boltex mfg. co.

4901 Oates Road Houston, Texas 77013 • Telephone 713-675-9433 • Telefax 713-672-6527 • www.boltex.com

Canadian Registration Number (CRN) – British Columbia

In accordance with Directive No: D-BP-2013-03, British Columbia exempts Fittings of Category B-Flanges from registration requirements as long as they comply with a standard listed in Table 326.1 of ASME B31.3. Directive No: D-BP-2013-03 and Table 326.1 of ASME B31.3 are attached to this document.

Boltex Mfg. Co. manufactures flanges in accordance with ASME B16.5, ASME B16.36, ASME B16.47 and MSS SP-44. Boltex marks all flanges in accordance with the specified specification and compliance is also noted on the Material Test Report (MTR). These specifications are listed in Table 326.1 of ASME B31.3. As defined in CSA B51 Table 1, flanges fall under Fittings of Category B-Flanges.

Boltex Mfg. Co. will continue to monitor future Directives from British Columbia and will make changes as needed.

Banja

Fabian Garza – Quality Manager



DIRECTIVE

EXEMPTION FROM REGISTRATION REQUIREMENTS FOR CATEGORY A, B, C, AND G CATEGORY FITTINGS

This Directive is being issued by a provincial safety manager pursuant to section 30 of the Safety Standards Act.

Date of Issue: July 12, 2013 Directive No: D-BP-2013-03

General Details

This directive supersedes Directive D-B6 070402 3 issued on April 3, 2007 and is being issued to clarify the requirements for exemption of Category A, B, C, and G fittings from registration.

Specific Details

Subsection 84(2) of the Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation (the Regulation) requires that fittings be registered with a provincial safety manager of the BC Safety Authority. Subsection 84(8) of the Regulation allows the Safety Manager to exempt fittings from registration.

The exemption of fittings from registration shall apply only to piping components complying with the standards and specifications listed in the ASME B31 Pressure Piping Codes and to certified pressure relief devices complying with the requirements of the ASME Boiler and Pressure Vessel Codes.

The registration exemption shall apply to specific fittings in categories A, B, C, and G:

Category A

- Pipe fittings, including couplings, tees, elbows, wyes, plugs, unions, nipples, pipe caps, and reducers complying with a standard listed in Table 126.1 of ASME B31.1, Table 326.1 of ASME B31.3, Table 526.1 of ASME B31.5, or Table 926.1 of ASME B31.9

Category B

- Flanges complying with a standard listed in Table 126.1 of ASME B31.1, Table 326.1 of ASME B31.3, Table 526.1 of ASME B31.5, or Table 926.1 of ASME B31.9 Category C
- Valves complying with a standard listed in Table 126.1 of ASME B31.1, Table 326.1 of ASME B31.3, Table 526.1 of ASME B31.5, or Table 926.1 of ASME B31.9
 Category G
 - Pressure-relief devices marked with an ASME or NB stamp

Pursuant to the power granted to the provincial Safety Manager under subsection 84(8) of the

DIRECTIVE NO: D-BP-2013-03 Page 1 of 3

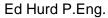
505 SIXTH STREET, SUITE 200, NEW WESTMINSTER, BRITISH COLUMBIA, CANADA V3L 0E1 Toll Free: 1-866-566-7233 Fax: 778-396-2064 Web Site: www.safetyauthority.ca E-mail: info@safetyauthority.ca



DIRECTIVE

Regulation, it is hereby directed that only category A, B, C, and G fittings, as described above, are exempt from the registration requirements of Subsection 84(2) of the Regulation. This directive is effective immediately.

Nonstandard or unlisted piping components not complying with the specifications and standards listed the ASME B31 Code for Pressure Piping or pressure relief devices not in compliance with the requirements of the ASME Boiler and Pressure Vessel Code, shall be registered in accordance with Section 84(2) by submitting the documentation specified in CSA B51 section 4.2.6(b).



