**“Urban Legends of the CWI”**

**How to get and stay certified**

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Boston Section AWS
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**Informational Presentation**

- **Length of presentation:** 1 hour + 15 minutes for Q&A

- **Potential CWIs**
  - CAWIs
  - CWIs
  - SCWIs

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**Informational Slide**

- The presentation will focus on the largest group of people at the presentation.
- Quick show of hands – interest of this group?
  - Potential new CWIs
  - CWIs
  - SCWIs

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**References**

- AWS QC1:2007 Standard for AWS Certification of Welding Inspectors
- AWS B5.1:2003 Specification for the Qualification of Welding Inspectors
- [www.aws.org](http://www.aws.org)
- [http://www.aws.org/w/a/certification/index.html](http://www.aws.org/w/a/certification/index.html)
Outline of Presentation

- Overall Guidance
- Getting certified
- Keeping certified
- Future training opportunities

Overall Guidance

Lessons Learned

Free Advice

- If you don’t know, ask... If you ask, verify
- Remember where to find the information, which is more important than memorizing everything
- If it isn’t written down, then it didn’t happen
- Keep a copy for your records... and keep your records organized (3-ring binders, hanging folders, shop notebooks)

Free Advice

- Keep your contact information current
- Send important documents with “receipt signature required”
  - Call to verify the information has been received and is in process with the right department
  - Record the names of the people of the people you speak to and the dates of the conversations
Getting certified

(AWS QC1:2007, Section 4)

What are the levels of Certification?
- Senior Certified Welding Inspector (SCWI)
- Certified Welding Inspector (CWI)
- Certified Associate Welding Inspector (CAWI)
- Endorsements
- Other certifications (NDE)

Chain of Command
- SCWI – senior/supervisor level
- CWI – individual contributor
- CAWI – individual contributor, that takes direct supervision from SCWI or CWI

What do I have to do to take the test?
(AWS QC1:2007, Section 5)
- Experience
- Education
- Evidence of employment
- Fill in the forms
- DO NOT FORGET your eye exam
- SCWI – six years as a CWI minimum
What are the different sections of the test?
- Part A – Fundamentals
- Part B – Practical
- Part C – Code Book
- Code Book endorsements

What do I need to do to pass the test?
- SCWI
  - Part A & B, 72% minimum correct (144/200 questions)
  - That's a "C"
- CWI
  - Part A, B & C, 72% minimum correct (all sections)
  - That’s a “C”
- CAWI
  - Part A, B & C, 60% minimum correct (all sections)
  - That’s a “D”

Taking the wrong code at the wrong time
- Plan to take the test that is the most appropriate for your industry!
  - If you’re working in Structural Industry, then you should plan to take the intended that you plan to work in!!
  - DOT requires evidence of taking the AWS D1.1 or D1.5
- Unless you work with a specific code every day start with API 1104.

When is the last time you took an exam?
Taking a test can be overwhelming…
Watch outs

- Make sure you have confirmation that the package was received AND is being processed
- Make sure you fill out the forms correctly AND on-time
- Eye exam – forget it and it’s an easy way to fail the exam (Section 8)

Test taking Tips

- Take practice exams
- Time yourself
- Answer ALL the questions
  - Probability is in your favor!
- Process of elimination
- If you jump around, make sure you verify the exam question number. You can use your test booklet

Test taking Tips

- Put a tick mark on the test sheet every 10th question, to verify that you’re on the right question
- Erase neatly!!
- Read the question, answer it based on the specification in front of you.
  - Example Part B weld specimens

What do I do if I don't pass the test?

(Section 6, 7)

Look at the stats:
Average 1st pass rate (not confirmed):
- 40% no prep
- 60% with some preparation
90% Boston Section last three years
Sometimes, the rules are very easy to understand...

**SCWI**
- Any test taken within 12 months of the original test date
- Up to (2) re-examinations within this 12 month period

**CWI**
- Pass with 60%, automatic CAWI
- If you achieve a 72% overall simple average but don't meet the 72% of any of the parts, you can take over those sections
- Up to (1) re-examination within one year of the original test without training
- Any additional re-examinations require 40 hours of documented further training in welding inspections before re-examination
- Up to (3) retests in any three year period

**CAWI**
Eligible for upgrading to CWI (Section 14)
Keeping Certified

CAWI's are not eligible for renewal
(Section 15)
- You have to retake the test and pass at the CWI required level to keep your certification
- You must pass the test within the 3 year period

Journal/log
- Daily Log should be kept by CWI
- If it isn't written down, then it didn't happen
- It's a digital world – a picture says a thousand words

Folder for all certification-related stuff
- Hanging folder in file cabinet
- Any event, meeting, training – put a copy in the file
**SCWI & CWI**
- Submit renewal package within the 6 month period before your expiration date
  - Not earlier than six months but no later than the expiration date

**SCWI & CWI**
- Document that during that last three years, no period greater than 2 years continuous inactivity (or simply put, you have been working on welding related activities for at least 1 of the last 3 years period).
  - Remember the logbook recommendation??
  - Again, if you document what you’re doing then taking ANOTHER test isn’t needed…

