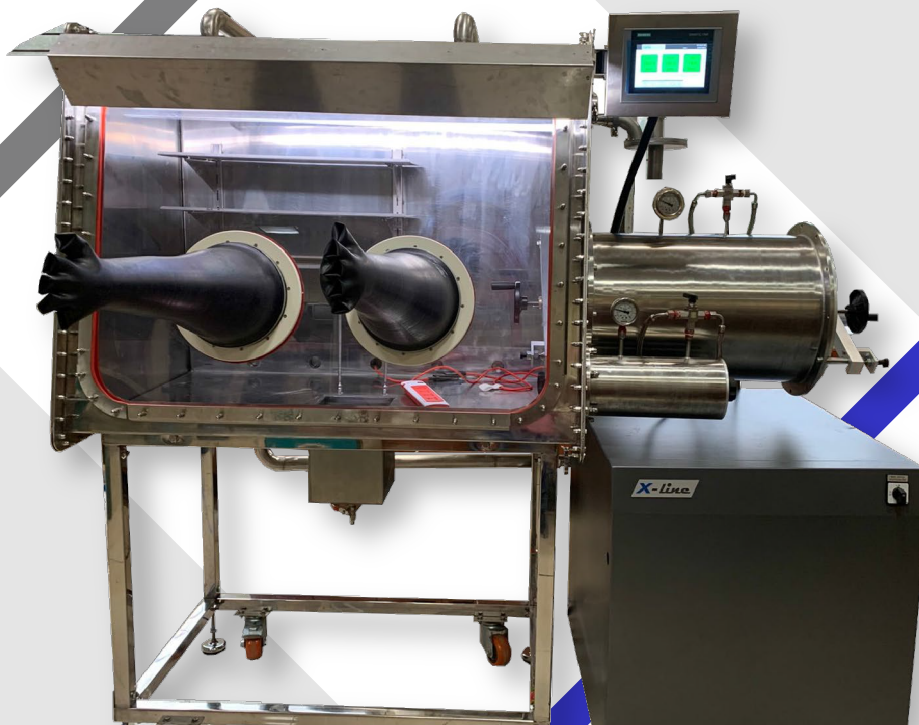


REV_{pure} INERT SYSTEM



GLOVE BOX WITH PURIFICATION SYSTEM

H₂O AND O₂ < 0.5PPM



REVARON.COM

INDUSTRIES



KEY FEATURES



COMPACT STANDARD GLOVE BOX

Introducing the REVpure Glove Box where purity meets reliability at the forefront. Engineered to prioritize purity and dependability, this glove box comes bundled with a standalone purification unit, offering an affordable solution for inert research applications. Crafted using top-tier components from globally renowned manufacturers, the REVpure Glove Box ensures a superior standard. This cutting-edge glove box doesn't just stop at reliability—it actively monitors critical parameters like oxygen, moisture, and temperature. Not only does it notify users when attention is needed, but it can also autonomously adjust these parameters based on pre-set conditions, reducing the need for constant human intervention.

Efficiency matters, and that's why this glove box is fully automated, offering unparalleled flexibility with its modular platform. Seamlessly integrate OEM equipment while managing time effectively. Beyond its automation prowess, it boasts features like a manual box purge valve, integrated high vacuum feedthroughs, and an automatic regenerable oxygen and moisture inert gas purification system. **Worried about environmental impact?** The REVpure Glove Box defaults to an ECO mode operation, ensuring minimal impact on the environment. It purifies the atmosphere within the glove box to levels of less than 0.5 ppm oxygen and moisture, aligning with our commitment to sustainability and our customers' concerns about the planet.

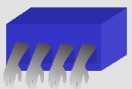
GLOVE PORT



2 PORTS



3 PORTS

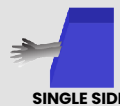


4 PORTS

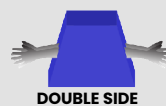


CUSTOMISED

WORKING AREA



SINGLE SIDE



DOUBLE SIDE

DECLINED WINDOWS



SINGLE SIDE



DOUBLE SIDE

FLAT WINDOWS



30+
INSTALLED



DELIVERED
WORLDWIDE

BEST SUITED FOR INDUSTRIES



BATTERY RESEARCH



ADDITIVE MANUFACTURING



**PACKAGING TOXIC AND
HYGROSCOPIC POWDERS**



**ELECTRONICS &
ORGANIC ELECTRONICS**



**PHARMACEUTICAL
RESEARCH**



**CHEMICALS HANDLING
AND STORAGE**

IOT FEATURES AT GLANCE



**DATA STREAMING
& BACKUP**



**CONNECTING WITH OTHER
IOT COMPATIBLE MACHINES**



**REMOTE MONITORING FROM
COMPUTER/TABLET/MOBILE**

OVERVIEW

High-quality compact glovebox; Stainless steel 1.4301 (SUS304) inside brushed, outside RAL 9003.

