

ALLOY UNS No.	Werkstoff	Chemical Analysis %											Density		Temper	Tensile Rm (min)		Yield Rp 0.2% (min)		Elong. % min	Hardness HV	Application	
		C	Mn	Ni	Cr	Fe	Mo	Ti	Nb	N	Al	Other	g/cm ³	lb/in ³		ksi	MPa	ksi	MPa				
304L S30403	1.4306	0.035 max	2.0 max	8.0-11.0	18.0-20.0	bal								7.93	0.286	ANN	70	485	25	170	35	200 max	Lower carbon of 304 with good weldability.
316L S31603	1.4404	0.035 max	2.0 max	10.0-13.0	16.0-18.0	bal	2.0-2.5							7.93	0.286	ANN	70	485	25	170	35	200 max	Better corrosion resistance than 304 in chloride Good weldability.
	1.4435																						2.5-3
321 S32100	1.4541	0.080 max	2.0 max	9.0-12.0	17.0-19.0	bal		5XC -0.600						7.93	0.286	ANN	75	515	30	205	35	200 max	Titanium stabilised grade with good weldability, improved resistance to weld decay attack & better mechanical properties at elevated temperatures.
347 S34700	1.4546	0.080 max	2.0 max	9.0-12.0	17.0-19.0	bal			10XC -1.000					7.93	0.286	ANN	75	515	30	205	35	200 max	As for 321 but uses niobium as stabilising element.
21\6\9 S21900		0.080 max	8.0-10.0	5.5-7.5	19.0-21.5	bal								8	0.289	CW	142-162	979-1117	120	827	16	250 min	Good corrosion resistance, high mechanical properties.
FV607 S64607		0.12-0.16	0.5-1.2	0.4-0.9	10.0-11.7	bal	0.7-1.2							7.7	0.278	HT	130-152	900-1050	107	740	8	290-349	Martensitic grade showing good creep resistance.
17\4PH S17400	1.4542	0.070 max	2.0 max	3.0-5.0	15.0-17.5	bal						0.15-0.45		7.9	0.286	HT	155	1070	145	1000	5	300 min	Capable of developing high mechanical properties by solution treatment & age hardening.
15\5PH S15500		0.070 max	1.0 max	3.50-5.5	14.5-15.5	bal						0.15-0.45		7.8	0.282	HT	155	1070	145	1000	12	331-401	Capable of developing high mechanical properties by solution treatment and age hardening.
Alloy 75 N06075	2.4951	0.08-0.15	1.0 max	bal	18.0-21.0	5.0 max		0.20-0.60						8.37	0.303	ANN	100-120	690-830	46	300	30	230 max	High temperature oxidation resistance.
Alloy 263 N07263		0.04-0.08	0.6 Ma	bal	19.0-21.0	0.7 max	5.6-6.1	1.9-2.4						8.36	0.302	HT	140	970	90	620	39	250 min	High creep strength with good weldability.
Alloy 600 N06600	2.4816	0.15 max	1.0 max	72.0 min	14.0-17.0	6.0-10.0								8.42	0.304	ANN	80	550	35	240	30	200 max	Very good combination of strength & oxidation resistance.
Alloy 625 N06625	2.4856	0.10 max	0.5 max	bal	20.0-23.0	5.0 max	8.0-10.0	0.40 max	3.15-4.15			0.40 max		8.44	0.305	ANN	120	827	60	414	30	260 max	High temperature strength and corrosion resistance.
Alloy 718 N07718	2.4668	0.08 max	0.4 max	50.0-55.0	17.0-21.0	bal	2.80-3.30	0.65-1.15	4.75-5.50			0.20-0.80	Co 1.0 max	8.19	0.296	HT	185	1275	150	1034	12	331 min	Age hardenable, high strength nickel alloy with good sour well corrosion resistance.
Alloy X750 N07750	2.4669	0.08 max	1.0 max	70.0 min	14.0-17.0	5.0-9.0		2.25-2.75	0.70-1.20			0.40-1.00		8.25	0.298	HT	160	1103	100	689	20	260-360	High temperature strength performance.
MP35N R30035		0.03 max	0.2 max	33.0-37.0	19.0-21.0	1.0 max	9.0-10.5	1.0 max					Co bal	8.43	0.304	HT	220	1514	200	1380	10	528 max	Nickel cobalt alloy with very high strength, toughness and outstanding corrosion resistance.
CP Grade 2 R50400	3.7035	0.08 max				0.30 max		bal				0.03 max		4.51	0.163	ANN	50	345	40-65	275-450	20		Very high strength to weight ratio combined with excellent seawater corrosion resistance.
Ti 3Al/2.5V Grade 9 R56320	3.7194	0.08 max				0.25 max		bal				0.03 max	2.5-3.50	4.48	0.162	CWSR	125	860	105	725	10		High strength to weight ratio. Excellent corrosion resistance.
Ti 6Al/4V Grade 5 ELI R56401	3.7165												6.0	4.33	0.156	CWSR	159	1100	141	980	8		ELI grade, very high strength to weight ratio.
Ti 425 Ti 4Al/2.5V						1.5		bal					4.0			CWSR	146	1006	129	890	14		Very high strength to weight ratio with improved ductility.