The high vacuum compatible unbalance magnetron sputtering is custom built machine designed and engineered for depositing thin films of various targets ranges from pure metals to different alloys by Pulse DC Magnetron sputtering and is suitable for research and development application.

**Salient features:**

- All SS 304 construction of vacuum chamber (550 x 550 x 700 mm³), valves and vacuum plumbing.
- Closed loop pressure control electronics for precise pressure control during sputtering.
- High vacuum assembly (rotary-1000 l/min and TMP-685 l/sec.) to create vacuum up to lower 10⁻⁷ Torr.
- High vacuum compatible heater (up to 300°C uniform heating) analog with PID controller.
- Water jacket for chamber cooling.
- Provision of two 4” circular and two 10” x 5” rectangular Target assembly.
- Substrate holder assembly consisting of a table with two folds continuous rotation.
- 3 K Watt DC/Pulse Dc power supply for sputtering as well as for negative biasing.