

# TAM 1000 (90W-Ni-Cu)

## Product Datasheet



Tungsten Alloy

Service. Quality. Value.

## High density tungsten

A 90% pure tungsten alloy with additions of nickel and copper.

TAM 1000 (90W-Ni-Cu) is a tungsten alloy, typically used in radiation shielding and tooling. Tungsten offers numerous unique product advantages. It is a high-density alloy which is 65% denser than lead and 130% denser than steel. TAM 1000 contains 90% tungsten, 6% nickel and 4% copper. The product offers superior shielding against x-rays and gamma rays and is 1.5 times more effective than lead. With such high density and high strength TAM 1000 also finds use in static balancing.

TAM 1000 provides greater resistance to acids when compared to stainless steels, so the alloy is suitable for use in hostile environments. The introduction of nickel and copper improves the ductility and machinability of the alloy.



### Key Features

- High density alloy
- High strength
- High resistance to thermal fatigue
- Low thermal conductivity

### Applications

- Radiation shielding
- Static balancing
- Tooling

### Chemical Composition (weight %)

	W	Ni	Cu
Min			
Max	90.0	6.0	4.0

### Mechanical Properties

Density	Hardness	Ultimate Tensile Strength	Elongation	Magnetic Properties
17 gm/cm <sup>3</sup>	24 HRC	730 N/mm <sup>2</sup>	2%	Non-magnetic

We stock TAM 1000 (90W-Ni-Cu) in round bar.

#### UK Service Centres:

Smiths Belfast **02895 908 897**  
Smiths Biggleswade **01767 604 704**  
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#### Quality & Testing:



[www.smithmetal.com](http://www.smithmetal.com) [info@smithmetal.com](mailto:info@smithmetal.com)

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