Consistent inert atmosphere with ultra-low leak rate (ISO Class II), Leak rate $<0.05\text{Vol\%/h}$ (Class 1 according to ISO 10648-2).

Large and small transfer chamber designed for quick item transfer.

Both antechambers are equipped with a removable sliding tray.

Built-in PLC controller with colour touch panel for precision control.

Simultaneous purification and regeneration of gas.

Perfect Closed-loop recirculation for minimal gas utilisation.

Facilitates Negative and/or positive pressure operation.

High-accuracy sensors for internal inert environment monitoring and real-time data.

Bright external LED white light (optional light filters for light-sensitive materials).

Front window (declined or flat) Material Polycarbonate with SAPHIR hard coating (resistant to many chemicals and scratches).

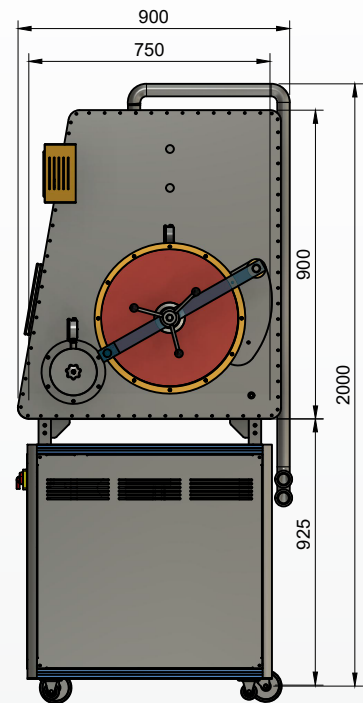
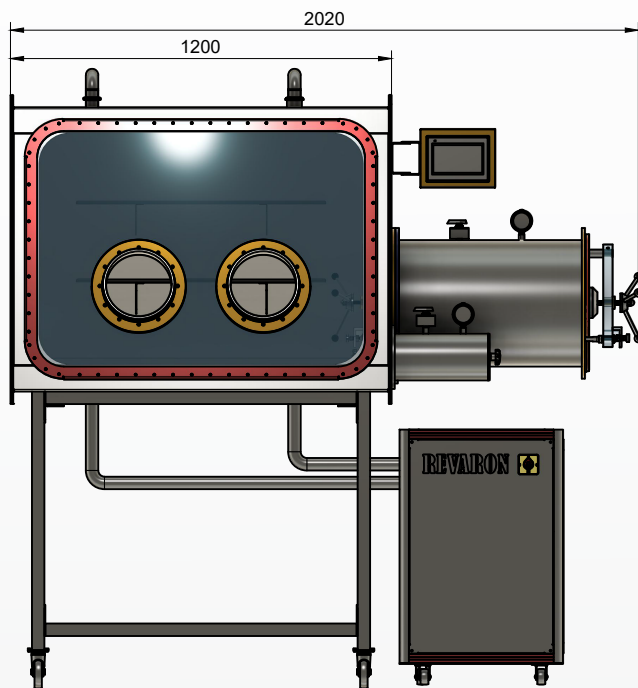
Multiple feedthrough options (up to 30 feedthroughs tested).



OUR SOLVENT PURIFIER CAN TREAT THESE SOLVENTS BY REMOVING WATER & OXYGEN

Pentane, n-Hexane, Cyclohexane, n-Heptane, Toluene, Benzene, Dichloromethane, Chloroform, Chlorobenzene, Methanol, Ethanol, Acetonitrile (MeCN), DMF, Dimethyl Sulfoxide, Acetone

Skelton view of the glovebox detailing the dimensions and positions of all the parts and accessories. Please note that these can be modified based on the customer's requirements.



