

Stainless Steels

Interlloy Grade	Nearest Related Specification	And Properties					Description & Applications
		C	Ni	Cr	Mo	Other	
Austenitic Stainless Steels							
303	AS2837-1986-303 AISI TYPE 303 BS970-303 S31 & S42 ASTM A582/582M-303	0.15 MAX	9.00	18.0	0.8	0.25S	Free machining stainless, used where extensive machining is involved.
304	AS2837-1986-304 AISI TYPE 304 BS970-304 ASTM A276-304	0.08 MAX	9.0	19.0	-	-	Readily formed and welded stainless, used mainly in domestic, dairy and decorative appliances.
310	AS 2837-310 AISI TYPE 310 BS970-310 S31 ASTM A276-310	.15 MAX	21%	25%	-	-	For continuous high temperature service in the range 850 - 1000°C.
316	AS2837-1986-316 AISI TYPE 316 BS970-316 S31 & S33 ASTM A276-316	0.08 MAX	12.0	17.0	2.25	-	For certain corrosive conditions particularly those involving Pit-type corrosion in the chemical and allied industries.
316L	AS2837-1986-316L AISI TYPE 316L BS970-316 S11 & S13 ASTM A276-316L	0.03 MAX	12.0	17.0	2.25	-	Low carbon version of 316 quality showing added resistance to weld decay.
321	AS2837-1986-321 AISI TYPE 321 BS970-321 S31 ASTM A276-321	0.08 MAX	10.0	18.0	-	0.50Ti	Titanium stabilised weldable grade. Corrosion resistant and scaling resistant at temperatures up to 800°C.
Martensitic Stainless Steels							
410	AS 2837-410 AISI TYPE 410 BS 970-410 S21 ASTM A276-410	.12	.5	12.5	-	-	A hardenable grade of stainless with good corrosion resistance properties.
416	AS2837-1986-416 AISI TYPE 416 BS970-1991 416 ASTM A582-416	0.10	1.00 MAX	12.5	0.6 MAX	1.2S	General engineering applications where free machining properties are required. Slightly inferior corrosion resistance to Type 410.
420	AS2837-1986-420 AISI TYPE 420 BS970-420 S29 ASTM A276-42000	0.25	1.00 MAX	12.5	-	-	General engineering applications such as pump and valve parts.
420C	BS970: PART 3 1991-420 S37 ASTM A276-92-S420 S42010	0.30	1.00 MAX	12.5	-	-	Stainless developed to provide higher hardness after heat treatment.
431	AS2837-1986-431 AISI TYPE 431 BS970: PART 1 1983-431 S29 ASTM A276-431	0.18	2.20	16.0	-	-	Hardenable steel with corrosion resistance approaching Type 302. Suited for pump shafts, or other uses where high tensile properties are required.
440C	AS2837-1986-440C AISI TYPE 440C ASTM A276-440C	1.10	1.00 MAX	17.0	0.75 MAX	-	High carbon martensitic grade. High attainable hardness make it suitable to abrasion and wear resistance.
Precipitation Hardened Stainless Steels							
630 17-4PH	AS2837-1986-630 AISI TYPE 630 ASTM A56/A564M-630 SAE J467 17-4PH UNS S17400	0.07 MAX	4	16	-	3.70 Cu 0.25 Nb	Martensitic age hardenable stainless. Good weldability and corrosion resistance comparable to 304. Suitable for pump shafts, boat shafts, valve stems etc.
Duplex Stainless Steel							

2205	ASTM-A276-98B UNS-S31803 W.NR 1.4462 DIN X 2 Cr Ni Mo N 22-5-3	0.03 MAX	5.50	22.00	3.00	0.14N	A ferritic/austenitic stainless steel providing an excellent combination of high yield strength and corrosion resistance. Better than 316 in most conditions.
------	--	-------------	------	-------	------	-------	--

Interlloy believes the information provided is accurate and reliable. However no warranty of accuracy, completeness or reliability is given, nor will any responsibility be taken for errors or omissions.