



Formal Interpretations/ Interprétation formelle

This section lists questions that individuals have submitted about a particular standard. Each question has been reviewed and answered by the appropriate committee. If you would like to submit a question about a particular standard, please see the end notes in the preface of that standard.

Posted Nov 18, 2022

The following interpretation regarding Clause 7.3.2.2 item (d) of CSA Standard N293-12, Fire protection for nuclear power plants, has been approved by the Members of the CSA Standards Technical Committee on *Fire Protection for Nuclear Power Plants (Z961)*.

Question: Does 7.3.2.2(d) allow three 60% pumps (in three separate fire areas), one electric motor driven and two diesel engine driven?

Answer: No

Rationale: N293-12 Clause 7.3.2.2 (d) requires that the total number of pumps driven by one power supply be sized for a total of 120% flow at the design pressure for that power supply.

Posted Nov 18, 2022

The following interpretation regarding Clause 6.3.1 a) note CSA Standard N291:19, Requirements for nuclear safety-related structures, has been approved by the Members of the CSA Standards Technical Committee on *Concrete Containment and Safety Related Structures for Nuclear Power Plants (Z952)*.

Question: Is the inherent conservatism and safety levels incorporated into safety-related structures indicated in the note sufficient as compared with the level defined of the important factors from NBCC for post-disaster buildings?

Answer: Yes

Rationale: The requirements in N291:19 are sufficient for nuclear safety-related structures. The requirements in NBCC are different but are not intended to be used for nuclear safety-related structures. In general, the requirements in N291 are periodically reviewed against the reference publications and any necessary changes are incorporated into the next edition.

Posted Nov 18, 2022

The following interpretation regarding Clause 6.2 & Table 3 of CSA Standard N291:19, Requirements for nuclear safety-related structures, has been approved by the Members of



the CSA Standards Technical Committee on *Concrete Containment and Safety Related Structures for Nuclear Power Plants (Z952)*.

Question:

- a) Does the committee agree that N291:19 Clause 6.2 does not define the load factors for combining tornado load effects Q_{tp} , Q_{td} and Q_{tm} in order to determine Q_t ?
- b) Does the committee agree that the bounding tornado load (Q_t) is not specifically the sum of the bounding wind pressure (Q_{tp}), bounding atmospheric pressure (Q_{td}), and bounding missile impact (Q_{tm})?
- c) Does the committee agree that the bounding tornado load (Q_t) can be the combination of wind pressure (Q_{tp}), atmospheric pressure (Q_{td}), and missile impact (Q_{tm}) at varying fractions of their individual bounding demands dependent on their simultaneous occurrence? (for example, only 50% of bounding Q_{td} is expected to occur simultaneously with 100% bounding Q_{tp} & Q_{tm})

Answer: Yes

Rationale: Agreed with a), b) and c). N291:19 does not explicitly state that all 3 tornado load effects must be combined where each has a load factor of 1.0. Q_{tp} , Q_{td} and Q_{tm} can be summed at varying percentage considering their time phase occurrence.

Posted Oct 25, 2022

The following interpretation regarding Clause 3 (definition of SDE) of CSA N289.1-18, General requirements for seismic design and qualification of nuclear power plants, has been approved by the Members of the CSA Standards Technical Committee on *Seismic Design for Nuclear Power Plants (Z957)*.

Question: In the N289.1-18 standard, is it the intent that the SDE can be described by a uniform hazard spectrum (UHS) with mean annual probability of exceedance of 10⁻² from a probabilistic seismic hazard assessment (PSHA) for the site?

Answer: No

Posted Jul 21, 2022

The following interpretation regarding Clause 6.4.1, of CSA Standard B149.6 has been approved by the Members of the CSA Technical Committee on *Biogas Generation & Utilization (JB117)*

Question 1: Is Clause 6.4.1 applicable to both open and enclosed flare waste gas burners?



Answer 1: Yes

Note: However, the TC is working to address the difference between open and enclosed flare waste gas burners in the new edition (2025). Meanwhile, Mr. Singh could seek variation from the AHJ (Authority Having Jurisdiction).

The following interpretation regarding Clause 8.9.4c, of CSA Standard B149.6 has been approved by the Members of the CSA Technical Committee on *Biogas Generation & Utilization (JB117)*

Question 1: Is there a basis for 200 mm being the maximum limit for this dimension?

