

## Tungsten Crucibles

**Description of Product** This specification covers sintered and machined Tungsten Crucible Shapes.

### Chemical Composition

Chemical composition for powder lots shall conform to the specification as shown below: (Chemical acceptance is based on the elements listed below.)

<u>Element</u>	<u>Maximum %</u>	<u>Element</u>	<u>Maximum %</u>
Aluminum	0.002	Manganese	0.002
Calcium	0.003	Nickel	0.003
Chromium	0.002	Silicon	0.002
Copper	0.002	Tin	0.002
Iron	0.003	Titanium	0.002
Lead	0.002	Carbon	0.005
Magnesium	0.002		

Tungsten (by difference) 99.95% Minimum.

### **Structure:**



**TUNGSTEN POWDER METALLURGY PRODUCTS**

Number PD-7045  
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**Mechanical Properties:**

Per negotiation at point of inquiry

**Physical Characteristics:**

Crucible Type	Material	Material Purity (min)	Property Density*	Dimensions (mm)		
				Outer Diameter	Inner Diameter	Height
Max. 1000 kg Sapphire ingot	Tungsten (W)	99.95%	~17.8 g/cc 92% min	600	500	1000

\* can be adjusted to meet customer needs

Standard Tolerance Range		Minimum Tolerance Range		Inner Surface Roughness Ra		
Diameter (mm)	Height (mm)	Diameter (mm)	Height (mm)	Sintered Blank	Lathe Turned	Ground
±0.5	±1.0	±0.3	±1.0 / -0	~3.2	Customer Specific	Customer Specific

**Hazards identification in Advertising (Directive 67/548/EEC Article 26 and Directive 1999/45/EC Article 13)**  
none.

**Identification** The material will be identified with appropriate specification number, ingot or lot number, and nominal size. Shipping containers will be marked with the name of the customer and the purchase order number.

**Rejection** H.C. Starck must receive written notification of rejected material with the reason for rejection. The right is reserved to inspect rejected material at customer plant for claim validation. The material may be returned only after proper authorization.

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