FITTINGS-GENERAL SERVICE

Item	Size	Description
Pipe	50 mm & smaller	Schedule 40S: ASTM A312/A312M, Type 304 seamless, pickled and passivated.
	60 mm to 500 mm	Schedule 10S: ASTM A778, "as-welded" grade, Type 304L.
Joints	50 mm & smaller	Threaded or flanged at equipment as required or shown.
	60 mm & larger	Butt-welded or flanged at valves and equipment.
Fittings	50 mm & smaller	Threaded Forged: 1,000 CWP, ASTM A182/A182M, Grade F304L.
	60 mm & larger	Butt-Welded: ASTM A774/A774M Grade 304L conforming to MSS SP 43, "as-welded" grade, pickled and passivated; fitting wall thickness to match adjoining pipe; long radius elbows unless shown otherwise.
Branch Connections	50 mm & smaller	Tee or reducing tee in conformance with Fittings above.
	60 mm & larger	Butt-welding tee or reducing tee in accordance with Fittings above.
Flanges	25 mm & 40 mm	Forged Stainless Steel: ASTM A182/A182M, Grade F304L, ANSI B16.5 Class 150, socketweld, raised face.
	50 mm and larger	Cast Carbon Steel: ASTM A216/A216M Grade WCA, drilled, ANSI B16.5 Class 150 Van Stone Type with stainless steel stub ends, ASTM A240 Type 304L "as-welded grade", conforming to MSS-SP43, wall thickness same as pipe.
Unions	50 mm & smaller	Threaded Forged: ASTM A182/A182M, Grade F304, 13800 or 20700 kPag WOG, integral ground seats, AAR design meeting the requirements of ANSI B16.11, bore to match pipe.
Bolting	All	Forged Flanges: Type 304 stainless steel, ASTM A320/A320M Grade B8M hex head bolts and ASTM A194/A194M Grade 8M hex head nuts.
		Van Stone Flanges: Carbon steel ASTM A307 Grade B hex head bolts and ASTM A563 Grade A hex head nuts. Supply and install same on mating cast iron flange on valve or equipment with flat ring gasket.

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FITTINGS-GENERAL SERVICE

Item	Size	Description
Gaskets	All Flanges	Flanged, Water and Sewage Service: 5 mm thick, unless otherwise specified, red rubber (SBR), hardness 80 (Shore A), rated to 93 °C, conforming to ANSI B16.21, AWWA C207, and ASTM D1330, Grades 1 and 2.
		Flanged, Hot Air and Fuel Gas Service: 3 mm thick, unless otherwise specified, homogeneous black rubber (EPDM), hardness 60 (Shore A), rated to 150°C, conforming to ANSI B16.21 and ASTM D1330 Steam Grade.
		Blind flanges shall be gasketed covering entire inside face with gasket cemented to blind flange.
Thread Lubricant	50 mm & smaller	Teflon tape.

END OF SECTION