

API Trim Number	Nominal Trim	Trim code	Stem & other trim parts	Disc/Wedge	Seat surface	Trim Material Grade
1	410	F6	410 (13Cr) (200-275 HBN)	F6 (13Cr) (200 HBN)	410 (13Cr) (250 HBN min)	13Cr-0.75Ni-1Mn
2	304	304	304	304 (18Cr-8Ni)	304 (18Cr-8Ni)	19Cr-9.5Ni-2Mn-0.08C
3	310	310	(25Cr-20Ni)	310 (25Cr-20Ni)	310 (25Cr-20Ni)	25Cr-20.5Ni-2Mn
4	410 - Hard	F6H	410 (13Cr) (200-275 HBN)	F6 (13Cr) (200-275 HBN)	F6 (13Cr) (275 HBN min)	13Cr-0.75Ni-1Mn
5	410 - Full Hard faced	F6HF	410 (13Cr) (200-275 HBN)	F6+St Gr6 (CoCr Alloy) (350 HBN min)	410+St Gr6 (CoCr Alloy) (350 HBN min)	13Cr-0.5Ni-1Mn/Co-Cr-A
5a	410 - Full Hard faced	F6HF	410 (13Cr) (200-275 HBN)	F6+Hardf. NiCr Alloy (350 HBN min)	410+Hardf. NiCr Alloy (350 HBN min)	13Cr-0.5Ni-1Mn/Co-Cr-A
6	410 and Ni-Cu	F6HFS	410 (13Cr) (200-275 HBN)	Monel 400® (NiCu Alloy) (250 HBN min)	Monel 400® (NiCu Alloy) (175 HBN min)	13Cr-0.5Ni-1Mn/Ni-Cu
7	410 - Very hard	F6HF+	410 (13Cr) (200-275 HBN)	F6 (13Cr) (250 HBN min)	F6 (13Cr) (750 HB)	13Cr-0.5Ni-1Mo/13Cr-0.5Ni-1Mo
8	410 - Hard faced	F6HFS	410 (13Cr) (200-275 HBN)	410 (13Cr) (250 HBN min)	410+St Gr6 (CoCr Alloy) (350 HBN min)	13Cr-0.75Ni-1Mn/1/2Co-Cr-A
8a	410 - Hard faced	F6HFS	410 (13Cr) (200-275 HBN)	F6 (13Cr) (250 HBN min)	410+Hardf. NiCr Alloy (350 HBN min)	13Cr-0.75Ni-1Mn/1/2Co-Cr-A
9	Monel	Monel	Monel® (NiCu Alloy)	Monel 400® (NiCu Alloy)	Monel 400® (NiCu Alloy)	70Ni-30Cu
10	316	316	316 (18Cr-Ni-Mo)	316 (18Cr-Ni-Mo)	316 (18Cr-Ni-Mo)	18Cr-12Ni-2.5Mo-2Mn
11	Monel - Hard faced	MonelHFS	Monel® (NiCu Alloy)	Monel 400® (NiCu Alloy)	Monel 400®+St Gr6 (350HBN min)	70Ni-30Cu/1/2Co-Cr-A
11a	Monel - Hard faced	MonelHFS	Monel® (NiCu Alloy)	Monel 400® (NiCu Alloy)	Monel 400®+HF NiCr Alloy (350 HBN min)	70Ni-30Cu/1/2Co-Cr-A
12	316 - Hard faced	316HFS	316 (Cr-Ni-Mo)	316 (18Cr-8Ni-Mo)	316+St Gr6 (350 HBN min)	18Cr-12Ni-2.5Mo-2Mn/1/2Co-Cr-A
12a	316 - Hard faced	316HFS	316 (Cr-Ni-Mo)	316 (18Cr-8Ni-Mo)	316 Hardf. NiCr Alloy (350 HBN min)	18Cr-12Ni-2.5Mo-2Mn/1/2Co-Cr-A
13	Alloy 20	Alloy 20	Alloy 20 (19Cr-29Ni)	Alloy 20 (19Cr-29Ni)	Alloy 20 (19Cr-29Ni)	29Ni-19Cr-2.5Mo-0.07C
14	Alloy 20 - Hard faced	Alloy 20HFS	Alloy 20 (19Cr-29Ni)	Alloy 20 (19Cr-29Ni)	Alloy 20 St Gr6 (350 HBN min)	29Ni-19Cr-2.5Mo-0.07C/1/2Co-Cr-A
14a	Alloy 20 - Hard faced	Alloy 20HFS	Alloy 20 (19Cr-29Ni)	Alloy 20 (19Cr-29Ni)	Alloy 20 Hardf. NiCr Alloy (350 HBN min)	29Ni-19Cr-2.5Mo-0.07C/1/2Co-Cr-A
15	304 - Full Hard faced	304-HF	304 (18Cr-8Ni-Mo)	304St Gr6	304+St Gr6 (350 HBN min)	19Cr-9.5Ni-2Mn-0.08C/1/2Co-Cr-A
16	316 - Full Hard faced	316-HF	316 HF (18Cr-8Ni-Mo)	316+St Gr6 (320 HBN min)	316+St Gr6 (350 HBN min)	18Cr-12Ni-2.5Mo-2Mn/Co-Cr-Mo
17	347 - Full Hard faced	347-HF	347 HF (18Cr-10Ni-Cb)	347+St Gr6 (350 HBN min)	347+St Gr6 (350 HBN min)	18Cr-10Ni-Cb/Co-Cr-A
18	Alloy 20 - Full Hard faced	Alloy 20 HF	Alloy 20 (19Cr-29Ni)	Alloy 20+St Gr6 (350 HBN min)	Alloy 20+St Gr6 (350 HBN min)	19Cr-29Ni/Co-Cr-A
Special	Bronze	Bronze	410 (CR13)	Bronze	Bronze	
Special	Alloy 625	Alloy 625	Alloy 625	Alloy 625	Alloy 625	
NACE	Specially treated 316 or 410 trim combined optionally with B7M bolts and 2HM nuts to meet NACE MR-01-75 requirements.					
Full Stellite	Full Hardfaced trim, suitable for abrasive & severe services up to 1200°F (650°C).					