

STANDARDS BULLETIN 2015-11

INTERPRETATION: Clauses 3.3.1 & 8.1.1

CAN/ULC-S601-07 Standard for Shop Fabricated Steel Aboveground Tanks for Flammable and Combustible Liquids

The following is an interpretation by the ULC Standards Committee on Stationary Steel Storage Containers for Flammable and Combustible (ULC-S600A) on CAN/ULC-S601-07, Standard for Shop Fabricated Steel Aboveground Tanks for Flammable and Combustible Liquids. The request for interpretation originates from the Clauses listed below.

Issue 1:

Clause 3.3.1 of CAN/ULC-S601-07 states:

3.3.1 Each manufacturing facility shall have an appropriate welding procedure as required by this Standard, recognized by a third-party certifier and shall ensure that each operator doing the work shall be duly trained and qualified.

Question 1:

When the welding procedure used for fabrication is a Welding Procedure Data Sheet qualified by the CWB, do the production welds have to meet the quality requirements of CSA W59 and/or CSA W47.1?

Answer: No

Rationale:

Clause 3.3.1 and the Standard in its entirety, does not make any reference to the requirements of CSA W59 and/or CSA W47.1 regarding the production welds. Each manufacturing facility shall have an appropriate welding procedure as required by CAN/ULC-S601-07, which the Standard does not identify specific welding procedures.

If a facility is CWB (Canadian Welding Bureau) accredited, we would assume it needs to follow the requirements of CWB.

Issue 2:

Clause 8.1.1 of CAN/ULC-S601-07 states:

*8.1.1 The manufacturer shall test each tank after all welding slag has been removed and all fittings and appurtenances, which are appropriate to its use, have been fitted. **Each tank shall be proved leak tight at all points including welds, threaded joints, fittings and manways by applying pressure in accordance with Table 6. While the pressure is maintained, a liquid soap***

solution shall be brushed or poured over all seams, threaded connections, flanged connections, bolts, etc. A complete inspection of the entire tank surface for flaws in the welds or parent metal shall then be made.

NOTE: The air supply for use in testing tanks must be controlled and monitored so that there exists no danger of over pressurizing.

Question 2:

If the floor plate welds were inspected with ultrasonic techniques to the requirements of CSA W59 Clause 11 and defects were found that would be rejectable to CSA W59 Clause 11, can the defects be left in as is and still meet the requirements of the Standard, assuming the leak test passes?

Answer: Yes

Rationale:

CAN/ULC-S601-07 only requires a complete surface inspection not an ultra-sonic inspection, accordingly the defects can be left in, as long as, the tank meets the requirements in Clause 8.1.1 i.e. surface inspection and leak test. This standard does not require nor specify using ultrasonic techniques, as required in CSA W59.

Should you require additional information, please contact Caitlin D'Onofrio at (613) 368-4430 or by email at Caitlin.DOnofrio@ul.com.

This Standard can be ordered by emailing publications@ul.com and specifying CAN/ULC-S601-07, Standard for Shop Fabricated Steel Aboveground Tanks for Flammable and Combustible Liquids.

Yours truly,

ULC Standards

A handwritten signature in black ink that reads 'G. Rae Dulmage'.

G. Rae Dulmage
Director, Standards Department