

CMA1 AS-1565 Grade C95710

SAND AND CHILL CASTINGS



James Coppel Lee

ABOUT

CMA1 is an Aluminium Manganese Bronze.

CMA1 has excellent corrosion and mechanical qualities. Excellent impact quality.

EQUIVALENT TO

Britain	BS1400 CMA1
USA	ASTM B 505 95700
Japan	
Germany	

NOMINAL CHEMICAL ANALYSIS

CHEMICAL COMPOSITION (Maximum % Unless Otherwise Listed)									OTHER ELEMENTS (*NOTES)
Copper Cu	Tin Sn	Zinc Zn	Nickel Ni	Lead Pb	Phos P	Alum Al	Iron Fe	Mang Mn	
71 min	1.0	0.50	1.50- 3.0	0.05	0.05	7.0- 8.5	2.0- 4.0	11.0- 14.0	Si 0.15 *Ni max. incl. Co.

MECHANICAL PROPERTIES

TENSILE (MPa)		ELONGATION (5-65/50% MIN.)		.2% PROOF (MPa)		HARDNESS RB	
Sand Cast	Chill Cast	Sand Cast	Chill Cast	Sand Cast	Sand Cast	Sand Cast	Chill Cast
650	670	18	7	280	310	160	160

Compressive Strength 0.1% Permanent Set	100 MPa (15,000 psi)
Specific Gravity	7.6
Machinability Rating (Free Machining Brass=100)	50
Max. Operating Temperature	260oC (500oF)
Stress Relieving Temperature	316oC (600oF)
Time at Temperature	1 hour per 25mm of section thickness

APPLICATIONS

- Heavy Load Bearings
- Marine, Chemical Parts
- Wear Plates
- Parts for non- sparking.