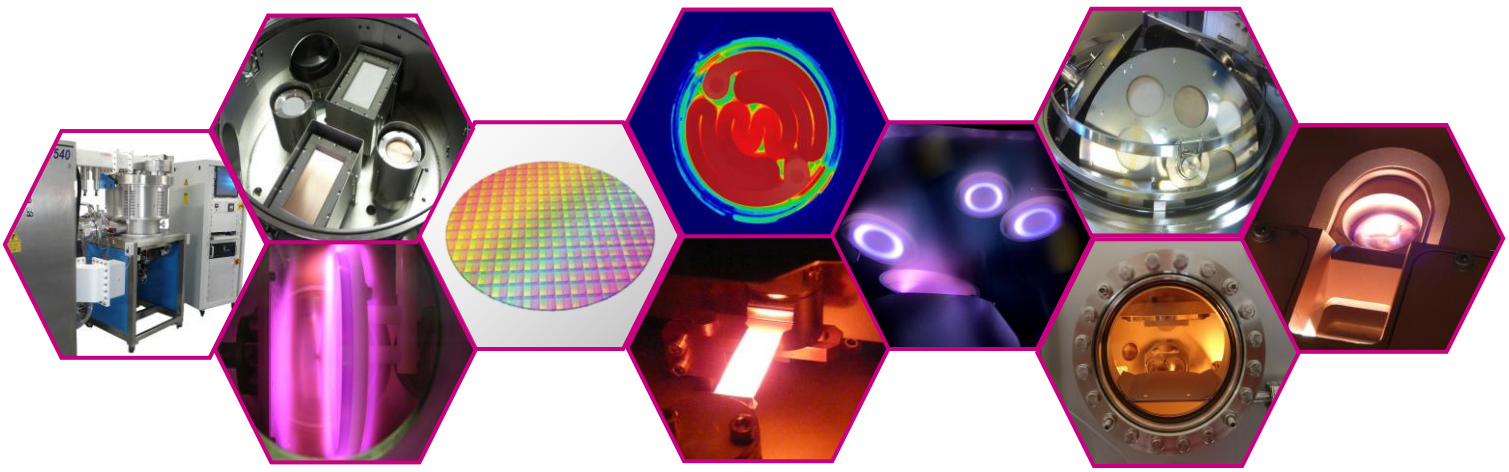
PLASSYS

Product Overview

Innovative Vacuum Deposition Tools



ME & MEB SERIES
HV & UHV Evaporation tools

Applications

- HMET, PHMET, ohmic contacts, Schottky diode
- Pseudomorphic transistors, transistors on InP
- IR waveguides, thermal barriers
- Magnetic materials for microwave applications
- MEMS encapsulation, Josephson junctions

Main features

- Box coater with front door/cylindrical chamber
- Load-lock with substrate treatment (plasma, ion gun, heating)
- Up to 8" mono or multiple substrates
- Resistive / electron beam sources
- Heating, cooling, rotating and tilting, LN_2 sample holders
- Ion source for sample preparation or for IAD
- Semi-automatic or automatic systems with fully computerized control



MP SERIES
HV & UHV Sputtering tools

Applications

- Spintronics
- Superconductors
- Optical layers
- X-Ray Mirror
- Energy (fuel cells, lithium batteries, etc.)

Main features

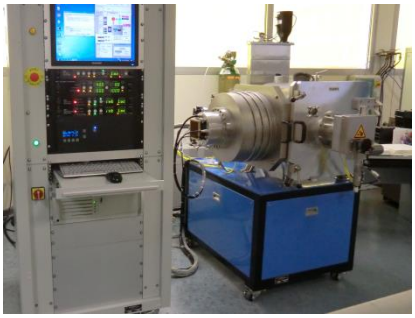
- Large range of options
- Box coater with front door, cylindrical chamber
- DC or RF cathodes, confocal / parallel
- Reactive or non-reactive sputtering
- RF substrate biasing for ionic assistance
- Substrate spinning and position indexing
- Substrate temperature up to 100°C
- Semi-automatic or automatic systems with fully computerized control

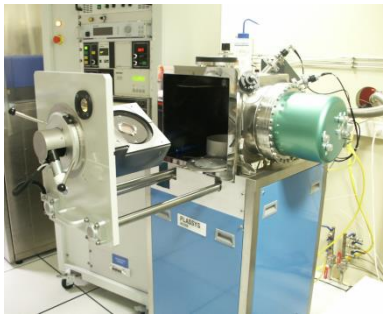
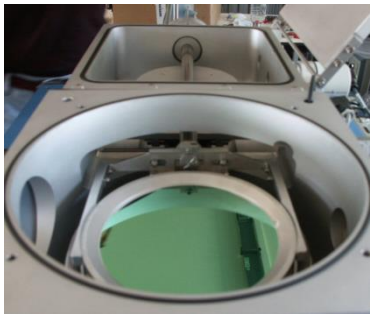


