

Valve Material Specifications

KEY PHYSICAL PROPERTIES	CAST		FORGED	
	ASTM	SUFFIX	ASTM	SUFFIX
CARBON STEEL				
0.25 C Max	A216	WCA	A105	A105
		WCB	A106	A106
		WCC		
LOW TEMPERATURE STEEL				
0.25 C Max	A352-LCA	LCA		
	A352-LCB	LCB	A350LF2	LF2
	A352-LCC	LCC		
0.5 Mo	A352-LC1	LC1		
2 Ni	A352-LC2	LC2		
3 Ni	A352-LC2-1	LC2-1		
3.5 Ni	A352-LC3	LC3	A350LF3	LF3
4.5 Ni	A352-LC4	LC4		
9 Ni	A352-LC9	LC9		
ALLOY STEEL				
0.5 Mo	A217-WC1	WC1	A182-F1	F1
0.5 Cr - 0.5 Mo	A217-WC4	WC4	A182-F2	F2
0.6 Cr - Ni-0.2 Mo	A487-4C	4C		
0.75 Cr - 0.75 Ni - 1 Mo	A182-WC5	WC5		
1 Cr - 0.5 Mo	A182-F12	F12		
1.25 Cr - 0.5 Mo	A217-WC6	WC6	A182-F11	F11
1.25 Cr - 0.5 Mo	A217-WC11	WC11		
2.25 Cr - 1 Mo	A217-WC9	WC9	A182-F22	F22
3 Cr - 1 Mo	A182-F21	F21		
5 Cr - 0.5 Mo	A217-C5	C5	A182-F5	F5
9 Cr - 1 Mo	A217-C12	C12	A182-F9	F9
9 Cr - 1 Mo-0.2 V	A217-C12A	C12A		
STAINLESS STEEL				
13 Cr	A217-CA15	CA15	A182-F6A	F6A
13 Cr - 4 Ni			A182-F6NM	F6NM
17 Cr			A182-F430	F430
18 Cr - 8 Ni			A182-F304H	F304H
18 Cr - 8 Ni with Molybdenum			A182-F316H	F316H
18 Cr - 8 Ni with Titanium			A182-F321	F321
18 Cr - 8 Ni with Titanium			A182-F321H	F321H
18 Cr - 8 Ni with Columbium			A182-F347H	F347H
19 Cr - 9 Ni	A351-CF8	CF8	A182-F304	F304
19 Cr - 10 Ni Low Carbon	A351-CF3	CF3	A182-F304L	F304L
19 Cr - 10 Ni - 2 Mo	A351-CF8M	CF8M	A182-F316	F316
19 Cr - 10 Ni - 2 Mo Low Carbon	A351-CF3M	CF3M	A182-F316L	F316L
19 Cr - 9 Ni - Cb	A351-CF8C	CF8C	A182-F347	F347
13 Cr - 4 Ni - 0.7 Mo	A351-CA6NM	CA6NM		
16 Cr - 4 Ni			A564-630	630
22 Cr - 13 Ni - 5 Mo			A182-FXM19	FXM19
DUPLEX STEEL				
19-22 Cr 27.5-30.5 Ni 2-3 Mo	A351-CN7M	CN7M	B473	
25.5-26.5 Cr 4.7-6 Ni 1.7-2.2 Mo	A351-CD4MCu	CD4M Cu	A182-F50	F50
18-21 Cr 9-13 Ni 3-4 Mo	A351-CG8M	CG8M		
19.5-20.5 Cr 17.5-19.5 Ni 6-7 Mo	A351-CK3MCuN	CK3MCuN	A182-F44	F44
24.5-26.5 Cr 4.7 Ni 1.7-2.2 Mo	A890-1A	1A	A182-F50	F50
21-23.5 Cr 4.5-6.5 Ni 2.5-3.5 Mo	A890-4A	4A	A182-F51	F51
24-26 Cr 6-8 Ni 4-5 Mo	A890-5A	5A	A182-F53	F53
24-26 Cr 6.5-8.5 Ni 3-4 Mo	A890-6A	6A		
24-26 Cr 19-22 Ni			A182-F310	F310