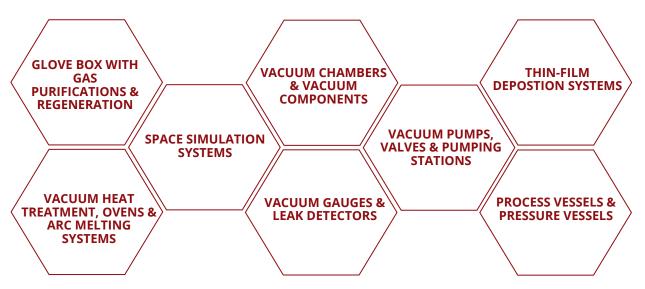
TOTAL VACUUM SOLUTIONS





Vacuum Techniques is a leader in design and manufacturing of vacuum equipment serving academia, industry and government sectors. With advanced engineering and experienced manufacturing bench, we build customer specific products and solutions.

With service centers India-wide, and international partners, we provide service, support and technical assistance for all your needs.



KEY DIFFERENTIATION

- 30+ years of experience and trust
- Research and development of advanced products and technology
- Quality and reliability of products and services
- Customizied solutions for application and customer requirements
- Simple design for easy maintenance
- Designed to be rugged and work in adverse conditions
- Established support and service centers all over India and partners worldwide





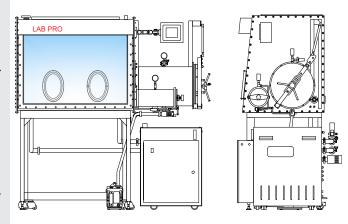
PRODUCT PORTFOLIO

GLOVE BOX WORKSTATIONS WITH INERT ENVIRONMENT, GAS PURIFICATION & REGENERATION SYSTEMS

LABPRO Glovebox Systems are a versatile line of workstations for a wide range of applications in both research as well as production environments. Wide range of glove box sizes, and configurations available.

These systems are designed with advanced automation and the flexibility for customization for applications with various options or with OEM equipment.

The glove boxes are stainless steel with polycarbonate panels. The closed loop gas purification and regeneration system can achieve less than 1 ppm purity levels for Oxygen and moisture, control positive and negative pressure, adaptive mode for energy savings and noise reduction, and fully automated with PLC and colour touch panel.





HIGH VACUUM (HV) & ULTRA HIGH VACUUM (UHV) CHAMBERS & VACUUM COMPONENTS

We offer a wide range of High Vacuum (HV) and Ultra High Vacuum (UHV) chambers of various sizes and shapes including spherical, D-shaped, box and cylindrical chambers.

We are a recognized leader for specializing in both R&D and production environments. From small chambers for R&D, to large chambers of over 10m long for space simulation systems, we have the expertise to design, and manufacture.

We offer various material options with source material documentation and analysis reports, various surface finish options, quality documentation including CMM inspection report, and leak testing reports based on Helium mass spectrometer leak dectector.

THIN-FLIM DEPOSITION SYSTEMS

Thin-film deposition systems including the VDS 100 and 500 product lines offers a wide selection for various applications in both research as well as production environments. We develop customized High Vacuum (HV) and Ultra High Vacuum (UHV) deposition systems as per the custom requirements.

We offer thermal evaporation, electron beam evaporation, Low Temperature Evaporation (LTE), and RF/DC sputtering based deposition systems and combinations of. The deposition systems provide the option of multiple sources sequential or co-deposition modes, multiple process gas capabiltiy, and process chamber pressure management. The systems support substrate heating up to 800°C with rotation, or cooling, substrate sizes up to 6".

These systems deliver high deposition rates, consistent uniformity, and high efficiency coating.



SPACE SIMULATION SYSTEMS (THERMAL VACUUM SYSTEMS)

We offer a wide range of space simulation systems suiting the customer's requirements.

We offer standard and custom-engineered chambers, payload support structures, and cards, vibration isolation options, and wide range of pumping options including turbo pumping, cryo pumping and Xenon pumping.

Our systems can be customized with various thermal shroud options including copper shrouds, SS304L double embossed blister, Aluminium, or water vapour panels. The thermal system can support multiple options TCU with -180°C to +150°C, mechanical refrigeration -50°C to +125°C, gaseous Helium for as low as 20K, and radiant heating options up to 200°C.

These systems can be fully automated with PLC and SCADA.

VACUUM HEAT TREATMENT FURNACES, VACUUM OVENS, ARC-MELTING SYSTEMS & VACUUM HOT PRESSES

We offer vacuum heat treatment, brazing, nitriding and carboriding furnaces with temperature range up to 1800°C along with the option for gas and oil quenching with pressure up to 12 bar.

We offer standard or custom-engineered furnaces with various configurations such as horizontal, vertical, bottom loading, and top loading. Systems include a range of heating elements such as graphite, molybdenum, kanthal, nichrome.

We supply arc-melting systems for industrial and academic use cases. We also supply vacuum hot press systems up to 250 tons.



PROCESS VESSELS, PRESSURE VESSELS & SPECIAL PURPOSE VESSELS

With U stamp and U2 stamp, we have the facilities to manufacture process and pressure vessels up to 6000 psi and handle high temperatures.

We design, manufacture and install process and pressure vessels at customer sites as per the customer requirements and regulation safety procedures.

We also supply vessels with agitators, stirrers, for top mounting, bottom mounting, high speed, homogenizing type, propeller blade options. Jacketed vessels with insulation options are also available. We offer the ability to manufacture vessels as per ASME Section 8 Div 2, and also ASME Section 3 Class 2 NC (Nuclear Components).

We are only authorized facility in India with the ability tomake vacuum also high pressure vessels at a single location.

VACUUM PUMPS, VACUUM VALVES & PUMPING STATIONS

We manufacture double stage rotary vane pumps, diffusion pumps, and booster pumps.

We offer double stage rotary vane pumps of 6 m 3 /h (100 LPM), 15 m 3 /h (250 LPM), 35 m 3 /h (585 LPM), 60 m 3 /h (1000 LPM), with oil mist filter and all required spares. We offer diffusion pumps of 150 l/s, 500 l/s, 1000 l/s, 3000 l/s, 12000 l/s and 16000 l/s. We offer booster pump of 4175 LPM.

We offer a wide range of HV and UHV vacuum valves ranging from DN16 to DN500 with ISO-KF and CF-F flanges.

We also offer integrated pumping stations with turbo pumps and dry or wet pumps from other vendors.





VACUUM GAUGES (MEASUREMENT) & HELIUM MASS SPECTROMETER LEAK DETECTORS (MSLD)

We manufacture analog and digital Pirani gauges and Penning (Cold Cathode) gauges supplied with Display Control Unit (DCU). Our gauges are rugged, are highly reliable and are used in extreme conditions.

We also offer indigenously developed Helium Mass Spectrometer Leak Detector (MSLD) based on diffusion pumping system (wet option) or turbo pumping system (dry option). These MSLDs are widely used in industry and production environments.

CUSTOMERS











































































We have sales and support offices in Mumbai, Hyderabad, Kolkata, Delhi and Bangalore. In addition, we have partners and representation in California (USA), and Singapore.

Vacuum Techniques Pvt. Ltd is leading manufacturer of vacuum equipment, components and vacuum instruments for academic, research and industrial markets. With over 30 years of engineering experience and leading innovation, we continue to develop customer specific products and solutions.