**TECHNICAL
SUPPORT**



**INSTALLATION
AND TRAINING**



**TECHNICAL AND ERGONOMIC
CONFIGURATION**



3D DRAWINGS



**SIMULATION FOR
CUSTOM DESIGNS**



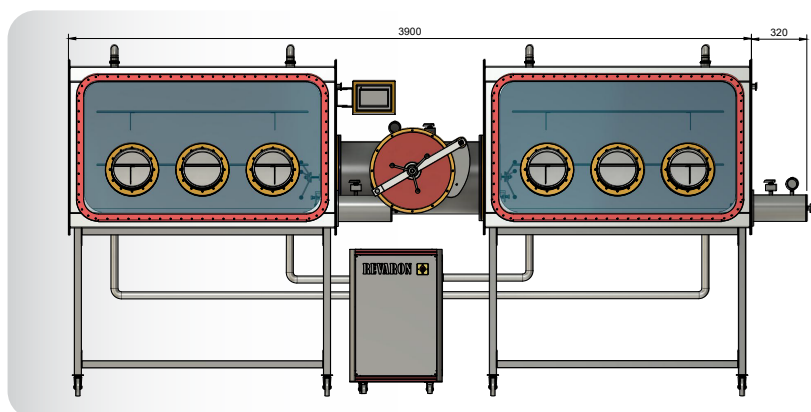
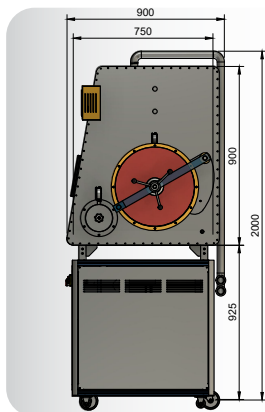
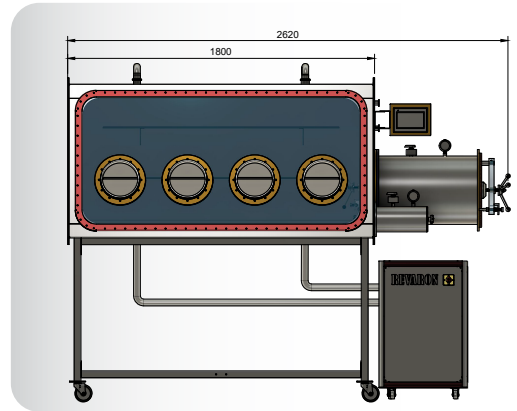
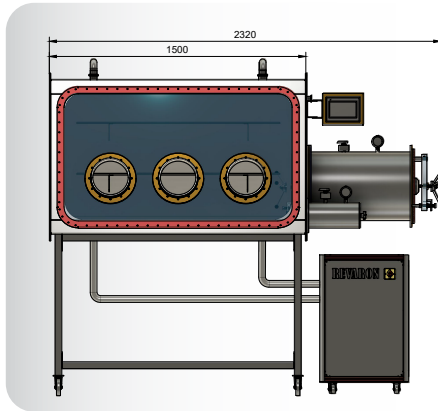
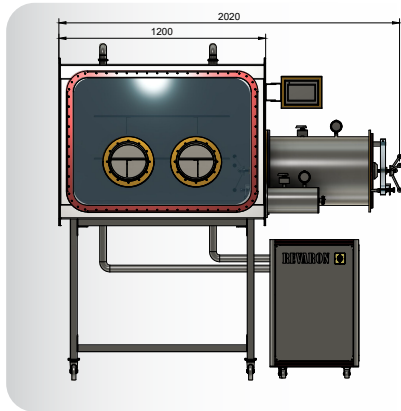
**SERVICE &
MAINTENANCE**