Provincial Safety Manager, Boilers

For more information on the British Columbia Safety Authority, please visit our web site at: www.safetyauthority.ca

References:

Relevant Legislation

Power Engineers, Boiler, Pressure Vessel & Refrigeration Safety Regulation

- 84 (1) For this section, "pressure retaining equipment" means a boiler or pressure vessel, or pressure piping system.
- (2) The design of all boilers, pressure vessels, fittings and pressure piping, to which this regulation applies, must be registered with a provincial safety manager.
- (3) Subsection (2) does not apply to pressure piping that is
 - (a) NPS 3 or less, or
 - (b) in a fluid plant.
- (4) To register a design, the owner, licensed contractor, consulting engineer, manufacturer or designer of the pressure retaining equipment must submit, for review by a provincial safety manager, an application containing all drawings, design specifications, calculations and codes of conformance as required by a provincial safety manager.
- (5) Registration of pressure retaining equipment must be obtained before construction is commenced.
- (6) If, in the opinion of a provincial safety manager, a design registered under subsection (2) is subsequently found to be defective in any detail, the design must be revised by the person

DIRECTIVE NO: D-BP-2013-03

Page 2 of 3



DIRECTIVE

who submitted the design and those revisions must be approved by the provincial safety manager.

- (7) The registration of a pressure retaining equipment design does not relieve the equipment manufacturer of liability for the design and construction of the pressure retaining equipment.
- (8) A provincial safety manager may exempt fitting designs from registration under subsection (2).

