



INFO UPDATE

Energy

Volume 5 — July 2009

Issue date: July 29, 2009

Info Update is published by the Canadian Standards Association (CSA) eight times a year. It contains important information about new and existing standards, e.g., recently published standards, and withdrawn standards. It also gives you highlights of other activities and services.

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Completed Projects / Projets terminés

New Standards – New Editions – Special Publications

C815-09, 2nd edition

Energy Performance of Drinking Water Coolers

PDF only \$55

This standard specifies energy performance requirements for self-contained drinking water coolers having an hourly rated capacity of up to 21 mL/s (20 US gal/h). Included in the standard are procedures for measuring capacity and energy consumption, including standby losses and maximum energy consumption levels.

This standard applies to the following mechanical, thermoelectric, and other electrically operated drinking water coolers that are designed to cool water for delivery to either locally or remotely installed dispensing means:

- pressurized type
- point-of-use (POU) type
- remote type
- bottle type.

This standard also applies to units that provide additional utility by means of a refrigerated compartment or a means of heating potable water, or both.

This standard does not apply to drinking water coolers intended for use on central circulating-type systems or employing remote-type (split-system) condensing units.

N285.4-09, 5th edition

Periodic Inspection of CANDU Nuclear Power Plant Components

Paper TBA

PDF \$200

This standard defines requirements for the periodic inspection of pressure-retaining systems, components, and supports that form part of a CANDU nuclear power plant.

This standard addresses the following:

- failure aspects
- classification of areas subject to inspection
- provision for access
- inspection techniques and procedures
- personnel qualifications
- frequency of inspection
- responsibilities
- documentation
- records
- evaluation of inspection results
- dispositioning
- repair requirements.



Nouvelles normes – Nouvelles éditions – Publications spéciales publiées en français

C439-09, 4^e édition

Méthodes d'essai pour l'évaluation en laboratoire des performances des ventilateurs-récupérateurs de chaleur/énergie

PDF seulement 100 \$

Cette norme vise les ventilateurs-récupérateurs de chaleur/énergie monoblocs (VRC/VRÉ) assemblés en usine, dans lesquels la chaleur ou la chaleur et l'humidité sont transférées entre deux flux d'air séparés.

Cette norme énonce des méthodes d'essai en laboratoire et des modes opératoires d'évaluation du rendement thermique apparent et de l'efficacité de la récupération d'un VRC/VRÉ. La norme traite également du mouvement de l'air et des fuites entre les flux d'air.

Les VRC/VRÉ monoblocs qui font appel à un cycle de réfrigération ou à un fluide de circulation pour transférer la chaleur entre deux flux d'air séparés peuvent être évalués au moyen de cette norme.

N287.2-08, 5^e édition

Exigences relatives aux matériaux des enceintes de confinement en béton des centrales nucléaires CANDU

Papier..... 220 \$
PDF 200 \$

Cette norme énonce les exigences visant les matériaux utilisés dans les enceintes de confinement en béton des systèmes de confinement, désignés comme composants, pièces et accessoires de la «classe confinement» des centrales nucléaires CANDU.

N287.7-08, 4^e édition

Exigences relatives à la mise à l'essai et à la vérification, en cours d'exploitation, des enceintes de confinement en béton des centrales nucléaires CANDU

Papier..... 220 \$
PDF 200 \$

Cette norme énonce les exigences relatives aux vérifications en cours d'exploitation et aux essais en pression positive des débits de fuite des enceintes de confinement en béton d'un système de confinement, désignées comme des composants de la classe de confinement.

Les essais et les inspections périodiques des autres composants et accessoires du système de confinement conçus conformément à la série de normes CSA N285 ne sont pas visés par cette norme, mais plutôt par la CAN/CSA-N285.5.

Nouvelles normes – Nouvelles éditions – Publications spéciales (suite)**N291-08, 1^{re} édition***Exigences relatives aux enceintes reliées à la sûreté des centrales nucléaires CANDU*

Papier.....	220 \$
PDF	200 \$

Cette norme énonce les exigences relatives aux matériaux, à la conception, à la construction, à la fabrication, à l'inspection et à l'examen des structures reliées à la sûreté des centrales nucléaires CANDU.

Les enceintes reliées à la sûreté traitées dans cette norme sont

- les structures qui soutiennent, abritent ou protègent les systèmes de sûreté nucléaire ;
- les composants des structures nécessaires à l'exploitation sûre et (ou) à l'arrêt sécuritaire du réacteur ; et
- les installations de stockage des combustibles épuisés et des autres déchets radioactifs.

