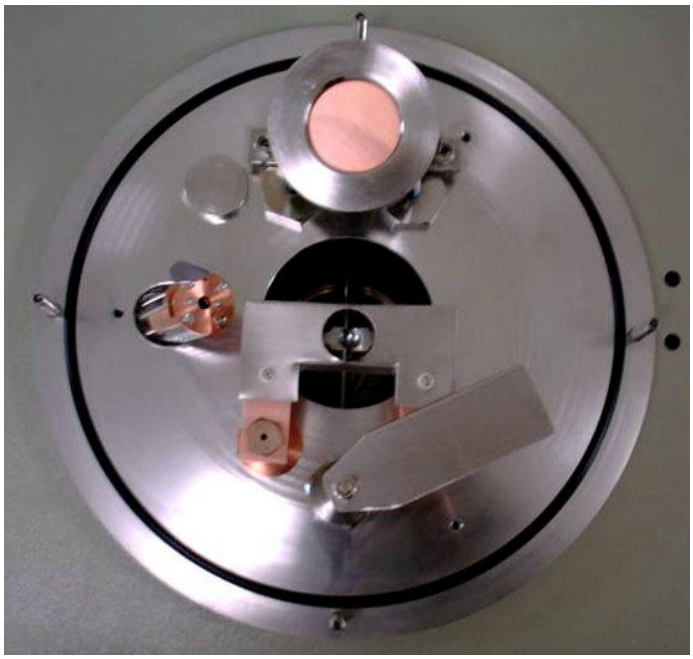
SPUCO – Sputter Coater

High Vacuum Coating System for Thin Film Deposition

Sputter Coater
with optional instruments and side rack



Configuration with Sputter Magnetron,
Thermal Evaporator and e-flux Mini e-beam

tectra's range of small high vacuum coating systems includes also a ‚Sputter-Coater'. Besides the Mini-Coater which is dedicated for thermal and e-beam evaporation the Sputter-Coater serves the application where also magnetron sputter deposition is also required. The Sputter-Coater allows the major vacuum thin film coating techniques:

- Thermal Evaporation
- Electron Beam Evaporation
- Sputter deposition

To be incorporated. This makes the Sputter-Coater an ideal system where utmost flexibility in Deposition modes is required. Due to its open design regarding the sample holder a wide variety of sample from several mm up to about Ø 100mm can be coated. Sample holder for multiple samples can easily be considered. Further, a very big CF160 (8"OD) flange on the top position allows special sample holder systems with e.g. rotation, heating, cooling, biasing etc. even to be retrofitted by the customer.

KEY FEATURES AND BENEFITS

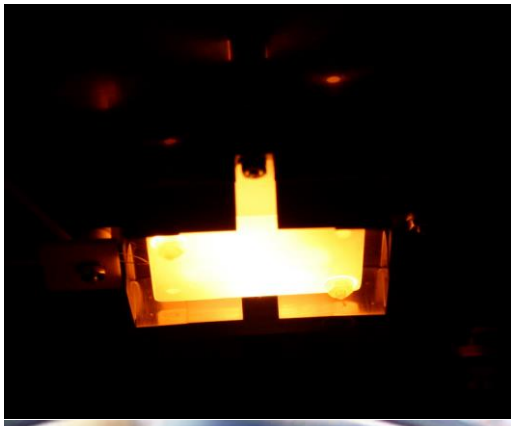
- 300 mm Quick Access Door
- Custom Configuration of the Evaporation System
- Thermal Evaporators, Sputter Magnetrons, Mini e-beam Evaporators
- Sample size up to dia. 100 mm
- Sample Holder Options include Rotation, Heating, Cooling, Biasing
- 19" Rack on Roller Casters
  Side Rack optional

The Sputter-Coater has a 300mm quick access door which opens the full inner diameter Of the vacuum chamber. Besides easy and quick sample and target exchange there are no space limitations for all kind of additions and amendments according to changing Research or deposition tasks.