Question 2: Do you agree that a larger value (300 mm, for example), for this dimension, would be acceptable under certain circumstances

Answer 1: Yes

Answer 2: No

The following interpretation regarding Sections 9.1.1, 9.1.2 & 28.1.1, 28.1.2, of CSA Standard B149.6 has been approved by the Members of the CSA Technical Committee on *Biogas Generation & Utilization (JB117)*

Question 1: Does the sketch shown below constitute a good representation of the requirements of clauses 9.1.1 and 28.1.1 as an example

Answer 1: No

The following interpretation regarding Sections 8 to 13 and 24-32 of CSA Standard B149.6 has been approved by the Members of the CSA Technical Committee on *Biogas Generation & Utilization (JB117)*

In this RFI, no question is asked. Therefore, the TC is not able to provide any answer; however, comments are noted.

The following interpretation regarding Sections 9.1.1 & 28.1.1, of CSA Standard B149.6 has been approved by the Members of the CSA Technical Committee on *Biogas Generation & Utilization (JB117)*

Question 1: The current and latest revision does not address the subject of the freeboard requirement on digesters and gas storage tanks. Should it be left to the civil engineer's discretion?

Answer 1: Yes

Posted Jun 29, 2022



The following interpretation regarding Clause 7.7.1.1 to 7.7.1.4 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question 1: If a welder produces an acceptable welder qualification test joint in accordance with Clause 7.7.1.2 or 7.7.1.3 using a qualified butt welding procedure, is the welder also qualified to make repairs to butt welds using the same butt welding procedure?

Answer 1: Yes

Question 2: If a welder produces a welder qualification test joint by making segments of through-wall weld repairs whose cumulative length is shorter than otherwise required by Clause 7.7.1.2 or 7.7.1.3, using a repair welding procedure which was qualified by producing segments of weld repairs as permitted by Clause 7.7.1.4, is the welder qualified to make repairs to butt welds using the repair welding procedure, provided that the segments of repair weld in the test joint pass all destructive or non-destructive testing requirements specified in Clause 7.7 and 7.8 for welder qualification?

Answer 2: No

Question 3: If a welder produces an acceptable welder qualification test joint by making a butt weld in accordance with Clause 7.7.1.2 or 7.7.1.3, using a repair welding procedure which was qualified by producing segments of weld repairs as permitted by Clause 7.7.1.4, does this qualify the welder to make repairs to butt welds using the repair welding procedure?

Answer 3: Yes

The following interpretation regarding Clauses 4.6 and 4.7.1 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question 1: Is the factor of 0.90 in the equation $S_h - S_L \leq 0.90 S X T$ intended to account for stresses typically encountered during construction?

Answer 1: No

Question 2: Are locked-in stresses resulting from construction, such as roping accounted for in the equation?

Answer 2: No, see Clause 4.2.4



The following interpretation regarding Clause C.6.6.7.3 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question: Is the factor of safety in Equation C.17 intended to account for elastic bending from as-built pipeline geometry, such as roping, which are not explicitly accounted for via analysis?

Answer: No

The following interpretation regarding Clause 7.11.13 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question 1: Is it the intent of Clause 7.11.13 to evaluate the cumulative projected area of spherical porosity over the full length of 150 mm of weld (i.e., cumulative sum of porosity divided by total area of weld over 150 mm)?

Answer 1: Yes

Question 2: Is it the intent of Clause 7.11.13 to evaluate the cumulative projected area of spherical porosity only in the area of weld which the indications occurs (i.e., cumulative sum of porosity divided by area of weld only where the indications are present)?

Answer 2: No

The following interpretation regarding Clause 10.9.6.2 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question: Does “inspection” in Clause 10.9.6.2 mean internal valve inspection?

Answer: The referenced clause does not specify the inspection method required

Posted Jun 26, 2022

The following interpretation regarding CSA Standard N286-12, Management system requirements for nuclear facilities, has been approved by the Members of the CSA Standards Technical Committee on *Management Systems for Nuclear Facilities (N286 Series) [Z955]*



Question: Is the term “reactor” used in CSA N286-12 based on the technology?