Cette norme ne s'applique pas aux enceintes de confinement en béton visées par la série de normes CSA N287, ni aux systèmes et aux composants sous pression visés par la CSA N285.0. Ces normes, ainsi que les exigences supplémentaires prescrites dans cette norme, établissent les exigences en matière de tenue en service et de sûreté applicables à ces structures.

N292.3-08, 1^{re} édition*Gestion des déchets radioactifs de faible et de moyenne activité*

Papier.....	220 \$
PDF	200 \$

Cette norme prescrit des exigences relatives à la gestion de déchets radioactifs de faible et de moyenne activité sous forme solide, liquide ou gazeuse.

Cette norme s'applique aux organismes et aux installations qui produisent, possèdent, gèrent et transportent des déchets radioactifs de faible et de moyenne activité, y compris les réacteurs de puissance, les instituts de recherche, les laboratoires et les installations industrielles.

Amendments

N285.0-08/N285.6 Series-08*General Requirements for Pressure-Retaining Systems and Components in CANDU Nuclear Power Plants / Material Standards for Reactor Components for CANDU Nuclear Power Plants*

The following revisions have been made to the series:

- **N285.0-08/N285.6 Series-08:** Revision of the Table of Contents.
- **N285.0-08:** Revision of Clauses 3, 7.2.2(d), 12.2.7, 12.3, 12.3.1, I.6.3.1, I.6.3.2, and I.6.3.5.1. Addition of Clauses 1.3A, 14.5.4, and I.6.3.2.1–I.6.3.2.4. Deletion of Clauses 12.3.2, 12.3.7–12.3.9, and I.6.3.3 and Figure 7.
- **N285.6.1-08:** Addition of Clause 8. Deletion of Clause 7.11.
- **N285.6.2-08:** Revision of Clause 3.
- **N285.6.7-08:** Revision of Table 1.



Amendments (cont'd)

N285.0-08/N285.6 Series-08 (cont'd)

- **N285.6.8-08:** Revision of Tables A.1 and A.3.
- **N285.6.10-08:** Revision of Clause 3.
- **N285.6.11-08:** Revision of Clause 3.

N285.8-05

Technical Requirements for In-Service Evaluation of Zirconium Alloy Pressure Tubes in CANDU Reactors

Revision of Clause A.6.3.3.3.2(d).

Formal Interpretations

The following interpretation regarding Clause 14.2.4 of **CSA standard B140.0-03, *Oil-Burning Equipment: General Requirements***, has been approved by the Technical Committee on Oil Burning Appliance Standards (B140 Series, B211 and B212).

Question: Is it the intent of the requirement of Clause 14.2.4 of the B140.0-03 to allow the flue gas temperature of a condensing furnace (as measured according to the flue gas temperature test of B140.4) to be less than 150°C (300°F)?

Answer: Yes.

The following interpretation regarding Clause 1.2.1 of **CSA standard Z245.15-05, *Steel Valves***, has been approved by the Technical Committee on Petroleum and Natural Gas Industry Pipeline Systems and Materials.

Question: Is an NPS 2 reduced port valve within the scope of CSA Z245.15?

Answer: Yes.

The following interpretation regarding Clause 16.6.4 of **CSA standard Z662-07, *Oil and Gas Pipeline Systems***, has been approved by the Technical Committee on Petroleum and Natural Gas Industry Pipeline Systems and Materials.

Question #1: Is hardness testing of "production welds" that will be subjected to sour service required when the CSA Z662-07 standard is being used?

Answer: No.

Note: *CSA Z662-07 does not specify what hardness testing is required on "production welds" to meet the stated hardness requirements of Clause 16.6.4 and leaves it to the user to determine what is required to demonstrate compliance to the performance requirement stipulated.*

Question #2: Is production weld hardness testing mandatory for sour service?

Answer: No.

Note: *CSA Z662-07 does not specify that hardness testing is mandatory on "production welds" to meet the stated hardness requirements of Clause 16.6.4 and leaves it to the user to determine what is required to demonstrate compliance to the performance requirement stipulated.*

Formal Interpretations (cont'd)

The following interpretation regarding Clause 16.6.4 of **CSA standard Z662-07, *Oil and Gas Pipeline Systems***, has been approved by the Technical Committee on Petroleum and Natural Gas Industry Pipeline Systems and Materials.

Question: In Clause 16.6.4, does the word “any location” mean that all the fabricated welds for sour pipelines will have to be hardness tested (100%) to meet the requirement?