Table 326.1 Component Standards

Bolting Square, Hex, Heavy Hex, and Askew Head Bolts and Hex, Heavy Hex, Hex Flange, Lobed Head, and Lag Screws (Inch Series). Nuts for General Applications: Machine Screw Nuts, Hex, Square, Hex Flange, and Coupling Nuts (Inch Series). ASME B18. Continuous Thread Stud, Double-End Stud, and Flange Bolting Stud (Stud Bolt) (Inch Series). Metallic Fittings, Valves, and Flanges Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250. ASME B18. ASME B18. ASME B18. ASME B18. Gray Iron Threaded Fittings: Classes 125 and 300. Gray Iron Threaded Fittings: Classes 125 and 250. ASME B16.	
(Inch Series) Nuts for General Applications: Machine Screw Nuts, Hex, Square, Hex Flange, and Coupling Nuts (Inch Series) ASME B18. Continuous Thread Stud, Double-End Stud, and Flange Bolting Stud (Stud Bolt) (Inch Series) ASME B18.3 Metallic Fittings, Valves, and Flanges Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250 ASME B1 Malleable Iron Threaded Fittings: Classes 150 and 300 ASME B1 Gray Iron Threaded Fittings: Classes 125 and 250 ASME B1 Pipe Flanges and Flanged Fittings: NPS ½ Through NPS 24 Metric/Inch Standard ASME B1 Factory-Made Wrought Buttwelding Fittings ASME B1 Face-to-Face and End-To-End Dimensions of Valves Forged Fittings, Socket-Welding and Threaded Ferrous Pipe Plugs, Bushings, and Locknuts With Pipe Threads ASME B16 Cast Copper Alloy Threaded Fittings: Classes 125 and 250 [Note (1)] ASME B16 Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Valves — Flanged, Threaded, and Welding End ASME B16 Orifice Flanges ASME B16 Orifice Flanges ASME B16 Ductile Iron Pipe Flanges in Flanged Fittings: Classes 150, 250, and 300 ASME B16 Ductile Iron Pipe Flanges in Flanged Fittings: Classes 150 and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard ASME B16 Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME B16 Bioprocessing Equipment [Note (2)] ASME B16 Bioprocessing Equipment [Note (2)] API Flanged Steel Pressure-relief Valves	
Nuts for General Applications: Machine Screw Nuts, Hex, Square, Hex Flange, and Coupling Nuts (Inch Series) ASME B18.3 Metallic Fittings, Valves, and Flanges Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250 Malleable Iron Threaded Fittings: Classes 150 and 300 ASME B1 Malleable Iron Threaded Fittings: Classes 125 and 250 ASME B1 Fipe Flanges and Flanged Fittings: NPS 1/2 Through NPS 24 Metric/Inch Standard ASME B1 Factory-Made Wrought Buttwelding Fittings Face-to-Face and End-To-End Dimensions of Valves ASME B16 Forged Fittings, Socket-Welding and Threaded Ferrous Pipe Plugs, Bushings, and Locknuts With Pipe Threads Cast Copper Alloy Threaded Fittings: Classes 125 and 250 [Note (1)] Cast Copper Alloy Solder Joint Pressure Fittings Mrought Copper and Copper Alloy Solder-Joint Pressure Fittings Wrought Copper Alloy Fipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Orifice Flanges Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Orifice Flanges Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150 and 300 ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150 and 300 ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150 and 300 ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150 and 300 ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150 and 300 ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150 and 300 ASME B16 Malleable Iron Threaded Pipe Unions: Classes Iso and 300 ASME B16 Malleable Iron Threaded Pipe Unions: Classes Iso and 300 ASME B16 Malleable Iron Threaded Pipe Unions: Classes Iso and 300 ASME B16 Malleable	3.2.1
Metallic Fittings, Valves, and Flanges Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250 Malleable Iron Threaded Fittings: Classes 150 and 300 ASME B1 Malleable Iron Threaded Fittings: Classes 125 and 250 ASME B1 Gray Iron Flanges and Flanged Fittings: Classes 125 and 250 ASME B1 Fipe Flanges and Flanged Fittings: NPS ½ Through NPS 24 Metric/Inch Standard Factory-Made Wrought Buttwelding Fittings ASME B1 Face-to-Face and End-To-End Dimensions of Valves Forged Fittings, Socket-Welding and Threaded Ferrous Pipe Plugs, Bushings, and Locknuts With Pipe Threads Cast Copper Alloy Threaded Fittings: Classes 125 and 250 [Note (1)] ASME B16 Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flanged Sittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flanged Fittings: ASME B16 Cast Copper Alloy Fittings for Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flanged Fittings: ASME B16 Cast Copper Alloy Fittings for Flanged Fittings AsME B16 Valves — Flanged, Threaded, and Welding End ASME B16 Cast Copper Alloy Fittings for Flange Fittings ASME B16 Valves — Flanged, Threaded, and Welding End ASME B16 Valves — Flanged, Threaded, and Welding End ASME B16 Valves — Flanged, Threaded, and Welding End ASME B16 Valves — Flanged, Threaded, and Welding End ASME B16 Valves — Flanged, Threaded, and Welding End ASME B16 Valves — Flanged, Threaded, and Welding End ASME B16 Valves — Flanged, Threaded, AsME B16 Valves — Fla	
