



# Manganese Bronze

Manganese Bronze is a copper-zinc based alloy, containing small amounts of manganese, aluminum and iron. The right combination of these alloying elements increases the strength of the material. Manganese Bronzes are most commonly used in applications that require some corrosion resistance, anti-seizing properties, coupled with high strength. Typical applications include high load bearings, bushings and gears. MCC grade MC90 is used only as a core material for Gear Bronzes when bi-metallic is required. It provides exceptional strength for keyways and splines.

Typical Chemistry Range									
Grade	Cu	Sn	Ni	Pb	Fe	Zn	Al	Mn	Similar Grades
863	60.0-66.0	0.0-.20	0.0-1.0	0.0-.20	2.0-4.0	22.0-28.0	5.0-7.0	2.5-5.0	C86300
MC60	59.0-63.0	0.0-1.0	0.0-0.5	.85-1.35	0.0-0.8	32.0-37.0	1.2-1.6	0.0-1.0	C86400, C86500
MC60M	57.0-64.0	0.0-1.0	0.0-0.5	0.7-1.2	0.2-0.8	34.0-39.0	1.2-1.4	0.1-1.0	C86400, C86500
MC90 (core material)	61.0-64.0	0.0-2.0	0.0-0.5	.85-1.2	2.0-3.5	25.0-27.0	3.7-4.1	3.0-4.0	-

Please contact your MCC International Representative for other Bronze Alloys available

Typical Mechanical Properties				
Grade	Tensile Strength (psi)	Yield Strength (psi)	Elongation (%)	BHN
863	110,000	60,000	12 min.	210-225
MC60	65,000	27,000	17 min.	120-135
MC60M	63,000	25,000	17 min.	110-125
MC90 (core material)	90,000	45,000	13 min.	180-210





MCC International's mission is to be a safe, stable, growing company; committed to our Customers, Employees and Owners by continually improving in all aspects of our business.



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