

Material Properties Chart

AISI Type	Unified #	C	Cr	Mn	Ni	P	S	Si	Mo	Rem.	Other	gm/cc Density	Hardness	Kpsi Tensile Strength	Kpsi Yield Strength
302	S30200	0.15 max	17.00-19.00	2.00 max	8.00-10.00	0.045 max	0.030 max	1.00 max	-	-	-	7.91	RC25-39	80-180	50-150
304	S30400	0.08 max	18.00-20.00	2.00 max	8.00-10.50	0.045 max	0.030 max	1.00 max	-	-	-	7.91	RC25-39	80-180	50-150
304L	S30403	0.03 max	18.00-20.00	2.00 max	8.00-12.00	0.045 max	0.030 max	1.00 max	-	-	-	7.91	RC25-39	80-180	40-150
316	S31600	0.08 max	16.00-18.00	2.00 max	10.00-14.00	0.045 max	0.030 max	1.00 max	2.00-3.00	-	-	7.97	RC25-39	80-180	40-150
316L	S31603	0.03 max	16.00-18.00	2.00 max	10.00-14.00	0.045 max	0.030 max	1.00 max	2.00-3.00	-	-	7.97	RC25-39	80-180	50-150
410	S41000	0.15 max	11.50-13.50	1.00 max	-	0.040 max	0.030 max	1.00 max	-	-	-	7.64	RC38-43	170-201	130-170
420	S42000	0.15 max	12.00-14.00	1.00 max	-	0.040 max	0.030 max	1.00 max	-	-	-	7.74	RC45-55	215-300	180-240
430	S43000	0.12 max	16.00-18.00	1.00 max	-	0.040 max	0.030 max	1.00 max	-	-	-	7.74	RB85-95	75	45
440C	S44004	0.95-1.20	16.00-18.00	1.00 max	-	0.040 max	0.030 max	1.00 max	0.75 max	-	-	7.67	RC58-62	270-300	260-290
52100 J404	G52986	0.95-1.10	1.30-1.60	0.25-0.45	-	0.025 max	0.025 max	0.15-0.35	-	-	-	7.83	RC60-67	310-340	280-310
1008 thru 1022	G10080 thru G10220	0.23 max		0.30-1.00		0.030 max	0.050 max					7.86	RC60-65*	45-60	35-50
1085 High Carbon	G10850	0.80-0.94		0.70-1.00		0.030 max	0.050 max					7.84	RC60-67	310-340	280-310
Aluminum	A92017	AA-2017	Cr 0.10 max	Cu 3.5-4.5	Fe 0.7 max	Mg 0.40-0.8	Mn 0.40-1.0	Si 0.20-0.8	Zn 0.25 max	Al = rem	Ti + Zr 0.15 max	2.78	n/a	27	11
Brass (Cartridge)	C26000	CDA-260	Cu 68.5-71.5	Fe 0.05 max	Pb 0.07 max	-	-	-	-	Zn = rem	Cu + sum of elements 99.7 min	8.47	RB85-95	70	48

This chart represents information from the Metal & Alloys in the Unified Numbering System 10th Edition book for determination of chemical conformance.

* Case hardened only