Metallic Fittings, Valves, and Flanges Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250 ASME BI Malleable Iron Threaded Fittings: Classes 150 and 300 ASME BI Gray Iron Threaded Fittings: Classes 125 and 250 ASME BI Pipe Flanges and Flanged Fittings: NPS ½ Through NPS 24 Metric/Inch Standard ASME BI Factory-Made Wrought Buttwelding Fittings ASME BI Face-to-Face and End-To-End Dimensions of Valves ASME BI6 Forged Fittings, Socket-Welding and Threaded ASME BI6 Forged Fittings, Socket-Welding and Threaded ASME BI6 Cast Copper Alloy Threaded Fittings: Classes 125 and 250 [Note (1)] Cast Copper Alloy Solder Joint Pressure Fittings ASME BI6 Cast Copper Alloy Solder Joint Pressure Fittings ASME BI6 Cast Copper Alloy Fittings for Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME BI6 Cast Copper Alloy Fittings for Flared Copper Tubes ASME BI6 Cast Copper Alloy Fittings for Flared Copper Tubes ASME BI6 Valves — Flanged, Threaded, and Welding End ASME BI6 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150, and 300 ASME BI6 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME BI6 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME BI6 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME BI6 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME BI6 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME BI6 Bilanks ASME BI6 Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME BI6 Bilanks	
Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250 ASME B1 Malleable Iron Threaded Fittings: Classes 150 and 300 ASME B1 Gray Iron Threaded Fittings: Classes 125 and 250 ASME B1 Pipe Flanges and Flanged Fittings: NPS ½ Through NPS 24 Metric/Inch Standard ASME B1 Factory-Made Wrought Buttwelding Fittings ASME B1 Face-to-Face and End-To-End Dimensions of Valves Forged Fittings, Socket-Welding and Threaded ASME B16 Ferrous Pipe Plugs, Bushings, and Locknuts With Pipe Threads Cast Copper Alloy Threaded Fittings: Classes 125 and 250 [Note (1)] Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings for Flared Fittings: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flared Fittings: Classes 150, 300 ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings: Classes 150, 250, and 300 ASME B16 Directile Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Ductile Iron Threaded Pipe Unions: Classes 150 and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard Line Blanks ASME B16 Bioprocessing Equipment [Note (2)] ASME B16 Specification for Pipeline and Piping Valves [Note (3)] Flanged Steel Pressure-relief Valves API 5	31.2
Malleable Iron Threaded Fittings: Classes 150 and 300	
Gray Iron Threaded Fittings: Classes 125 and 250 Pipe Flanges and Flanged Fittings: NPS 1/2 Through NPS 24 Metric/Inch Standard ASME B1 Factory-Made Wrought Buttwelding Fittings ASME B1 Face-to-Face and End-To-End Dimensions of Valves ASME B16 Forged Fittings, Socket-Welding and Threaded ASME B16 Ferrous Pipe Plugs, Bushings, and Locknuts With Pipe Threads Cast Copper Alloy Threaded Fittings: Classes 125 and 250 [Note (1)] ASME B16 Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes Valves — Flanged, Threaded, and Welding End Orifice Flanges ASME B16 Orifice Flanges ASME B16 Ductile Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard Line Blanks Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME B16 Bioprocessing Equipment [Note (2)] ASME B16 Bioprocessing Equipment [Note (2)] API Flanged Steel Pressure-relief Valves	
Pipe Flanges and Flanged Fittings: NPS 1/2 Through NPS 24 Metric/Inch Standard ASME B1 Factory-Made Wrought Buttwelding Fittings ASME B1 Face-to-Face and End-To-End Dimensions of Valves ASME B16 Forged Fittings, Socket-Welding and Threaded Ferrous Pipe Plugs, Bushings, and Locknuts With Pipe Threads Cast Copper Alloy Threaded Fittings: Classes 125 and 250 [Note (1)] Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Cast Copper Alloy Solder-Joint Pressure Fittings ASME B16 Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes Valves — Flanged, Threaded, and Welding End Orifice Flanges Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard ASME B16 Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME B16 Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME B16 Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves API S	16.3
Factory-Nade Wrought Buttwelding Fittings ASME B1 Face-to-Face and End-To-End Dimensions of Valves Forged Fittings, Socket-Welding and Threaded Ferrous Pipe Plugs, Bushings, and Locknuts With Pipe Threads Cast Copper Alloy Threaded Fittings: Classes 125 and 250 [Note (1)] Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes Cast Copper Alloy Fittings for Flared Copper Tubes Valves — Flanged, Threaded, and Welding End Orifice Flanges Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard ASME B16 Bioprocessing Equipment [Note (2)] Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves API S	
Face-to-Face and End-To-End Dimensions of Valves ASME B16 Forged Fittings, Socket-Welding and Threaded ASME B16 Ferrous Pipe Plugs, Bushings, and Locknuts With Pipe Threads ASME B16 Cast Copper Alloy Threaded Fittings: Classes 125 and 250 [Note (1)] ASME B16 Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings ASME B16 Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Orifice Flanged, Threaded, and Welding End ASME B16 Orifice Flanges ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard ASME B16 Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME B16 Bioprocessing Equipment [Note (2)] ASME B16 Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves	