Answer: No

Posted May 31, 2022

The following interpretation regarding Section 1, Scope & Section 3, Significance and use of CSA A23.2:19, A23.2-26A, Test methods and standard practices for concrete, has been approved by the Members of the CSA Standards Technical Committee on *Concrete Materials and Construction (A152)*.

Question 1: Can the test be conducted on any portion of a mixed gravel source (carbonate or otherwise)?

Answer 1: No.

Question 2: Also, are we correct in interpreting that the term "Quarried" implies that this is only to be used on Bedrock Quarries and on nothing else?

Answer 2: Yes.

Posted Apr 13, 2022

The following interpretation regarding Annex B, Figure B.4 of CSA Standard Z276:18, Liquefied natural gas (LNG) - Production, storage, and handling, has been approved by the Members of the CSA Standards Technical Committee on *Liquefied Natural Gas (LNG) Production, Storage, and Handling (K104)*.

Question 1: What is the definition of tank penetration?

Answer 1: Figure B.4 has been revised. The revision will be reflected in the next edition update (April 2022). “Tank system penetration” has been replaced by “mechanical pipe joint.” Mechanical pipe joint is defined as a non-welded connection (i.e. flanged, threaded) that is not disassembled as part of regular operating procedures but may be disassembled for maintenance purposes.

Question 2: What is the definition of tanks connection?

Answer 2: In the context of Figure B.4 “tank connection” has been replaced by “mechanical pipe joint.” Mechanical pipe joint is defined as a non-welded connection (i.e. flanged, threaded) that is not disassembled as part of regular operating procedures but may be disassembled for maintenance purposes.



Question 3: Do we need to apply Figure B.4 (Zone 0, 1 and 2) to all horizontal tank system penetrations, in all cases, regardless of tank type (single wall, double wall, capacity, max pressure, etc.)?

Answer 3: YES. Refer to the updated figure B.4 in the next edition update.

Question 4: Do we need to apply Figure B.4 (Zone 0, 1 and 2) to all horizontal tank system penetrations, in all cases, regardless of tank penetration type (welded, flanged, threaded, etc.)?

Answer 4: NO. Refer to the updated figure B.4 in the next edition update.

Question 5: Do we need to apply Figure B.4 (Zone 0, 1 and 2) if we have tank penetrations with welded piping past the first valve?

Answer 5: NO. Refer to the updated figure B.4 in the next edition update.

Posted Mar 30, 2022

The following interpretation regarding Clause 12.3.1 of CSA Standard N285.0-17 Update No. 1, General Requirements For Pressure-Retaining Systems And Components In CANDU Nuclear Power Plants / Material Standards For Reactor Components For CANDU Nuclear Power Plants - Production, storage, and handling, has been approved by the Members of the CSA Standards Technical Committee on *CANDU Nuclear Power Plant Pressure-Retaining Systems and Components (Z953)*.

Question: Is the intent of CSA N285.0-17 & U1 Clause 12.3.1 to require CSA N285 Certificate Holders to have a “certification mark with designator” stamped on the Nameplate?

Answer: No

Posted Jan 25, 2022

The following interpretation regarding Clause 11.7.3 of CSA Standard Z276:18, Liquefied natural gas (LNG) - Production, storage, and handling, has been approved by the Members of the CSA Standards Technical Committee on *Liquefied Natural Gas (LNG) Production, Storage, and Handling (K104)*.

Question: In CSA Z276-18, Section 11.7 covers hoses and arms. 11.7.3 says “Loading arms for marine loading and unloading shall be provided with alarms to indicate when the arms are approaching the limits of the extension envelopes.” Does it mean that only articulated loading arms (pipes plus swivel joints) are allowed for marine loading and unloading of LNG?



Answer: No

Posted Jan 25, 2022

The following interpretation regarding Clause 11.7.3 of CSA Standard Z276:18, Liquefied natural gas (LNG) - Production, storage, and handling, has been approved by the Members of the CSA Standards Technical Committee on *Liquefied Natural Gas (LNG) Production, Storage, and Handling (K104)*.

Question: We are requesting interpretation of CSA Z276-18, that floating hose can be used in place of rigid/insulated piping for transfer of LNG from a shore terminal to a loading platform.

