

# HE 395

## Product Datasheet



Tungsten Alloy

Service. Quality. Value.

### High-density Alloy

HE 395 is a high-density tungsten alloy which is suitable for a broad range of commercial engineering applications.

HE 395 tungsten alloy offers numerous beneficial performance characteristics. The alloy benefits from excellent hardness, with high ductility and ultimate tensile strength. High-temperature resistance is also superior, and the wear resistance of the material is excellent. HE 395 benefits from reasonable corrosion resistance in both acid and alkaline atmospheres.

Manufactured with a binder of iron and nickel, the tungsten content of HE 395 is **95%**. The resulting alloy is magnetic and is suitable for applications where high material density is required. Tungsten is regarded as a safer alternative to lead. Due to higher density, the product holds a better shape, even under extreme conditions.



#### Key Features

- High density
- High melting point
- Superior wear resistance and ductility
- High ultimate tensile strength
- A safer alternative when compared to lead
- Excellent hardness

#### Applications

- Welding rods
- Extrusion dies
- Radiation shields
- High-temperature applications
- Rotor blades
- Ordnance components

#### Mechanical Properties

Nominal Density		0.2% Proof Stress		Tensile Strength		Elongation	Hardness
g/cm <sup>3</sup>	lb/in <sup>3</sup>	MPa	ksi	MPa	ksi	on 25mm (1")	(HRC)
18.1	0.65	660	95	910	131	22	24

We stock tungsten alloy HE 395 in plate, flats and round bar.

#### UK Service Centres:

Smiths Belfast **02895 908 897**  
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#### Quality & Testing:



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