TECHNICAL SPECIFICATIONS OF GLOVE BOX

Type of construction	Side panels bolted on the box body
Material	Stainless Steel 304
Main chamber internal dimensions	780 mm x 1200 mm x 920 mm (D x W x H)
Width can be altered	1200 / 1500 / 1800 mm
Dimensions including frame	780 mm x 1200 mm x 1900 mm (D x W x H)
Big antechamber internal dimensions	Diameter 400 mm, Length 600 mm
Small transfer antechamber internal dimensions	Diameter 150 mm, Length 600 mm
Pressure Gauge for antechambers	Analog display (digital available on request)
Door Lock for antechambers	Latch and spindle-lock mechanism
Control Unit	nVIDIA Control System
Display	10" Colour touch screen (Graph, monitoring, menus, control interface ..)
Leak rate	< 0.05 Vol%/h
Inside surface	Brushed finish (Ra 1.2 µm)
Outside surface	Powder coated surface
Window	Polycarbonate with SAPHIR hard coating
Glove ports	8 inch diameter (PP / POE)
Gloves	Butyl (thickness 0.4 mm)
Light	Energy saving bright LED (installed outside)
Electrical feedthrough	Based on customer requirement
Filter	HEPA (0.3 µm) installed (gas inlet/outlet)
Shelves	3 modular stainless steel shelves rear side
Automatic Pressure control	Adjustable range between -10 to +10 mBar.
Manual Pressure control	Foot control switch to operate during the operation
Power, communication lines, vacuum	DN 40 ISO-KF flange feedthroughs
Data transfer and firmware updates	USB

Installed Feedthrough	Four standard DN 40 ISO-KF feedthroughs on the rear wall. Two are sealed by blank KF-40 caps, one electrical power extension and one USB female-to female (supports data and power).
Oxygen Analyser	GE, PLC integrated, enabling auto-circulation of the purifier
Moisture Analyser	Michell or Xantar, PLC integrated, enabling auto circulation of the purifier
Plumbing	304 stainless steel tubing
Movement and relocation	Casters for easy moving (can be wheeled). Also fixed levellers to level and stabilise the glovebox.

