

Manganese Bronze

		Composition (% maximum except as indicated)										Sand Cast Mechanical Properties				Pour Temperature	
Copper Alloy Number	Ingot Number	Copper (Cu) incl Ni	Tin (Sn)	Lead (Pb)	Zinc (Zn)	Iron (Fe)	Nickel (Ni) incl Co	Aluminum (Al)	Manganese (Mn)	Other	Total Named Elements	Tensile ksi	Yield ksi	Elongation %	Brinell 500 kg Load	Light Castings	Heavy Castings
C86100		66.0-68.0	0.10	0.10	balance	2.0-4.0		4.5-5.5	2.5-5.0		99.0	check CDA for typical props					
C86200	423	60.0-66.0	0.10	0.10	22.0-28.0	2.0-4.0	0.8	3.0-4.9	2.5-5.0		99.0	90	45	18		1950-2150	1800-1950
C86300	424	60.0-66.0	0.10	0.10	22.0-28.0	2.0-4.0	0.8	5.0-7.5	2.5-5.0		99.0	110	60	12	223 [3000 kg]	1950-2150	1800-1950
C86400	420	56.0-62.0	0.50-1.0	0.50-1.3	34.0-42.0	0.40-2.0	0.8	0.50-1.5	0.10-1.0		99.0	60	20	15		1900-2050	1750-1900
C86500	421	55.0-60.0	1.0	0.30	36.0-42.0	0.40-2.0	0.8	0.50-1.5	0.10-1.5		99.0	47	17	18	100 [3000 kg]		
C86700	422	55.0-60.0	1.5	0.50-1.5	30.0-38.0	1.0-3.0	0.8	1.0-3.0	1.0-3.5		99.0	80	32	15		1900-2000	1750-1900
C86800		53.5-57.0	1.0	0.20	balance	1.0-2.5	2.5-4.0	2.0	2.5-4.0		99.0	check CDA for typical props				1950-2150	1800-1950

*a = ASTM spec B22 has compression deformation limit minimum of 55 ksi