(b) Pipe for bypasses should be at least Schedule 80 seamless, and of a material of the same nominal chemical composition and physical properties as that used for the main line. Lesser thickness may be approved depending on the installation and service conditions.

(c) Bypasses may be integral or attached.

[CGFR 68–82, 33 FR 18843, Dec. 18, 1968, as amended by USCG–2003–16630, 73 FR 65176, Oct. 31, 2008]

Subpart 56.25—Pipe Flanges, Blanks, Flange Facings, Gaskets, and Bolting

§ 56.25–5 Flanges.

Each flange must conform to the design requirements of either the applicable standards of table 56.60–1(b) of this part, or of those of appendix 2 of section VIII of the ASME Boiler and Pressure Vessel Code (incorporated by reference; see 46 CFR 56.01–2). Plate flanges must meet the requirements of § 56.30–10(b)(5) of this part and the material requirements of § 56.60–1(a) of this part. Flanges may be integral or may be attached to pipe by threading, welding, brazing, or other means within the applicable standards specified in table 56.60–1(b) of this part and the requirements of this subpart. For flange facing gasket combinations other than those specified above, calculations must be submitted indicating that the gaskets will not result in a higher bolt loading or flange moment than for the acceptable configurations.

[CGD 77–140, 54 FR 40605, Oct. 2, 1989, as amended by USCG–2002–13058, 67 FR 61278, Sept. 30, 2002; USCG–2003–16630, 73 FR 65176, Oct. 31, 2008]

§ 56.25–7 Blanks.

Each blank must conform to the design requirements of 104.5.3 of ASME B31.1 (incorporated by reference; see 46 CFR 56.01–2).

[USCG–2003–16630, 73 FR 65176, Oct. 31, 2008]

§ 56.25–10 Flange facings.

(a) Flange facings shall be in accordance with the applicable standards listed in table 56.60–1(b) and MSS SP–6 (incorporated by reference; see 46 CFR 56.01–2).

(b) When bolting class 150 standard steel flanges to flat face cast iron flanges, the steel flange must be furnished with a flat face, and bolting must be in accordance with § 56.25–20 of this part. Class 300 raised face steel flanges may be bolted to class 250 raised face cast iron flanges with bolting in accordance with § 56.25–20(b) of this part.

[CGFR 68–82, 33 FR 18843, Dec. 18, 1968, as amended by CGD 77–140, 54 FR 40605, Oct. 2, 1989; USCG–2003–16630, 73 FR 65176, Oct. 31, 2008]

§ 56.25–15 Gaskets (modifies 108.4).

(a) Gaskets shall be made of materials which are not injuriously affected by the fluid or by temperature.

(b) Each gasket must conform to the design requirements of the applicable standards of table 56.60–1(b) of this part.

(c) Only metallic and suitable asbestos-free nonmetallic gaskets may be used on flat or raised face flanges if the expected normal operating pressure exceeds 720 pounds per square inch or the operating temperature exceeds 750 °F.

(d) The use of metal and nonmetallic gaskets is not limited as to pressure provided the gasket materials are suitable for the maximum fluid temperatures.

[CGFR 68–82, 33 FR 18843, Dec. 18, 1968, as amended by CGD 86–035, 54 FR 36316, Sept. 1, 1989; USCG–2003–16630, 73 FR 65176, Oct. 31, 2008]

§ 56.25–20 Bolting.

(a) *General.* (1) Bolts, studs, nuts, and washers must comply with applicable standards and specifications listed in 46 CFR 56.60–1. Unless otherwise specified, bolting must be in accordance with ASME B16.5 (incorporated by reference; see 46 CFR 56.01–2).

(2) Bolts and studs must extend completely through the nuts.

(3) See § 58.30–15(c) of this chapter for exceptions on bolting used in fluid power and control systems.

(b) Carbon steel bolts or bolt studs may be used if expected normal operating pressure does not exceed 300 pounds per square inch gauge and the