TRAINING

CERTIFIED WELDING INSPECTOR







CREATING FUTURE TOGETHER

www.cutechgroup.com



CERTIFIED WELDING INSPECTOR AWS - CWI



ABOUT US

CUTECH, based in Singapore, passion to serve the industry to develop highly skilled personnel in the field of Quality Engineering and NDT has led us to impart exclusive training courses and certification in this field and to provide continuing education through knowledge updating, skills upgrading, certification and career development to remain right and suitable in the fast-changing economy.

CUTECH is an accredited international agency for American Welding Society, Florida, USA to



conduct Seminars, Examination and Certification programs for AWS in Singapore, Malaysia and Overseas.

All our training courses are conducted by Qualified and Highly-experienced Trainers with up-to-date instructional materials. We are conducting Day & Evening classes at your convenience and time availability.

Additional information on CUTECH and its other certification course and technical services can be found at <u>www.cutechgroup.com</u>

AWS/CWI

An AWS CWI (Certified Welding Inspector) certificate is important because it demonstrates a thorough understanding of welding processes and standards, signifying a high level of expertise within the welding industry, which can lead to career advancement, better job opportunities, increased credibility with employers and clients, and the ability to ensure projects adhere to the highest quality standards by performing accurate welding inspections; essentially, it's a recognized mark of proficiency in the field that can open doors to more demanding and specialized roles within the welding sector.

Key reasons to get an AWS CWI certificate:

• Industry Recognition:

The AWS CWI certification is widely recognized across the welding industry, meaning employers and clients value the credential when selecting qualified inspectors.

• Career Advancement:

Having a CWI certification can significantly enhance your career prospects, potentially leading to higher paying positions and greater responsibility within a company. • Quality Assurance:

As a CWI, you are responsible for ensuring that welding procedures and finished welds meet industry standards, contributing to the overall quality and safety of projects.

• Demonstrated Expertise:

Passing the CWI exam proves you have a comprehensive knowledge of welding codes, inspection techniques, and quality control practices.

ELIGIBILITY

To qualify to earn the CWI credential, candidates must pass a vision test and have a combination of qualifying education and work experience, with supporting documentation.

MINIMUM EDUCATION	MINIMUM WORK EXPERIENCE
Bachelor or higher degree in welding engineering or	Minimum of one (1) year welding-based work
welding technology - four (4) years maximum substitution	experience
Associate or higher degree in welding or non-welding related engineering technology, engineering, or a physical science - three (3) years maximum substitution	Minimum of two (2) years welding based work experience
Engineering/Technical courses that can be applied to Bachelor or higher degree in Welding - two (2) years maximum substitution	Minimum of three (3) years welding based work experience
Trade/Vocational courses - one (1) year maximum substitution for successfully completed courses	Minimum of four (4) years welding based work experience
High school diploma or approved high school	Minimum of five (5) years welding based work
equivalency diploma	experience
8th grade level of schooling	Minimum of nine (9) years welding based work experience
Less than 8th grade	Minimum of twelve (12) years welding based work experience
Also read the OC1.001C AND1 Creation for ANC	

Also, read the <u>QC1:2016-AMD1 - Specification for AWS Certification of Welding Inspectors</u> and <u>B5.1:2013-AMD1 - Specification for the Qualification of Welding Inspectors</u> for in-depth requirements.

SEMINAR PATTERN

- 1.5 days of the seminar will be used to cover the (Part A) "Fundamentals" part of the examination that covers all the facets of AWS QC, Welding Process, Cutting Process, Weld Joints Geometry and Welding Symbols, Document Governing Welding Inspection and Qualification, Metal Properties and Destructive Testing, Welding Metallurgy, Weld and Base Metal Discontinuities, Visual Inspection and NDE Methods and Symbols, Safety in Welding and Cutting.
- 1.5 days will be used to cover the (Part B) "practical applications" part of the examination. This will expose
 you to use actual visual inspection tools, gauges and examine weld replicas and further to the acceptability
 and rejection criteria of sample weldments based on the Book of specification and Application of WPS, PQR,
 WQTR & PWHT Chart.
- **1 day** will be used to expose and refresh your skills in-comprehending the welding code books (Part C) API 1104 including the qualification of welding procedure, testing requirements and acceptance criteria, the proper terminology that gets you to the right section of the code quickly and how to use any Code, Standard or Specification by understanding the core of the problem or question.
- **1 day** will be totally dedicated to Model Exam for part A, B and C.

WHO SHOULD ATTEND

Though the seminar and certification give a career boost for all individuals in Oil and Gas, Manufacturing, Petrochemical, Power Generation and Power Stations, Ship Building/Ship Repair and Construction, Offshore Fabrication, Railways, Service and Maintenance and Metal Fabrication, it is specifically recommended for the professionals in the following category:

- Welding Foremen
- QA Engineers
- Engineers and Supervisors.
- Supervisor Field Experience
- Field Inspectors & Certified Welders

- Construction Engineers
- NDT Professionals
- QC Inspectors
- Field Service Staff
- Erection Engineers

KEY BENEFICIARIES OF THE EVENT

Upon completion of this seminar, students will be able to:

- ✓ Use comprehensive knowledge of various welding processes, including arc welding, gas welding, and resistance welding, to identify and evaluate welding procedures effectively.
- \checkmark Demonstrate knowledge of the basic principles of welding.
- \checkmark Identify the different types of welding processes and their applications.
- ✓ Select the appropriate welding equipment and materials for a given application.
- ✓ Navigate codes and standards to find salient information.
- ✓ Perform visual inspections of welds.
- ✓ Identify common welding discontinuities.
- ✓ Determine discontinuity acceptability using acceptance criteria and tolerances.
- ✓ Explain the principles and applications of non-destructive testing methods
- Proficiently read welding symbols on engineering drawings and interpreting blueprints accurately to verify that welding procedures conform to specifications.
- Explain the material properties of base and filler metals and how they are changed by welding to and inform material compatibility.
- ✓ Skillfully use visual inspection tools.
- ✓ Explain the process of qualifying welding procedures and performance qualifications.
- ✓ Explain the criteria and procedures for qualifying welders.
- Adhere to safety best practices as defined by ANSI to promote a safe and responsible working environment.
- ✓ Follow AWS's code of conduct and professional ethics to ensure integrity and professionalism in their roles as welding inspectors.

