

# TABLE TOP SPUTTER COATER



## MAIN FEATURES

- COMPLETELY PORTABLE STAND ALONE TABLE TOP MODEL
- TARGET ASSEMBLY WITH EASILY REMOVABLE TARGET / BONDING PLATES WITH INDEPENDENT SHUTTER
- SPECIMENT HOLDER TO PROVIDE TILT, ROTATION AND DISTANCE ADJUSTMENT (FROM TARGET)\*
- PULSED DC POWER SUPPLY FOR METALS AND REACTIVE† SPUTTERING
- TURBO MOLECULAR PUMP TO PROVIDE FAST AND CLEAN OILFREE HIGH VACUUM
- USER FRIENDLY FRONT PANEL COLOR LCD BASED TOUCH SCREEN HMI CONTROL
- PLC BASED PROCESS AUTOMATION WITH RECIPE MANAGEMENT‡
- SUBSTRATE HEATING FACILITY UP TO 250°C
- LOW FOOTPRINT WITH UNIVERSAL SINGLE PHASE INPUT POWER
- LIMITED UTILITIES REQUIREMENT
- “CE” CERTIFICATION

---

\* Optional

† Possible with additional Mass Flow Controller

‡ With manual override



MILMAN THIN FILM SYSTEMS PVT. LTD. , PUNE . INDIA

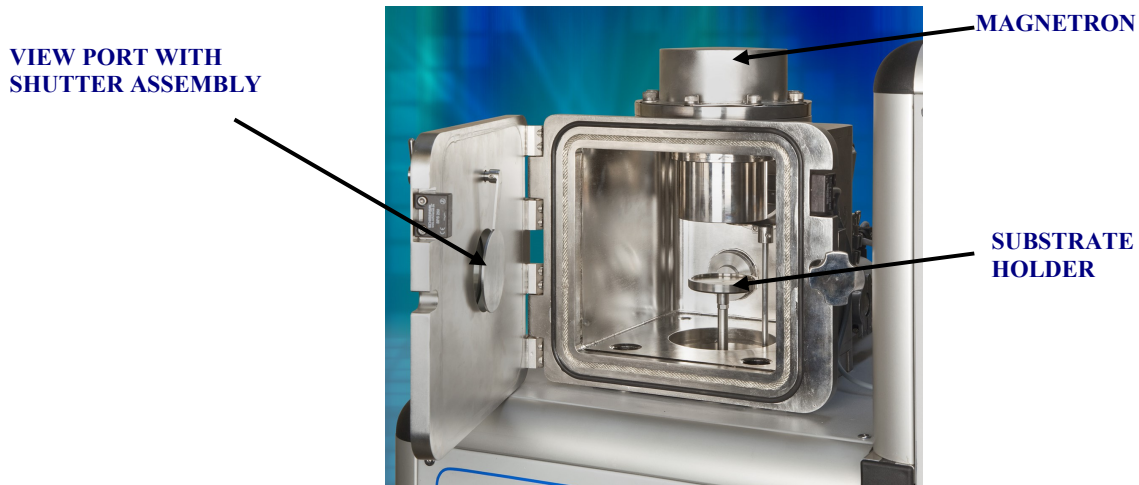
## Magnetron Sputtering Configuration

All Magnetron Sputtering Configurations are Sputter-down modes. The cathode typically uses standard 2" diameter target in clamp-on fashion. Cathode is equipped with independent shutter. Compact magnet plate makes use of rare earth magnets enabling high rates of deposition. The unit is provided with Pulsed DC power supply of 350 Watts/ 30 kHz. The cathode, however, is also compatible with RF power supply which can be supplied separately. Cathodes which can sputter magnetic materials such as Fe, Co etc. will be specifically supplied when demanded. Substrate stage can be supplied with facilities such as tilt, rotation, heater and electrical isolation for biasing purpose optionally. Cathodes that accept 3" diameter target can be provided on request.

**Substrate Diameter:** PVD Mini Station can handle samples up to 1 inch diameter. Type of substrate can be silicon wafer, glass, metal, ceramics etc. Large substrate table size for coating bigger samples can be provided on request which can be used in the absence of thickness monitor.

**Substrate Heating:** Substrate heating is provided up to 250°C.

**Substrate Rotation:** Substrate rotation as well as tilting arrangement continuously through different angle from 0 to 30° simultaneously can be provided as an option. Tilt is provided up to 30° so that the sample can be coated on the edges whenever application demands.



**Image of Substrate Holder Assembly & Sputtering Assembly**

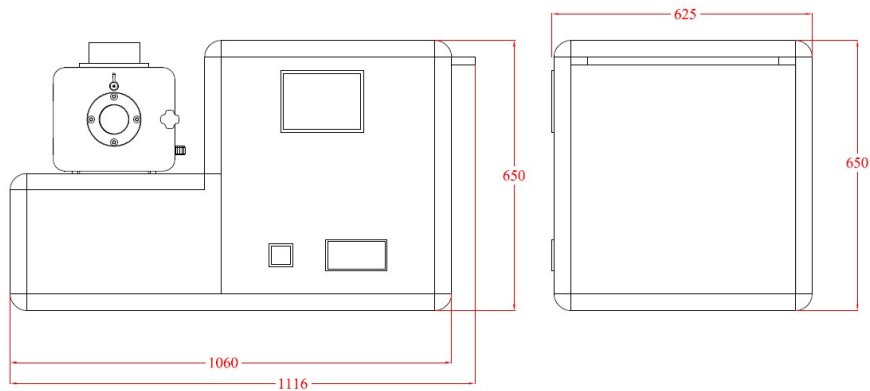


The system can be operated through color LCD based touch screen (HMI) located on the front panel. The operation can be in Manual or Auto mode. USB port on front panel provides data logging facility to record and download process parameters. Separate port is provided which can be utilized for software upgrades and remote maintenance. Installation and commissioning of equipment does not require elaborate set up in terms of utilities and space. The system is table top and does not require more space. It consumes low power (Single Phase) and a small water chiller can take care of all the cooling requirements. There is no requirement for compressed air.



Some additional Optional Items that are available with equipment are magnetron sputtering compatible Quartz Crystal based Digital Thickness Monitor, RF power supply etc.

Schematic with dimensional details is give below<sup>§</sup>



**MILMAN THIN FILM SYSTEMS PVT. LTD.**  
 Gat No 322/A/1, 2 & 3, Vishwachhaya Industry Road,  
 Pirangut, Tal: Mulshi, Dist: **PUNE-412115**  
 Tel.: +91- 7888085401 / 7888085404 / 7888085405  
 Mobile: +91-9881470865  
 Email: [info@milmanthinfilms.com](mailto:info@milmanthinfilms.com)  
 Website: [www.milmanthinfilms.com](http://www.milmanthinfilms.com)

<sup>§</sup> All dimensions are in mm



**MILMAN THIN FILM SYSTEMS PVT. LTD. , PUNE . INDIA**