

## Evaporation Source & Evaporation Material

### About Us

Baoji Winners Metals Co., Ltd is located in Baoji, Shaanxi, China. Our company is mainly engaged in the R&D, production and sales of tungsten, molybdenum, tantalum, niobium, titanium and other non-ferrous metal materials and their products.

### Product Application Field

The company's products are widely used in aerospace, national defense, automobile, electronic power, equipment manufacturing, metal material processing, quartz glass, rare earth metallurgy, high-temperature industrial furnace, solar energy, LED screen, integrated circuit and other fields.

### Products for PVD Coating & Optical Coating

We provides spare parts and consumables for Optical coating and PVD coating, including:

- **Electron Beam Crucible Liners, Electron Gun Tungsten Filament (OEM Filaments).**
- **Tungsten Evaporation Filaments (Evaporation Coils), Thermal Evaporation Crucibles, Evaporation Boats, etc.**
- **Evaporation Materials (such as metal pellets, wires, blocks), Sputtering Targets, etc.**

You can learn about vacuum-coating related products through our product brochure. For more product details, please visit our website or contact us.

**Web: [www.winnersmetals.com](http://www.winnersmetals.com)**

**Tel: 0086 1561 9778 518 (WhatsApp)**

**Sales Manager: Amanda**



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## Evaporation Source & Evaporation Material

### E-beam Crucible Liners

We supply crucible liners for all popular e-beam systems with high purity, no contamination, accurate dimensions and smooth surfaces at competitive prices.



### Available specifications

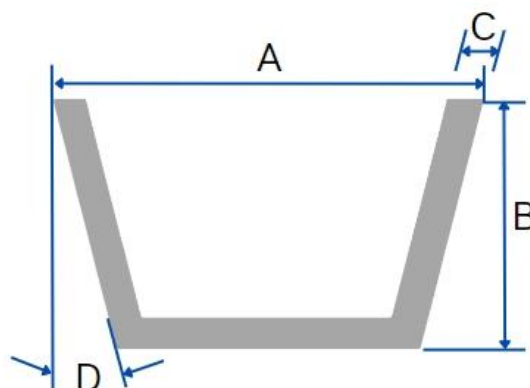
4cc, 7cc, 15cc, 25cc, 30cc, 40cc, 100cc,  
Can be customized.



### Materials (Purity: $\geq 99.95\%$ )

Tungsten (W), Molybdenum (Mo), Tantalum (Ta), Copper (Cu)

We also offer **thermal evaporation crucibles**, made of the same material as electron beam source crucibles, please contact us for a preferential quote.



Crucible Drawings

Volume	Top Diameter(A) × Height(B) × Wall thickness(C)
4cc	0.88 inch (22.4mm) × 0.59 inch (14.9mm) × 0.093 inch (2.36mm)
7cc	1.12 inch (28.5mm) × 0.51 inch (12.9mm) × 0.093 inch (2.36mm)
15cc	1.49 inch (37.8mm) × 0.68 inch (17.3mm) × 0.125 inch (3.17mm)
25cc Shallow	1.85 inch (47.0mm) × 0.69 inch (17.5mm) × 0.125 inch (3.17mm)
25cc Deep	1.63 inch (41.4mm) × 0.93 inch (23.6mm) × 0.125 inch (3.17mm)
30cc with web	1.92 inch (48.8mm) × 0.95 inch (24.1mm) × 0.125 inch (3.17mm)
30cc without web	1.80 inch (45.7mm) × 0.80 inch (20.3mm) × 0.125 inch (3.17mm)
40cc	2.03 inch (51.6mm) × 1.03 inch (26.2mm) × 0.125 inch (3.17mm)
100cc	2.80 inch (71.1mm) × 1.50 inch (38.1mm) × 0.125 inch (3.17mm)
All wall angles (D) are 15° , Any specification can be customized according to the drawing.	

