

MATERIAL TABLE

Super Alloy Valves Material Table

Material Code	Nominal	Casting		
	Designation	ASTM	DIN	UNS
Austenitic Stainless Steel				
SS304	18Cr-8Ni	A351 CF8	1.4308	J92600
SS304L	18Cr-8Ni-LC	A351 CF3	1.4306	J92500
SS316	18Cr-9Ni-2Mo	A351 CF8M	1.4408	J92900
SS316L	18Cr-9Ni-2Mo-C<0.03%	A351 CF3M	1.4404	J92800
SS317	18Cr-12Ni-3.5Mo	A351 CG8M		J93000
SS317L	18Cr-12Ni-3.5Mo-C<0.03%	A351 CG3M		J92999
SS347	18Cr-10Ni-Nb	A351 CF8C	1.4552	J92710
904L	19Cr-23Ni-4.0Mo			
Alloy 20	29Ni-20.5Cr-3.5Cu-2.5Mo	A351 CN7M	1.4536	J95150
Super Austenitic Stainless Steel				
254 Mo	20Cr-18Ni-6.5Mo-N-Cu	A351 CK3MCuN	1.4308	J93254
Nickel based Alloy				
Monel 400	67Ni-30Cu	A494 M-35-1	2.4365	N24135
Hastelloy B	67Ni-28Mo-5Fe	A494 N-12MV	2.4882	N30012
Hastelloy B2	67Ni-30Mo-1Fe	A494 N-7M	2.4617	
Hastelloy C276	58Ni-16Cr-16Mo-6Fe-4W	A494 CW12MW	2.4686	N30002
Hastelloy C	64Ni-18Cr-18Mo	A494 CW6M	2.4819	N30107
Hastelloy C22	58Ni-21Cr-14Mo-4Fe-3W	A494 CX2MW	9.4602	N26022
Inconel 600	78Ni-15Cr-5Fe	A494 CY-40	2.4816	N06040
Inconel 625	65Ni-22Cr-9Mo-3.5Nb	A494 CW6MC	2.4856	N26625
Nickel CZ100	97Ni	A494 CZ-100	2.4066	N02100
Duplex Stainless Steel				
1A	25Cr-5Ni-Mo-Cu	A890 CD4Mu	1.4507	J93370
1B	25Cr-5Ni-Mo-Cu-N	A890/955 CD4MCuN	1.4507	J93372
2A	24Cr-5Ni-Mo-N	A955 CE8MN		J93345
2205/4A	22Cr-5Ni-Mo-N	A890/955 CD3MN	1.4462	J92205
Super Duplex Stainless Steel				
2507/5A	25Cr-7Ni-4Mo-N	A890/955 CE3MN		J93404
Z100/6A	25Cr-7Ni-3Mo-Cu-N-W	A890/955 CD3MWCuN	1.4468	J93380
Ferrallium 255/1C	25Cr-6Ni-Mo-Cu-N	A890 CD3MCuN		J93373
329	25Cr-7Ni-3Mo-N		1.4507	

Material Code	Bar or Forged			Typical Application
	ASTM	DIN	UNS	
Austenitic Stainless Steel				
SS304	A276 304	1.4301	S30400	nitric acid, phosphoric acid, organic acid
SS304L	A276 304L	1.4306	S30403	
SS316	A276 316	1.4401	S31600	
SS316L	A276 316L	1.4404	S31603	
SS317	A276 317	1.4449	S31700	
SS317L	A276 317L	1.4438	S31703	alkali chloride, boiled acid
SS347	A276 347	1.4550	S34700	
904L	AISI 904L	1.4539	N08904	
Alloy 20	B473	2.4660	N08020	sulfuric acid
Super Austenitic Stainless Steel				
254 Mo	A276		S31254	
Nickel based Alloy				
Monel 400	B164	2.4360	N04400	alkali chloride, boiled acid
Hastelloy B	B335	2.4819	N10001	hydrochloric acid, sulfuric acid(up to 60%), phosphoric acid, copper chloride
Hastelloy B2	B335	2.4856	N10665	
Hastelloy C	B574	2.4819	N10002	wet chlorine gas, chlorine dioxide, organic acid, acetic acid, seawater
Hastelloy C276	B574	1.7752	N10276	
Hastelloy C22	B574	2.4602	N06022	
Inconel 600	B166	2.4817	N06600	
Inconel 625	B446	2.4856	N06625	oxidizing and high temperature environment
Nickel CZ100				
Duplex Stainless Steel				
1A	A790 31260		S31260	nitric acid, phosphoric acid , organic acid
1B	A790 31260			
2A				
2205/4A	A790 31803	1.4462	S31803	
Super Duplex Stainless Steel				
2507/5A	A479 32750	1.4410	S32750	salt / seawater application, sulfuric acid, phosphoric acid, formic acid, acetic acid,
Z100/6A	A479 32760	1.4460	S32760	
Ferrallium 255/1C	A479 39277		S39277	
329	A479 32760	1.4460	S32900	