

E-beam deposition evaporator system

Manufacturer: **Tectra**

Model: **Spuca**

Description:

Tectra Spuca has been designed for E-beam and RF sputtering deposition of metals (especial for the metal with high melting point temperature). The system combines one E-beam source and one RF sputtering source in the chamber. The metals include: Au, Ag, Al, Cu, Fe, Pt, SiO₂ etc.

Specification

Name	Function
Sputter Coater	High-vacuum deposition-system, Vacuum degree: 10 ⁻⁶ -10 ⁻⁷ Torr Stainless steel sputter chamber (diameter 300mm) with a large access door (300mm, incl. viewport) Turbo pump with auto-venting valve and membrane roughing pump Compact full range pressure gauge Mounted in 19" rack, can be mobile
2" Magnetron Sputter Gun	Internally mounted. Water-cooled Magnetron power supply 250W RF, as above but with automatic matching network and control panel
Bakeable Leak Valve	For gas inlet for sputtering systems, bakeable to 450°C (Opened or Closed)
e--Flux	e-beam heated crucible evaporator, ca. 0.25cc - including power supply, control options and other options on request, additional port is necessary
Source Shutter	Manually operated for boats, magnetrons, e-beam evaporators etc.
Quartz Microbalance System	One thickness and rate controller - Thickness range: 0.0 nm to 999.9 μm - Thickness resolution: 0.1 nm

	<ul style="list-style-type: none"> - Rate of deposition range: 0.0 nm/s to 999.9 nm/s - Relay output e.g. for shutter control at given thickness - Analogue output of thickness or rate: 0-1 volt - Sampling rate varies automatically: 1 Hz to 4 Hz - Film parameters recordable in 8 material memory (density, tooling factor, z- value) <p>One sensor head, side mount, CF-35 rotatable, water-cooling</p> <p>One oscillator and cable set</p>
Residual Gas Analyzer	<p>With Saddle Mounted Mass Filter</p> <p>PC Controlled RGA via RS232 (PC not included)</p> <p>Mass Range 2- 200amu.</p>
Plasma Cleaning of the Chamber	<p>Include low DC power supply</p>
Additional Adapters and Accessories	<p>Ports, and</p> <p>Adapter, from NW16CF to 1/4" Swagelok, x1</p> <p>Port, NW35CF (OD 2.75"), x1</p> <p>DV-158 back to air valve, x1, gas inlet for sputtering systems</p>

