

FAQ's from Attendees, CWB Engineer Forum Fall 2020

General:

Q: Will you be addressing any of our questions submitted for this forum in the FAQs later?

A: Yes, it will be posted in the FAQ section of the webpage

Q: There was an update to W47.1, the tables you are presenting are different than in the October 2019 release is this update available? How do we get the update?

A: The edition used during the presentation was the 2019 edition published in October 2019, there is no update published for the 2019 edition yet.

To register for e-mail notification about any updates to a CSA Standard

- go to <https://www.csagroup.org/store/>
- click on **Product Updates**

Q: This web page is not user friendly, there is too much information on one page. It needs to be broken down to permit easier access to the comments on the various standards

A: We will take good note of this comment and will improve the webpage consequently

Q: When there are multiple PQRs where parameters are significantly different, such that even when the ranges are applied, there are no overlaps. What should the range stated on the data sheet be?

A: In most cases, under CSA W47.1 parameter stated on the WPDS should be within the range tested, but there could be exceptions. CSA W47.2 essential variables are more restrictive on welding parameters.

Q: In W59 there are several errors in the images of prequalified joints. When will these be updated.

A: CSA will publish errata for W59 early in 2021

Q : Is there a lot of qualification test done with the Lincoln Electric HyperFill technology

A: No, until now just a few procedure qualifications tests have been witnessed by CWB with the HyperFill technology

Annex E

Q: Presentation of Annex E assumes it is mandatory, but the Annex indicates it is informative. Is it mandatory?

A: Annex E is not mandatory. As stated in clause E.1: *In the absence of toughness requirements specified by contract or by a governing code or standard, the requirements in Annex E may be used to specify the temperature and minimum average energy values required for the filler metal classification or base metal to be used.*

Q: Table E.1 does not state reference to ASTM E23. Will this reference be added or is it assumed?

A: ASTM E23 and A370 are referred in clause E.2.2.

Q: Why is the weave an essential variable for impact? do you assume travel speed is always reduced when weaving is used? if travel speed is maintained, how would this affect the heat input/toughness...it stays the same unless there are dwell times. (especially applies in automatic welding)

A: Question for W47.1 technical committee

Q: AWS D1.1 permits the qualification of a broader range of materials with impacts. Is this anticipated for Annex E?

A: Question for CSA W47.1 technical committee

Q: It may be more a question to the standard committees, but why the steel elaboration is not an essential variable on annex E? (normalized, thermomechanical, killed..) Steel have major influence for HAZ result

A: Question for CSA W47.1 technical committee

Annex J

Q: Re: Annex J - Why no reference to D1.3 with respect to design, workmanship, and acceptance criteria?

A: Question for CSA W47.1 technical committee

Q: Can you confirm if my understanding is correct? For prequalified allowances under CSA W47.1 Annex J, prequalification up to 7Ga is allowed for fillet and flare bevels only. For all other joints (3mm and up) and anything over 7Ga for fillets and flare bevels, then W59 applies.

A: Prequalified thickness range of fig. J.9 are to be followed, except for flare V and corner fillet weld, the maximum prequalified thickness of annex J is 7Ga. For thickness equal or greater than 3mm, except as stated above, prequalified joint of CSA W59 shall be used

Annex K

Q: Re Annex K - Are the prequalified joints in D1.6 not considered prequalified? Why not? For many SS's groove angle is often larger.

A: For prequalification, until further notice, AWS D1.6 can be used to accept WPDS for stainless steel.

Q: Both 316 and 308 consumables are acceptable for 304 base metal, some fabricators choose to have 316 only in the shop to avoid choosing the wrong consumable for 316 base metal.

A: Welding consumable 316L and base metal ASTM A240 type 304L and 316L have matching mechanical properties, consequently they are meeting the requirements of 5.2 and 5.3 of AWS D1.6

Q: Annex K refers to W59 for prequalified joints. There are prequalified joints in D1.6 which are not included in W59

A: Until further notice, we will still accept AWS D1.6 prequalified joint and procedure limitations to support acceptance of WPDS based on prequalification

Q: When can we expect an update to W47.1 that correct the many mistakes and items that are not clear?

A: Question for CSA W47.1 technical committee

Q: Notwithstanding W47.1 Annex K is for SS what prevents a company from qualifying to D1.6? Especially for US companies that want W47.1 certification.

A: Clause 11.2.8 of CSA W47.1:19:

*11.2.8 The qualification of welding procedures for stainless steel **shall** be governed by the requirements of Annex K.*

Q: D1.6 was valid down to 1/16". Why on earth did the CSA Committee not stay with this thickness? We do not need one set of requirements for Canada and one set for US. Many fabricators work in both countries. A goal should be to harmonize requirements.

A: Question for CSA W47.1 technical committee

Q: If a welding procedure was prequalified in D1.6, what is the rationale for requiring a tension test for PJP welds (Table K.6, Note 1)? It should not be necessary.

A: Question for CSA W47.1 technical committee

Q : As per K.8.5.1.2, CWB will require testing for thickness less than 1.6mm?

A : If annex K and J prequalification requirements are met for thickness less than 1.6mm, the WPDS could be consider prequalified and accepted without testing. If prequalification requirements cannot be met, then the WPDS will be qualified as per annex J.

Q : Will a qualification test be required to weld 304L base metal with ER316L filler metal?

A: If all the prequalification requirements are met, no qualification test will be required

Welding Consumables

Q; AWS A5.36 is being phased out.

A: AWS A5.36 has been withdrawn by AWS. But A5.36M is still referred in CSA W59 and CSA W48, until the next edition of these CSA Standards, AWS A5.36M classification system and requirements will still apply in Canada

Q: Why GMAW you went with ISO and all others Standard you refer to AWS... why not all AWS or all ISO ?

A: Question for the CSA W48 technical committee

Q: My understanding is that AWS is discontinuing A5.36. Why are CWB continuing it's use?

A: AWS A5.36 has been withdrawn by AWS. But A5.36M is still referred in CSA W59 and CSA W48, until the next edition of these CSA Standards, AWS A5.36M classification system and requirements will still apply in Canada

Q: It should be permissible to refer to AWS A5.20 or A5.29 also.

A: As AWS A5.29 is referred in CSA W59, it can be used in WPDS, but for carbon steel FCAW and MCAW, the reference shall be CSA W48/A5.36M. It is worth to mention that A5.36 retained the most common classifications from A5.20, so even if classification on WPDS shall refer to A5.36 classifications, one of the retained classifications from A5.20 can be used (i.e.: E491T-9C-H8).