COPPER AS-1567 -147 C14700 (SULPHUR COPPER)



WROUGHT PRODUCT, EXTRUDED ROD & BAR

ABOUT

Sulphur Copper has machinability close to that of free machining brass as well as retaining good electrical conductivity.

EQUIVALENT TO

Britain BS-2874 – C111
USA ASTM -B301-c14700
Japan

Germany

APPLICATIONS

• Electrical components where threading or fine machining is required.

Nominal Composition	
Copper %	REM
Phosphorus %	0.01
Oxygen %	
Sulphur %	0.4
Silver %	
Tellurium %	
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Typical Mechanical Properties		Temper: Drawn		
	Size	Up to 13 mm	13 to 50 mm	Over 50 mm
Tensile	MPa	340	310	260
0.2% Proof Stress	MPa	300	230	175
Elongation % (5.65)		15	22	30
Hardness	HV	115	100	85
Shear Strength	MPa	215	185	155

Physical Properties		Corrosion Resistance		
Melting Point °C		1073	Rural Atmosphere	Excellent
Density kg/m3		8940	Industrial Atmosphere	Excellent
Electrical Conductivity	% IACS 85-100		Marine Atmosphere	Excellent
Modulus of Elasticity	MPa	117000	Sea Water	Good
			Drinking Water	Excellent
Fabrication Data		Joining		
Machinability (brass = 100%)	85%		Oxy- Acetylene welding	Not Recommended
Riveting & Peening	Fair		Coated Metal Arc Welding	Not Recommended
Thread Rolling	Fair		Carbon Arc Welding	Fair - Good
Cold Heading	Not Recommended		Gas Sheilded Arc Welding (Tig & Mig)	Fair
Bending (cold)	Fair to Good		Soft Soldering	Good - Excellent
Hot Forging	Good		Silver Soldering	Good - Excellent
Hot Forging Temp °C	875			
Annealing °C	630			
Stress Relieving °C	250			