Answer: No.

Note: CSA Z662-07 does not specify what hardness testing is required on fabricated welds to meet the stated hardness requirements of Clause 16.6.4 and leaves it to the user to determine what is required to demonstrate compliance to the performance requirement stipulated.

The following interpretation regarding Clause I.4.1 of **CSA standard Z662-07, *Oil and Gas Pipeline Systems***, has been approved by the Technical Committee on Petroleum and Natural Gas Industry Pipeline Systems and Materials.

Question #1: Is it the intent of Clause I.4.1 in Annex I that the all weld metal test be done by testing the entire composite completed weld?

Answer: Yes.

Question #2: Is it the intent of Clause I.4.1 in Annex I that each weld consumable used in completing the weld is to be tested independently in the all weld metal test?

Answer: No.

The following interpretation regarding Clauses 14.4.4.2 and I.2.2.1 of **CSA standard Z662-07, *Oil and Gas Pipeline Systems***, has been approved by the Technical Committee on Petroleum and Natural Gas Industry Pipeline Systems and Materials.

Question #1: Is it acceptable to use the pressure design formula and procedures specified in ASME B31.3-2006 Paragraph 304.1.2 (in particular formula 3a) instead of the equations provided in CSA Z662 Paragraph 14.2.2.1 for the determination of the required pressure design thickness (t) and minimum required thickness (t_m) for straight pipe under internal pressure?

Answer: No.

Question #2: Is it acceptable to use the pressure design formula and procedures specified in ASME B31.3-2006 Chapter IX “High Pressure Piping” (in particular formula 34a) instead of the equation provided in Paragraph I.2.1.1 of Annex I of CSA Z662?

Answer: No.



Formal Interpretations (cont'd)

The following interpretation regarding Clauses 4.3.12.4 and 5.2.5.1 of **CSA standard Z662-07, *Oil and Gas Pipeline Systems***, has been approved by the Technical Committee on Petroleum and Natural Gas Industry Pipeline Systems and Materials.

Question #1: Can ASME B16.5 and B16.36 flanges now be used at elevated temperatures when used under CSA Z662 without regard to ASME temperature de-rating requirements below 120°?

Answer: No.

Question #2: For materials shown in Table 5.3 as having “No Limitations” for the applicable material Category, are these materials considered completely equivalent to the applicable CSA Z245 material standards?

Answer: No.

Question #3: If yes to Question #2 above, does this mean that ASME temperature de-rating factors (above 38°C) for B16.34 valves can also be ignored in lieu of CSA Z662-07 temperature factor requirements as stated in clause 4.3.12.4?

Answer: Not Applicable.

Question #4: If yes to Question #3 above, does this mean that NPS1.5 valves and smaller (for which there is no applicable CSA Z245 material spec) would also be subject to the CSA Z662-07 temperature factor requirements as stated in clause 4.3.12.4 rather than the ASME temperature de-rating requirements (above 38°C)?

Answer: Not Applicable.

The following interpretation regarding Annex I of **CSA standard Z662-07, *Oil and Gas Pipeline Systems***, has been approved by the Technical Committee on Petroleum and Natural Gas Industry Pipeline Systems and Materials.

Question #1: For girth welding of pressure-retaining pipe and components, recognizing that the cellulosic SMAW root pass comprises a minimal portion of the aggregate production weldment and that there are currently no cellulosic SMAW electrodes that will meet the elevated temperature yield strength for Grade 483 or higher, is it the intent of the standard to require each individual welding electrode classification to be tested separately as indicated in Clause I.3.2.2 and that each electrode classification meet the elevated temperature properties of the base metal?

Answer: Not Applicable.

Note: Clause I.3.2.2 does not apply to girth welding, the requirements specified in Clause I.4 apply for girth welding. The requirements of Clause I.3.2.2 are intended to apply to the manufacturer of pipe and components for the longitudinal seam welds.

Formal Interpretations (cont'd)

Question #2: Is it permissible to perform an aggregate all weld metal elevated temperature tensile test as indicated in Clause I.4 (a) (iii) and (iv) to demonstrate acceptable welding electrode properties for the root pass providing that all remaining welding electrodes used for the completion of the girth weld are tested as per Clause I.3.2.2?

Answer: Not Applicable.

Note: The reference to Clause I.3.2.2 is not applicable in this case. Clause I.3.2.2 is intended to apply to the manufacturer of pipe and components for the longitudinal seam welds.