(b) Where nonpressure parts are directly welded to the pressure-retaining surface of a pressure vessel, this scope shall include the material, design, fabrication, and testing requirements established for nonpressure attachments by the applicable paragraphs of this Section.

(c) Items in addition to the pressure vessel transform the vessel into a tank. These items are addressed in the applicable Modal Appendix.

TG-110.2 PHYSICAL SCOPE OF THE PRESSURE VESSEL

(a) Internal pressure shall be in the range from full vacuum to 207 bar (3,000 psig).

(b) The temperature range shall be from −269°C to 343°C (−452°F to 650°F).

(c) Thickness of shells and heads shall not exceed 38 mm (1 1/2 in.).

TG-120 VESSEL CLASSIFICATIONS

TG-120.1 CLASSIFICATIONS OUTSIDE THE SCOPE OF THIS SECTION

The following classes of pressure-containing equipment are not within the scope of this Section:

(a) those items that are within the scope of other Sections of the Code

(b) pressure-containing equipment that is an integral part or component of a rotating or reciprocating mechanical device mounted in a common setting with the vessel, where the primary design considerations and/or design stresses are derived from the functional requirements of the device

(c) piping, valves, and other components beyond the geometric scope described in TG-110.1 for the loading, transport, and unloading of the vessel contents

TG-120.2 STAMPING OF VESSELS WITHIN THE SCOPE OF THIS SECTION

(a) Any vessel that meets all applicable requirements of this Section may be stamped with the Certification Mark with T designator.

(b) Vessels manufactured and stamped under this Section are not precluded from using parts stamped to Section VIII, Division 2 (for fatigue analysis only)

ASME CA-1, Conformity Assessment Requirements

ASME PTC 25, Pressure Relief Devices

ASME QAI-1, Qualifications for Authorized Inspection (see TG-410)

Publisher: The American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990 (www.asme.org)

ASNT ACCP 1997, Rev. 3, ASNT Central Certification Program (for Nondestructive Testing Personnel)

ASNT CP-189-2006, ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

ASNT Recommended Practice No. SNT-TC-1A-2006, Guidelines for Personnel Qualification and Certification in Nondestructive Testing

Publisher: American Society for Nondestructive Testing (ASNT), 1711 Arlingate Lane, P.O. Box 28518, Columbus, OH 43228-0518


Publisher: National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, OH 43229

Code of Federal Regulations, Title 49, Parts 100 through 185, Transportation


ISO 1496-3:1995, Series 1 freight containers — Specification and testing — Part 3: Tank containers for liquids, gases and pressurized dry bulk

ISO 21010:2004, Cryogenic vessels — Gas/materials compatibility

TG-130 DOCUMENTS REFERENCED BY THIS SECTION

TG-130.1 NORMATIVE REFERENCES

The latest edition of the following documents shall be used, unless a specific edition is listed below. Items in compliance with one of the Product Standards listed in Table TG-130 are acceptable for use in construction, unless specifically prohibited elsewhere in this Section.

ADR 2003, European Agreement Concerning the International Carriage of Dangerous Goods by Road

Publisher: UN Economic Commission for Europe, Information Service, Palais des Nations, CH-1211 Genève, Switzerland/Suisse

ASME Boiler and Pressure Vessel Code, Section VIII, Division 1 (e.g., see TG-120.2) and Division 2 (for fatigue analysis only)

ASME CA-1, Conformity Assessment Requirements

ASME PTC 25, Pressure Relief Devices

ASME QAI-1, Qualifications for Authorized Inspection (see TG-410)

Publisher: The American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990 (www.asme.org)

ASNT ACCP 1997, Rev. 3, ASNT Central Certification Program (for Nondestructive Testing Personnel)

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Code of Federal Regulations, Title 49, Parts 100 through 185, Transportation


ISO 1496-3:1995, Series 1 freight containers — Specification and testing — Part 3: Tank containers for liquids, gases and pressurized dry bulk

ISO 21010:2004, Cryogenic vessels — Gas/materials compatibility
Table TG-130
Product Standards Referenced by This Section

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<tr>
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<td>Pipe Threads, General Purpose (Inch)</td>
<td>ASME B1.20.1</td>
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<td>Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250</td>
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<td>Metallic Gaskets for Pipe Flanges: Ring-Joint, Spiral Wound, and Jacketed</td>
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<td>Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300</td>
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<td>Repair of Pressure Equipment and Piping</td>
<td>ASME PCC 2</td>
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