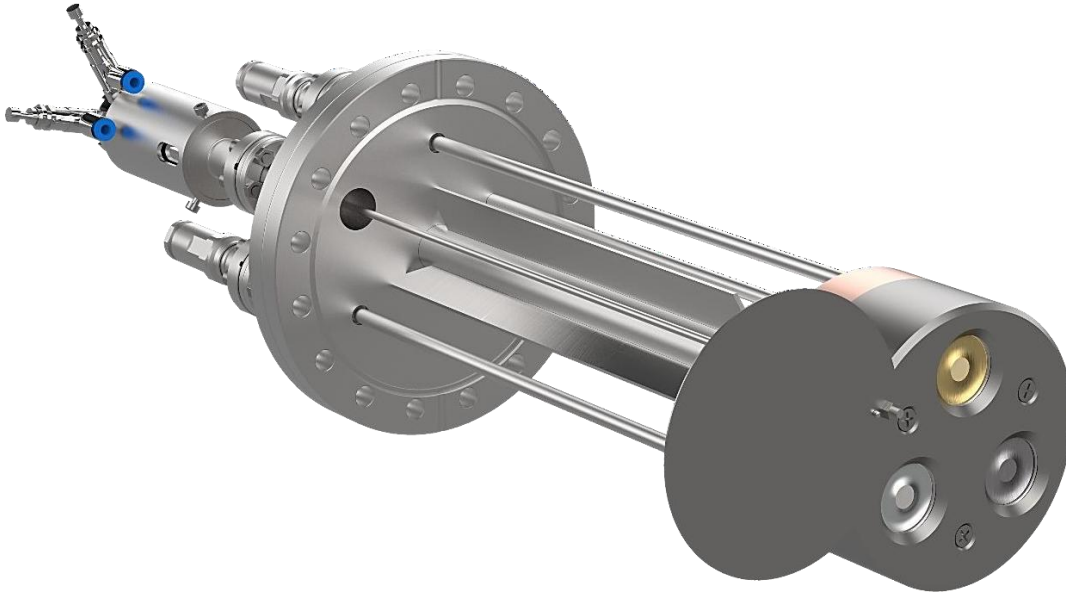




UHV Triple Target Sputter Source



Compact sputter cluster source

Simultaneous or sequential operation

Co-sputtering source

UHV Compatible and fully bakeable



The **triple target sputter source** is a compact cluster sputter source which enables co sputtering from up to three different materials in a single magnetron source. Ideal for alloy or multilayer thin film sputtering where space is limited. Each target has independent power control and can be operated with dc, rf, pulsed dc or HiPIMS power supply. Users can co-sputter up to three different materials to form alloys, or switch between materials to create multilayers without breaking vacuum.



Figure 1 Triple target sputter source operated with an Argon plasma.

The triple target sputter source enables sputtering of both magnetic and non-magnetic materials and targets are easily exchanged by removing the Anode cap and loosening the bayonet style target clamp.

The integral gas hood ensures uniform gas distribution across each of the three targets and facilitates stable sputtering low flow rates and low chamber pressures. The cluster sputter source is compatible with oxygen and nitrogen gases for reactive sputtering of oxides or nitrides.

The source is UHV compatible and can be baked up to 250° C without the need to remove the magnets.

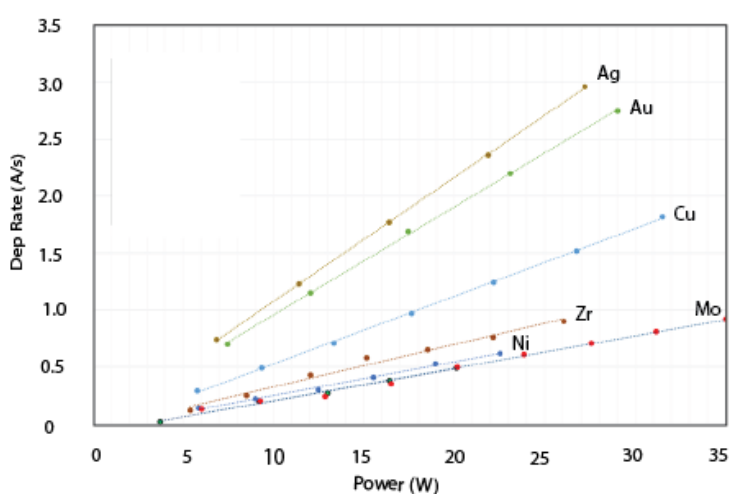


Figure 2 Deposition Rate of different Metals with triple target source for 100m working distance and 8e-3mbar working pressure.

Specifications

Triple Target Sputter Source	
Head Diameter	97mm (with a +/-0.1mm tolerance)
In Vacuum Length	300mm as standard (Configurable)
Target Operation	Independent or Simultaneous
Target Size	3 * 1 Inch (25mm)
Target thickness	Up to 3mm (nonmagnetic target), up to 0.4mm (magnetic target)
Deposition Rate	Typically, 5 Å/s per target, depending upon material
Source Output	3*75W
Target utilisation	Up to 25%
Power Supply	DC, RF, Pulsed DC (unipolar or bipolar) and HiPIMS
Shutter	Manual or Automated
UHV	Bakeable Up to 250 °C
Gas Distribution	Gas injection hood
Mounting Flange	CF100
Cooling	Min Water flow 1l/min

