



REPRESENTATIVE IMAGE

Tungsten (W) Sputtering Targets

Tungsten (W) Sputtering Targets Overview

Our comprehensive offering of sputtering targets, evaporation sources and other deposition materials is listed by material throughout the website. Below you will find budgetary pricing for sputtering targets and deposition materials per your requirements. Actual prices may vary due to market fluctuations. To speak to someone directly about current pricing or for a quote on sputtering targets and other deposition products not listed, please [click here](#).

Tungsten (W) General Information

Tungsten, also known as Wolfram, is one of the densest elements in the world. It has a density of 19.3 g/cc, a melting point of 3,410°C, and a vapor pressure of 10^{-4} Torr at 2,757°C. It is lustrous and grayish-white in appearance. It is known to have the highest melting point of all metals and its characteristic hardness can make it very difficult to machine and forge in pure form. Tungsten is commonly used to make electric filaments. Tungsten carbide is found in drills, saws, and jewelry. Tungsten is evaporated under vacuum for the production of semiconductors, fuel cells, and sensors.

Tungsten (W) Specifications

Material Type	Tungsten
Symbol	W
Atomic Weight	183.84
Atomic Number	74
Color/Appearance	Grayish White, Lustrous, Metallic
Thermal Conductivity	174 W/m.K
Melting Point (°C)	3,410
Coefficient of Thermal Expansion	4.5 x 10 ⁻⁶ /K
Theoretical Density (g/cc)	19.25
Z Ratio	0.163
Sputter	DC
Max Power Density (Watts/Square Inch)	100*
Type of Bond	Indium, Elastomer
Comments	Forms volatile oxides. Films hard and adherent.

** This is a recommendation based on our experience running these materials in KJLC guns. The ratings are based on unbonded targets and are material specific. Bonded targets should be run at lower powers to prevent bonding failures. Bonded targets should be run at 20 Watts/Square Inch or lower, depending on the material.*

SDS



Click here for the [Tungsten SDS](#).

Request A Quote



Can't find the size or material you need? Please use our [Materials Quotation Form](#) to request.

Deposition Materials FAQ



Click [here](#) for answers to some of the most common questions we are asked.

Contact Us



To contact someone directly, please [click here](#), or call **+1 800 245 1656** to get in contact with your dedicated sales team.

Process Equipment Expertise



By staying on the leading edge of engineering and technology, we offer our customers the advantage of unparalleled knowledge and expertise in the manufacturing of [TORUS® Magnetron Sputtering Cathodes](#) and [Thin Film Deposition Vacuum Systems](#).

Ordering Table

Size							
Material	Description		Purity	Part Number	Price	In Stock	Add To Cart
-- All --							
> Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 1.00" DIAMETER X 0.125" THICK, +/-0.010" ALL	1.00" Dia. x 0.125" Thick	99.95%	EJTWXXX351A2		✓	+
> Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 1.00" DIAMETER X 0.250" THICK, +/-0.010" ALL	1.00" Dia. x 0.250" Thick	99.95%	EJTWXXX351A4		☎	+
> Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 2.00" DIAMETER X 0.125" THICK, +/-0.010" ALL	2.00" Dia. x 0.125" Thick	99.95%	EJTWXXX352A2		✓	+
	TUNGSTEN TARGET, W,						
Material	Description	Size	Purity	Part Number	Price	In Stock	Add To Cart

Material		Description	Size	Purity	Part Number	Price	In Stock	Add To Cart
		-- All --						
>	Tungsten	99.95% PURE, 2.00" DIAMETER X 0.250" THICK, +/-0.010" ALL	2.00" Dia. x 0.250" Thick	99.95%	EJTWXXX352A4		✓	
>	Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 3.00" DIAMETER X 0.125" THICK, +/-0.010" ALL	3.00" Dia. x 0.125" Thick	99.95%	EJTWXXX353A2		✓	
>	Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 3.00" DIAMETER X 0.250" THICK, +/-0.010" ALL	3.00" Dia. x 0.250" Thick	99.95%	EJTWXXX353A4		✓	
>	Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 4.00" DIAMETER X 0.125" THICK, +/-0.010" ALL	4.00" Dia. x 0.125" Thick	99.95%	EJTWXXX354A2			
>	Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 4.00" DIAMETER X 0.250" THICK, +/-0.010" ALL	4.00" Dia. x 0.250" Thick	99.95%	EJTWXXX354A4		✓	
>	Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, FOR KJL 108, 57MM DIA X 0.2MM THK, +/-0.25MM DIA, +0.125MM/-0 THK	57mm Dia. x 0.2mm Thick	99.95%	KJL81025	P.O.R.		
>	Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 6.00" DIAMETER X 0.250" THICK, +/-0.010" ALL	6.00" Dia. x 0.250" Thick	99.95%	EJTWXXX356A4	P.O.R.		
>	Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 8.00" DIAMETER X 0.125" THICK, +/-0.010" ALL	8.00" Dia. x 0.125" Thick	99.95%	EJTWXXX358A2	P.O.R.		
>	Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 8.00" DIAMETER X 0.250" THICK, +/-0.010" ALL	8.00" Dia. x 0.250" Thick	99.95%	EJTWXXX358A4	P.O.R.		
Material		Description	Size	Purity	Part Number	Price	In Stock	Add To Cart

Notes:

1.Dimensions vary by sputtering gun. Review sputtering gun manual to determine appropriate target size.

Bonded Assemblies Ordering Table

	Material	Description	Target Size	Purity	Part Number	Price	In Stock	Add To Cart
>	Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 2.00"DIAMETER X 0.125"THICK, +/-0.010" ALL, INDIUM BONDED TO COPPER BACKING PLATE, OFHC 101, Cu, 2.00" DIAMETER X 0.125" THICK, +/-0.010" ALL	2.00" Dia x 0.125" Thick	99.95%	EJUWXXX352A4			
>	Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 2.00" DIAMETER X 0.125" THICK, +/-0.010" ALL, ELASTOMER BONDED TO COPPER BACKING PLATE, OFHC 101, Cu, 2.00" DIAMETER X 0.125" THICK, +/-0.010" ALL, W/ KEEPER AND SCREW, FOR TORUS MAG KEEPER 2, PER DRAWING	2.00" Dia x 0.125" Thick	99.95%	EJUWXXX352TK4			
>	Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 3.00" DIAMETER X 0.125" THICK, +/-0.010" ALL, INDIUM BONDED TO COPPER BACKING PLATE, OFHC 101, Cu, 3.00" DIAMETER X 0.125" THICK, +/-0.010" ALL	3.00" Dia x 0.125" Thick	99.95%	EJUWXXX353A4			
>	Tungsten	TUNGSTEN TARGET, W, 99.95% PURE, 3.00" DIAMETER X 0.125" THICK, +/-0.010" ALL, ELASTOMER BONDED TO COPPER BACKING PLATE, OFHC 101, Cu, 3.00" DIAMETER X 0.125" THICK, +/-0.010" ALL, W/ KEEPER AND SCREW, FOR 3" TORUS MAG KEEPER	3.00" Dia x 0.125" Thick	99.95%	EJUWXXX353TK4			
	Material	Description	Target Size	Purity	Part Number	Price	In Stock	Add To Cart

Notes:

1.Dimensions vary by sputtering gun. Review sputtering gun manual to determine appropriate target size.

2.Bonded assemblies to be used in TORUS Mag Keeper guns require Elastomer bonding.

COVID-19 Info

We want to report to you that we are fully open for business and are here to assist in any of your vacuum technology needs. We have taken enhanced precautions to ensure that our workforce and customers are safe - [LEARN MORE](#)

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