Forged Fittings, Socket-Welding and Threaded Ferrous Pipe Plugs, Bushings, and Locknuts With Pipe Threads Cast Copper Alloy Threaded Fittings: Classes 125 and 250 [Note (1)] Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Pittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Flanges, and Valves, Classes 150, 300, 600, 900, 1500,	
Ferrous Pipe Plugs, Bushings, and Lockmuts With Pipe Threads	
Cast Copper Alloy Threaded Fittings: Classes 125 and 250 [Note (1)] Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Orifice Flanges Malleable Iron Threaded, and Welding End Orifice Flanges Malleable Iron Pipe Flanges and Flanged Fittings: Classes 150, 250, and 300 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard Line Blanks Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves API S	
Cast Copper Alloy Solder Joint Pressure Fittings ASME B16 Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings ASME B16 Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Valves — Flanged, Threaded, and Welding End ASME B16 Orifice Flanges ASME B16 Orifice Flanges ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard ASME B16 Line Blanks ASME B16 Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME B16 Bioprocessing Equipment [Note (2)] ASME B16 Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves	
Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings ASME B16 Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Valves — Flanged, Threaded, and Welding End ASME B16 Orifice Flanges ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard ASME B16 Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME B16 Bioprocessing Equipment [Note (2)] Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves	
Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500 ASME B16 Cast Copper Alloy Fittings for Flared Copper Tubes Valves — Flanged, Threaded, and Welding End Orifice Flanges Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard Line Blanks Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves API S	
Cast Copper Alloy Fittings for Flared Copper Tubes ASME B16 Valves — Flanged, Threaded, and Welding End ASME B16 Orifice Flanges ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard ASME B16 Line Blanks ASME B16 Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME B16 Bioprocessing Equipment [Note (2)] ASME B16 Specification for Pipeline and Piping Valves [Note (3)] Flanged Steel Pressure-relief Valves	
Valves — Flanged, Threaded, and Welding End ASME B16 Orifice Flanges ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard ASME B16 Line Blanks ASME B16 Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME B16 Bioprocessing Equipment [Note (2)] ASME B16 Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves	
Orifice Flanges ASME B16 Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300 ASME B16 Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard ASME B16 Line Blanks ASME B16 Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME B16 Bioprocessing Equipment [Note (2)] ASME B16 Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves API S	
Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300	
Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300 . ASME B16 Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard . ASME B16 Line Blanks . ASME B16 Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings . ASME B16 Bioprocessing Equipment [Note (2)] . ASME I Specification for Pipeline and Piping Valves [Note (3)] . API Flanged Steel Pressure-relief Valves . API	
Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard Line Blanks Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings Bioprocessing Equipment [Note (2)] Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves API S	
Line Blanks ASME B16 Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME B16 Bioprocessing Equipment [Note (2)] ASME S Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves API	
Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings ASME B16 Bioprocessing Equipment [Note (2)] ASME B Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves API	
Bioprocessing Equipment [Note (2)]	
Specification for Pipeline and Piping Valves [Note (3)] API Flanged Steel Pressure-relief Valves API S	
Flanged Steel Pressure-relief Valves	BPE
•	
Check Valves: Flanged, Lug, Wafer, and Butt-welding	
Metal Plug Valves — Flanged, Threaded, and Welding Ends	
Steel Gate Valves — Flanged and Butt-welding Ends, Bolted Bonnets	
Gate, Globe, and Check Valves for Sizes DN 100 (NPS 4) and Smaller for the Petroleum and Natural Gas Industries API 6	
Corrosion-resistant, Bolted Bonnet Gate Valves — Flanged and Butt-welding Ends	
Metal Ball Valves — Flanged, Threaded, and Welding Ends	
Butterfly Valves: Double-flanged, Lug- and Wafer-type	609
Performance of Gasketed Mechanical Couplings for Use in Piping Applications	476
Performance of Fittings for Use with Gasketed Mechanical Couplings Used in Piping Applications ASTM F1	548
Ductile-Iron and Gray-Iron Fittings	110
Flanged Ductile-Iron Pipe With Ductile-Iron or Gray-Iron Threaded Flanges	115
Steel Pipe Flanges for Waterworks Service, Sizes 4 in. Through 144 in. (100 mm Through 3,600 mm)	207
Dimensions for Fabricated Steel Water Pipe Fittings	208
Metal-Seated Gate Valves for Water Supply Service	500
Standard Finishes for Contact Faces of Pipe Flanges and Connecting-End Flanges of Valves and Fittings MSS S	SP-6
Spot Facing for Bronze, Iron, and Steel Flanges	
Standard Marking System for Valves, Fittings, Flanges, and Unions	-25

