

Coast Guard, Dept. of Homeland Security

§ 56.01-2

this part but must meet Subpart 58.60 of this subchapter.

[CGFR 68-82, 33 FR 18843, Dec. 18, 1968, as amended by CGD 73-251, 43 FR 56799, Dec. 4, 1978]

§ 56.01-2 Incorporation by reference.

(a) Certain standards and specifications are incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). To enforce any edition other than the one listed in paragraph (b) of this section, notice of the change must be published in the FEDERAL REGISTER and the material made available to the public. All approved material is available from the sources indicated in paragraph (b) or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(b) The standards and specifications approved for incorporation by reference in this part, and the sections affected are:

- AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
11 West 42nd Street, New York, NY 10036
ANSI B1.1-82 Unified Inch Screw Threads (UN and UNR Thread Form)
ANSI B1.20.1-83 Pipe Threads, General Purpose (Inch)
ANSI B1.20.3-76 (reaffirmed 1982) Dryseal Pipe Threads (Inch)
ANSI B16.1-75 Cast Iron Flanges and Flanged Fittings, Class 25, 125, 250 and 800
ANSI B16.3-85 Malleable Iron Threaded Fittings, Classes 150 and 300
ANSI B16.4-85 Cast Iron Threaded Fittings, Classes 125 and 250
ANSI B16.5-81 Pipe Flanges and Flanged Fittings
ANSI B16.9-86 Factory-Made Wrought Steel Butt Welding Fittings
ANSI B16.10-86 Face-to-Face and End-to-End Dimensions of Ferrous Valves
ANSI B16.11-80 Forged Steel Fittings, Socket-Welding and Threaded
ANSI B16.14-83 Ferrous Pipe Plugs, Bushings, and Locknuts with Pipe Threads

- ANSI B16.15-85 Cast Bronze Threaded Fittings, Classes 125 and 250
ANSI B16.18-84 Cast Copper Alloy Solder Joint Pressure Fittings
ANSI B16.20-73 Ring-Joint Gaskets and Grooves for Steel Pipe Flanges VIII, Division 1, Pressure Vessels, 1986 with addenda
Section IX, Welding and Brazing Qualifications, 1986 with addenda
ANSI B16.24-79 Bronze Pipe Flanges and Flanged Fittings, Class 150 and 300
ANSI B16.25-86 Butt Welding Ends
ANSI B16.28-86 Wrought Steel Butt Welding Short Radius Elbows and Returns
ANSI B16.29-86 Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings—DWV
ANSI B16.34-88 Valves—Flanged, Threaded and Welding End
ANSI B16.42-87 Ductile Iron Pipe Flanges and Flanged Fittings, Classes 150 and 300
ANSI B18.2.1-81 Square and Hex Bolts and Screws, Inch Series
ANSI B18.2.2-87 Square and Hex Nuts
ANSI B31.1-86 Power Piping
ANSI B36.10M-85 Welded and Seamless Wrought Steel Pipe
ANSI B36.19M-85 Stainless Steel Pipe
AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) INTERNATIONAL
Three Park Avenue, New York, NY 10016-5990
Boiler and Pressure Vessel Code:
Section I, Power Boilers, 1986 with addenda
Section VIII, Division 1, Pressure Vessels, 1986 with addenda
Section IX, Welding and Brazing Qualifications, 1986 with addenda
AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
100 Barr Harbor Drive, West Conshohocken, PA 19428-2959
ASTM A 36/A 36M-97a, Standard Specification for Carbon Structural Steel