Answer: Yes, provided that the floating hose meets the requirements of CSA Z276 Clause 4.1.

Additional guidance on flexible hoses are considered in CSA Z276 11.7 and 13.3.10.13 as well as Annex B. Suggest designer refer to other standards to ensure meeting design, fabrication, and operational (purging, inspection, and testing) requirements.

Posted Dec 21, 2021

The following interpretation regarding Clause 4.3.3 and Table 4.1 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question 1: Must a sweet natural gas pipeline consider unrelated Sour Gas Facilities within the Class Location Assessment Area to determine the applicable Class Location?

Answer 1: Yes

Question 2: Does the presence of an unrelated Sour Gas Facility within the Class Location Assessment Area automatically require that this area of the pipeline be at least Class 2?

Answer 2: No

Question 3: If a release from the sweet natural gas pipeline, passing near an unrelated Sour Gas Facility, could create a dangerous or environmentally hazardous condition at the Sour Gas Facility, does this require that this area of the pipeline be at least Class 2?

Answer 3: Yes

Posted Dec 21, 2021



The following interpretation regarding Clause 5.1.3 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

As per CSA Z662-19 Oil and Gas Pipeline Systems Clause 5.1.3 materials for types of items for which no standard or specification is listed in the Standard may be used provided the company has determined such materials are suitable for the intended use as per Clause 5.8

Question: Could the engineering assessment provide a foundation for future inclusion in the Standard?

Answer: This is not part of the interpretation of the standard. Recommendations for future inclusion in the standard are addressed by the CSA Request for Change process.

Posted Dec 21, 2021

The following interpretation regarding Clause 10.13.2.2 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question 1: Does Clause 10.13.2.2 impose “weld restraint level” as an essential change for qualification of in-service welding procedures?

Answer 1: No

Question 2: Does Clause 10.13.2.2 impose “weld cooling rates” as an essential change for qualification of in-service welding procedures?

Answer 2: Yes

Question 3: If “weld restraint level” was not measured or characterized in any way (quantitatively or qualitatively), or was not documented in the procedure qualification record at the time a welding procedure specification was qualified in accordance with Clause 7.17, does Clause 10.13.2.2 prohibit the use of that welding procedure for in-service welding?

Answer 3: No. However, application of external forces during in-service weld joint fit up should be considered.

Posted Dec 21, 2021



The following interpretation regarding Clauses 4.14.2.11.c) and 4.14.3.8.d) of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question: Regarding portions of compressor and pump stations piping systems designed in accordance with ASME B31.3 as permitted in Clause 4.14.2.11.c), 4.14.3.8.d) and related notes, is it intended that users would follow the requirements of ASME B31.3 “in its entirety”, without further supplementary requirements of any kind (including other than design) being imposed by other clauses in CSA Z662?

Answer: No, “in its entirety” only applies to design requirements for compressor and pump station piping.

Posted Dec 21, 2021

The following interpretation regarding Clause 4.3.18 and 4.3.19 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question 1: In Table 4.6 Design of welded branch connections, the ratio of nominal branch diameter to nominal run diameter is calculated using the nominal diameter of the branch pipe or fitting (i.e., NPS) and not the exact outside diameter or the diameter of hole in the run pipe (D_o).

Answer 1: Agree.

Question 2: Can the area of reinforcement calculations in Clause 4.3.19 be used to demonstrate that reinforcement is not required to control stress levels within safe limits (not considering stresses that could be induced by other loads) despite the applicable items in Table 4.6 indicating that reinforcement shall be complete encirclement type, pad type, saddle type, or welding outlet fitting type.

Answer 2: Yes.

Posted Dec 21, 2021

The following interpretation regarding Clause 7.9.2 and Figure 7.2 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question: Can the maximum allowable offset of 1.6 mm referred to in Clause 7.9.2 be added to the nominal internal offset (bi) of 2.4 mm permitted in Figure 7.2 Note 2.a, thereby allowing for a total of up to 4.0 mm internal offset without requiring an internal



taper transition or internal taper weld as otherwise required by Figure 7.2 Notes 2.b through 2.d?

Answer: No

Posted Dec 21, 2021

The following interpretation regarding Clause 4 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question 1: Can the Flexibility Characteristic and Flexibility Factor related to Table 4.8 Sketch C be used for complete encirclement type of reinforcement that are welded to the branch piping but not welded to the run pipe?

