



ED FAGAN INC.

Tungsten Alloys

Refractory Alloys



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DESCRIPTION

Tungsten alloys, which contain elements such as nickel, copper and iron, produce a host of alloys which have engineering properties similar to steel, are relatively easy to machine, and can be plated or painted to enhance their corrosion protection. These alloys are approximately 50% denser than lead resulting in a higher concentration of mass in a limited area.

APPLICATIONS

Tungsten alloys have found wide acceptance in applications such as radiation shielding, boring bars, and counterweights in aircraft and racing cars.

TRADE NAMES

Mallory 1000; Densalloy; Fansteel 77; Densimet

Airplane Counterweights



TUNGSTEN ALLOYS

EFI GRADE	ASTM B 777-07 GRADE	NOMINAL % TUNGSTEN	NOMINAL DENSITY GM/CC	MINIMUM* ULTIMATE TENSILE STRENGTH UTS (KSI)	MINIMUM* ELONGATION %	MODULUS OF ELASTICITY (KSI)
EF17	1	90	17.00	110	5	45,000
EF175	2	92.5	17.50	110	5	48,000
EF18	3	95	18.00	105	3	50,000
EF185	4	97	18.50	100	2	52,000

**Note: Non-magnetic compositions (N) conforming to EF17, 175 and EF18 shall have minimum properties of 94 ksi minimum ultimate tensile strength. Minimum elongation shall be 2 percent on EF17 and 175 and 1 percent on EF18.*

Crankshaft Balancing Weights



X-Ray Shielding Metal



FORMS AVAILABLE

- **Rod:**
0.317mm to 76.20 Dia x 203.20mm to 304.80mm Lg**
 - **Crankshaft Weights:**
12.70mm to 25.40mm Dia x 12.70mm to 38.10mm Dia**
 - **Boring Bars**
 - **Other sizes quoted on request**
- ** Supplied ROTF (Rough Oversize To Finish) or Centerless Ground to Customer's Specification

SPECIFICATIONS

ASTM B 777-07



Ed Fagan Inc also specializes in locating exotic materials. So, if you can't locate that hard-to-find material you need... Put EFI's material locator service to work for you!

www.Material-locator.com

**THE MATERIALS YOU NEED,
WHEN YOU NEED THEM**



www.edfagan.eu
sales@edfagan.eu
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efi
ED FAGAN INC.

Glass Sealing/ Controlled Expansion Alloys

EFI provides the highest quality materials including materials from Carpenter Technology Corp.

ASTM F15 Alloy:

aka Kovar & Pernifer 2918
Coil/Strip, Sheet, Plate,
Bar, Wire

Invar 36:

Bar, Sheet, Plate

42/46/48/52 Alloy:

Coil/Strip, Sheet, Plate, Bar

Electronic Nickel

200/201/233/270:

Coil/Strip, Rod, Sheet, Plate

Soft Magnetic Alloys/ EMI Shielding & Laminations

EFI is a distributor of magnetic shielding alloys for the world's leading producer of these alloys – ThyssenKrupp VDM.

EFI Alloy 79: aka Magnifer 7904,

Moly-Permalloy & HyMu 80
Sheet, Coil/Strip

EFI 50:

aka Magnifer 50 & High Perm 49
Bar, Coil/Strip

Carpenter VimVar Core Iron:

Rod, Bar

Carpenter Hiperco 50:

Coil/Strip, Billet

Radiometal 4550: Rod, Coil/Strip

Refractory Metals/Alloys

EFI is a stocking distributor of Molybdenum & Tungsten products, as well as many other refractory metals and alloys, providing the highest quality materials available.

Molybdenum:

Bar, Sheet, Plate, Coil/Strip

TZM Molybdenum Alloy:

Sheet, Bar

Tungsten:

Bar, Coil/Strip, Sheet

Tantalum: Sheet, Tubing

Niobium: Strip

Tungsten Alloy: Rod, Shapes

Rhenium: Sheet

Hard-to-Find Special Purpose Metals, Alloys and Materials

Are you spending too much of your valuable time trying to locate suppliers of specialty metals and materials? Use EFI's Material Locator (see below) to source it for you so you can get back to doing what you do best.

- Coil/Strip
- Sheet
- Plate
- Rod
- Tube
- Pipe
- Wire

JUST IN TIME DELIVERY

All standard stock items can be **shipped within 24 hours** – and are often **shipped the same day**. All materials are certified with shipment.

METALS WE DISTRIBUTE

Titanium
Zirconium

High Temperature Alloys
Corrosion Resistant Alloys
Stainless Steel

Copper – OFE, OFHC
Brass & Bronze
Beryllium Copper

SERVICES WE OFFER

Slitting, Shearing, Saw Cutting, Centerless Grinding, Water-jet Cutting, Laser Cutting,
Custom Stocking Programs • Consignment Programs



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