ASTM A 47-90 (1995), Standard Specification for Ferritic Malleable Iron Castings.....	56.60-1	ification for Electric-Resistance-Welded Carbon Steel Boiler and Superheater Tubes for High-Pressure Service.....	56.60-1
ASTM A 53-98, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.....	56.10-5; 56.60-1	ASTM A 234/A 234M-97, Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and High Temperature Service.....	56.60-1
ASTM A 106-95, Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service.....	56.60-1	ASTM A 249/A 249M-96a, Standard Specification for Welded Austenitic Steel Boiler, Superheater, Heat-Exchanger, and Condenser Tubes.....	56.60-1
ASTM A 126-95, Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.....	56.60-1	ASTM A 268/A 268M-96, Standard Specification for Seamless and Welded Ferritic and Martensitic Stainless Steel Tubing for General Service.....	56.60-1
ASTM A 134-96, Standard Specification for Pipe, Steel, Electric-Fusion (Arc)-Welded (Sizes NPS 16 and Over).....	56.60-1	ASTM A 276-98, Standard Specification for Stainless Steel Bars and Shapes.....	56.60-2
ASTM A 135-97c, Standard Specification for Electric-Resistance-Welded Steel Pipe.....	56.60-1	ASTM A 307-97, Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength.....	56.25-20
ASTM A 139-96, Standard Specification for Electric-Fusion (Arc)-Welded Steel Pipe (NPS 4 and Over).....	56.60-1	ASTM A 312/A 312M-95a, Standard Specification for Seamless and Welded Austenitic Stainless Steel Pipes.....	56.50-105; 56.60-1
ASTM A 178/A 178M-95, Standard Specification for Electric-Resistance-Welded Carbon Steel and Carbon-Manganese Steel Boiler and Superheater Tubes.....	56.60-1	ASTM A 320/A 320M-97, Standard Specification for Alloy/Steel Bolting Materials for Low-Temperature Service.....	56.50-105
ASTM A 179/A 179M-90a (1996), Standard Specification for Seamless Cold-Drawn Low-Carbon Steel Heat-Exchanger and Condenser Tubes.....	56.60-1	ASTM A 333/A 333M-94, Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service.....	56.50-105; 56.60-1
ASTM A 182/A 182M-97c, Standard Specification for Forged or Rolled Alloy-Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service.....	56.50-105	ASTM A 334/A 334M-96, Standard Specification for Seamless and Welded Carbon and Alloy-Steel Tubes for Low-Temperature Service.....	56.50-105; 56.60-1
ASTM A 192/A 192M-91 (1996), Standard Specification for Seamless Carbon Steel Boiler Tubes for High-Pressure Service.....	56.60-1	ASTM A 335/A 335M-95a, Standard Specification for Seamless Ferritic Alloy-Steel Pipe for High-Temperature Service.....	56.60-1
ASTM A 194/A 194M-98b, Standard Specification for Carbon and Alloy Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both.....	56.50-105	ASTM A 350/A 350M-97, Standard Specification for Carbon and Low-Alloy Steel Forgings, Requiring Notch Toughness Testing for Piping Components.....	56.50-105
ASTM A 197-87 (1992), Standard Specification for Cupola Malleable Iron.....	56.60-1	ASTM A 351/A 351M-94a, Standard Specification for Castings, Austenitic, Austenitic-Ferritic (Duplex), for Pressure-Containing Parts.....	56.50-105
ASTM A 210/A 210M-96, Standard Specification for Seamless Medium-Carbon Steel Boiler and Superheater Tubes.....	56.60-1	ASTM A 352/A 352M-93 (1998), Standard Specification for Steel Castings, Ferritic and Martensitic, for Pressure-Containing Parts, Suitable for Low-Temperature Service.....	56.50-105
ASTM A 213/A 213M-95a, Standard Specification for Seamless Ferritic and Austenitic Alloy-Steel Boiler, Superheater, and Heat-Exchanger Tubes.....	56.60-1	ASTM A 358/A 358M-95a, Standard Specification for Electric-Fusion-Welded Austenitic Chromium-Nickel Alloy Steel Pipe for High-Temperature Service.....	56.60-1
ASTM A 214/A 214M-96, Standard Specification for Electric-Resistance-Welded Carbon Steel Heat-Exchanger and Condenser Tubes.....	56.60-1		
ASTM A 226/A 226M-95, Standard Spec-			