EXAM PATTERN

Examination	Number of Questions	Duration	Min % to Pass	Exam Pattern					
Computer-Based Testing - Any Prometric Exam Centers									
Part A - Fundamentals	165	2 Hrs.	72%	Closed Book					
Part C - Code Book	55 to 65	2 Hrs.	72%	Open Book					
Paper Exam – Cutech approved locations where AWS educational seminars are conducted									
Part B - Practical	46	2 Hrs.	72%	Open Book					

Part A - For additional information access the <u>Examination Information Guide.</u>

- **For additional information access the CWI Part B Examination Information Guide.**
- ↓ For additional information access the <u>CWI Part C Examination Information Guide.</u>

All candidates are required to take the Part B Practical portion of the CWI Exam before Parts A and C. Candidates may choose whether to take Part A before Part C or vice versa, but both must be after Part B has been completed and within 60 days of Part B Practical



Welding of Pipelines and Related Facilities

American Betroleure

API STANDARD 1104 TWENTY-SECOND EDITION, JULY 2021

- What Scores Do You Need to Pass the Exam?
 - A passing score is a 72% or higher in all 3 sections (Part A, B & C) of the test. If your score on any part of the test is lower than 72%, you will not be certified.
 - However, if the average score of the entire test is 72% or higher, yet one or more of the sections have a score lower than 72%, you can retake just the parts of the test that had a failing score. If you pass them on the next try, you will be certified.
 - But that only applies if the average score of the entire test is at least 72%, so try to get the highest score you can in the sections you know.

REGISTRATION PROCESS

All the registrations are to be completed preferably 4 weeks prior to the commencement of the seminar through this website <u>https://training.cutechgroup.com/index</u> For more enquiry call us at +65 6262 6614; Email: training@cutechgroup.com

Upon completion of registration process, candidates can collect their copy of study materials. This will help you to start your preparations immediately.

COURSE REF. TGS-2023018852

We will issue course completion certificate after successfully completion of training program.

COURSE FEE DETAILS

PERFORM WELDING INSPECTION CERTIFIED WELDING INSPECTOR (AWS-CWI)

CERTIFIED WELDIN	COMPETENCY CODE. AER-ACO-2050-1.1						
SEMINAR * (40HRS)		CLOSIN G DATE (3HR		SEMINAR FEE			
				ART B XAM 3HRS) FEE	NORMAL	ETS	MCE
			EXAM (3HRS)		Singapore Citizens / PRs Aged 21 Yrs & above	Singapore Citizens/ PRs SME Company Sponsored	Singapore Citizens Aged 40 Yrs & above
20 to 24 Jan	weekday	23 Dec	27-Jan	SGD 2000	SGD 1000	SGD 600	SGD 600
17 to 21 Feb	weekday	23 Jan	24-Feb				
24 to 28 Mar	weekday	27 Feb	31-Mar				
21 to 25 Apr	weekday	31 Mar	28-Apr				
19 to 23 May	weekday	28 Apr	26-May				
23 to 27 Jun	weekday	26 May	30-Jun				
21 to 25 Jul	weekday	30 Jun	28-Jul				
18 to 22 Aug	weekday	25 Jul	25-Aug				
22 to 26 Sep	weekday	25 Aug	29-Sep				
13 to 17 Oct	weekday	22 Sep	21-Oct				
17 to 21 Nov	weekday	23 Oct	24-Nov				
15 to 19 Dec	weekday	21 Nov	22-Dec				

* * Part Time classes available based on request.

- Top-Up of SGD 1250 for AWS-CWI examination, in addition to the above seminar fee, applicable to all candidates.
- SGD 292.50 [GST] applicable to all candidates, based on full course & examination fee.
- * Parts A & C Online Examinations subject to Prometric Centre availability, scheduled after completion of Part B Exam.
- * Part B Examination as per Cutech Schedule, mentioned above.
- PDU points: 43 applicable, subject to advanced request & PEB approval.

Funding Terms:

- SkillsFuture Singapore (SSG) funding is applicable for Singapore citizens & Permanent Residents.
- SkillsFuture Credit can be used for all SSG-funded courses; the claim should be processed before the course commencement date.
- SSG funding codes are not reusable for repeat usage on the same course or the same category of courses.
- Sponsor Company can claim Absentee Payroll for all Singapore citizens/ PR candidates.
- Submission of training grant will be done by Cutech for all funded candidates.
- Variation in fund amount/grant awarded/rejection is solely at the discretion of SSG. Terms & Conditions apply.

RENEWALS

The renewal process is part of your continued certification according to Latest QC1. The validity of the certification is 3 years and CWIs can renew their status by applying in the prescribed application format before the expiration date of the certification. If the renewals are not applied before expiration, the candidates lose their CWI status and will have to reappear for fresh certification.

Contact us for the renewals of your AWS-CWI certifications well before 8-weeks of expiration.