

Grade	Chemical composition	Tensile Strength	Maximum Use Temp	Melting Point	Ductility (%)	Hardness (HB)	Magnetic
Austenitic							
201	16-18% Cr, 3.5-5.5% Ni, 5.5-7.5% Mn	515 MPa (75 Ksi)	700 °C (1292 °F)	1400-1450°C (2552-2642°F)	40%	250	No
202	17-19% Cr, 4-6% Ni, 7.5- 10% Mn	515 MPa (75 Ksi)	800 °C (1472 °F)	1400-1450°C (2552-2642°F)	40%	250	No
205	16.5-18% Cr, 1-1.75% Ni, 14-15% Mn	515 MPa (75 Ksi)	800 °C (1472 °F)	1400-1450°C (2552-2642°F)	40%	250	No
301	16-18% Cr, 6-8% Ni	515 MPa (75 Ksi)	871 °C (1600 °F)	1399-1421°C (2550-2590°F)	40%	201	No
302	17-19% Cr, 8-10% Ni	585 MPa (85 Ksi)	870 °C (1598 °F)	1400-1420°C (2550-2590°F)	40%	201	No
303	17-19% Cr, 8-10% Ni, 0.15-0.35% S	690 MPa (100 Ksi)	760 °C (1400 °F)	1400-1420°C (2550-2590°F)	35%	262	No
304	18-20% Cr, 8-10.5% Ni	621 MPa (90 Ksi)	870 °C (1598 °F)	1399-1454°C (2550-2650°F)	45%	201	No
305	17-19% Cr, 10-13% Ni	515 MPa (75 ksi)	815 °C (1500 °F)	1375-1425°C (2507-2597°F)	40%	205	No
308	19-21% Cr, 9-11% Ni	620 MPa (90 ksi)	870 °C (1598 °F)	1400-1425°C (2552-2597°F)	35%	217	No
309	23% Cr, 13% Ni	620 MPa (89 Ksi)	1000 °C (1832 °F)	1400-1455°C (2550-2651°F)	25%	180	No
314	24-26% Cr, 19-22% Ni	620 MPa (90 Ksi)	1100 °C (2012 °F)	1399-1421°C (2550-2590°F)	45%	217	No
316	16-18% Cr, 10-14% Ni, 2-3% Mo	579 MPa (84 Ksi)	800 °C (1472 °F)	1371-1399°C (2500-2550°F)	45%	217	No
317	18-20% Cr, 11-15% Ni, 3-4% Mo	585 MPa (85 Ksi)	816 °C (1500 °F)	1370-1400°C (2500-2550°F)	40%	217	No
321	17-19% Cr, 9-12% Ni, 0.7% Ti	620 MPa (90 Ksi)	816 °C (1500 °F)	1400-1425°C (2550-2600°F)	45%	217	No

347	17-19% Cr, 9-12% Ni, 0.8% Nb	690 MPa (101 Ksi)	816 °C (1500 °F)	1400-1425 °C (2550-2600 °F)	45%	217	No
904L	19-23% Cr, 23-28% Ni, 4.5% Mo	490 MPa (71 Ksi)	400 °C (752 °F)	1350-1400 °C (2462-2552 °F)	35%	200	No
A2	18% Cr, 8% Ni (Equivalent to 304)	505 MPa (73 ksi)	870 °C (1598 °F)	1400-1450 °C (2552-2642 °F)	40%	123	No
18/8	18% Cr, 8% Ni	505 MPa (73 ksi)	870 °C (1598 °F)	1400-1450 °C (2552-2642 °F)	40%	123	No
18/10	18% Cr, 10% Ni	520 MPa (75 ksi)	870 °C (1598 °F)	1400-1450 °C (2552-2642 °F)	40%	129	No
Ferritic							
405	11.5-14.5% Cr	585 MPa (85 Ksi)	815 °C (1499 °F)	1480-1530 °C (2700-2790 °F)	20%	200	Yes
408	11% Cr, 8- 10% Ni	505 MPa (73 Ksi)	815 °C (1499 °F)	1400-1455 °C (2550-2651 °F)	25%	170	Yes
409	10.5-11.75% Cr	448 MPa (65 Ksi)	815 °C (1499 °F)	1425-1510 °C (2597-2750 °F)	25%	180	Yes
414	11.5-13% Cr	500 MPa (73 Ksi)	650 °C (1202 °F)	1425-1510 °C (2597-2750 °F)	20%	250	Yes
429	14-16% Cr	450 MPa (65 Ksi)	815 °C (1499 °F)	1425-1510 °C (2597-2750 °F)	25%	200	Yes
430	16-18% Cr	450 MPa (65 Ksi)	815 °C (1499 °F)	1425-1510 °C (2597-2750 °F)	25%	200	Yes
434	16-18% Cr, 1% Mo	540 MPa (78 Ksi)	815 °C (1499 °F)	1426-1510 °C (2600-2750 °F)	25%	200	Yes
436	17% Cr, 1.25% Mo	459 MPa (67 Ksi)	815 °C (1499 °F)	1425-1510 °C (2600-2750 °F)	25%	200	Yes
442	18-23% Cr	515-550 MPa (77-80 Ksi)	925-980 °C (1700/1800 °F)	1065-1120 °C (1950-2048 °F)	20%	250	Yes
444	17-20% Cr, 1.8-2.5% Mo	415 MPa (60 Ksi)	950 °C (1752 °F)	1405-1495 °C (2561-2723 °F)	25%	200	Yes
18/0	18% Cr, 0% Ni	450 MPa (65 ksi)	760 °C (1400 °F)	1425-1510 °C (2597-2750 °F)	30%	200	Yes

Martensitic							
410	11.5-13.5% Cr, 0.15% C	500-1400 MPa (73-203 Ksi)	650 °C (1202 °F)	1482-1532 °C (2700-2790 °F)	15%	250	Yes
410S	11.5-13.5% Cr, 0.08% C	444 MPa (64 Ksi)	705 °C (1300 °F)	1482-1532 °C (2700-2790 °F)	20%	250	Yes
416	12-14% Cr, 0.15-0.35% S	517 MPa (75 Ksi)	760 °C (1400 °F)	1480-1530 °C (2696-2786 °F)	25%	250	Yes
420	12-14% Cr, 0.15-0.45% C	586 MPa (85 Ksi) when annealed	650 °C (1202 °F)	1454-1510 °C (2649-2750 °F)	20%	250	Yes
422	11.5-14% Cr, 0.20-0.25% C	760 MPa (110 Ksi)	760 °C (1400 °F)	1483 °C (2700 °F)	15%	250	Yes
431	15-17% Cr, 1.25-2.5% Ni	500-1500 MPa (73-217 Ksi)	650 °C (1202 °F)	1482-1532 °C (2700-2790 °F)	20%	250	Yes
440	16-18% Cr, 0.75-1.20% C	758 MPa (110 Ksi)	760 °C (1400 °F)	1483 °C (2700 °F)	15%	250	Yes
Precipitation							
630	16-17% Cr, 4-5% Ni, 3-5% Cu	1103 MPa (160 Ksi)	316 °C (600 °F)	1404-1440 °C (2560-2625 °F)	15%	350	Yes