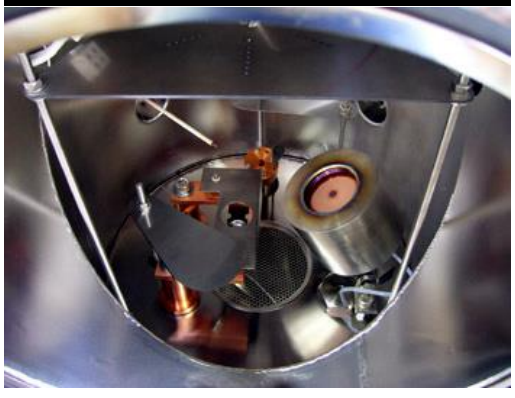
On the circumference of the Sputter-Coater chamber there are as standard 5 CF40 (2.75"OD) flanges provided. Typical extensions are: quartz microbalance, leak valve for Sputter gas, current/thermocouples etc... Other flange configurations are possible on Special request.

The standard pumping system consists of a 260l/s turbo molecular pump with oil free Membrane pump. Vacuum gauging is accomplished by a full range gauge. The entire Sputter-Coater is mounted on a 19" rack with roller casters. According to the deposition Techniques mostly a side rack has to be considered.
The Sputter-Coater is a modular system which can be tailored to customer's application. Please contact us for further discussion.

Sputter Magnetron



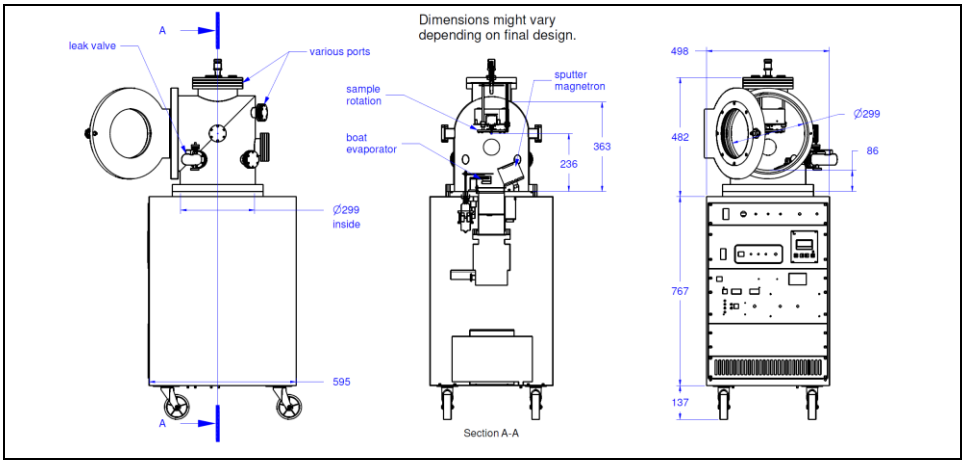
Optional 1" Sample Heater (@ 950°C)



Internal view showing:
Sputter Magnetron,
Mini e-beam Evaporator,
Thermal Boat Evaporator,
Plasma Cleaner, and
Sample Holder Platform

SPECIFICATION

Dimensions



Technical Specification

Chamber	Stainless Steel
Chamber Diameter	300 mm
Chamber Height	About 360 mm
Pumping	260 l/s Turbo Pump with Membrane Prepump
Gauging	Compact Full Range
Sample Size	Up to 100 mm
Housing	19” Rack on Roller Casters

Options

Evaporation Sources	Sputter Magnetron
	Thermal Evaporation
	Thermal Evaporation
Sample Holder	Rotation
	Heating
	Cooling
	Biasing
Thickness Measurement	Quartz Microbalance
Others	Leak Valve
	Current Feedthroughs
	Side Rack

Please contact us for more Information.
We and our team behind us will be happy to help you!

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