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**SCWI & CWI**
- If you don’t meet the criteria, then you have to take Part B and pass at the 72% minimum.
- You can only do this twice (two consecutive three-year periods). After than, you have to meet the 9-year recertification criteria

**Upgrading from CWI to SCWI**
(Section 15)
- If you are renewing at your 6 or 9-year recertification AND want to get your SCWI, then…
  - Fill in two separate applications
  - Meet the criteria to pass for the CWI (Part B or PDH) AND take the SCWI exams
  - You won’t lose your CWI status if you don’t pass the SCWI but meet the criteria of CWI.
9-year recertification for SCWI and CWI

- Submit renewal package within the 6 month period before your expiration date
  - Not earlier than six months but no later than the expiration date
- Document that during that last three years, no period greater than 2 years continuous inactivity (or simply put, you have been working on welding related activities for at least 1 of the last 3 years period)
  - Remember the logbook recommendation??

AND...

9-year recertification for SCWI and CWI

- Minimum of 80 PDHs earned during past nine-year certification AND twenty of those 80 PDHs must be earned in the final three-year period.
- Trainers can substitute teaching hours for the required PDHs, but the objective evidence has to be provided (16.4.5)

Options??

1. Take the ENTIRE test over
2. Take Part B examination only
3. Take a Supplemental Inspection Exam (SIE) or Endorsement
4. Take the 9-year Recertification Course (aka 9-year CWI Boot Camp)
5. Professional Development Hours

The “Sure Pain” Indicator

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<thead>
<tr>
<th>Option</th>
<th>Pain Threshold</th>
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<tbody>
<tr>
<td>1</td>
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<tr>
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<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
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</tbody>
</table>
Options - details

- Option 1 – you can torture yourself over again 😁
- Option 2 – you can limit your torture level

Option 3

- Good option if you know the Standards well
  - AWS, ASME, API
  - Inspector Programs like Radiographic Interpreter

Supplemental Inspection Exam (SIE) or Endorsement

- RT – currently available
- Codebook exams to AWS D1.1, API 1104, AWS D1.5, ASME Section IX, B31.3, + B31.1, and AWS D15.1
- PT, MT, Steel Inspector (IBC) – future opportunities

Options - details

- Option 4 – Good option if you have the time and money and you don’t want to take the test again
  - If you don’t want to retake the exam and don’t have 80 hours of PDHs in the past 9 years
    - 6 day course
    - Informal, interactive discussion
    - Field trip to a local plant or test lab
Option 5

- Recommended if you don't like extra pain and can document what you've been doing
  - Remember the logbook??

What are Professional Development Hours & how to get them

- Professional Societies – AWS, ASME, ASM, ASNT, ASQ
- Contact hour – minimum of 50 minutes of instruction
  - If CEUs are awarded, each CEU = 10 PDHs
    - Class room, correspondence, or distance learning in one or more areas indicated in AWS B5.1.
  - No max but objective evidence is needed
- Attending local section meetings of a professional society (AWS or other) where technical presentations over one or more of the areas of B5.1
  - Maximum of 20 PDHs but objective evidence is needed

What are Professional Development Hours & how to get them

- Preparation and presentation of technical session at an AWS local or national conference addressing subjects contained in B5.1.
  - A single 10 PDHs will be awarded but objective evidence is needed
  - Maximum of 20 PDHs can be awarded under this provision during the nine-year period
- Participation on an AWS standing committee, sub-committee, or task group
  - A single 10 PDHs will be awarded but objective evidence is needed
  - Maximum of 20 PDHs can be awarded under this provision during the nine-year period

What are Professional Development Hours & how to get them

- Publication of a paper, article or book published in a nationally recognized publication that addresses a subject from B5.1
  - Objective Evidence is required
  - Each publication = 10 PDHs
  - No maximum limit
- Patent issues that has an association with the field of welding, inspection or testing.
  - Objective Evidence is required
  - Patents had to have been issued during the most recent nine-year period.
  - Each application = 10 PDHs
  - Max of 20 PDHs
What are Professional Development Hours & how to get them

- Initial certification as an AWS RI or ASNT ACCP level II or III inspector in any NDT method listed in B5.1 (except VT)
  - NDE certification = 20 PDHs
  - No maximum limit
  - Objective evidence of the date of original certification.

Initial certification to endorsements offered under the AWS QC1 program

- Codebook exams to AWS D1.1, API 1104, AWS D1.5, ASME Section IX, B31.3, + B31.1, and AWS D15.1
- All count a full 80 PDHs and will permit a CWI to recertify for 9-year recertification without further testing or seminars.
- The endorsement credit can be earned at any time during the nine-year cycle.

Future Training, Ideas and discussion

- ISO-9001 & Welding Industry Auditor Training (flexible to participants of the class)
- Quality Management Systems
- Welding Metallurgy
- Welding Symbols
- Nondestructive Testing
- Welding processes
- CWI preparatory class
Future ideas?

- Follow best practices already used by other Professional Societies
  - ASQ Recertification Journals
  - ASME
- Promoting developing directly welding related
  - Leadership
  - Quality
  - Conflict Resolution

Training to be offered

- Getting certified vs. keeping certified focused classes?
- What are the needs, interests of our members?

Questions

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