

Dielectric Sputter System (Advanced Processing Technology)

Purposes: To perform thin film deposition of dielectric materials

Process Capabilities:

- **Wafer size:** 2 Inch
- **Dielectric targets:** Hafnium Oxide, Silicon Oxide, Tantalum Oxide
- **Gases Involved:** Argon, Oxygen, Nitrogen
- **Base pressure:** 2×10^{-6} mbar
- **Operating pressure:** 0.015 – 0.023 mbar
- **Substrate temperature:** Room temperature
- **Target Size:** 125 mm (diameter)
- **Sputtering Distance:** 13 cm
- Two RF power supplies with matching networks
- RF matching can be manual or Auto



Sputter Target Details:

- **Target Shape:** Circular Disk
- **Diameter:** 125 mm
- **Thickness of the target:** 1mm - 5mm (as per requirement)
- **Backing plate:** Copper backing plate
- **Bonding of backing plate with target:** Indium Metallic Bonding (Indium metallic bonding is must for copper backing plate)