

W

183.84

Tungsten

Tungsten

Refractory Metals and Alloys

www.edfagan.com | sales@edfagan.com
toll free 800.348.6268

DESCRIPTION

Tungsten is a chemical element identified by the symbol W. Of all the elements discovered, tungsten is most remarkable for the characteristic of having the highest melting point at 3410°C. In its pure form tungsten's density is 1.7 times that of lead. Furthermore, the element has the lowest vapor pressure and the highest boiling point at 5555°C of all the elements. Tungsten also has the lowest coefficient of thermal expansion of all the pure elements. Tungsten has found wide use as an additive to steel to enhance its physical properties and as an alloy with nickel, copper and iron to provide high-density machinable materials.

APPLICATIONS

High-temperature furnace components; glass-to-metal seals; electronics; medical devices; welding electrodes.

TYPICAL PHYSICAL PROPERTIES

Density	lb/in ³	0.70
	gm/cm ³	19.27
Melting Point	°F	6170
	°C	3410
Electrical Resistivity	Micro-ohm-cm	5.50
Thermal Conductivity @20°C	W/(m-K)	164
Specific Heat	Cal/gm / °C	0.032
Coefficient of Linear Thermal Expansion @20°C	ppm/ °F	2.7
	ppm/ °C	4.6

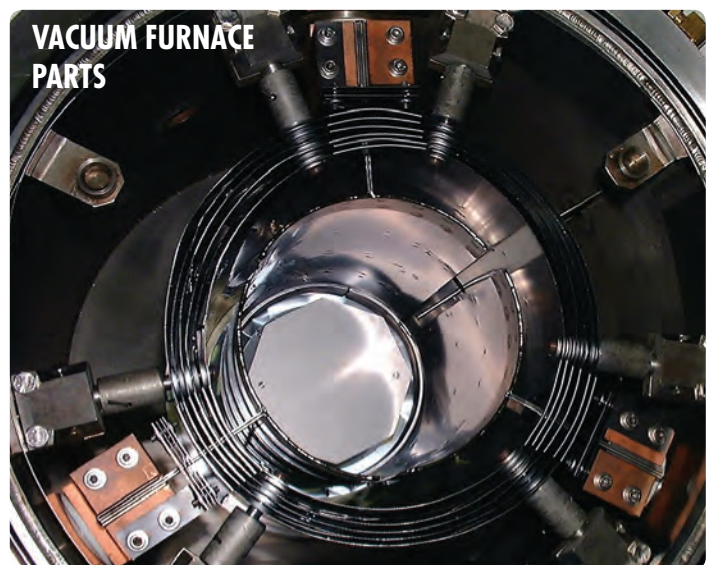
TYPICAL MECHANICAL PROPERTIES

Typical Hardness	DPH (Vickers) RC	460
Modulus of Elasticity	KSI (GPa)	58 (405)

FORMS AVAILABLE

- Bar | Rod •
- Coil | Strip •
- Parts (To Specifications) •
- Plate •
- Precision Cut Wire •
- Sheet •

Please call us at 800-348-6268 with your form and size requirements.
No order is too small.



CHEMISTRY %

99.95 Tungsten (W) Minimum

SPECIFICATIONS

AMS 7898/7899, ASTM B760, CAS 7440-33-7, UNS R07005

769 Susquehanna Avenue, Franklin Lakes, NJ 07417
PH: 201.891.4003 | Toll Free: 800.335.6827



10537 Humbolt Street, Los Alamitos, CA 90720
PH: 562.431.2568 | Toll Free: 800.782.9657

Special Purpose Alloys & Metals From Stock

Controlled Expansion | Glass Sealing

Ed Fagan Inc. supplies the highest quality metals and alloys including materials from Carpenter Technology Corp.

Kovar® | ASTM F15 Alloy

Forms: Plate, Round Bar, Sheet, Strip/Coil, Wire
Trade Names: Kovar®, Pernifer® 2918, NILO K®, DilverP1®

Alloy 42/46/48/52

Forms: Plate, Round Bar, Sheet, Strip/Coil, Wire
Trade Names: Pernifer®40, 46, 48, 50; NILO® 42, 46, 48, 50; Glass Seal 42, 46, 48, 50

Free-Cut Invar "36"® Alloy

Forms: Round Bar, Wire

Invar "36"® Alloy

Forms: Plate, Sheet
Trade Names: Pernifer® 36, NILO® 36, Invar

Super Invar 32-5®

Forms: Plate, Round Bar, Sheet

Refractory Metals and Alloys

Ed Fagan Inc. is your leading source for quality refractory metals and alloys. We stock Tungsten, Molybdenum and its alloys in various forms and sizes manufactured from Plansee Group.

Molybdenum

Forms: Plate, Precision Cut Wire, Round Bar, Sheet/Strip, Spooled Wire, Threaded Rod/Nuts

Molybdenum Lanthanum Oxide (ML)

Forms: Sheet – Stress Relieved, Recrystallized

Molybdenum TZM

Forms: Plate, Round Bar

Niobium

Forms: Plate, Round Bar, Sheet, Strip/Coil, Wire

Rhenium

Forms: Plate, Round Bar, Sheet, Strip/Coil

Tantalum

Forms: Round Bar, Sheet

Tungsten

Forms: Parts (To Specification), Plate, Precision Cut Wire, Round Bar, Sheet

Tungsten Alloy

Blank Forms: Flats, Parts, Plate/Sheet, Rod, Shapes

Soft Magnetic Alloys | EMI Shielding & Laminations

Ed Fagan Inc. is a distributor of "EMI shielding alloys" for VDM Metals GmbH the world's leading producer of these alloys.

EFI Alloy 50

Forms: Round Bar, Square Bar, Strip/Coil, Wire
Trade Names: Alloy 4750, High Permeability 49®, Magnifer® 50

EFI Alloy 79

Forms: Rectangular Bar, Round Bar, Sheet, Strip/Coil, Wire
Trade Names: Hipernom, HyMu80®, Magnifer® 7904, Molypermalloy, Permalloy 80®

Hiperco® 50, Hiperco® 50A, Hiperco® 50 HS

Forms: Plate, Round Bar, Strip/Coil

Carpenter VimVar Core Iron

Forms: Plate, Round Bar

Electrical & Electronic Nickels

Ed Fagan Inc. supplies select, commercially pure grades of Nickel in various forms and sizes.

Electronic Nickels

200/201/205/233/270

Forms: Round Bar, Sheet, Strip/Coil, Wire

Alloys and Metals We Distribute

Corrosion Resistant Alloys • High-Temperature Alloys • Stainless Steel
• Titanium – CP, 6 Al-4V

Ed Fagan Inc. Services

Slitting, Shearing, Saw Cutting, Grinding, Water Jet Cutting, Laser Cutting,
Custom Stocking and Consignment Programs

JUST-IN-TIME DELIVERY: All of our **standard stock** items can be **shipped within 24-hours** of your order confirmation and most are **shipped the same day**. All materials certified with shipment. For special orders and non-stock materials, contact our sales team for our competitive pricing and delivery lead times.