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Steel valves

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Preface

This is the eighth edition of CSA Z245.15, *Steel valves*. It supersedes the previous editions published in 2009, 2005, 2001, 1996, 1991, 1987, and 1981.

This Standard covers the requirements for steel valves intended to be used for transporting fluids as specified in CSA Z662.

Changes to this edition include the following:

- a) revised quality management program requirements (Clause 4.4);
- b) revised requirements for sour service (Clause 13);
- c) clarification of weld procedure hardness test locations (Clauses 13.6 and 13.7); and
- d) revised requirements for reports of Charpy V-notch tests (Clause 15.8).

This Standard was prepared by the Subcommittee on Materials, under the jurisdiction of the Technical Committee on Petroleum and Natural Gas Industry Pipeline Systems and Materials and the Strategic Steering Committee on Petroleum and Natural Gas Industry Systems, and has been formally approved by the Technical Committee.

Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
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Z245.15-13

Steel valves

1 Scope

1.1 General

This Standard covers steel valves primarily intended for use in oil or gas pipeline systems. The following types of valves are covered:

- a) gate valves;
- b) plug valves;
- c) ball valves; and
- d) check valves.

1.2 Size, nominal pressure class, and category

1.2.1 Size

This Standard covers valves in sizes from NPS 2 to NPS 60. (See Table [A.1](#).)

1.2.2 Nominal pressure class

This Standard covers valves having cold working-pressure ratings designated by nominal pressure classes from PN 20 to PN 420. The standard nominal pressure classes are shown in Table [1](#). (ASME class designations are shown in Table [B.1](#).)

1.2.3 Category

This Standard covers valves in the following categories:

- a) Category I: valves without requirements for proven notch-toughness properties; and
- b) Category II: valves with requirements for proven notch-toughness properties.

1.3 End configuration

This Standard covers standard end requirements for flanged, buttwelding, and wafer-type valves. Other end configurations are considered non-standard and are subject to agreement between the purchaser and the manufacturer.

1.4 Terminology

In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.