ASME B31.3-2020

Table 326.1 Component Standards (Cont'd)

Standard or Specification	Designation
Metallic Fittings, Valves, and Flanges (Cont'd)	
Corrosion-Resistant Gate, Globe, Angle, and Check Valves with Flanged and Butt Weld Ends (Classes 150, 300, & 600)	MSS SP-42
Wrought and Fabricated Butt-Welding Fittings for Low Pressure, Corrosion Resistant Applications [Note (4)]	MSS SP-43
Steel Pipeline Flanges	MSS SP-44
Bypass and Drain Connections	MSS SP-48
Class 150LW Corrosion Resistant Flanges and Cast Flanged Fittings	MSS SP-51
High Pressure Chemical Industry Flanges and Threaded Stubs for Use with Lens Gaskets	MSS SP-69
Gray Iron Gate Valves, Flanged and Threaded Ends	MSS SP-70
Gray Iron Swing Check Valves, Flanged and Threaded Ends	MSS SP-71
Ball Valves with Flanged or Butt-Welding Ends for General Service	MSS SP-72
ligh-Strength, Wrought, Butt-Welding Fittings	MSS SP-7
Gray Iron Plug Valves, Flanged and Threaded Ends	MSS SP-78
ocket Welding Reducer Inserts	MSS SP-79
Bronze Gate, Globe, Angle, and Check Valves	MSS SP-80
tainless-Steel or Stainless-Steel-Lined. Bonnetless. Knife Gate Valves with Flanged Ends	MSS SP-8
Class 3000 and 6000 Pipe Unions, Socket Welding and Threaded (Carbon Steel, Allov Steel, Stainless Steels, and Nickel	MSS SP-83
Alloys)	1100 01 01
ray Iron Globe and Angle Valves, Flanged and Threaded Ends	MSS SP-8
Diaphragm Valves	MSS SP-8
wage(d) Nipples and Bull Plugs	MSS SP-9
ntegrally Reinforced Forged Branch Outlet Fittings — Socket Welding, Threaded, and Buttwelding Ends	MSS SP-9
nstrument Valves for Code Applications	MSS SP-10
ast Copper Allov Flanges and Flanged Fittings: Class 125, 150, and 300	MSS SP-10
actory-Made Wrought Belled End Pipe Fittings for Socket-Welding [Note (5)]	MSS SP-11
lefrigeration Tube Fittings — General Specifications	SAE J51
lydraulic Tube Fittings	SAE J51
lydraulic Flanged Tube, Pipe, and Hose Connections, 4-Screw Flange Connection Part 1: 3.5 MPa to 35 MPa (Code 61)	SAE J518-
Hydraulic Flanged Tube, Pipe, and Hose Connections, 4-Screw Flange Connection Part 2: 42 MPa (Code 62)	SAE J518-
Market War and Backet 1994	
Metallic Pipe and Tubes [Note (6)] Velded and Seamless Wrought Steel Pipe	1010 000 100
•	ASME B36.101
tainless Steel Pipe	ASME B36.191
langed Ductile-Iron Pipe With Ductile-Iron or Gray-Iron Threaded Flanges	AWWA C11
hickness Design of Ductile-Iron Pipe	AWWA C15
Ouctile-Iron Pipe, Centrifugally Cast	AWWA C15
Cteel Water Pipe, 6 in. (150 mm) and Larger	AWWA C20
discellaneous	
Jnified Inch Screw Threads (UN and UNR Thread Form)	ASME B1.
ipe Threads, General Purpose (Inch)	ASME B1.20.
Pryseal Pipe Threads (Inch)	ASME B1.20.
lose Coupling Screw Threads (Inch)	ASME B1.20.
Metallic Gaskets for Pipe Flanges	ASME B16.2
Ionmetallic Flat Gaskets for Pipe Flanges	ASME B16.2
Outwelding Ends	ASME B16.2
outtweiding Ends ourface Texture (Surface Roughness, Waviness, and Lav)	
	ASME B46.
hermowells [Note (7)]	ASME PTC 19.3 TV
Specification for Threading, Gauging, and Thread Inspection of Casing, Tubing, and Line Pipe Threads	API 5
Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings	AWWA C11