



Tungsten

Rod

T&D Materials manufactures and supplies **premium quality pure tungsten and WK (potassium doped) tungsten rod.**

Tungsten Rod

Tungsten's unique properties as a high-performance material, including a melting point of 3410° C, low vapor pressure at elevated temperatures and low coefficient of thermal expansion, make it of value in a variety of high temperature products and processes. Among them are glass-to-metal seal parts and support parts for lighting and electronics, silicon rectifier stud mounts and high temperature furnace components.

T& D produces pure and potassium doped (WK Type) tungsten rod. The potassium doped products are targeted for use where high temperature non-sag properties are required in smaller cross sections by the lighting and electronic industries.

Availability

Tungsten rod is manufactured as random length pieces or cut to customers' desired lengths in diameters ranging from .020 inches to .750 inches. Standard diameter and length tolerances are listed in the accompanying tables. Other, closer tolerances can be quoted on request. In addition, there are three different surface processes or finishes which are provided, depending upon the desired end use.

Surface Finish

- **Black Surface** is "as swaged" or "as drawn"; retaining a coating of processing lubricants and oxides.
- **Cleaned Surface** is chemically cleaned to remove all lubricants and oxides.
- **Ground Surface** is centerless ground to remove all coating and to achieve precise diameter control.



Tungsten Rod Standard Diameter Tolerances (Inches)

Diameter	Black/Clean	Ground
.020 to .025	± .001	±.001
.025 to .070	± .0015	±.001
.070 to .200	± .003	±.001
.200 to .250	± .007	±.001
.250 to .435	± .007	±.0015
.435 to .690	± .010	±.003

Tungsten Rod Standard Length Tolerances (Inches)

Diameter	Length		
	.500 to 12	12 to 24	>24
.020 to .100	±.010	±.010	±.0625
.100 to .500	±.015	±.015	±.0625
.500 to .690	±.015	±.030	±.0625