

Table 2 - Common stainless steels

	316T DESIGNATIONS			CHEMICAL COMPOSITION ASTM/EN STANDARDS (Major elements only) % content is a maximum unless a range is indicated							Welding consumables
	ASTM	EN	Trade Name	C	Mn	Cr	Ni	Mo	N	Other	
Martensitic	410			0.15		11.5/13.5	0.75				Strengthened by heat treatment. Very poor weldability. Not generally welded.
		1.4006		0.08/0.15		11.5/13.5					
	420			0.15		12.0/14.0					
		1.4021		0.16/0.25		12.0/14.0					
	431			0.2		15.0/17.0	1.25/2.5				
		1.4507		0.12/0.22		15.0/17.0	2.5				
	440A			0.6/0.75		16.0/18.0		0.75			
	440B			0.75/0.95		16.0/18.0		0.75/0.9			
	1.4112		0.85/0.95		17.0/19.0		1.3				
	1.4125		0.95/1.2		16.0/18.0		0.75/0.9				
			0.95/1.2		16.0/18.0		0.8				
Ferritic		1.4003		0.03		10.5/12.5	0.3/1.0		0.03		309 L
			3CR12 <sup>®</sup>	0.03		10.5/12.5	1.5			Ti stabilised	
	409			0.03		10.5/11.7	0.5		0.03	Ti stabilised	Weldability poor. Generally only welded in thinner gauges. Welding mostly autogenous. If filler wire is used, 309L is preferred
		1.4512		0.03		10.5/12.5				Ti stabilised	
	430			0.12		16.0/18.0	0.75				
		1.4016		0.08		16.0/18.0					
		1.4509		0.03		17.5/18.5			0.045	Ti & Nb stabilised	
	439			0.07		17.0/19.0	0.5	0.04		Ti stabilised	
		1.451		0.05		16.0/18.0				Ti stabilised	
	444			0.025		17.5/19.5	1	1.8/2.5	0.035	Ti & Nb stabilised	
	1.4521		0.025		17.0/20.0		1.8/2.5		Ti stabilised		
446			0.02		23.0/27.0	0.75		0.25	1.7Al & 1.4 Si		
	1.4762		0.12		23.0/26.0						
Duplex	2304			0.03		21.5/24.5	3.0/5.5	0.1/0.6	0.05/0.2	0.05/0.6 Cu	2304/2205
		1.4362		0.03		22.0/24.0	3.5/5.5	0.1/0.6	0.05/0.2	0.1/0.6 Cu	
	2101	1.4162		0.04	4.0	21.0	1.35	0.1	0.2		
	2205			0.03		22.0/23.0	4.5/6.5	3.0/3.5	0.14/0.2		2205
		1.4462		0.03		21.0/23.0	4.5/6.5	2.5/3.5	0.10/0.22		
	2507			0.03		24.0/26.0	6.0/8.0	3.0/5.0	0.24/0.35	1.5/2.5 Cu	2507
	1.441		0.03		24.0/26.0	6.0/8.0	3.0/4.5	0.2/0.35	1.0/2.5 Cu		
Austenitic	201	1.4372		0.15	5.5/7.5	16.0/18.0	3.5/5.5		0.25		309L
	201L			0.03	5.5/7.5	16.0/18.0	3.5/5.5		0.25	0.2 Si	
		1.4371		0.03	6.0/8.0	16.0/17.0	3.5/5.5		0.15		
	301			0.15		16.0/18.0	6.0/8.0		0.10		308L
		1.4373		0.05/0.15		16.0/19.0	6.0/9.5	0.8	0.11		
	304			0.08		18.0/20.0	8.0/10.5		0.10		
		1.4301		0.07		17.0/19.5	8.0/10.5		0.11		
	304L	1.4306		0.03		18.0/20.0	10.0/12.0		0.10		309L
	309			0.2		22.0/24.0	12.0/15.0				
		1.4828		0.2		19.0/21.0	11.0/13.0		0.11	2.0 Si	
	309S			0.08		22.0/24.0	12.0/15.0			1.5 Si	
		1.4833		0.15		22.0/24.0	12.0/14.0		0.11		
	310			0.25		24.0/26.0	19.0/22.0			1.5 Si	310L
		1.4841		0.2		24.0/26.0	19.0/22.0		0.11	1.5/2.5 Si	
	310S			0.08		24.0/26.0	19.0/22.0			1.5 Si	
		1.4845		0.1		24.0/26.0	19.0/22.0		0.11	1.5 Si	
	316			0.08		16.0/18.0	10.0/14.0	2.0/3.0	0.10		316L/318
		1.4401		0.07		16.5/18.5	10.0/13.0	2.0/2.5	0.11		
		1.4436		0.05		16.5/18.5	10.5/13.0	2.5/3.0	0.11		
	316L			0.03		16.0/18.0	10.0/14.0	2.0/3.0	0.10		316L/316Nb
		1.4404		0.03		16.5/18.5	10.0/13.0	2.0/2.5	0.11		
		1.4432		0.03		16.5/18.5	10.5/13.0	2.5/3.0	0.11		
316Ti			0.08		16.0/18.0	10.0/14.0	2.0/3.0	0.10	Ti stabilised	316Nb	
	1.4571		0.08		16.5/18.5	10.5/13.5	2.0/2.5		Ti stabilised		
321	1.4541		0.08		17.0/19.0	9.0/12.0			Ti stabilised	347	
347	1.455		0.08		17.0/19.0	10.0/13.0			Nb stabilised		
904L			0.02		19.0/23.0	23.0/28.0	4.0/5.0	0.0/0.15	1.0/2.0 Cu	904L	
	1.4539		0.02		19.0/21.0	24.0/26.0	4.0/5.0		1.2/2.0 Cu		