OUR RANGE

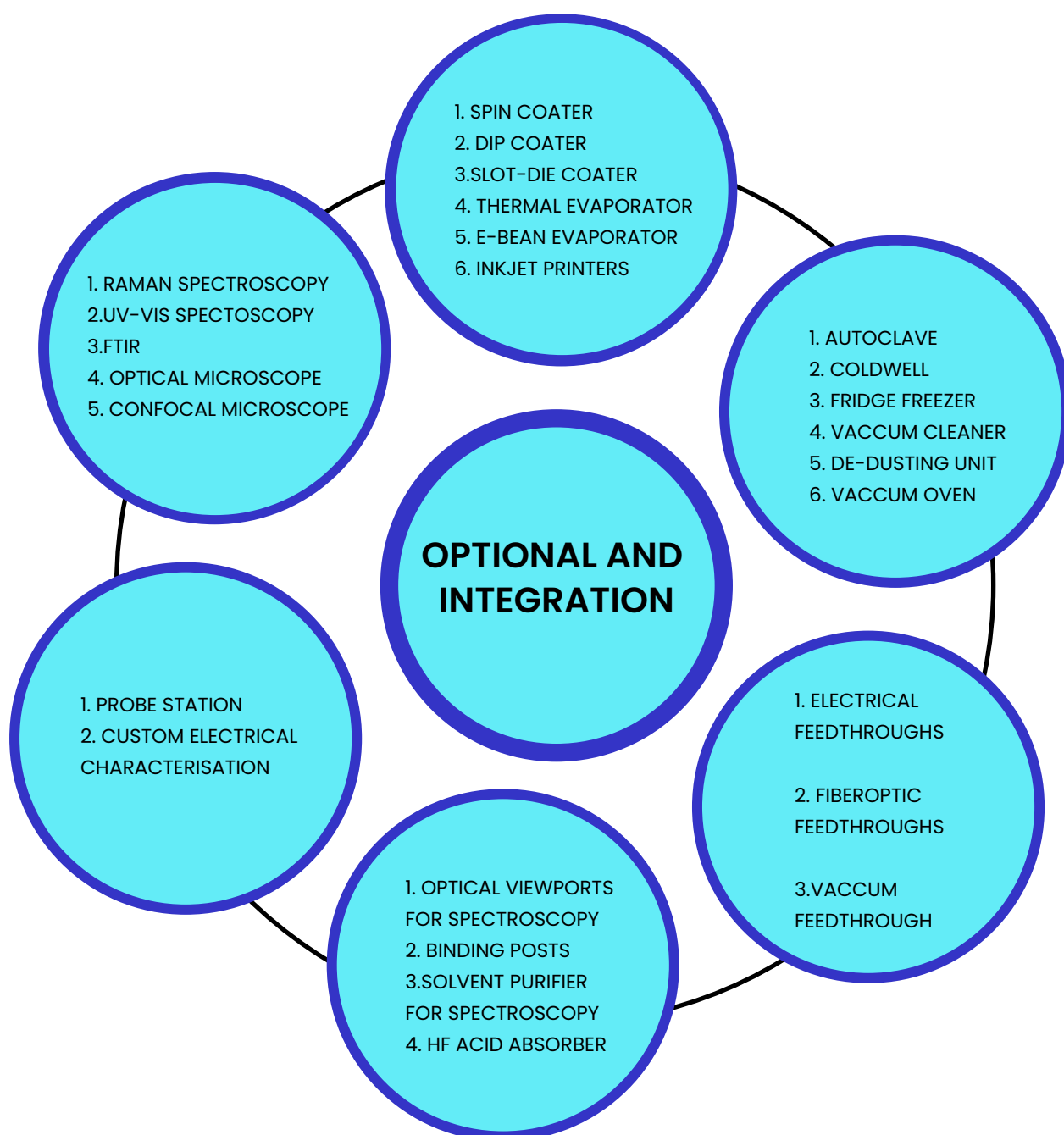


TECHNICAL SPECIFICATIONS OF PURIFIER

Operational Process	Closed loop recirculation system
Attainable purity	Moisture (H_2O) < 0.5ppm Oxygen (O_2) < 0.5ppm
Enclosure volume	Up to 3m ³
Gas Purifier	Full automatic
Number of purification columns	1 (used for cleaning inert gas (working gas) and absorb moisture and oxygen present within the working gas)
Reactor capacity/purification line	High-capacity organic solvent absorber (also referred as a scrubber), incorporating activated charcoal. O_2 : 50 litres, H_2O (Moisture): 1000g
Regeneration	Automated regeneration sequence
Box pressure control	Automatic pressure control
Vacuum pump	Rotary pump (Edwards/similar RV8 or RV12), rotary vane pump with oil mist eliminator & oil return kit
Blower	Frequency controlled up to 80cfm, vibration dampened. High-efficiency and low-noise, no need for water cooling, thereby you save water and the planet.
Circulation	Energy-efficient on-demand circulation. In automatic mode, the purifier works on demand (about 5 min/hr), controlled by oxygen and/or moisture sensors. Note: continuous circulation mode should be used to achieve ultralow impurity levels.
Main and Control valves	Electro Pneumatic or manual / solenoid valves
Regeneration gas	N_2/H_2 mixture or Ar/H_2 with H_2 (2-10%)
Working Gas	Argon or Nitrogen or Helium
Sensor measurement range	Moisture (H_2O): 0-3000 PPM, Oxygen (O_2): 0-1000 PPM
Electrical power	230V/50-60Hz (13A) (including fuse)

ADDITIONAL FACILITIES

We can integrate the Glove box with thin film deposition equipment and characterisation equipment. We have listed very few here, but we have all the facilities to integrate many other devices, please discuss this with our specialist team.