ASTM A 369/A 369M-92, Standard Specification for Carbon and Ferritic Alloy Steel Forged and Bored Pipe for High-Temperature Service	56.60-1	for Aluminum-Alloy Die Castings	56.60-2
ASTM A 376/A 376M-96, Standard Specification for Seamless Austenitic Steel Pipe for High-Temperature Central-Station Service ...	56.07-10; 56.60-1; 56.60-2	ASTM B 88-96, Standard Specification for Seamless Copper Water Tube	56.60-1
ASTM A 395/A 395M-98, Standard Specification for Ferritic Ductile Iron Pressure-Retaining Castings for Use at Elevated Temperatures	56.50-60; 56.60-1; 56.60-15	ASTM B 96-93, Standard Specification for Copper-Silicon Alloy Plate, Sheet, Strip, and Rolled Bar for General Purposes and Pressure Vessels	56.60-2
ASTM A 403/A 403M-98, Standard Specification for Wrought Austenitic Stainless Steel Piping Fittings	56.60-1	ASTM B 111-95, Standard Specification for Copper and Copper-Alloy Seamless Condenser Tubes and Ferrule Stock	56.60-1
ASTM A 420/A 420M-96a, Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Low-Temperature Service	56.50-105; 56.60-1	ASTM B 124-96, Standard Specification for Copper and Copper Alloy Forging Rod, Bar, and Shapes	56.60-2
ASTM A 520-97, Standard Specification for Supplementary Requirements for Seamless and Electric-Resistance-Welded Carbon Steel Tubular Products for High-Temperature Service Conforming to ISO Recommendations for Boiler Construction	56.60-1	ASTM B 161-93, Standard Specification for Nickel Seamless Pipe and Tube	56.60-1
ASTM A 522/A 522M-95b, Standard Specification for Forged or Rolled 8 and 9% Nickel Alloy Steel Flanges, Fittings, Valves, and Parts for Low-Temperature Service	56.50-105	ASTM B 165-93, Standard Specification of Nickel-Copper Alloy (UNS NO4400) Seamless Pipe and Tube	56.60-1
ASTM A 536-84 (1993), Standard Specification for Ductile Iron Castings	56.60-1	ASTM B 167-97a, Standard Specification for Nickel-Chromium-Iron Alloys (UNS NO6600, NO6601, NO6603, NO6690, NO6025, and NO6045) Seamless Pipe and Tube	56.60-1
ASTM A 575-96, Standard Specification for Steel Bars, Carbon, Merchant Quality, M-Grades	56.60-2	ASTM B 171-95, Standard Specification for Copper-Alloy Plate and Sheet for Pressure Vessels, Condensers, and Heat Exchangers	56.60-2
ASTM A 576-90b (1995), Standard Specification for Steel Bars, Carbon, Hot-Wrought, Special Quality	56.60-2	ASTM B 210-95, Standard Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes	56.60-1
ASTM B 16-92, Standard Specification for Free-Cutting Brass Rod, Bar, and Shapes for Use in Screw Machines	56.60-2	ASTM B 234-95, Standard Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes for Condensers and Heat Exchangers	56.60-1
ASTM B 21-96, Standard Specification for Naval Brass Rod, Bar, and Shapes	56.60-2	ASTM B 241/B 241M-96, Standard Specification for Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube	56.60-1
ASTM B 26/B 26M-97, Standard Specification for Aluminum-Alloy Sand Castings	56.60-2	ASTM B 280-97, Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service	56.60-1
ASTM B 42-96, Standard Specification for Seamless Copper Pipe, Standard Sizes	56.60-1	ASTM B 283-96, Standard Specification for Copper and Copper-Alloy Die Forgings (Hot-Pressed)	56.60-2
ASTM B 43-96, Standard Specification for Seamless Red Brass Pipe, Standard Sizes	56.60-1	ASTM B 315-93, Standard Specification for Seamless Copper Alloy Pipe and Tube	56.60-1
ASTM B 68-95, Standard Specification for Seamless Copper Tube, Bright Annealed	56.60-1	ASTM B 361-95, Standard Specification for Factory-Made Wrought Aluminum and Aluminum-Alloy Welding Fittings	56.60-1
ASTM B 75-97, Standard Specification for Seamless Copper Tube	56.60-1	ASTM B 858M-95, Standard Test Method for Determination of Susceptibility to Stress Corrosion Cracking in Copper Alloys Using an Ammonia Vapor Test	56.60-2
ASTM B 85-96, Standard Specification		ASTM D 635-97, Standard Test Method for Rate of Burning and/or Extent	

and Time of Burning of Plastics in a Horizontal Position.....56.60-25

ASTM D 1785-96b, Standard Specification for Poly (Vinyl Chloride)(PVC) Plastic Pipe, Schedules 40, 80, and 120.....56.60-25

ASTM D 2241-96b, Standard Specification for Poly (Vinyl Chloride)(PVC) Pressure-Rated Pipe (SDR Series).....56.60-25

ASTM D 2464-96a, Standard Specification for Threaded Poly (Vinyl Chloride)(PVC) Plastic Pipe Fittings Schedule 80.....56.60-25

ASTM D 2466-97, Standard Specification for Poly (Vinyl Chloride)(PVC) Plastic Pipe Fittings, Schedule 40.....56.60-25

ASTM D 2467-96a, Standard Specification for Poly (Vinyl Chloride)(PVC) Plastic Pipe Fittings, Schedule 80.....56.60-25

ASTM D 2665-97b, Standard Specification for Poly (Vinyl Chloride)(PVC)Plastic Drain, Waste, and Vent Pipe and Fittings.....56.60-25

