
Sputtering Targets

- ✚ Purity up to 99.9999%
- ✚ Target sizes from 1" dia. to 8" dia.
- ✚ Thickness from 1/8" to 1/4"
- ✚ Custom sizes available
- ✚ High quality at lower prices
- ✚ OFHC copper backing plates
- ✚ Target bonding available
- ✚ Analysis provided



Aluminum, Al
Antimony, Sb
Barium, Ba
Bismuth, Bi
Boron, B
Cadmium, Cd
Carbon Graphite, C
Cerium, Ce
Chromium, Cr
Cobalt, Co
Copper, Cu
Dysprosium, Dy
Erbium, Er
Europium, Eu
Gadolinium, Gd
Germanium, Ge
Gold, Au
Hafnium, Hf
Holmium, Ho
Indium, In
Iridium, Ir
Iron, Fe
Lanthanum, La
Lead, Pb
Magnesium, Mg
Manganese, Mn
Molybdenum, Mo

Neodymium, Nd
Nickel, Ni
Niobium, Nb
Palladium, Pd
Platinum, Pt
Praseodymium, Pr
Rhenium, Re
Ruthenium, Ru
Samarium, Sm
Selenium, Se
Silicon, Si
Silver, Ag
Strontium, Sr
Tantalum, Ta
Tellurium, Te
Terbium, Tb
Thallium, Tl
Thulium, Tm
Tin, Sb
Titanium, Ti
Tungsten, W
Vanadium, V
Ytterbium, Yb
Yttrium, Y
Zinc, Zn
Zirconium, Zr

Fritz Glass

Iron Oxide, Fe₂O₃

Indium Tin Oxide, ITO

Lead Oxide, PbO

Lithium Niobate, LiNbO₃

Nickel Oxide, NiO

Pyrex 7740

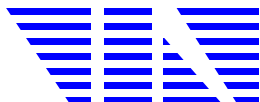
Silicon Dioxide, SiO₂

Tantalum Nitride, TaN

Vanadium Dioxide, VO₂

Zinc Oxide, ZnO

Please enquire for any other
material



VIN KAROLA INSTRUMENTS

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Bonded Targets:

It is highly recommended that all oxide based sputtering targets use a bonded copper backing plate. This will avoid any cracking of targets due to improper clamping and under high power applications.

Indium Alloy Solder Bonding:

It is recommended due to uniform bond-line thickness and covering almost 100% of the surface area. It offers excellent thermal and electrical conductivity and is compatible with RF/DC applications.

Silver-filled Epoxy Bonding:

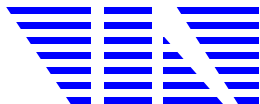
Silver-filled, low-outgassing, electrically and thermally conductive, 2-part epoxy is quite popular in bonding the target. Care should be taken to thoroughly mix the epoxy/resin and making sure that the bond-line thickness is quite uniform thus avoiding any air pockets. It is also compatible with RF/DC applications.

Precious Metal Targets Weight Chart:

The table below shows approximate weight of various diameter/thickness sputtering targets fabricated from Gold, and Platinum metal. The bare target price consists of the metal weight, and the fabrication cost.

Target	Dia.	Thickness	Weight (gms)	Weight (Oz)	Remarks
Gold (Au)	2.00"	0.125"	125	4.03	<ul style="list-style-type: none"> Gold density = 19.3 gm/cm³ = 316.27 gm/in³ 1 troy oz = 31 gms
	2.00"	0.250"	249	8.03	
	3.00"	0.125"	280	9.03	
	3.00"	0.250"	560	18.06	
	3.00"	1mm	88	2.84	
	3.00"	2mm	177	5.70	
	4.00"	0.125"	497	16.03	
	4.00"	0.250"	995	32.10	
	4.00"	3mm	470	15.16	

Target	Dia.	Thickness	Weight (gms)	Weight (Oz)	Remarks
Platinum (Pt)	2.00"	0.125"	138	4.45	<ul style="list-style-type: none"> Platinum density = 21.45 gm/cm³ = 351.50 gm/in³ 1 troy oz = 31 gms
	2.00"	0.250"	276	8.91	
	3.00"	0.125"	311	10.02	
	3.00"	0.250"	621	20.04	
	3.00"	1mm	98	3.16	
	3.00"	2mm	196	6.32	
	4.00"	0.125"	552	17.81	
	4.00"	0.250"	1,104	35.62	
	4.00"	3mm	522	16.83	



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