, GTAW and GMAW. In his 28-year welding career, Diaz has performed the duties of quality assurance engineer, NDE Level III and welding inspector in the power-generating industry. Diaz has been part of the AWS faculty for a number of years.

ROBERT J. GIBSON has over 40 years experience in the welding industry in structural fabrication, pressure vessels, shipbuilding, nuclear power plant construction and aerospace components in England, Canada, and the U.S. He is an SCWI and has been a popular instructor for AWS for many years.

SCOTT HELZER's (CWI/CWE) welding background spans more than 20 years of diversified welding experiences. He holds a Ph.D from Texas A&M with primary emphasis in NDE, ferrous and nonferrous metallurgy, and welding power sources/procedures. During his 24-year membership in AWS, he has been recognized for outstanding contributions to welding and welding education by being selected to receive the Plummer Award and Outstanding Certificate of Achievement for being a major contributing author for the re-write of the week-long CWI prep course materials. Dr. Helzer has served as an IIW delegate and participated in many international forums to promote welding and inspection on behalf of AWS. His outside research interests are presently focused on T-K & Y connections in 4130 tubular structures for aircraft and motor sports, and web-based instruction for welding inspection and continuing education. He currently is a faculty member in the department of engineering technology with TCCC (Florida), pursuing public/private partnerships for welder training and inspection.

Veteran educator **RON THEISS** has been Coordinator of the NDE program at North Harris College (Texas) and a teaching professor for 23 years. An AWS Life Member as well as a CWI, He has been a popular instructor with CWI applicants for 11 years.

A SCWI, **KEN JOBES** was voted the Certified Welding Inspector of the Year in 1997. This LeTourneau University alumnus has developed and implemented inspection, maintenance, and repair programs for fossil, hydroelectric, and nuclear power plants over the last 28 years. Aside from his instructor duties for AWS' CWI prep seminars, Mr. Jobes has conducted training for Alabama Power, Commonwealth Edison, Babcock and Wilcox, Alliance Steel, and many others. A past member of the AWS Education Committee, Jobes is also a member of ASM.

EUGENE G. HORNBERGER (SCWI) is a welding consultant for the Arcet Equipment Company, headquartered in Richmond, Virginia. Prior to this, Hornberger had been in charge of welder training for Newport News Shipbuilding. He has served in many positions for AWS, including the Board of Directors and Chairman, AWS Education Committee. He has written and edited several books, including *Welding Processes and Practices*, co-authored with AWS Fellow (Class of 1993) August Manz. He was the editor for the new AWS publication *Design and Planning Manual for Cost-Effective Welding*, and is working on several other publication projects for the Society. Hornberger teaches welding and troubleshoots for Arcet's customers, and he leads AWS seminars on preparing for the CWI examination as a senior instructor.

RICHARD DEPUE, has successfully transitioned from professor, welding technology, State University of New York, to manager, Structural and Welding Inspection Operations, for New York City-based Advance Testing. DePue, a CWI and LEVEL II in all NDE processes, holds an MBA in occupational administration and an undergraduate degree in technical education (Buffalo State College). He is vice chair of the AWS Educators' Subcommittee and member, AWS Education Committee.

Nineteen years of **WILLIAM H. SEYFARTH's** quarter century in welding have been as a CWI. From early on, Seyfarth has been involved in welding education, including four years of community college teaching, and he is currently serving on the welding program advisory board of four Florida schools. Based in Cedar Key, Florida, Seyfarth's company, WeldTest Services, focuses on standards consulting, inspection, technical writing and welder/procedure qualification testing. He is a contracted test supervisor for an AWS-Accredited Test Facility and has instructed CWI applicants for the past nine years.



American Welding Society

550 N.W. LeJeune Rd. • Miami, FL 33126

Visit our website: www.aws.org

NON-PROFIT ORG.
U.S. POSTAGE
PAID
American Welding
Society Inc.