

COPPER AS-1567 -145 C14500
(TELLURIUM COPPER)
WROUGHT PRODUCT, EXTRUDED ROD & BAR



ABOUT

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

EQUIVALENT TO

Britain	BS-2874 – C109
USA	ASTM -B301-c14510
Japan	
Germany	

APPLICATIONS

- Electrical components where threading or fine machining is required.

Nominal Composition	
Copper %	REM
Phosphorus %	0.01
Oxygen %	----
Sulphur %	----
Silver %	---
Tellurium %	0.5

Typical Mechanical Properties		Temper: Drawn		
		Up to 13 mm	13 to 50 mm	Over 50 mm
	Size			
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	1075		Rural Atmosphere	Excellent
Density kg/m ³	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%)	90%		Oxy- Acetylene welding	Not Recommended
Riveting & Peening	Fair		Coated Metal Arc Welding	Not Recommended
Thread Rolling	Fair		Carbon Arc Welding	Fair
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			