

Alloy	chemical composition								
	C %	Mn %	Si %	Ni %	Cr %	Mo %	P ≤ %	S% ≤ %	Other %
Ic 1010	0.05-0.15	0.30-0.60	0.40-0.80				0.04	0.04	
Ic 1020	0.15-0.25	0.20-0.60	0.20-0.60				0.04	0.045	
Ic 1030	0.25-0.35	0.70-1.00	0.20-0.60				0.04	0.045	
Ic 1040	0.35-0.45	0.70-1.00	0.20-1.00				0.04	0.045	
Ic 1050	0.45-0.55	0.70-1.00	0.20-1.00				0.04	0.045	
Ic 1060	0.55-0.65	0.60-0.90	0.20-1.00				0.04	0.045	
Ic 1090	0.85-0.98	0.60-0.90	0.20-1.00				0.04	0.045	
Ic 2345	0.40-0.50	0.70-0.90	0.20-0.80	3.25-3.75			0.04	0.04	
Ic 3120	0.15-0.25	0.60-0.80	0.20-0.80	1.1-1.4	0.55-0.75		0.04	0.04	
Ic 4130	0.25-0.35	0.40-0.70	0.20-0.80		0.80-1.10	0.15-0.25	0.04	0.04	
Ic 4140	0.35-0.45	0.70-1.00	0.20-0.80		0.80-1.10	0.15-0.25	0.04	0.04	
Ic 4150	0.45-0.55	0.7-1.00	0.20-0.80		0.8-1.10	0.15-0.25	0.04	0.04	
Ic 4330	0.28-0.36	0.60-1.00	0.20-0.80	1.65-2.00	0.65-1.00	0.30-0.45	0.04	0.04	
Ic 4340	0.36-0.44	0.60-0.90	0.20-0.80	1.65-2.00	0.70-0.90	0.20-0.30	0.25	0.024	
Ic 4620	0.15-0.25	0.40-0.70	0.20-0.80	1.65-2.00		0.20-0.30	0.04	0.045	
Ic 6120	0.15-0.25	0.70-0.90	0.20-0.80		0.70-1.00		0.04	0.04	
Ic 6150	0.45-0.55	0.65-0.95	0.20-0.80		0.80-1.10		0.04	0.045	V:15min
Ic 8620	0.15-0.25	0.65-0.95	0.20-0.80	0.40-0.70	0.40-0.70	0.15-0.25	0.04	0.045	
Ic 8630	0.25-0.35	0.65-0.95	0.20-0.80	0.40-0.70	0.40-0.70	0.15-0.25	0.04	0.045	
Ic 8640	0.35-0.45	0.70-1.05	0.20-0.80	0.40-0.70	0.40-0.60	0.15-0.25	0.04	0.04	
Ic 8665	0.60-0.70	0.70-1.05	0.20-0.80	0.40-0.70	0.40-0.60	0.15-0.25	0.04	0.04	
Ic 8730	0.25-0.35	0.70-0.90	0.20-0.80	0.40-0.70	0.40-0.60	0.15-0.30	0.04	0.04	
Ic 8740	0.35-0.45	0.75-1.00	0.20-0.80	0.40-0.70	0.40-0.60	0.20-0.30	0.04	0.04	
Ic 52100	0.95-1.10	0.25-0.55	0.20-0.80		1.30-1.60		0.04	0.045	
Ic 1722AS	0.27-0.34	0.45-0.65	0.55-0.75		1.0-1.50	0.40-0.60	0.04	0.04	

**Properties of separately cast test bars of carbon and low alloy steels**

Alloy	Heat treatment Condition	Tensile strength		0.2% yield strength		%Elongation range	Hardness range or max
		English(PSIA)	Metric(MPa)	English(PSIA)	Metric(MPa)		
Ic 1010	annealed	50-60000	345-414	30-35000	207-241	30-35	50-55Rb
Ic 1020	annealed	60-70000	414-483	40-45000	276-310	25-40	80Rb
Ic 1025	annealed	63-73000	434-503	42-47000	290-324	25-35	80Rb
Ic 1030	Annealed	65-75000	448-517	45-50000	310-345	20-30	75Rb
	hardened	85-150000	586-1034	60-150000	414-1034	0-15	20-50Rc
Ic 1035	Annealed	70-80000	483-552	45-55000	310-379	20-30	80Rb
	hardened	90-150000	621-1034	85-150000	586-1034	0-15	25-52Rc
Ic 1045	Annealed	80-90000	552-621	50-60000	345-414	20-25	100Rb
	hardened	100-180000	690-1241	90-180000	621-1241	0-10	25-57Rc
Ic 1050	Annealed	90-110000	621-758	50-65000	345-448	20-25	100Rb
	hardened	125-180000	862-1241	100-180000	690-1241	0-10	30-60Rc
Ic 1060	Annealed	100-120000	690-827	55-70000	379-483	12-20	25Rc
	hardened	120-200000	827-1379	100-180000	690-1241	0-5	30-60Rc
Ic 1090	Annealed	110-150000	758-1034	70-80000	483-552	5-10	30Rc
	hardened	130-180000	896-1241	130-180000	876-1241	0-3	37-50Rc
Ic 2345	Annealed	-	-	-	-	-	100Rb
	hardened	130-200000	896-1394	110-180000	758-1241	5-10	30-58Rc
Ic 3120	annealed						100Rb
Ic 4130	Annealed						100Rb
	hardened	130-170000	896-1172	100-130000	690-896	5-20	23-49Rc
Ic 4140	Annealed						100Rb
	hardened	130-200000	876-1394	100-155000	690-1069	5-20	29-57Rc
Ic 4150	Annealed						100Rb
	hardened	140-200000	965-1394	120-180000	827-1241	5-10	25-58Rc
Ic 4330	Annealed						20Rc
	hardened	130-190000	876-1310	100-175000	690-1207	5-20	25-48Rc
Ic 4340	Annealed						20Rc
	hardened	130-200000	876-1394	100-180000	690-1241	5-20	20-55Rc
Ic 4620	Annealed						100Rb
	hardened	110-150000	758-1034	90-130000	621-896	10-20	20-32Rc
Ic 6120	annealed						100Rb
Ic 6150	Annealed						100Rb
	hardened	140-200000	965-1394	120-180000	827-1241	5-10	30-60Rc
Ic 8620	Annealed						100Rb
	hardened	100-130000	690-896	80-110000	552-758	10-20	20-45Rc
Ic 8630	Annealed						100Rb
	hardened	120-170000	827-1172	100-130000	690-896	7-20	25-50Rc
Ic 8640	Annealed						20Rc
	hardened	130-200000	876-1394	100-180000	690-1241	5-20	30-60Rc
Ic 8665	Annealed						25Rc
	hardened	170-220000	1172-1517	140-200000	965-1394	0-10	-
Ic 8730	Annealed						100Rb
	hardened	120-170000	827-1172	110-150000	758-1034	7-20	-
Ic 8740	Annealed						100Rb
	hardened	140-200000	965-1394	120-180000	827-1241	5-10	30-60Rc
Ic 52100	Annealed	180-230000	-	-	-	-	25Rc
	hardened		1241-230000	140-180000	965-1241	1-7	30-65Rc
Ic 1722AS	Annealed	130-170000	876-1172	100-140000	690-1241	6-12	25Rc
	hardened						25-48Rc