## Evaporation Source & Evaporation Material

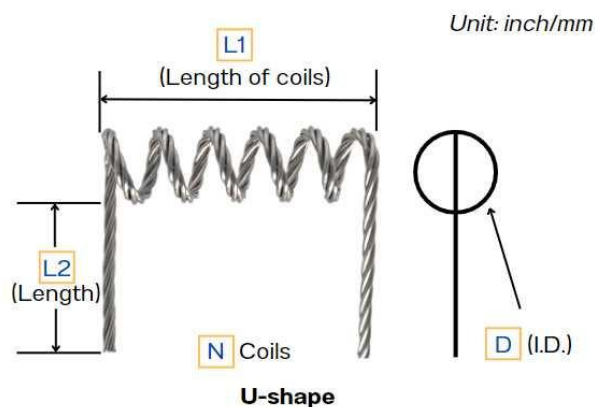
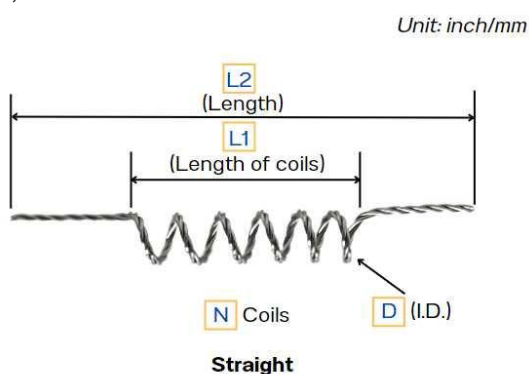
### Tungsten Evaporation Filaments (Evaporation Coils)

We provide high-quality tungsten evaporation filament with high purity, good film-forming effect, favorable product price and short delivery time.

#### Supply Specifications

$\phi$  0.76X3,  $\phi$  0.81X3,  $\phi$  1.0X3,  $\phi$  1.0X2,  $\phi$  0.81X4, can be customized.

For more types of Tungsten Filaments , please go to the website "**About Us-Download**" page to download the "**Tungsten Filament Heaters Catalog**" to view, or consult us.



### Specification

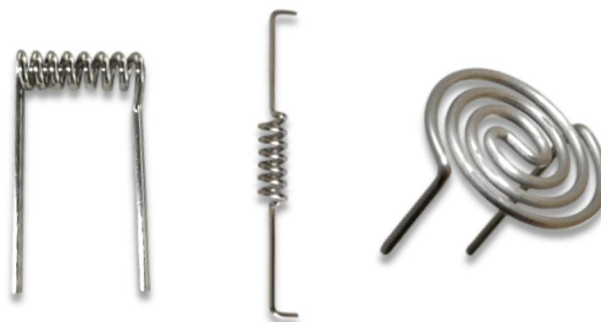
Shape	Straight, U Shape, Can be customized
Number of Strands	1, 2, 3, 4
Coils	4, 6, 8, 10
Diameter of Wires	0.76mm, 0.81mm, 1mm
Length of Coils	L1
Length	L2
ID of Coils	D

Note: other specifications and filament shapes can be customized.

## Evaporation Source & Evaporation Material

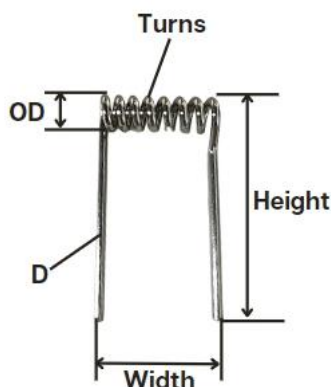
### Tungsten Filaments for Electron Gun, Tungsten Cathode Filaments

We supply tungsten filaments for all popular e-beam systems, including replacement and OEM filaments. Complete specifications, high quality, price concessions, welcome to consult.



### Tungsten Filament Information

Material	Pure tungsten (W), Tungsten rhenium (WRe)
Melting Point	3410 °C
Resistivity	$5.3 \times 10^{-8}$
Wire Diameter	$\phi$ 0.55- $\phi$ 0.8mm
MOQ	One box (10-Pack)



For more types of evaporator coils, please go to the website "[About Us-Download](#)" page to download the "[Tungsten Filament Heaters Catalog](#)" to view, or consult us.