Answer 1: No

Question 2: In the event that sketch C cannot be used, can the designer default to using sketch D instead?

Answer 2: Yes

Posted Dec 21, 2021

The following interpretation regarding Clauses 4.11.1 and 4.11.2 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question 1a: Would geohazard or unfavorable conditions that could create instability during the installation of the pipeline at the cover required in Table 4.9 be considered an adverse condition?

Answer 1a: Yes, provided it prevents installation with the required depth

Question 1b: Would impact to an adjacent infrastructure during the installation of the pipeline at the cover required in Table 4.9 be considered an adverse condition?

Answer 1b: No, unless it prevents installation with the required depth

Question 2: Would a utility already at the pipeline depth be considered an adverse condition that would allow reduced cover?

Answer 2: No, unless it prevents installation with the required depth



Question 3: Would a utility already at the pipeline depth that the pipeline could be routed beneath be considered an adverse condition that would allow reduced cover?

Answer 3: No

Posted Dec 21, 2021

The following interpretation regarding Clauses 13.3.8.1 and 13.3.9.4 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Circumstances

A Polyethylene pipeline is designed and constructed to CSA Z662 Clause 13.3. The design engineer wants a pipeline with a maximum operating pressure (MOP) of 100 psi. He back calculates the required Standard Dimension Ratio (SDR) using the formula given in Clause 13.3.2.2. Due to standard sizes of polyethylene pipe and availability of materials, he selects an SDR with a thicker wall than the minimum calculated. Using that wall thickness, he back calculates an effective design pressure per the formula in Clause 13.3.2.2 of 150 psi, because the wall thickness is much more than required. Clause 13.3.8.1 requires a pressure test at least 1.25 x the design pressure

Question 1: In this situation, is the “design pressure” referenced in clause 13.3.8.1 intended to be the “intended MOP”, in that the minimum test pressure required is 1.25 x 100psi = 125 psi?

Answer 1: Yes

Question 2: In this situation, is the “design pressure” referenced in clause 13.3.8.1 intended to be the “effective” design pressure as back calculated from the equation given in clause 13.3.2.2 using the actual thicker wall used in the project, and that the minimum test pressure required is
 $1.25 \times 150 \text{ psi} = 187.5 \text{ psi}$?

Answer 2: No

Question 3: Should the reference to “design pressure” in Clause 13.3.8.1 actually be referencing “intended maximum operating pressure”?

Answer 3: Yes

Question 4: Similar situation as above, if this case was a repair piece of pipe with a higher thickness than required, is the “design pressure” referenced in clause 13.3.9.4 intended to be the “intended MOP”, in that the minimum test pressure required is 1.25 x 100psi = 125 psi?

Answer 4: Yes

Question 5: Should the reference to “design pressure” referenced in Clause 13.3.9.4 actually be referencing “intended maximum operating pressure”?

Answer 5: Yes

Posted Dec 21, 2021

The following interpretation regarding Table 4.2 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question 1: Should concrete slab protected crossings be considered equally as good as “cased crossings”?

Answer 1: No

Question 2: Should concrete slab protected crossings have the same location factors as “cased crossings”?

Answer 2: No

Question 3: Does “All except uncased railway crossings” include concrete slab protected uncased railway crossings?

Answer 3: No

Posted Dec 21, 2021

The following interpretation regarding Table 7.3, 7.10, Clauses 7.8.1.5, 7.8.2.4, and 7.8.2.7 of CSA Standard Z662:19, Oil and gas pipeline systems, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Circumstances 1

A circumferential in-service sleeve welding procedure is qualified in accordance with Clause 7.17 and Table 7.10 with the run pipe in horizontal position. Welding is conducted using uphill progression.

Question 1a: Is this welding procedure qualified for pipe position with any inclination?

Answer 1a: Yes, as per Table 7.10

Question 1b: Or is it limited with pipe inclination up to 45 degree?



Answer 1b: No

Circumstances 2

A circumferential in-service sleeve welding procedure is qualified in accordance with Clause 7.17 and Table 7.10 with the run pipe in horizontal position. Welding is conducted using uphill progression.