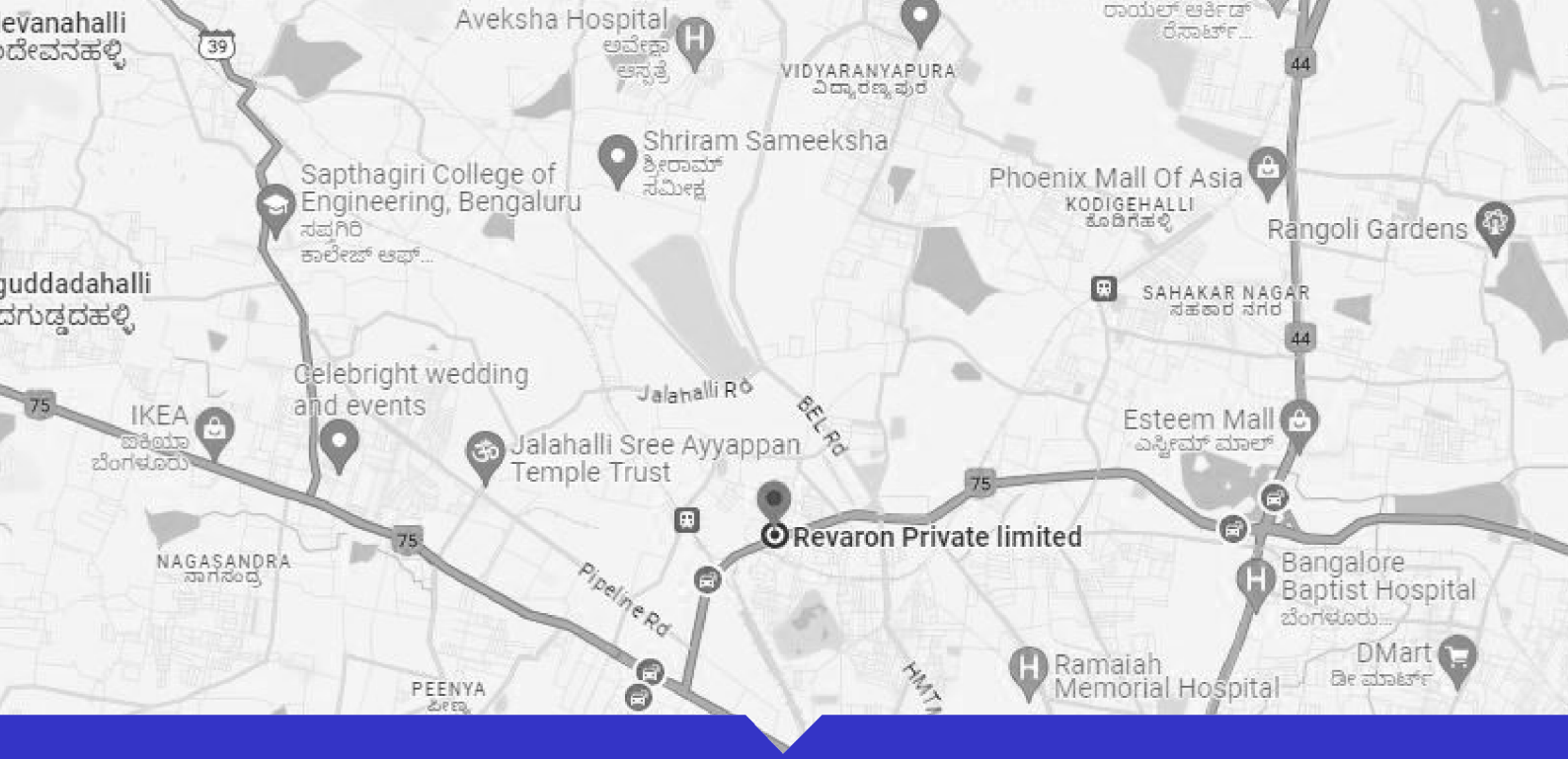
ADDITIONAL ACCESSORIES

- ❑ Automatic Regenerative Vapor Removal
- ❑ Pump: Dry pump
- ❑ Filters: ULPA Filter
- ❑ Heated Antechamber (with temperature controller upto 250C)
- ❑ Glove ports: Oval and Square
- ❑ Disposal: Secure waste disposal
- ❑ Fridge (0° to 15° C) and Freezer (down to -40° C), Volume 20L and 40L
- ❑ Solvent Vapor removal (required if customer work involves working with solvents frequently). For example, spin coating and/or Dip coating process within the glove box)
- ❑ Transfer systems: air lock, interlocked doors for clean room transfer, cascaded glovebox, other fabrication or test equipment
- ❑ Antechamber designs: Rectangular square antechamber, L & T shaped square antechamber, Round L & T-shaped antechamber
- ❑ Remote troubleshooting and monitoring including data collection and storage.

OUR GLOVEBOXES ARE SHIELDED FOR SAFETY AND SECURED FOR PURITY

LIST OF OUR ESTEEMED CUSTOMERS IN ALL SECTORS





CONTACT US TODAY

Get in touch with us today to explore new possibilities, discuss your needs, or seek assistance. Our team is ready to provide prompt and personalised support. Whether you have questions, feedback, or interested in our services, we're here to help. Reach out via the contact information below, and let's start a conversation.

INDIA

Revaron Private Limited
(HEADQUATERS)

K5 & K7, 304/6, Seetharam Industrial Estate,
Jalahalli Village, Jalahalli, Bengaluru,
Karnataka 560013, India

info@revaron.com

UNITED KINGDOM

Reviun Ltd

Unit 00.02, DMU Innovation Centre,
49 Oxford St, Leicester LE1 5XY, UK.

info@reviun.com

**SCAN TO VISIT
OUR WEBSITE**



REVARON.COM