

# C86300 Manganese Bronze / C863 Manganese Bronze

## C86300 (Manganese Bronze)

Chemical Composition (unless shown as range or min)								
unit %	Cu(1)	Al	Fe	Pb	Mn	Ni(2)	Sn	Zn
min/max	60.0~66.0	5.0~7.5	2.0~4.0	max0.2	2.5~5.0	max1.0	max0.2	22.0~28.0
Nominal	63	6.2	3	/	3.7	/	/	25

(1) In determining Cu min, Cu may be calculated as Cu + Ni.

(2) Ni value includes Co.

Note: Cu + Sum of Named Elements, 99.0% min.



Straight Bushing



Flange Bushing



Thrust Washer



Guide Bushing



Wear Plate



## APPLICATIONS

Maintenance-free sliding elements  
Various structural shapes for tool- and  
mould making.

Maintenance-free thanks to integrat-  
ed solid lubricants. Long service life,  
wear-resistant, corrosion-resistant,  
dirt-resistant.

We manufactures bushings used in  
die sets, metal stamping dies, molds  
special machines and heavy equip-  
ment of all types.

# C86300 Manganese Bronze / C863 Manganese Bronze

## MECHANICAL PROPERTIES:

Temper	Section Size	Cold Work	Typ/ Min	Temp	Tensile Strength	Yield Strength (0.5% ext. under load)	Yield Strength (0.2% offset)	Yield Strength (0.05% offset)	EI	Rockwell Hardness	Vickers Hard.	Brinell Hard.	Shear Strength	Fatigue Strength*	Izod Impact Strength
	in	%	/	F	ksi	ksi	ksi	ksi	%	B C F 30T	500ksi	500/3000	ksi	kai	FT-LB
	mm			C	Mpa	Mpa	Mpa	Mpa					Mpa	Mpa	J
As Sand Cast															
M01	0	0	Typ	68	119	62			18			255		25	15
	0			20	821	427			18			255		172	20
As Centrifugal Cast															
M02	0	0	SMIN	68	110	60			18						0
	0			20	785	414			18						0
As Centrifugal Cast															
M07	0	0	SMIN	68	110	62			18						0
	0			20	785	427			18						0
As Sand Cast															
M01	0	0	SMIN	68	110	60			18			223			0
	0			20	760	415			18			223			0

\*Fatigue Strength:  $100 \times 10^6$  cycles, unless indicated as [N]X  $10^6$ .

**NOTE: Information courtesy of Copper.org**

Product	Specification
Centrifugal	AMS 4855 ASTM B271 SAE J462 J461
Continuous	ASTM B505 SAE J462 J461
Fittings	ASME B16.15 SB62 B16.32 B16.26 B16.23 B16.18 ASTM B62 FEDERAL WW-P-460
Flanges	ASME SB62 B16.24 ASTM B62
Ingot	ASTM B30
Precision	MILITARY MIL-C-11866
Sand	AMS 4855 ASME SB62 ASTM B584 B62 SAE J461 J462
Unions	FEDERAL WW-U-516



*viiplus*