Question 2: For a welder who made this test weld, or a welder who is tested with the run pipe in horizontal position, is the welder qualified for pipe position with inclination up to 45 degree?

Answer 2: Yes

Circumstances 3

As an alternative way to qualify the welder for in-service sleeve welding: If the welder is qualified on welding an in-service branch connection whose outside diameter is at least 50% of the outside diameter of the run pipe and the test weld was made with the branch on the side of the run pipe

Question 3a: In consideration of Clause 7.8.1.5 is the welder qualified for in-service sleeve welding?

Answer 3a: Yes

Question 3b: Does this testing qualify the welder for in-service sleeve welding on all positions and with no limitation on pipe inclination?

Answer 3b: Yes

Posted Dec 21, 2021

The following interpretation regarding Clauses 10.5, 10.6, and Figures 3 and 4 of CSA Standard Z245.11-17, Steel fittings, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*

Question 1: Can a counter-bore and taper be used as an end preparation to align materials of matching grade if the fitting wall thickness is greater than the matching pipe, this is not an explicit option in Figure 3, Recommended End Preparations?

Answer 1: Yes. Figure 3 is recommended but not exclusive.

Question 2: Is there a limit on the length of the transition region within a fitting, particularly for a counter bore and taper end preparation?

Answer 2: No, it is not addressed.



Question 3: Can a counter-bore and taper end preparation be used on a fitting if the grade is less than the matching pipe provided than the counterbore wall thickness is suitable for the material grade? Clause 10.6 and Figure 4 seem to prohibit it.

Answer 3: No.

Question 4: If 1) or 3) are yes, is it required that the fitting integrity, i.e. not impacting fitting pressure rating, is maintained when a counter-bore and taper end preparation is applied to a fitting be completed?

Answer 4: It is not addressed in the standard.

Posted Dec 21, 2021

The following interpretation regarding Clauses 1.2.3, 7.6.1.2, and 7.6.3.1 of CSA Standard Z245.1-18, Steel Pipe, has been approved by the Members of the CSA Standards Technical Committee on *Petroleum and Natural Gas Industry Pipeline Systems and Materials (Z662)*.

Question 1: For the manufacture of CAT II pipe with OD <114.3 mm; is a Charpy test mandatory to prove pipe body notch toughness properties in the form of energy absorption and fracture appearance?

Answer 1: Yes, as per Clauses 1.2.3, 7.6.1.1, and 8.4.

Question 2: For the manufacture of CAT II pipe with OD <114.3 mm; is it acceptable for the manufacturer to certify material to CAT II without performing a Charpy test?

Answer 2: No, only materials with proven notch toughness as per Clause 1.2.3 may be certified as Catt II.

Question 3: Can the manufacturer prove pipe body notch toughness properties in the form of energy absorption and fracture appearance through other means? Clarification of 'other means': Other means to be defined by the manufacturer and shall guarantee the CAT II compliance of the material to the customer. An example of other means is a strict control on the chemical composition and steel making, forming and heat treatment process combined with Charpy tests formed on other, larger OD products, produced in the same conditions.

Answer 3: No, as per Clause 7.6.1.1 and 8.4

Posted Nov 22, 2021



The following interpretation regarding Clause 12.8.4.1 of CSA standard B139 Series, Installation code for oil-burning equipment, has been approved by the Members of the CSA Technical Committee on *Fuels and Appliances*.

Question: Are certified vent connectors complying with section 12.2 also subject to the requirements of section 12.8.4.1?

Answer: Yes

Note: Yes; however, a separate wall thimble is not required provided that the combustion venting product is certified to one of ULC-S604, ULC-S609 or ULC-S629 and includes the (otherwise optional) testing of a wall penetration unit for clearance to combustibles that meets the requirements of ULC-S641. For clarity, if the venting product is listed to one of those standards but was not evaluated for a wall penetration for clearance to combustibles, or is listed to ULC/ORD-C959, then a wall penetration device listed to ULC-S641 would still be required.

Posted Oct 28, 2021

The following interpretation regarding CSA C22.1:21, Canadian Electrical Code, Part I has been approved by the Members of the CSA Technical Committee on the *Canadian Electrical Code, Part I*.

Question: Is a storage-tank water heater considered a *heating device*?

Answer: Yes