ASTM D 2863-95, Standard Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-like Combustion of Plastics (Oxygen Index).....56.60-25

ASTM E 23-96, Standard Test Methods for Notched Bar Impact Testing of Metallic Materials.....56.50-105

ASTM F 682-82a (1993), Standard Specification for Wrought Carbon Steel Sleeve-Type Pipe Couplings.....56.60-1

ASTM F 1006-86 (1992), Standard Specification for Entrainment Separators for Use in Marine Piping Applications.....56.60-1

ASTM F 1007-86 (1996), Standard Specification for Pipe-Line Expansion Joints of the Packed Slip Type for Marine Application.....56.60-1

ASTM F 1020-86 (1996), Standard Specification for Line-Blind Valves for Marine Applications.....56.60-1

ASTM F 1120-87 (1993), Standard Specification for Circular Metallic Bellows Type Expansion Joints for Piping Applications.....56.60-1

ASTM F 1123-87 (1993), Standard Specification for Non-Metallic Expansion Joints.....56.60-1

ASTM F 1139-88 (1993), Standard Specification for Steam Traps and Drains.....56.60-2

ASTM F 1172-88 (1993), Standard Specification for Fuel Oil Meters of the Volumetric Positive Displacement Type.....56.60-1

ASTM F 1173-95, Standard Specification for Thermosetting Resin Fiberglass Pipe and Fittings to be Used for Marine Applications.....56.60-1

ASTM F 1199-88 (1993), Standard Spec-

ification for Cast (All Temperature and Pressures) and Welded Pipe Line Strainers (150 psig and 150 Degrees F Maximum).....56.60-1

ASTM F 1200-88 (1993), Standard Specification for Fabricated (Welded) Pipe Line Strainers (Above 150 psig and 150 Degrees F).....56.60-1

ASTM F 1201-88 (1993), Standard Specification for Fluid Conditioner Fittings in Piping Applications above 0 Degrees F.....56.60-1

ASTM F 1387-93, Standard Specification for Performance of Mechanically Attached Fittings.....56.30-25

ASTM F 1476-95a, Standard Specification for Performance of Gasketed Mechanical Couplings for Use in Piping Applications.....56.30-35

ASTM F 1548-94, Standard Specification for the Performance of Fittings for Use with Gasketed Mechanical Couplings, Used in Piping Applications.....56.30-35

EXPANSION JOINT MANUFACTURERS ASSOCIATION INC. (EJMA)

25 North Broadway, Tarrytown, NY 10591

Standards of the Expansion Joint Manufacturers Association, 1980.....56.60-1

INTERNATIONAL MARITIME ORGANIZATION (IMO), PUBLICATIONS SECTION,

4 Albert Embankment, London, SE1 7SR United Kingdom

Resolution A.753(18) Guidelines for the Application of Plastic Pipes on Ships.....56.60-25

FLUID CONTROLS INSTITUTE INC. (FCI)

31 South Street, Suite 303, Morristown, NJ 07960

FCI 69-1 Pressure Rating Standard for Steam Traps.....56.60-1

MANUFACTURERS STANDARDIZATION SOCIETY OF THE VALVE AND FITTINGS INDUSTRY, INC. (MSS)

127 Park Street NE, Vienna, VA 22180

SP-6-85 Standard Finishes for Contact Faces of Pipe Flanges and Connecting-End Flanges of Valves and Fittings.....56.25-10; 56.60-1

SP-9-87 Spot Facing for Bronze, Iron and Steel Flanges.....56.60-1

SP-25-88 Standard Marking System for Valves, Fittings, Flanges and Unions.....56.15-1; 56.20-5; 56.60-1

SP-44-85 Steel Pipe Line Flanges.....56.60-1

SP-45-87 Bypass and Drain Connection Standard.....56.20-20; 56.60-1

SP-51-86 Class 150LW Corrosion Resistant Cast Flanges and Flanged Fittings.....56.60-1

- SP-53-85 Quality Standard for Steel Castings and Forgings for Valves, Flanges and Fittings and Other Piping Components—Magnetic Particle Examination Method56.60-1
- SP-55-85 Quality Standard for Steel Castings for Valves, Flanges and Fittings and Other Piping Components—Visual Method.....56.60-1
- SP-58-83 Pipe Hangers and Supports—Materials, Design and Manufacture.....56.60-1
- SP-61-85 Pressure Testing of Steel Valves.....56.60-1
- SP-67-83 Butterfly Valves.....56.60-1
- SP-69-83 Pipe Hangers and Supports—Selection and Application.....56.60-1
- SP-72-87 Ball Valves with Flanged or Butt-Welding Ends for General Service.....56.60-1
- SP-73-86 Brazing Joints for Wrought and Cast Copper Alloy Solder Joint Pressure Fittings.....56.60-1
- SP-83-87 Steel Pipe Unions, Socket-Welding and Threaded56.60-1