### Drawing Specifications

Width	Height	Turns	OD	D
12	18	8	3.4	0.8
11.75	17	8	3.3	0.8
10.97	19.55	7.5	3.2	0.75
14.4	19.2	11	3.1	0.9
12.1	17	10	3.4	0.83
14	16.2	11	3.1	0.8
12	19	9	3.6	0.8

Width	Height	Turns	OD	D
8	17	6	3.2	0.8
10.5	16	8	3.2	0.8
11.4	18	8	3	0.8
8.6	15.1	8	3.1	0.76
10	18	7	3.2	0.8
10.6	15	7	3.4	0.8
9	15	8	3.2	0.8

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## Evaporation Source & Evaporation Material

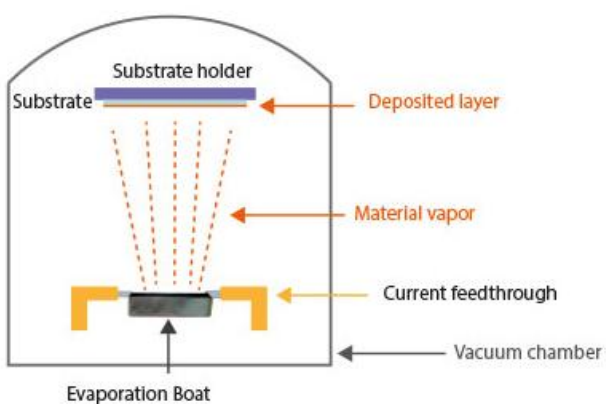
### Evaporation Boat

99.95% high purity evaporation boat for thermal evaporation source. We offer evaporation boats in a variety of lengths, widths, thicknesses and materials.



### Materials

Tungsten (W), Molybdenum (Mo), Tantalum (Ta)



### Standard Size

Model	Thickness (mm)	Width(mm)	Length(mm)
#210	0.2	10	100
#215	0.2	15	100
#220	0.2	20	100
#310	0.3	10	100
#315	0.3	15	100
#320	0.3	20	100
#510	0.5	10	100
#515	0.5	15	100

Note: Special specifications and dimensions can be processed according to drawings or samples.

## Evaporation Source & Evaporation Material

### Evaporating material

We offer evaporated materials for vacuum metallization. We provide pellets, bulks, filaments and other forms, which are mainly used in semiconductor chips, optoelectronic devices, sensors, OLED and other industries.

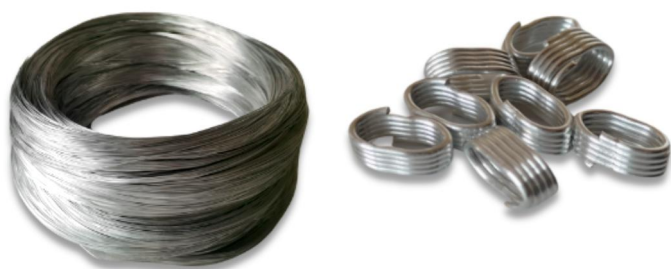
### Purity

99.95%, 99.99%, 99.999%

### Size

For the size of pellets, we provide specifications such as  $\phi 3 \times 3\text{mm}$ , and  $\phi 6 \times 6\text{mm}$ , and other specifications can be customized.

For aluminum wire evaporation materials, we provide coils, coils, U-shaped and other shapes, which can be cut to length, please consult us.



Other materials and different forms can be customized, please contact us for details.



### Supply Materials

We provide the following evaporation materials, all of which are of high purity, whether you need pellets, blocks, flakes, filaments, etc., we can provide them, please contact us.

Material		
Tungsten (W)	Molybdenum (Mo)	Tantalum (Ta)
Niobium (Nb)	Titanium (Ti)	Zirconium (Zr)
Nickel (Ni)	Copper (Cu)	Aluminum (Al)

## Evaporation Source & Evaporation Material

### Target material

We supply high-purity circular planar targets with high purity, fine grain size and good film deposition effect.



### Specification

Diameter (1.0mm -200mm) x

Thickness (0.1mm -10mm)

Material		
Tungsten (W)	Molybdenum (Mo)	Tantalum (Ta)
Niobium (Nb)	Titanium (Ti)	Zirconium (Zr)
Nickel (Ni)	Copper (Cu)	Aluminum (Al)

### Purity

99.95%, 99.99%, 99.999%

### Other specifications

More specifications of circular targets can be customized, please contact us for preferential quotation.

For spare parts and consumables for PVD Coating and Optical Coating, we provide electron beam crucibles, tungsten filaments, evaporation coils, evaporation boats, evaporation materials and other evaporation source products.

For more products, please visit our website, please consult us for detailed information and favorable quotations.

**Do you have any questions? Don't hesitate to contact us now.**

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