

CHROME COPPER AS-1565 Grade C81500 HT



James Coppel Lee

J47 SAND CASTINGS

ABOUT

C81500 is a heat treatable copper to give increased hardness and wear resistance, while maintaining good electrical and thermal conductivity. The increase in hardness also gives the alloy good machining properties, particularly if threads are to be machined. Has very good corrosion resistance, strength and ductility.

EQUIVALENT TO

James Coppel Lee Brand: J47

USA

Japan

Germany

NOMINAL CHEMICAL ANALYSIS

CHEMICAL COMPOSITION (Maximum % Unless Otherwise Listed)									OTHER ELEMENTS (*NOTES)
Copper Cu	Chrome Cr	Zinc Zn	Nickel Ni	Lead Pb	Tin Sn	Alum Al	Iron Fe	Silicon Si	
98 min	0.40- 1.50	0.25	-	0.20	0.10	0.10	0.10	0.15	

MECHANICAL PROPERTIES / Typical

TENSILE Sand Cast Precipitation Hardened		ELONGATION (5-65/50% MIN.)		.2% PROOF		HARDNESS	
MPa	KSi			MPa	KSi	RB	HB
270	39	18	18	170	25	62	105

Electrical Conductivity % IACS	82
Specific Gravity	8.82 g/cm ³
Machinability Rating (Free Machining Brass=100)	25
Max. Operating Temperature	250 (482 F)
Stress Relieving Temperature	280oC (500oF)
Time at Temperature	1 hour per 25mm of section thickness

APPLICATIONS

- Electrical Contact Blocks
- Resistance Welding gun parts.
- Threaded Copper Components