



Properties of Separately Cast Test Bars of Aluminum Base Alloys					
Alloy	Tensile Strength		0.2% Yield Strength		% Elongation Range (in 2.5cm)
	English PSI	Metric MPA	English PSI	Metric MPA	
356	32-40,000	221-276	22-30,000	152-207	3-7
A-356	38-48,000	262-331	28-36,000	193-248	3-10
ZA-8 Zinc					

Properties of Separately Cast Test Bars of Copper Base Alloys							
Alloy (CDA No.)		Tensile Strength		0.2% Yield Strength		% Elongation Range (in 2.5cm)	Hardness (RB) Range
		English PSI	Metric MPA	English PSI	Metric MPA		
Al. Bronze D (955)	A.C.	90-100,000	621-690	40-50,000	276-347	6-10	91-96
	H.T.	110-120,000	758-827	60-70,000	414-552	5-8	93-98
Tin Bronze		40-50,000	276-347	18-30,000	124-207	20-35	40-50
MnBr, A		65-75,000	448-517	25-40,000	172-276	16-24	60-65
MnBr, C		110-120,000	758-827	60-70,000	414-483	8-16	95-100
BeCu 20C (825)	A.C.	70-80,000	483-552	40-45,000	276-310	18-23	75-80
	Hard.	110-160,000	758-1103	90-130,000	621-896	1-4	25-44(Rc)

Properties of Separately Cast Test Bars of Iron and Low Alloy Steels							
Alloy	Condition	Tensile Strength		0.2% Yield Strength		% Elongation Range (in 2.54cm)	Hardness Range or Max
		English PSI	Metric MPA	English PSI	Metric MPA		
IC 1010	Annealed	50-60,000	345-414	30-35,000	207-241	30-35	50-55Rb
IC 1020	Annealed	60-70,000	414-483	40-45,000	276-310	25-40	80Rb
IC 1030	Annealed	65-75,000	448-517	45-50,000	310-345	20-30	75Rb
	Hardened	85-150,000	586-1034	60-150,000	414-1034	0-15	20-50Rc
IC 1035	Annealed	70-80,000	483-552	45-55,000	310-379	20-30	80Rb
	Hardened	90-150,000	621-1034	85-150,000	586-1034	0-15	25-52Rc
IC 1045	Annealed	80-90,000	552-621	50-60,000	345-414	20-25	100Rb
	Hardened	100-180,000	690-1241	90-180,000	621-1241	0-10	25-57Rc
IC 1050	Annealed	90-110,000	621-758	50-65,000	345-448	20-25	100Rb
	Hardened	125-80,000	862-1241	100-180,000	690-1241	0-10	30-60Rc
IC 1060	Annealed	100-120,000	690-827	55-70,000	379-483	12-20	25Rc
	Hardened	120-200,000	827-1379	100-180,000	690-1241	0-5	30-60Rc
IC 4140	Annealed	N/A	N/A	N/A	N/A	N/A	100Rb
	Hardened	130-200,000	876-1394	100-155,000	690-1069	5-20	29-57Rc
IC4340	Annealed	N/A	N/A	N/A	N/A	N/A	20Rc
	Hardened	130-200,000	876-1394	100-180,000	690-1241	5-20	20-55Rc

Properties of Separately Cast Test Bars of Hardenable, Stainless Steels							
Alloy	Condition	Tensile Strength		0.2% Yield Strength		% Elongation Range (in 2.54cm)	Hardness Range or Max
		English PSI	Metric MPA	English PSI	Metric MPA		
IC 416	Annealed	N/A	N/A	N/A	N/A	N/A	100Rb
	Hardened	95-200,000	655-1394	75-160,000	517-1103	8-Mar	94Rb-45Rc
IC 440A	Annealed	N/A	N/A	N/A	N/A	N/A	30Rc
	Hardened	N/A	N/A	N/A	N/A	N/A	35-56Rc
IC 440C	Annealed	N/A	N/A	N/A	N/A	N/A	35Rc
	Hardened	N/A	N/A	N/A	N/A	N/A	40-60Rc
IC 17-4	Annealed	N/A	N/A	N/A	N/A	N/A	36Rc
	Hardened	150-190,000	1034-1310	140-160,000	965-1103	6-20	34-44Rc

Properties of Separately Cast Test Bars of Austenitic Stainless Steels							
Alloy	Condition	Tensile Strength		0.2% Yield Strength		% Elongation Range (in 2.54cm)	Hardness Range or Max
		English PSI	Metric MPA	English PSI	Metric MPA		
304	Annealed	70-85,000	483-586	40-50,000	276-345	35-50	90
316	Annealed	70-85,000	483-586	40-50,000	276-345	35-50	90
303	Annealed	65-75,000	418-517	30-35,000	207-241	35-45	90