Vacuum system VS1200 was initially designed for PVD (Physical Vapor Deposition) deposition of large substrates or set of small samples fixed in rotating calotte. It allows deposition of thin layers including multiple layers of different materials (sandwiches). Adhesion is improved by means of high output ion source. Ion Assisted Deposition is used in case of oxides deposition to achieve high-quality layers.

**APPLICATION**

- Reflective layers for UV, VIS and near infra wavelength range
- Protective layers of SiO₂, HfO₂, TiO₂, and Ta₂O₅
- Beam splitters, band filters

**MATERIAL/SUBSTRATE TYPES**

- Solid substrates - glass, plastics, metal pieces
- Maximum dimension of substrate up to 1000 mm OD
- Deposited layers: Al, Cr, SiO₂, MgF₂, ZnS, TiO₂, HfO₂, Ta₂O₅

**MODES, CONDITIONS AND PRECISION**

- Technical vacuum up to 5.10⁻⁵ Pa
- Means of deposition: thermal vaporization, electron gun
- Reactive deposition in O₂ atmosphere (optional)
- Ion Assisted Deposition (IAD)
- Surface activation: Argon discharge, low-energy ion pre-cleaning

**DETAILED INFORMATION ON REQUEST**