SOCIETY OF AUTOMOTIVE ENGINEERS (SAE)

400 Commonwealth Drive, Warrendale, Pa 15096

- J1475-84 Hydraulic Hose Fittings for Marine Applications.....56.60-25
 - J1942-89 Hose and Hose Assemblies for Marine Applications.....56.60-25
- [CGD 77-140, 54 FR 40599, Oct. 2, 1989; 55 FR 39968, Oct. 1, 1990, as amended by CGD 88-032, 56 FR 35822, July 29, 1991; CGD 95-012, 60 FR 48049, Sept. 18, 1995; CGD 95-027, 61 FR 26000, May 23, 1996; CGD 96-041, 61 FR 50728, Sept. 27, 1996; CGD 97-057, 62 FR 51044, Sept. 30, 1997; CGD 95-028, 62 FR 51200, Sept. 30, 1997; USCG-1999-6216, 64 FR 53224, Oct. 1, 1999; USCG-1999-5151, 64 FR 67178, Dec. 1, 1999; USCG-2004-18884, 69 FR 58346, Sept. 30, 2004]

§ 56.01-3 Power boiler external piping (Replaces 100.1.1, 100.1.2, 111.6, 122.1, 132 and 133).

(a) Power boiler external piping and components must meet the requirements of this part and §§ 52.01-105, 52.01-110, 52.01-115, and 52.01-120 of this chapter.

(b) Specific requirements for power boiler external piping and appurtenances, as defined in §§ 100.1.1 and 100.1.2, appearing in the various paragraphs of ANSI B31.1, are not adopted unless specifically indicated elsewhere in this part.

[CGD 77-140, 54 FR 40602, Oct. 2, 1989; 55 FR 39968, Oct. 1, 1990]

§ 56.01-5 Adoption of ANSI (American National Standards Institute) Code B31.1 for pressure and power piping, and other standards.

(a) Piping systems for ships and barges shall be designed, constructed, and inspected in accordance with B31.1, the “Code for Pressure Piping, Power Piping,” of the ANSI (American National Standards Institute), as limited, modified, or replaced by specific requirements in this part. The provisions in the appendices to ANSI-B31.1 are adopted and shall be followed when the requirements in ANSI-B31.1 or the regulations in this part make them mandatory. For general information Table 56.01-5(a) lists the various paragraphs, etc., in ANSI-B31.1 which are limited, modified, replaced, or reproduced by regulations in this part.

TABLE 56.01-5(A)—LIMITATIONS AND MODIFICATIONS IN THE ADOPTION OF ANSI-B31.1 CODE FOR PRESSURE AND POWER PIPING

Section or paragraph in ANSI-B31.1, and disposition	Unit in this part
100.1 replaced by	56.01-1.
100.2 modified by	56.07-5.
101 through 104.7 modified by	56.07-10.
101.2 modified by	56.07-10(a), (b).
101.5 replaced by	56.07-10(c).
102.2 modified by	56.07-10(d).
102.2.5(d) replaced by	56.50-40.
102.3 and 104.1.2 modified by	56.07-10(e).
104.3 modified by	56.07-10(f).
104.4 modified by	56.07-10(e).
104.5.1 modified by	56.30-10.
105 through 108 replaced by	56.10-1 through 56.25-20.
110 through 118 replaced by	56.30-1 through 56.30-35.
119.5.1 replaced by	56.35-10, 56.35-15, 56.35-35.
119.7 replaced by	56.35-1.
122.3 modified by	56.50-97.
122.6 through 122.10 replaced by	56.50-1 through 56.50-80.
123 replaced by	56.60-1.
Table 126.1 is replaced by	56.30-5(c)(3), 56.60-1.
127 through 135.4 replaced by	56.65-1, 56.70-1 through 56.90-10.
136 replaced by	56.95-1 through 56.95-10.
137 replaced by	56.97-1 through 56.97-40.

(b) When a section or paragraph of the regulations in this part relates to material in ANSI-B31.1 Code (American National Standard Code for Pressure Piping, Power Piping), the relationship with this code will be shown immediately following the heading of the