MU SERIES
Ion Beam Etching Tools

Applications

- Microfabrication, nano-pattering
- Electronics, MEMS
- Acoustic resonators



Main features

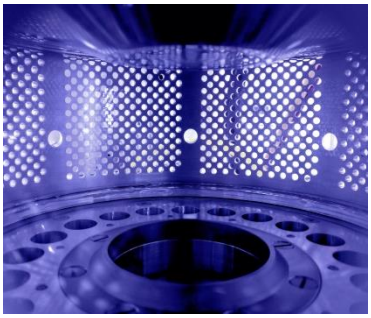
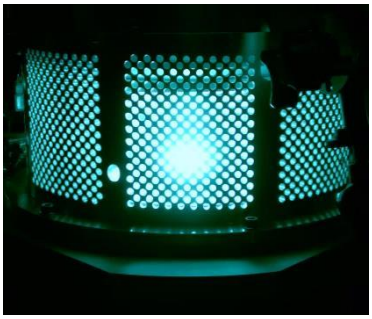
- Reactors with front doors / load-lock
- Starting from 2 inch substrate
- IBE, CAIBE, RIBE
- Cooling, rotating / tilting sample holders
- Etch rate monitoring
- Laser interferometer monitoring

SSDR SERIES
MPCVD Diamond Growth Tools

Applications

- Gemstones
- Optical windows
- Heat spreaders
- Cutting tools, wear resistant coating
- Electrochemical electrodes



Main features

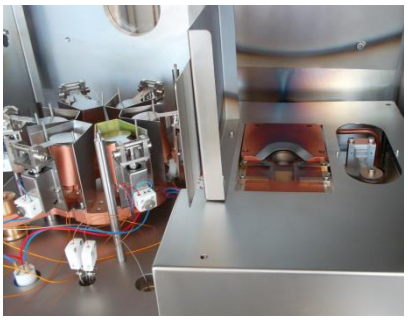
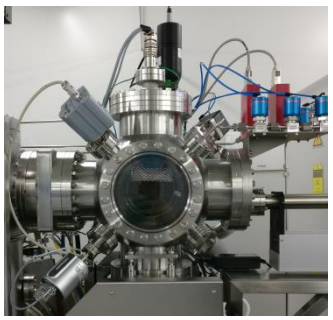
- High purity mono or polycrystalline diamond
- High power density plasma reactor
- High operation pressure in the range of 10^2 mbar
- Water-cooled substrate holder
- Position vs. temperature feedback loop
- Easy substrate loading
- Bi-chromatic IR pyrometer (475 - 1475 °C)
- Reactor base pressure: < 2×10^{-7} mbar
- Fully automated process

CUSTOMIZED SOLUTIONS

Applications

- Photovoltaics (CIGS, CZTS, etc.)
- Organic (OLED, OFET, OPV, perovskite, etc.)
- GMR, high T_C superconductors
- Dielectric coatings
- Decorative coatings
- Tooling
- R&D / Production



Main features

- HV/ UHV specific chambers
- From single chamber to cluster configuration
- Starting from 2 inch substrate
- Single to multi technique: IBE, CAIBE, RIE, CVD, PLD, MBE evaporation, sputtering
- Heating, cooling, rotating and tilting, LN_2 sample holders
- In situ monitoring, analysis and control: quartz crystal sensor, RHEED, EIES, end-point detection, 4-probe, optical sensors, etc.
- Semi-automatic or automatic systems with fully computerized control

ABOUT PLASSYS

PLASSYS-BESTEK
14 rue de la Gare
Marolles-en-Hurepoix

91630, France

+33 (0)1 64 56 20 00
https://www.plassys.com

client@plassys.com

PLASSYS

PLASSYS has designed and built thin film deposition tools for more than 30 years. Up to this day all the commissioned machines have met the customer's needs, the claimed performance parameters have systematically been obtained and often exceeded. The reliability of our equipment is an undeniable fact.

The interconnected scientific and technical skills of PLASSYS are very valuable for our customers, especially for the research laboratories which never hesitate to rely on our expertise for their new projects. This in-depth relationship between PLASSYS and the international research community strengthens our skills and allows our equipment to always be at rendez-vous with the cutting edge of technology.