

UNS C72900

Smiths Advanced Metals

Rev: SAM/datasheets/copper/uns-c72900/feb-22

Page: 1 of 1

Unrivalled Strength

Copper-Nickel Tin Alloy Bar

UNS C72900 offers unrivalled strength when compared to other high-strength alloys.

The copper-nickel tin alloy offers an excellent alternative to aluminium bronzes, beryllium coppers, nickel and steel alloys. The material resists the majority of acidic environments and retains strength at both sub-zero and elevated temperatures.

UNS C72900 benefits from high fracture toughness, excellent machinability and excellent lubricity. Wear resistance is also impressive under severe loading conditions, and the alloy is non-sparking. The materials' performance characteristics make UNS C72900 suitable for applications in heavy industry, including bearings, bushes, and wear-resistant solutions.

We stock UNS C72900 copper bars in a range of incremental sizes which we also process in-house.



Grades / Specifications

- AMS4596
- AMS4597
- BMS-7-373
- EN 12163
- CuNi15Sn8
- CW355H
- UNS C72900

Key Applications

- Mining and drilling equipment
- Heavy-duty bearings and bushings
- Pump parts
- High performance engines

Chemical Composition (weight %)

	Cu	Ni + Co	Sn	Mg	Mn	Fe	Pb	Zn	Nb
min.	Bal	14.50	7.50						
max.	Bal	15.50	8.50	0.15	0.30	0.50	0.02	0.50	0.10

As per AMS 4596

Physical	Mechanical Properties	(Up to 4.249" (108mm) incl.)	(4.25-8.5" (108-216mm) incl.)	
Density	0.325	Tensile Strength Ksi (MPa)	132 (910)	127 (876)
Melting point (solid)	2,040°F	Yield Strength 0.2% UL Ksi (MPa)	107 (738)	108 (745)
Electrical Conductivity	6 - 10% IACS	Elongation	9.5%	3%
Thermal Conductivity	28 W/m °K			

Properties as per AMS 4596

Benefits

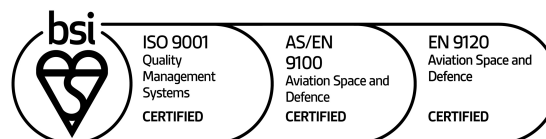
- Excellent erosion and corrosion resistance
- High strength
- Excellent galling and friction resistance

www.smithsadvanced.com

info@smithsadvanced.com



Stratton Business Park,
London Road, Biggleswade,
Bedfordshire SG18 8QB
Tel: +44 (0) 1767 604710



1930

All information in our data sheet is based on approximate testing and is stated to the best of our knowledge and belief. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading.