# **Our Global Distribution Arrangements**

# PLAS LABS, INC.® **Our Global Distribution Network** Company Established in 1967

PLAS LABS, INC.® has a global distribution network of over 110 distributors. Our distributors have a proven record of good service, applications expertise, and knowledge of our product line. Many are scientists and engineers with strong technical backgrounds and "hands-on" experience.

Most of our global distributors are family owned businesses. Good service and customer satisfaction are critical to their ongoing business success.

For a complete listing of our distributors (country by country) please go to the PLAS LABS, INC.<sup>®</sup> web site at www.Plas-Labs.com

PLAS LABS, INC.<sup>®</sup> has a global pricing policy maintained on a year long basis. We normally change prices once a year. All quotations are honored for sixty (60) days.

We are proud of our products, their service and durability. Our product warranty is twenty-four (24) months on most products., but not including gloves and consumables. A twelve (12) month warranty applies to selected products.

# Have a need or an idea for a new product? Just let us know. We like to do custom work!

Distributed by:



Tallaght Business Park Whitestown, Dublin 24. Ireland **D24 RFK3** 

Tel: (01) 4523432 Fax: (01) 4523967

Quatro House, Frimley Road, Camberley, United Kingdom **GU16 7ER** 

Tel: 08452 30 40 30 Fax: 08452 30 50 30 E-mail: info@labunlimited.com E-mail: info@labunlimited.co.uk Web: www.labunlimited.com Web: www.labunlimited.co.uk

# WHAT'S INSIDE AND WHAT'S NEW!! • INDEX

### **CHAMBERS & GLOVE BOXES:**

| Hypoxia Chamber Glove Box (Touch Screen Controlled)                                                                              | 4     | NEW: |
|----------------------------------------------------------------------------------------------------------------------------------|-------|------|
| Automatic Controlled Atmosphere "One-Touch / Go Anaerobic" Chamber<br>( <i>Touch Screen Controlled</i> )                         | 5     | NEW! |
| Controlled Atmosphere (Anaerobic) Chamber<br>Multiple Operator Atmosphere (Anaerobic) Chamber ( <i>All manually controlled</i> ) | 6-7   |      |
| Temperature & Humidity Controlled glove box. (Touch Screen Controlled)                                                           | 8     |      |
| Closed Loop Containment Isolator glove box                                                                                       | 9     |      |
| Nitrogen Dry Box<br>Multiple Operator Nitrogen Dry Box ( <i>Manually Controlled</i> )                                            | 10-11 |      |
| Powder Handling Isolator                                                                                                         | 12-13 | NEW! |
| Basic Glove Box, single operator<br>Multiple Operator, Basic glove box                                                           | 14-15 |      |
| Compact Glove Box (830-Series)                                                                                                   | 16-17 |      |
| Compact Glove Boxes with HEPA Filtration                                                                                         | 18    |      |
| Compact Glove Boxes with access doors and automatic locks                                                                        | 19    |      |
| Germicidal Work Station (Still Air Enclosure)                                                                                    | 20    |      |
| La Petite Glove Box ( <i>Re-engineered style</i> )                                                                               | 21    |      |
| PCR (UV) Chamber<br>HEPA Filtered, PCR Chamber                                                                                   | 22-23 |      |
| Ventilated Balance Enclosures, HEPA Filtered                                                                                     | 24-25 | NEW! |
| Low Velocity Fume Hoods, non-HEPA Filtered                                                                                       | 26    |      |
| Biotoxin & Decontamination Chambers                                                                                              | 27    |      |
| Custom Capabilities                                                                                                              | 28-29 | NEW: |
| Desiccator Cabinets (clear and light sensitive units)                                                                            | 30-33 |      |
| Stainless Steel desiccators                                                                                                      | 32    |      |
| Stainless Steel Glove Box (Integrity) ( <i>Re-engineered style</i> )                                                             | 34-35 | NEW! |
| CO <sub>2</sub> Lab Chambers (Heavy Duty)                                                                                        | 36    |      |
| Vacuum Chambers (Multi-purpose)<br>Pressure Relief Valve, 800-PRV                                                                | 37    |      |

# WHAT'S INSIDE AND WHAT'S NEW!! • INDEX

### ACCESSORIES FOR ALL CHAMBERS AND GLOVE BOXES

| Major Accessories (Devices)3Digital Oxygen Indicator3"Counter SPI" Static EliminatorHumidty Control System                                                                                                             | 38    |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|
| Controlled Purge System 3<br>Bacti-Microcinerator<br>"Bright Light" System                                                                                                                                             | 39    |      |
| HEPA Filtration and Components 4<br>HEPA Filters<br>Carbon Filters<br>Magnehelic Gauges                                                                                                                                | 40-41 |      |
| Suspended Shelf (Storage) Systems<br>#830-Series Units<br>Glove Boxes & Isolators                                                                                                                                      | 42    | NEW: |
| Entry Port (Plug) Variations<br>Bare Hand Entry                                                                                                                                                                        | 43    |      |
| Atmosphere Purification & Sterilization4Carbon & General Filter Types"VHP" Sterilization Set-UpsCatalyst Heater & Palladium CanisterDrying Train Set-up"ONEG" Strict Oxygen Reducing SystemGeneral Purpose Vacuum Pump | 44-45 | NEW! |
| Stainless Steel Support Carts (Trolleys) 4<br>"Knocked Down Style"                                                                                                                                                     | 46    |      |
| Microscope & Inspection Lens 4                                                                                                                                                                                         | 47    |      |
| Glove Box & Isolator Gloves 4                                                                                                                                                                                          | 48-49 |      |
| Valve and Gauge Variations 5                                                                                                                                                                                           | 50    |      |
| Miscellaneous Accessories 5<br>Blanking Plate<br>Automatic Door Inter-Locking System<br>Computer Interface Package<br>Germicidal Dip (Entry) Tank<br>"T" Connecting Transfer Chamber<br>Oxygen Indication (Hand Held)  | 51-52 |      |

### Hypoxia Chamber Glove Box

This new Hypoxia Chamber Glove Box is ideal for tissue culture work, including tumor cell and stem cell research. It features a color operated "touch screen" for automatically controlling oxygen levels, temperature levels, and carbon dioxide levels.

### **Basic Features Include**

- 8" Color Panel Touch Screen.
- O2 sensor and CO2 sensor.
- Platinum RTD with sealing gland.
- N<sub>2</sub>, CO<sub>2</sub>, and O<sub>2</sub> gas hook-up.
- Inert gas hook-up.
- Ethernet port connection for data-logging.
- Thermoelectric Assembly (Peltier device).
- Password protected, configurable PID ٠ control.
- One touch, on screen data-logging.
- Air circulation fan.



## **Optional Accessories for the 856-Series:**

See pages 38-52 for a complete list of available accessories.



800-CART/GB Stainless steel support cart.



Adjustable height lift cart.





### 856-HYPO, Hypoxia Chamber

856-HYPO/Exp, Export Model

| <b>Product Specifications:</b><br>Outside Dimensions: | 55" wide x 35" deep x 38" high<br>1397mm x 889mm x 965mm |
|-------------------------------------------------------|----------------------------------------------------------|
| Inside Dimensions:                                    | 41" wide x 28" deep x 26" high<br>1041mm x 711mm x 660mm |
| Oxygen (O2)Range:<br>Oxygen sensor accuracy:          | $0-25\% \pm 0.25\%$                                      |
| Carbon Dioxide (CO2) rang                             | e: ± 0-20%                                               |

Temperature range: Temperature accuracy:

Carbon Dioxide sensor accuracy:

ambient to 40°C ±0.3°C @ 0°C (class "B" accuracy)  $\pm 1\%$  or degree of set point

 $\pm 0.2\%$ 

Parameter control:

**Export Crated Weight:** 450 lbs. 205 kilos

### GO ANAEROBIC

### "One-Touch / Go Anaerobic" Glove Box

This new Automatic "One Touch" Anaerobic Chamber allows one to simply press the "Go Anaerobic" button to automatically create a strict anaerobic atmosphere. It features a color operated "touch screen" for automatically creating an anaerobic atmosphere.

### Features of the 857-Series Glove Box

- One-Touch, "Go Anaerobic" button to initiate purging sequence.
- One-Touch, on-screen data-logging with USB port for long term studies.
- Larger touch-screen, display. 24 hour data logging.
- Automatic pressure hold function. Pressure control maintains user selected pressure levels.
- Automatic purging cycles for main chamber and transfer chamber.
- Larger, easy-to-use operator touch screen.
- Continual display of atmospheric oxygen conditions in percentage (%) and parts-per-million (ppm).
- Oxygen display automatically switches to ppm when  $O_2$  levels is < 0.5%
- User selectable gas; Nitrogen or Anaerobic gas mixture.
- High and low level alarms with alarm history log.
- Password protected Administration window.
- Optional Rh monitoring and control.

#### **Product Specifications:**

| Outside Dimensions: | 55" wide x 35" deep x 38" high<br>1397mm x 889mm x 965mm |
|---------------------|----------------------------------------------------------|
| Inside Dimensions:  | 41" wide x 28" deep x 26" high<br>1041mm x 711mm x 660mm |

| • Oxygen Sensor accuracy (%):   | $0-100.0\% \pm 1.0\%$ |
|---------------------------------|-----------------------|
| • Oxygen Sensor accuracy (ppm): | 0-10,000 ±1.0% FS     |

• Temperature range:

ambient to 41.0° C accuracy: (±0.5°)

5-90% Rh

±1.0%

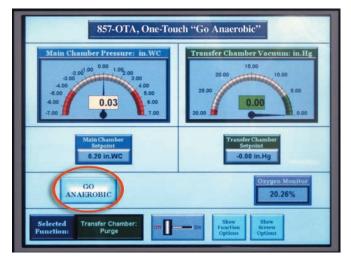
### **Optional Rh control**

- Rh Range:
- Control accuracy:



### 857-OTA, Automatic Anaerobic Chamber

857-OTA/Exp, Export Model



- Warranty: 2 years (24 months) on non-consumable items; i.e. gloves.
- Gas consumption for anaerobic achievement: 300 liters
- Pressure range: -3" WC to +3" WC (-1500 Pa to +1500 Pa)

Export Crated Weight: 450 lbs. 205 kilos

### Controlled Atmosphere (Anaerobic Chamber) Glove Box

The **855-AC** (Anaerobic Chamber) has been designed for manually controlling your atmosphere when working with Oxygen sensitive materials. It is perfect for working in situations requiring low levels of Oxygen during critical isolation of the operator or your research materials. Any inert gas may be used.

Its main advantage is minimizing the risk of Oxygen entry into the main working chamber. If trace amounts of Oxygen happen to enter the main chamber, the Catalyst Heater reduces it to water vapor. The drying train can then be activated to remove any excess water vapor.

The **855-AC** is offered as a complete system ready to use. There are no other components required. All you need to add are your work samples and gas of choice.

This glove box has a capacity of 348 culture plates when using our suspended shelf accessory. Please refer to the Accessories Section (800-SHELF-1).

#### Some typical applications include:

Microbiology, Biochemistry, Plasma environment work, animal science studies, and electronic sub-assembly work.

#### The Basic Chemical Reaction.

The internal atmosphere is drawn off the floor of the glove box and is pushed up through the heating elements and the warm Palladium (Pd) pellets. The Hydrogen in the special gas mixture then reacts with trace amounts of Oxygen to create water vapor. The excess water vapor is then absorbed by the Molecular Sieve<sup>™</sup> in the three drying train canisters. The canisters are re-chargeable.

#### The Catalyst Heater Function.

The catalyst heater has two main functions. It reduces trace amounts of Oxygen and it maintains the correct incubation temperature level for cultivating anaerobes (35 to 39 degrees C).

### Crated Weight: Refer to page 7



855-AC/Exp, Export Model

Refer to 800-ONEG and dimensions on page 7.

### **Basic Features Include:**

- Standard 24 month warranty (not gloves or consumables.)
- Formed one-piece clear plastic top section with "Easy Clean" corners.
- Matched Die-Molded white thermoset bottom with "Easy Clean" corners.
- Two vacuum diaphragm pumps, one each for the drying train and the transfer chamber (purging).
- Drying train includes three (3) clear plastic canisters filled with Molecular Sieve.
- All controls are illuminated.
- "Bright Light" system (40,000 hour lamp guarantee).
- White ambidextrous Hypalon gloves.
- All clamps are adjustable to compensate for wear.
- Adjustable vacuum gauge on transfer chamber.
- Four (4) ground key-cock valves for purging.
- Transfer chamber is 12" (305mm) long x 11" (280mm) I.D.
- Electrical outlet (socket) strip (UL, CSA, & CE).
- Self sealing quick disconnects allow changing of the drying train without disturbing the internal atmosphere.

#### Electrical requirements.

North American 115-120 Volts, 60 Hz. 10 Amps. Export Models 220-240 Volts, 50 Hz. 5 Amps.

### Controlled Atmosphere (Anaerobic Chamber) for Multiple Operators

Our **#855-ACB** contains all the features of our single operator unit, but it has more capacity. It is ideal for two or more operators working together up to a maximum of four (4) people. Two people each side. NOTE: The maximum working pressure is 6" of WC.

### The Drying Train Function.

The drying train includes its own vacuum pressure pump and six (6) polycarbonate canisters filled with Molecular SieveTM. The canisters are attached in series on the top and back of the unit. All canisters are connected using self sealing quick disconnects so as not to disturb the inner atmosphere when recharging them.

The Molecular Sieve<sup>™</sup> acts as an atmosphere purifying medium. Most impurities produced by

drying agent as moisture is produced. As moisture is absorbed, the Molecular Sieve<sup>TM</sup> will turn color to a dark brown.

The Molecular Sieve<sup>™</sup> can be rejuvenated by heating in a hot oven for three (3) hours at 450° F. NOTE: You must remove the Molecular Sieve<sup>™</sup> from the plastic canisters before recharging (baking).

#### What's included with the glove box:

- Two (2) pairs of white ambidextrous Hypalon gloves.
- Two (2) vacuum pressure pumps. One each for the drying train and the transfer chamber purging cycle.
- Two (2) Catalyst Heaters and four (4) Palladium canisters.
- Manual controls for purging, lights, and drying train operation.
- A "Bright Light" illumination system with a 40,000 hour lamp guarantee.
- Hospital grade multiple electric outlet (socket) strip.
- Optically clear plastic top and bottom sections with "Easy Clean" corners.
- Transfer chamber size 12" long X 11" I.D. (305 mm X 280 mm I.D).
- Two year (24 month) standard warranty (Not gloves or consumables).



855-ACB, Anaerobic Chamber for Multiple Operators

research will adhere to the granules. It also acts as a 855-ACB/Exp, Export Model

| Product Data                                     | 855-AC                                             | 855-ACB                                              |
|--------------------------------------------------|----------------------------------------------------|------------------------------------------------------|
| I.D.                                             | 41"w x 28"d x 26"h<br>1,040mm x 710mm x<br>660mm h | 60"w x 38"d x 31"h<br>1,520mm x 960mm x<br>790mm     |
| O.D.<br>(Includes transfer<br>chamber (12" long) | 55"w x 35"d x 38"h<br>1,400mm x 890mm x<br>970mm   | 76"w x 47"d x 42"h<br>1,930mm x 1,190mm x<br>1,070mm |
| Approximate Volume                               | 17.3 Cubic Feet<br>489 Liters                      | 40.9 Cubic Feet<br>1,157 Liters                      |
| Approximate Shipping<br>Weight (Crated)          | 450 Pounds<br>205 Kilos                            | 685 Pounds<br>311 Kilos                              |

### 800-ONEG, Oxygen reducing accessory not included

This accessory further reduces the trace amounts of Oxygen remaining in the glove box after initial purging. Part #1 is the Oxygen trap. Part #2 is the Oxygen indicator (sensor).

The accessory is attached only after the initial purge cycles have been completed. It will reduce trace amounts of Oxygen down to about ten (10) ppb.

Refer also to Page 45



### Touch Screen, Automatically Controlled Atmosphere Isolator/ Glove Box

The NEW #890-THC accurately maintains temperature and humidity (Rh) inside a roomy single operator glove box. We also offer multiple operator units.

The unit is operated by merely touching the color control screen for the functions desired. It includes your private password protected administrator controls. Touch screen viewing of the data logging function is included as well as serial port connection for data logging.

Automatic purging cycles can be programmed. The humidity range control accuracy is  $\pm 2\%$  Rh. Temperature can be regulated in either "F" or "C" degrees and the Peltier style thermoelectric assembly is accurate to  $\pm 2$  degrees C. Temperature range is from 16 to 44 degrees C.

### Features Included:

- · Password protected, configurable "PID" controlled.
- Inert gas hookup capability.
- White ambidextrous HypalonTM gloves.
- Platinum RTD with sealing gland.
- Four (4) pre-set conditions.
- 24 hour one touch, on screen data logging.
- Room temperature and Rh read outs.
- Thermoelectric assembly (Peltier device).
- Nebulizer for the Rh system.
- The top section is one piece clear acrylic plastic for easy viewing. It features "Easy Clean" corners.
- Four (4) key cock values for purging. Two (2) on the main chamber and two (2) on the transfer chamber.
- 8" (203 mm) Color panel touch screen. Date and time display.
- Humidity (Rh) transmitter with 8 feet of sensor cable.
- Standard 24 month warranty (Not gloves or consumables).
- Serial port for external computer data logging & remote access.
- Transfer chamber is 11" (280 mm) I.D. x 12" (305 mm) long.
- "Bright Light" system (40,000 hour lamp guarantee).

### Optional Drying Train package. Catalog #890-THC/DT

The Drying Train accessory includes two (2) canisters filled with Molecular Sieve<sup>™</sup> and circulation (vacuum) pump. This accessory can be used if a house supply of inert gas is not available. Periodic regeneration of the Molecular Sieve<sup>™</sup> is recommended for optimal drying performance. Refer to Accessories Section.

**NOTE:** If drying train feature is preferred, order as: **#890-THC/DT** (Domestic) or **#890-THC/DT/EXP** (Export).

### Electrical requirements.

North American 115-120 Volts, 60 Hz. 10 Amps. Export Models 220-240 Volts, 50 Hz. 5 Amps.



### 890-THC

890-THC/Exp, Export Model

| Product Data                                                    | 890-THC & 890-THC/DT                            |
|-----------------------------------------------------------------|-------------------------------------------------|
| Inside Dimensions                                               | 41"w x 28"d x 26"h<br>1,040mm x 710mm x 660mm h |
| Outside Dimensions<br>(Includes transfer<br>chamber (12" long)) | 55"w x 35"d x 38"h<br>1,400mm x 890mm x 970mm   |
| Approximate Volume                                              | 17.3 Cubic Feet<br>489 Liters                   |
| Maximum Working<br>Pressure                                     | 6.0" of W.C.<br>(1.49kPa)                       |
| Approximate<br>Shipping Weight                                  | 450 Pounds<br>205 Kilos                         |



Close-up of "Touch Screen" display

### Closed-Loop Containment Isolator for Multiple Operators

The **#870-CLC** "Closed Loop" Isolator is a completely automated negative pressure containment glove box.

The system is engineered and programmed to maintain a slight negative working pressure to ensure containment of your specimens (-0.5" of H2O). The internal atmosphere is continually filtered by two (2) HEPA filters. Filters are rated at 99.9997% efficiency and can be changed over from within the isolator for safety. During change over, contaminated filters do not come into direct contact with the operator.

These isolators may be coupled together in train for multiple station work processes. They can be set up for up to four (4) sets of glove ports (operators). Two operators on both the front and back walls.

#### **Basic Features:**

- Effective containment of potentially hazardous toxins, organisms, and other materials etc.
- A completely sealed containment unit with automatic negative pressure control.
- Large, easy to read control panel with digital controllers and bright LED status lights.
- Easy (and safe) to change, inlet and outlet HEPA filters. Filters can be incinerated after use.
- · Easy to clean highly radiused corners.
- Stainless steel support cart (trolley) with gas tank support tracks for safety. Refer to page 46.
- Clear plastic top and bottom section. Bottom is formed of high impact resistant plastic.
- "Bright Light" illumination system with a 40,000 hour lamp guarantee.
- Two (2) pairs of white ambidextrous Hypalon<sup>™</sup> gloves.
- Manual house exhaust valve for emergency venting of the isolator.
- Electrical outlet (socket) strip (UL, CSA, & CE).
- Four (4) ground key cock valves for purging.
- Standard twenty-four (24) month warranty (Not gloves or consumables).

#### Electrical requirements.

North American 115-120 Volts, 60 Hz. 1 Amp. Export Models 220-240 Volts, 50 Hz. .5 Amps.

#### How the isolator works:

If the internal negative pressure rises above -0.55" of W.C, the

programmable logic controller automatically opens the atmosphere supply valve.

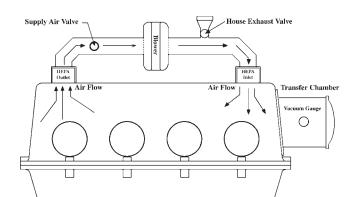
Incoming (make-up) gas is automatically filtered through the inlet HEPA filter.

Once the internal atmosphere reaches your preferred set point, the automatic valve closes. The isolator also includes a manual "ball valve" for connection to your house exhaust/filter system.



870-CLC with Stainless Steel Support Cart

870-CLC/Exp, Export Model



#### 870-CLC Atmosphere flow schematic (front view)

| Product Data                                                     | 870-CLC                                                                    |  |
|------------------------------------------------------------------|----------------------------------------------------------------------------|--|
| Inside Dimensions                                                | 57"w x 35"d x 27"h<br>1,423mm x 890mm x 690mm h                            |  |
| Outside Dimensions<br>(Includes transfer<br>chamber (12" long))  | 82"w x 47"d x 53"h<br>2,080mm x 1,190mm x 1,350mm                          |  |
| Approximate Volume                                               | 40 Cubic Feet<br>1,157 Liters                                              |  |
| Approximate<br>Shipping Weight.<br>Isolator & Cart<br>(2 crates) | Isolator: 615 Pounds / 279 Kilos<br>Cart (Trolley): 310 Pounds / 141 Kilos |  |

### Nitrogen Dry Box

Our **#850-NB** "Nitrogen Dry Box" is a completely enclosed environmental chamber ideal for working in your preferred inert gas atmosphere. Any inert gas such as Nitrogen, Argon, Helium and Plasma are easily maintained.

The unit is compact, lightweight, and portable. The design makes it easily moveable from lab to lab. Everything you need is included with the glove box. All you need to add is your gas of choice and your preferred research materials.

### **Basic Features Include**

- Standard 24 month warranty (Not gloves or consumables.
- Formed one piece clear acrylic top section with rounded "Easy Clean" corners.
- Matched die molded white thermoset bottom with rounded "Easy Clean" corners.
- Two (2) vacuum diaphragm pumps. One each for the drying train and transfer chamber.
- The drying train includes three (3) clear acrylic canisters filled with Molecular Sieve<sup>™</sup>.
- Transfer chamber is 12" (305 mm) long x 11" (280 mm) I.D.
- All controls are illuminated.
- "Bright Light" system (40,000 hour lamp guarantee).
- White ambidextrous Hypalon<sup>™</sup> gloves.
- All clamps are adjustable to compensate for wear.
- The front sloped viewing panel minimizes glare.
- Vacuum gauge on transfer chamber.
- Self sealing quick disconnects enable changing of the drying train canisters without disturbing the internal atmosphere.
- Four (4) ground key cock valves for purging.
- Transfer chamber leveling tray for handling liquids.
- Hospital grade multiple electric outlet (socket) strip. UL, CSA, and CE approved.



850-NB, (Shown with optional shelf package, 800-SHELF I)

850-NB/Exp, Export Model

**800-SHELF-I,** shown as an optional accessory. Culture dish capacity from 348 up to 432 plates. Refer to Accessories Section for more details.

| Product Data                                     | 850-NB                                             | 850-NBB                                              |
|--------------------------------------------------|----------------------------------------------------|------------------------------------------------------|
| I.D.                                             | 41"w x 28"d x 26"h<br>1,040mm x 710mm x<br>660mm h | 60"w x 38"d x 31"h<br>1,520mm x 960mm x<br>790mm     |
| O.D.<br>(Includes transfer<br>chamber (12" long) | 55"w x 35"d x 38"h<br>1,400mm x 890mm x<br>970mm   | 76"w x 47"d x 42"h<br>1,930mm x 1,190mm x<br>1,070mm |
| Approximate Volume                               | 17.3 Cubic Feet<br>489 Liters                      | 40.9 Cubic Feet<br>1,157 Liters                      |
| Approximate Shipping<br>Weight (Crated)          | 450 Pounds<br>205 Kilos                            | 685 Pounds<br>311 Kilos                              |

#### Electrical requirements:

North American 115-120 Volts, 60 Hz. 10 Amps. Export models 220-240 Volts, 50 Hz. 5 Amps.

**NOTE**: If this unit is to be used for Anaerobic work, you must also purchase our #800-HEATER and #800-PC (Palladium) accessories for optimum performance. Refer to the Accessories Section for details.

### Nitrogen Dry Box for Multiple Operators

The **#850-NBB** is our Nitrogen Dry Box for two (2) operators. It can be set up for up to four (4) operators. It includes all of the same features as our #850-NB, but it has six (6) drying train canisters and two (2) vacuum diaphragm pumps.

**NOTE**: The unit as shown includes optional accessories #800-SHELF-II.



# Working with fine powders and chemicals?

The **#800 AS/SPI** "Counter SPI" ionizer emits alternating positive and negative Ions that eliminate static electricity within the glove box. It is non-air assisted (no fan), so there is no atmosphere turbulence inside the chamber. Additionally, no particle contaminants are introduced because of the ionizer.

This device is perfect for working with fine powders and chemicals.



800-AS/SPI, Anti-Static Ionizer

Electrical requirements for #800-AS/SPI. North American 115-120 Volts, 60 Hz. 1Amp. Export models 220-240 Volts, 50 Hz. .5 Amp.

850-NBB, (Shown with optional shelf package, 800-SHELF II) 850-NBB/Exp, Export Model



The 850-NBB Nitrogen Dry Box includes the drying train system with six (6) canisters filled with molecular sieve.

For complete product specifications, refer to page 10 (850-NB).

NOTE: If the #850-NBB glove box is used for anaerobic work, you must purchase additional accessories #800-HEATER and #800-PC. For the large (NBB) glove box, we recommend two (2) #800-HEATERS and four (4) #800-PC canisters for the best efficiency.

### **Powder Handling Isolator**

The new **840-Series** Powder Handling Isolator is a closed-loop HEPA-filtered containment glove box used for small-scale handling/weighing of active pharmaceutical ingredients ("APIs") in powder form.

### **Observed Containment Levels:**

<1.0 Nanograms/cubic meter With optional Bag-In / Bag-Out Port (pn: 800-BIBO)

### Standard Features of the 840-Series:

- Standard 24 month warranty (Not gloves or consumables
- 3/8" thick clear acrylic construction with 3/8" thick bright white acrylic bottom.
- Hinged Front Door with oval polypropylene glove ports and door lock hasp.
- White Hypalon<sup>™</sup> Gloves.
- Closed-Loop Double HEPA Filtration Package.
- Two clear acrylic square transfer chambers. Ingress/ Egress. No gas valves. ID: 17"wide x 13" deep x 13" high. Not engineered for vaccum use.
- Magnehelic<sup>™</sup> Gauge bracket with on/off switch for blower.
- No removable top.
- HEPA Capsule with manual ball valve.
- Magnetic Interlocks on transfer chamber doors.
- Single, covered electrical receptacle.
- Work Station Ionizer, #800-AS/SPI.
- Leak test Report, ISO 14644-7 class I (Tf  $\leq$  5 x 10-4).



### 840-PH-10

840-PH-10/Exp, Export Model

### Included!



**800-AS/SPI**, Anti-Static Ionizer. Emits alternating positive and negative ions, removing static inside the glove box. This is a non-air assisted static eliminator, (no blower / no fan). The 800-AS/SPI is perfect for working with fine powders and chemicals.

| Product Data                                         | 840-PH-10                                       | 840-PH-20                                       | 840-PH-30                                           |
|------------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-----------------------------------------------------|
|                                                      | 840-PH-10/Exp                                   | 840-PH-20/Exp                                   | 840-PH-30/Exp                                       |
| Inside                                               | 34"w x 24"d x 30"h                              | 46"w x 24"d x 30"h                              | 59"w x 24"d x 30" high                              |
| Dimensions                                           | 88cm x 61cm 76cm high                           | 118cm x 61cm x 76cm high                        | 151cm x 61cm x 76cm high                            |
| Outside<br>Dimensions<br>(Includes transfer chamber) | 72"w x 30"d x 48"h<br>183cm x 76cm x 122cm high | 84"w x 30"d x 48"h<br>214cm x 76cm x 122cm high | 97"w x 30"d x 48" high<br>247cm x 76cm x 122cm high |
| Approximate Shipping                                 | 90" x 48" x 57"                                 | 105" x 40" x 57"                                | 99" x 42" x 59"                                     |
| Dimensions (Crated)                                  | 229cm x 122cm x 145cm                           | 267cm x 102cm x 145cm                           | 252cm x 107cm x 150cm                               |



840-PH-20/Exp, Export Model



### **Transfer Chamber**

- Features square transfer chamber: 17" wide x 13" deep x 13" high
- Door opening: 27" wide x 22" high
- Door interlock system for safety.
- Not engineered for vacuum use.
- For safety, only one transfer chamber door can be opened at a time.

### **Powder Handling Isolator Options and Accessories**



here, features hinged front door with oval polypropylene glove ports, Closed-Loop double HEPA filtration system, two clear acrylic square transfer chambers, anti-static ionizer and much more.

### **Bag Port Crimper Tool**

The **800-BIBO/CRIMPER** allows you to safely and securely remove, and seal, used HEPA filters.

HEPA filters are removed from the inside of the glove box, through the transfer chamber, and into the Bag-In / Bag-Out port. The used HEPA filters are never exposed to the laboratory atmosphere or the researcher.

### < 1.0 Nanograms / cubic meter

with optional Bag-In / Bag-Out port (800-BIBO/PORT)

**800-BIBO/PORT**, Bag-In / Bag-Out port includes a 14" x 48" long ArmorFlex <sup>TM</sup> polypropylene bag for safe removal of HEPA filters.

Used HEPA filters are always contained and are never exposed outside of the containment isolator. Bag port is 12" OD (304mm OD) clear acrylic with two machined grooves for bag placement.



**800-DT**, Drying Train System for humidity reduction. Includes three (3) canisters filled with molecular sieve, quick disconnects, and vacuum pump.



800-BIBO/CRIMPER

BAG-IN / BAG-OUT accessories:

800-BIBO, Bag-In / Bag-Out port.
800-BIBO/BAGS, Additional bags.
800-BIBO/CRIMPER, Crimper tool and caps.
800-BIBO/CRIMPS, Red closure crimps for bags.

800-BIBO/CRIMPS

Electrical requirements: North American 115-120 Volts, 60 Hz. 1Amp. Export models 220-240 Volts, 50 Hz. .5 Amp.

### **Basic Glove Boxes**

Our catalog #818-GB style glove boxes are designed to be just what they are named, "Basic." This is a simple enclosure that can be used for general isolation or containment work. They are very useful for isolating sensitive research materials from a hostile exterior environment.

These units are engineered to fit general laboratory research situations. They can be easily modified for specific research projects.

These are "starter" glove boxes upon which many accessories can be attached allowing for specific research projects. For unique research applications, please refer to pages 38-52 and our "Accessories Section" of this catalog.

These units are compact, portable, light weight, and can easily be moved from lab to lab.

### Standard Features of the 818-Series:

- Standard 24 month warranty (Not gloves or consumables.
- Formed one piece clear acrylic top section with rounded "Easy Clean" corners.
- Matched die molded white thermoset bottom with rounded "Easy Clean" corners.
- White Hypalon<sup>™</sup> Gloves.
- All clamps are adjustable to compensate for wear.
- The front sloped viewing panel minimizes glare.
- · Vacuum gauge on transfer chamber.
- Four (4) ground key cock valves for purging.
- Transfer chamber leveling tray for handling liquids.
- The transfer chamber is 12" (305 mm) long x 11" (280 mm) I.D.
- Hospital grade multiple electric outlet (socket) strip. UL, CSA, & CE approved (Domestic 12 Amp rating).

### **Optional Accessories for the 818-Series:**

See pages 38-52 for a complete list of available accessories.



Stainless steel support cart.



800-PUMP/Exp Vacuum Pump



### 818-GB

818-GB/Exp, Export Model

| Product Data                                     | 818-GB<br>818-GB/Exp                                  | 818-GBB<br>818-GBB/Exp                                  |
|--------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------|
| I.D.                                             | 41"w x 28"d x 26"h<br>1,040mm x 710mm x<br>660mm h    | 60"w x 38"d x 31"h<br>1,520mm x 960mm x<br>790mm        |
| O.D.<br>(Includes transfer<br>chamber (12" long) | 55"w x 35"d x 27"h<br>1,400 mm x 890 mm x<br>685 mm h | 76"w x 47"d x 32"h<br>1,930 mm x 1,190 mm x<br>812 mm h |
| Approximate Volume                               | 17.3 Cubic Feet<br>489 Liters                         | 40.9 Cubic Feet<br>1,157 Liters                         |
| Approximate Shipping<br>Weight (Crated)          | 285 Pounds<br>130 Kilos                               | 485 Pounds<br>220 Kilos                                 |

#### Electrical requirements:

North American 115-120 Volts, 60 Hz. 12 Amps. Export models 220-240 Volts, 50 Hz. Amps will vary as to the end users country.

**NOTE:** Clear PVC or PETG units are also available for "VHP" sterilization needs. Two (2) "BanjoTM" type attachment fittings are included and mounted on the glove box. This is a special quote item. Refer to pages 44.



Refer to page 43 for more information.

### Basic Glove Boxes for Multiple Operators

Our catalog #818-GBB style Glove Box includes all the same features as the #818-GB, but it has greater capacity. It features a clear transparent bottom section and two (2) pairs of white Hypalon<sup>TM</sup> gloves for two (2) operators.

This is a very nice glove box for operators working in tandem (up to four [4] scientists). Refer to page #12 for product specifications.

# Some optional accessory suggestions (Refer to Accessories Section).

- H.E.P.A. Filtration systems to .3µ @ 99.9997%.
- Activated carbon (charcoal) filters.
- Static control/elimination systems.
- Oxygen analyzer unit.
- Germicidal (U.V.) sterilization light package.
- Additional glove ports (Up to four [4] operators).
- Computer interface ports (Blanking plates).
- Flow meters.
- Iris diaphragms for bare hand entry.
- Light sensitive units.
- Atmosphere drying set up with vacuum pump.
- · Additional ground key cock valves (For inert gases).
- Cushioned transport support cart (trolley) with gas tank storage track.
- Catalyst heater unit to reduce Oxygen.
- Milled Neoprene gloves for increased sensitivity.
- Glove port plugs for damaged glove change over.
- Ten (10") inch Ø (254 mm) gloves and ports.
- A "Bright Light" illumination system (40,000 hour lamp warranty.
- Exhaust outlet for your house exhaust system.
- "VHP" sterilization requirements (With"Banjo™" fittings.
- Suspended shelf packages for increased culture dish capacity. Refer to page 42.

### **Optional Accessories for the 818-Series:**

See pages 38-52 for a complete list of available accessories.



Flat side access door





### 818-GBB

818-GBB/Exp, Export Model

#### Refer to page 14 for specifications

#### Some possible applications:

- Pharmaceutical Research Labs.
- Bio-Tech Research Facilities.
- Animal Science Research.
- Clean Room Facilities.
- Waste Management Research.
- Micro-Electronics Assembly.
- Chemical Company Labs.
- Plasma Welding Applications.
- Nano Technology Enclosures.
- Universities & Medical Schools.
- · Microbiology (Anaerobic) Studies.
- Food Science Research.
- Toxicology, Biology, Geology, Zoology & Pharmacology applications.

NOTE: Documentation for I.Q., O.Q. and F.A.T. requirements are now available from PLAS LABS, INC.<sup>®</sup>. Refer to page 28-29.

Contact us for complete details.

### Compact Glove Boxes Four Sizes Available

The #830-Series of glove boxes has been developed to minimize drafts and maximize the effectiveness of your analytical balance. All units feature high visibility of the interior, cleanliness, safety, complete containment, portability, and a draft free atmosphere.

These compact glove boxes are available in four (4) user friendly sizes. They are excellent for use in hazardous situations where materials to be weighed must be contained. The chamber is ideal for determining the dry weight measure or moisture content of aqueous solutions, adhesives, cereals, toxic chemicals, pharmaceuticals, paper, plastics, and light radio active materials. All units minimize product degradation caused by moisture absorption.

They may also be used when working with toxic substances, asbestos fibers, sewage residue, and harmful liquid vapors.

**NOTE:** These units are not recommended for use with aromatic hydrocarbons.

When working with analytical balances, top loaders, bench scales, and/or moisture analyzers, we recommend placing those items upon a marble block for added stability.

Special access doors are available if transfer chambers are not desired. Refer to pages 51.

### Standard Features of the 830-Series:

- Clear acrylic plastic main body (3/8" [10 mm] thick).
- Removable top section for easy installation of equipment.
- Four (4) key cock valves for purging. Two (2) on the main body and two (2) on the transfer chamber.
- · All clamps adjustable to compensate for normal wear.
- White ambidextrous Hypalon<sup>™</sup> gloves for superior chemical and U.V. resistance.
- Hospital grade multiple electrical outlet (socket) strip. UL, CSA, and CE approved.
- Small pressure relief "pop" valve minimizes glove "fight back."
- Transfer chamber is 12" (305 mm) long x 11" (280) I.D.
- · Standard 24 month warranty (Not gloves or consumables).
- Small replaceable H.E.P.A. and organic vapor canister filter. Face mask style. Refer to #830-FILTER on this page.

### Electrical requirements (Without any accessories).

North American 115-120 Volts, 60 Hz. 12 Amps. Export models 220-240 Volts, 50 Hz. Amps will vary as to end users country.



830-ABC 830-ABC/Exp, Export Model



Red Pop Valve. PN: HW3126

**#830-FILTER** set up includes a small "Face Mask" style HEPA and CARBON filter canister. Sold in packages of two (2). Pop valve not included. Refer to Catalog **#830-FILTER** in Accessories Section.



830-ABC with side access door, 800-Access/D 830-ABC/Exp, Export Model

### **Compact Glove Boxes** Additional Information

The **#830-Series** of glove boxes all include the same features and are similar in shape.

For units with access doors instead of transfer chambers, please refer to photo on page 19 and Specifications Chart below.



830-CP/20, with flat side access door and <u>no</u> transfer chamber and <u>no</u> vent outlet.



830-ABD/Exp, Export Model

**NOTE:** All export units are shipped crated using approved & certified lumber.

| Product Data                                     | 830-ABC<br>830-ABC/Exp                                 | 830-ABB<br>830-ABB/Exp                                    | 830-ABD<br>830-ABD/Exp                                    | 830-ABE<br>830-ABE/Exp                                    |
|--------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Inside<br>Dimensions                             | 28"w x 23"d x 29" h<br>710 mm X 580 mm<br>x 740 mm h   | 35"w x 29"d x 30" h<br>890 mm X 740 mm<br>x 760 mm h      | 48"w x 29"d x<br>32" h<br>1,220 mm X 740 mm<br>x 810 mm h | 60"w x 29"d x 32" h<br>1,524 mm X 740 mm<br>x 810 mm h    |
| O.D.<br>(Includes transfer<br>chamber (12" long) | 43"w x 24"d x 31" h<br>1,100 mm X 610 mm<br>x 790 mm h | 49"w x 30"d x<br>31" h<br>1,250 mm X 760 mm<br>x 790 mm h | 63"w x 31"d x<br>35" h<br>1,600 mm X 790 mm<br>x 860 mm h | 76"w x 32"d x<br>35" h<br>1,930 mm X 812 mm<br>x 890 mm h |
| Approximate Volume                               | 10.8 Cubic Ft.<br>306 Liters                           | 17.6 Cubic Ft.<br>498 Liters                              | 25.8 Cubic Ft.<br>730 Liters                              | 32.2 Cubic Ft.<br>912 Liters                              |
| Approximate<br>Shipping Weight<br>(Crated)       | 300 Pounds.<br>137 Kilos                               | 380 Pounds.<br>173 Kilos                                  | 440 Pounds.<br>200 Kilos                                  | 475 Pounds<br>216 Kilos                                   |
| Top Opening                                      | 17" x 23"<br>432 mm x 585 mm                           | 24" x 29"<br>610 mm x 735 mm                              | 24" x 42"<br>610 mm x 1,065 mm                            | 24" x 54"<br>610 mm x 1,370 mm                            |
| Access Door<br>Opening<br>(Optional)             | 15.5" x 22" h<br>400 mm x 560 mm h                     | 21.5" x 22" h<br>546 mm x 560 mm h                        | 21.5" x 24" h<br>546 mm x 610 mm h                        | 21.5" x 24" h<br>546 mm x 610 mm h                        |

### Product Specifications for all #830-SERIES Units including North American and Export models.

#### Electrical requirements:

North American 115-120 Volts, 60 Hz. 12 Amps.

Export models 220-240 Volts, 50 Hz. Amps will vary as to the end users country.

### Compact Glove Boxes With HEPA Filtration

#### We offer three (3) models of the **#830-SERIES** glove boxes featuring HEPA filtration packages. There are two (2) different versions available. Refer to listings 1 & 2 below. NOTE: All three models include the same basic #830-Series features and are available in four (4) sizes. Refer also to page 17.

#### "Closed Loop Style" CLC Style.

This system continually re-circulates and filters the internal atmosphere of the glove box. It is a negative pressure containment unit. Magnehelic<sup>TM</sup> gauges indicate both inner chamber pressure and pressure drop levels across the filters. These gauges indicate when it is time to change the HEPA filters. Add 15.5" (395 mm) to the overall height of this style glove box.

# What's included with the "Closed Loop" CLC-Style glove box:

- Totally enclosed blower (fan) unit.
- Two (2) cylindrical 8" inch Ø (203 mm) HEPA filters.
- Two (2) Magnehelic gauges. Domestic models in Inches of H2O and Export in Pascals.
- All necessary hoses and connections.
- Non-Hydroscopic pre-filters.
- Standard 24 month warranty (Not gloves or consumables.

#### "Open Exhaust Style" (Two filter versions)

These glove boxes draw the ambient room atmosphere through a HEPA filter and then into the chamber. Both versions are set up for negative pressure operations. Exhaust atmosphere is filtered through a HEPA or  $5\mu$  (micron) glass media filter. The "open exhaust" outlet can be set up to connect to your house exhaust system. Please specify a **#800-VENT** outlet accessory.

 Catalog #800-HEPA/S (Single HEPA) and glass media exhaust filter).
 Catalog #800-HEPA/D (Double HEPA filters).

HEPA filter efficiency: .3µ @99.9997%

Variations in different types of filters are:

- 1. HEPA's
- 2. ULPA's
- 3. Activated Carbon (Charcoal) Four (4) different compositions. Refer to page 25.



830-ABB/CLC (Closed-Loop Glove Box) 830-ABB/CLC/Exp, Export Model



830-ABC/SPCL/800-HEPA/S (Open Exhaust)



830-ABC/SPCL/800-HEPA/D (Open Exhaust)

2.

### Compact Glove Boxes Additional Information and Style Variations

The **#830-SERIES** of glove boxes can be modified to create different variations.

Access doors can be substituted for transfer chambers. Sizes of the doors vary according to the size of the glove box. Refer to #1 in the photograph.

Exhaust (4" [102 mm]  $\emptyset$ ) vents may also be added for connecting to your house exhaust system. Refer to #2 in the photograph. Refer also to page 20 **#800-VENT/OUTLET**.

Square (box type) transfer chambers can be substituted for cylindrical (round) ones. Square transfer chambers have pressure limitations however. NOTE: The maximum working pressure on the square transfer chambers is 6" of WC (150 mm). It is not engineered to support negative pressure.

We now offer a new automatic door locking system for these transfer chambers. Catalog **#800-DOOR/ILOCK.** Refer to photo on this page.



### 830-CP/31 830-CP/31/Exp, Export Model

Please refer to page 17 for door and glove box dimensions. To include a transfer chamber with the **#830-CP** unit order **#800-TRANS-CH**. Specify desired location of transfer chamber.



Catalog **#830-SHELF-ABC**, Suspended shelf accessory. Total shelf capacity is about 150 Petri dishes depending upon chamber size. Refer also to page 42.



NOTE: Maximum working pressure on this style transfer chamber is 6.0" of H2O (0.44" of Hg). It is not engineered to support negative pressure.

When one door is opened, the other door locks automatically. Locking force is 120 Lbs. Refer to page 12 for more details.

### Germicidal Workstation (Still Air Enclosure)

Our catalog #820-TCH Workstation has been designed to fit nicely on a lab counter top. It provides simple protection when a more sophisticated device is not required. It is an ideal enclosure for many acute and simple research procedures.

Its modest weight of 60 pounds (27.5 Kg) makes it readily transportable. The main housing is formed of one (1) piece clear acrylic and offers total viewing of your task at hand.

# This Workstation can also be used as a PCR Chamber or Tissue Culture Hood

### Standard Features of the 820-Series:

- Standard twenty-four (24) month warranty (Not consumables).
- Formed one (1) piece clear acrylic top section .375" (950 mm) thick. With "easy clean" corners."
- "Bright Light" illumination system (40,000 hour lamp guarantee).
- Formed in place liquid barrier to facilitate easy clean up of spills.
- The U.V. system is rated at 254 nm. Automatic timer is included. Beta ray protected but not gamma rays.
- All controls are illuminated and the system is fused for safety.
- Ground key cock valve for introduction of Oxygen or your inert gas of choice.
- Hospital grade multiple electric outlet strip (socket).
- Easy access sash. Iris diaphragms included.

#### Electrical requirements.

North American 115-120 Volts, 60 Hz. 12 Amps. Export Models 220-240 Volts, 50 Hz. Amps will vary as to the end users country.

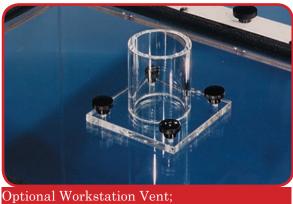
| Inside Dimensions                   | 41"w x 28"d x 17"h<br>1,040 mm x 710 mm<br>x 432 mm |
|-------------------------------------|-----------------------------------------------------|
| Outside Dimensions<br>(with flange) | 44"w x 29"d x 30"h<br>1,118 mm x 736 mm<br>x 762 mm |
| Sash Opening                        | 8.5" h x 27.5 long<br>216 mm x 700 mm               |
| Shipping Weight                     | 220 Pounds<br>100 Kilos                             |



820-TCH, Germicidal Workstation (open position) 820-TCH/Exp, Export Model



Workstation Sash for Draft Control featuring Iris Diaphragms



800-VENT/OUTLET

Catalog **#800-VENT/OUTLET** can be mounted just about anywhere on the enclosure and is available in any diameter. Use this to connect to your house exhaust system. Standard outside diameter is  $4"\emptyset$  (102 mm).

### "La Petite" Glove Box

PLAS LABS, INC.<sup>®</sup> is proud to offer a new concept in small glove boxes. The #815-PGB "Petite Glove Box" is comprised of essentially two (2) components. The top and bottom sections are sealed using a revolutionary new gel system commonly used in the clean room industry for sealing HEPA filters.

The La Petite is only two-thirds the size of our #818-GB Basic Glove Box. It has been designed to be ergonomically correct for the average person.

Careful attention to research requirements and our over forty-five (45) years of experience helped make this glove box very user friendly and inexpensive.

### Standard Features of the 815-Series:

- · Lightweight and easy to move from lab to lab.
- Optically clear, one piece formed top is unbreakable.
- Bright white one piece bottom formed out of high temperature Noryl<sup>™</sup> and has "easy clean" corners.
- Large access door (12" inch Ø [305 mm] opening).
- Vacuum gauge on transfer chamber.
- All stainless steel clamps are adjustable and have security locking capabilities.
- White leveling tray for transferring liquids.
- Modern, Gel Sealant (Refer to Gel data below).
- Large, interior Rh gauge.
- Four (4) ground key cock valves for purging and gas entry.
- · Hospital grade multiple electrical outlet (socket) strip.
- Latex gloves 7"Ø (175 mm). Neoprene or HypalonTM also available (Special order).
- Transparent and vacuum capable transfer chamber size 10"long (254 mm) x 9.75"I.D (245 mm).
- Standard twenty-four (24) month warranty (Not gloves).

#### Electrical requirements (Without any accessories).

North American 115-120 Volts, 60 Hz. 12 Amps. Export models 220-240 Volts, 50 Hz. Amps will vary as to end users country.

| Inside Dimensions                                    | 31.5" w x 25.5" d x 21.5" h 800<br>mm x 650 mm x 545 mm |
|------------------------------------------------------|---------------------------------------------------------|
| Outside Dimensions<br>(includes transfer<br>chamber) | 49" w x 29" d x 22" h<br>1,245 mm x 740 mm x 558 mm     |
| Approximate Volume                                   | 9.5 Cubic Ft.<br>269 Liters                             |
| Shipping Weight                                      | 225 Pounds<br>103 Kilos                                 |



### 815-PGB

815-PGB/Exp, Export Model

#### The Gel Sealant System.

This new gel sealant was specifically developed for the clean room industry to seal HEPA filters.

#### Properties of the gel:

- The gel does not support biological growth.
- It will not "out gas" and is non-toxic.
- It is an air-tight, water-tight barrier.
- It contains no silicone that might cause contamination.
- It is highly adhesive, yet quick releasing and self healing.

**NOTE:** If operations are expected to exceed the pressure limitations listed below, please refer to our #818-GB, Basic Glove Box.

| NOTE: "La Petite" pressure | limitations: |
|----------------------------|--------------|
| • 2.0" WC (51mm)           | • 0.5 kPa    |
| • 5.0 MBAR                 | • .077 PSI   |

#### Electrical requirements.

North American 115-120 Volts, 60 Hz. 12 Amps. Export Models 220-240 Volts, 50 Hz. Amps will vary as to end users' country.



### PCR (UV) Chamber

This Catalog **#825-PCR(UV)** has been designed to help improve the accuracy of P.C.R.<sup>TM</sup> and general tissue culture procedures. The chance for air borne contamination during D.N.A. sequencing is greatly reduced.

The chamber is a "still air enclosure" which contains both our "Bright Light" illumination system and a U.V. germicidal lamp. The U.V. germicidal system is rated at 254 nm and will decontaminate all exposed surfaces in the interior. The lamp timer should be activated 15 minutes before and 15 minutes after each use.

The front viewing panel and main housing are .375" (9.5 mm) thick optically clear material. This thickness helps to prolong the service life (about 2,500 operating hours) of the unit. The front viewing panel Catalog **#825-UV(FS)** is attached by six (6) screws and is easily and quickly replaced, if needed.

Access to the interior of the chamber is gained by pulling swinging doors outward. New self closing hinges have eliminated the need for locks. The doors are removable, therefore do not take up valuable lab counter space. If a corner door is accidently opened, proximity sensors turn off the U.V. system for operator safety.

### **Basic Features:**

- "Bright Light" illumination system (40,000 hour lamp guarantee).
- Two bright white plastic (adjustable) shelves. One is tooled to store pipettors.
- Front panel is .375" thick (9.5 mm) for Beta Ray protection. **NOTE: Not Gamma Rays.**
- Removable side access doors with slip apart hinges.
- · Proximity sensors on doors for operator safety.
- Automatic timer to activate U.V. sterilization procedures.
- Bottom tray has a formed in place "spill guard" for easy cleaning.
- The U.V. system is rated at 254 nm.
- Standard 24 month warranty (Not gloves or consumables).
- Side and back walls are one piece formed optically clear acrylic .375" thick (9.5 mm).
- Main housing and top are removable for installation of large pieces of equipment.



825-PCR(UV) 825-PCR/Exp, Export Model

| Inside Dimensions                   | 23.5"w x 17"d x 21" h<br>597 mm x 432 mm x<br>530 mm |
|-------------------------------------|------------------------------------------------------|
| Outside Dimensions<br>(with flange) | 24"w x 18"d x 28"h<br>610 mm x 457 mm x<br>711 mm    |
| Shipping Weight                     | 110 Pounds<br>50 Kilos                               |

**NOTE:** If HEPA filtration is preferred, refer to Catalog **#825-PCR/HEPA** illustrated on page 23.

#### Electrical requirements.

North American 115-120 Volts, 60 Hz. 12 Amps. Export Models 220-240 Volts, 50 Hz. 6 Amps.

### **HEPA Filtered PCR Chamber**

The new HEPA filtered PCR Chamber, Catalog #825-PCR/HEPA, includes all of the same basic features as our standard #825-PCR(UV) Chamber, but includes a factory installed HEPA filter system. The HEPA filter system is rated at 99.9997% efficiency at 0.3 ( $\mu$ ) microns. No tools are required for HEPA filter change over.

This is a positive pressure research chamber. The fan (blower) noise level is rated at less than 40 dBA.



825-PCR/HEPA NOTE: HEPA housing on rear wall.

| Inside Dimensions                   | 23.5"w x 17"d x 21" h<br>597 mm x 432 mm x<br>530 mm |
|-------------------------------------|------------------------------------------------------|
| Outside Dimensions<br>(with flange) | 26"w x 23"d x 28"h<br>610 mm x 457 mm x<br>711 mm    |
| Shipping Weight                     | 112 Pounds<br>51 Kilos                               |



### 825-PCR/HEPA

825-PCR/HEPA/Exp, Export Model

### **Basic Features:**

- "Bright Light" illumination system (40,000 hour lamp guarantee).
- "Mini HEPA" filter size 4" x 9.5" x 1" thick (101 mm x 240 mm x 25.4 mm thick) Replacement part **#MS2199**.
- Two bright white plastic (adjustable) shelves. One is tooled to store pipettors.
- Front panel is .375" thick (9.5 mm) for Beta Ray protection. **NOTE: Not Gamma Rays.**
- Removable side access doors with slip apart hinges.
- Proximity sensors on doors for operator safety.
- Automatic timer to activate U.V. sterilization procedures.
- Bottom tray has a formed in place "spill guard" for easy cleaning.
- The U.V. system is rated at 254 nm.
- Standard 24 month warranty (Not gloves or consumables).
- Side and back walls are one piece formed optically clear acrylic .375" thick (9.5 mm).
- Main housing and top are removable for installation of large pieces of equipment.

### Electrical requirements.

North American 115-120 Volts, 60 Hz. 12 Amps. Export Models 220-240 Volts, 50 Hz. 6 Amps.

### Ventilated Balance Enclosures

The PLAS LABS, INC.<sup>®</sup> HEPA filtered ventilated balance enclosures are the latest in self contained laboratory processing products. The VBE Series is ideal for working with fine powders, chemicals and biological products.

These portable ventilated balance enclosures include top mounted HEPA/Blower filtration. They are set-up to circulate the internal chamber atmosphere, through the HEPA filter and into the lab. The VBE Series can also connect to your house exhaust system.

The smooth curved, or rounded, ABS<sup>™</sup> airfoils provide gentle, unobstructed air flow through rear, and side, baffles and through the top mounted HEPA filter.

The ventilated balance enclosure provides minimal laboratory space and minimal energy usage.

### Features Include:

- Constructed of optically clear 3/8" jeweled acrylic plastic.
- Front viewing sash with multiple air foils for higher containment and draft deflection.
- Includes phenolic base with superior chemical resistance and provides higher analytical balance stabilization.
- Low vibrations. The black base allows for easy powder detection.
- Electrical cord outlet port.
- Air Flow alarm system.
- Adjustable front draft protection.
- Side blank plate for optional Bag-In / Bag-Out port (pn 900-VBE/BIBO).
- Each balance enclosure includes face velocity alarm.

### **HEPA Filters:**

Aluminum frame with upstream/downstream polyurethane gasket. 100 mm thick pleat requires fewer filter change outs and increased longevity. Rate 99.9997% @ 0.3 microns (H14). Easy HEPA filter replacement.

#### **Blowers:**

High efficiency backward curved impeller. Variable speed controller. IP44 protection as per EN60034-5. Ecodesign Directive 2009/125/EC

### **Exhaust Duct:**

6" OD port can be hard-ducted, thimble connected, exhausted back into the room, or exhausted out of a mobile laboratory.

### **Energy and Sound**

Blower current 0.53 amps. <55 dBA @ 80 FPM

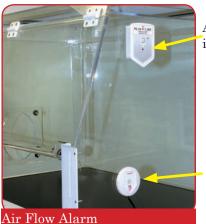
### Airflow

Target face velocity: 80 FPM. Non-turbulent, gentle airflow sweeps particulates into the rear baffle.



#### 900-VBE/36

900-VBE/36/Exp, Export Model



Air-Flow alarm and indicator.

- Air-Flow sensor.

### Air Flow Alarm Features:

- Adds additional security needed for your laboratory researchers.
- Continuous tracking of air velocities within the balance enclosure.
- Includes next generation airflow alarm technology.
- Audible and visual alarm functions.
- Includes 110 volt adapter.

Airflow velocity range: Response time: Alarm indicators: Turbulence warning:

System Failure: System Healthy: 40 - 2,000 fpm < 1 second LED light & audible Piezo Flashing yellow LED rest switch Red Flashing LED Green solid LED

| Product Specifications for the Ventilated Balance Enclosures |                                            |                                                           |  |  |
|--------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------|--|--|
| Part Number                                                  | mber Inner Work Surface Outside Dimensions |                                                           |  |  |
| 900-VBE/24<br>900-VBE/24/Exp                                 |                                            |                                                           |  |  |
| 900-VBE/36<br>900-VBE/36/Exp                                 | 1 1 0                                      |                                                           |  |  |
| 900-VBE/48<br>900-VBE/48/Exp                                 |                                            |                                                           |  |  |
| 900-VBE/60<br>900-VBE/60/Exp                                 | 59.5" wide x 21" deep<br>1511mm x 533mm    | 60" wide x 28" deep x 41" high<br>1524mm x 711mm x 1041mm |  |  |

The 800-BIBO/CRIMPER allows you to safely and

Trash is removed from the inside of the balance

enclosure, through the 6" waste port, and into the bag.

securely remove unwanted debris from

149 kilos

grooves for bag placement.

inside the balance enclosure.

800-BIBO/PORT, Bag-In / Bag-Out port includes a long ArmorFlex TM

polypropylene bag (48" long) for safe removal of trash and unwanted debris.

Unwanted debris and trash are always contained and are never exposed outside of the containment isolator. Bag port is 6" OD clear acrylic with two machined

### **Useful Accessories:**



### Adjustable Lift Tables

Adjustable Height Lift Tables with locking casters.

Height range: 25" to 45" 635mm x 11

635mm x 1143mm

Cart Options: 900-CARTLIFT/24, Adjustable lift table for 900-VBE/24 900-CARTLIFT/36, Adjustable lift table for 900-VBE/36 900-CARTLIFT/48, Adjustable lift table for 900-VBE/48 900-CARTLIFT/60, Adjustable lift table for 900-VBE/60

NOTE: Standard "VBE" System on adjustable height lift table.

Bag Port Crimper Tool

800-CART/LIFT



900-EXTRACT, Extraction Unit is a

Maximum Weight: 330 lbs.

variable speed suction housing that includes your choice of filters such as HEPA or Impregnated Carbon. Suction speeds can be adjusted from "0" up to 250 CFM face velocity.

### Filter Options

- 900-LVFH/HEPA, HEPA Filter.
- **900-LVFH/Carbon**, Impregnated carbon filter.
- **900-LVFH/HEPA/CARB**, Combination. HEPA / Non-Impregnated Carbon Filter.
- 900-LVFH/CARBN(A), Alkaline type fumes.
- 900-LVFH/CARBN(B), Ammonia or amines.
- **900-LVFH/CARBN(C)** Aromatic hydrocarbons, organic vapors, keytones, alcohols, organic acids, and odors.

### Low Velocity Fume Hoods non-HEPA filtered

This Low Velocity Fume Hood system has been developed in response to customer requests and suggestions for improvements to the original product currently offered in the market place.

These units can be used with your in house exhaust system or our accessory #900-EXTRACT, Fume Extraction Unit. All units are ANSI/ASHRAE 110:2016 Certified. You can select either HEPA or Activated Carbon filters (or a combination of both) for the Extraction Unit. Three (3) styles of Carbon are available. (See bottom of page 25 for filter options.)

### All Low Velocity Fume Hoods include:

- Standard 24 month warranty (Not consumables; i.e. filters).
- Units are fabricated out of .375" (9.5 mm) thick optically clear acrylic plastic.
- Hinged (two [2] position) front sash with draft deflector.
- Formed horizontal lower front airfoil.
- Two (2) formed vertical air foils with draft deflectors.
- Bright white acrylic bottom work surface.
- Two (2) side wall cable ports at 1.5"Ø (38 mm). Labled "1" and "2" in image.
- Six (6") inch Ø (about 152 mm) exhaust hook up.
- The exhaust hose is smooth bore inside and is six (6") inch (152 mm) Ø x eight (8') feet (2,440 mm) long.

Our hoods are unique in that they include both horizontal and vertical "air foils" taking advantage of a"venturi" effect. They also feature rounded rear corners to guide and facilitate inner atmosphere exhaust efficiency.

The exhaust hose has a "smooth bore" interior, which minimizes air flow exhaust restrictions, is chemically resistant, FDA approved, and is included with the main work housing. It may be attached directly to your house exhaust system.



900-LVFH/32

900-LFVH/32/Exp, Export Model



900-LVFH/24 900-LVFH/24/Exp, Export Model



| Product Specifications for the Low Velocity Fume Hoods                                                           |  |  |  |
|------------------------------------------------------------------------------------------------------------------|--|--|--|
| Part NumberInner Work SurfaceOutside Dimensions                                                                  |  |  |  |
| 900-LVFH/2423.25" wide x 19" deep24" wide x 27" deep x 28" high900-LVFH/24/Exp590mm x 482mm609mm x 685mm x 711mm |  |  |  |
| 900-LVFH/3635.25" wide x 19" deep36" wide x 27" deep x 28" high900-LVFH/36/Exp895mm x 482mm914mm x 685mm x 711mm |  |  |  |
| 900-LVFH/4847.25" wide x 19" deep<br>1200mm x 482mm48" wide x 27" deep x 28" high<br>1219mm x 685mm x 711mm      |  |  |  |

900-LVFH/36 with 900-EXRACT and cart

### BioToxin Containment & Decontamination Chambers

Illustrated are two special units coupled together for biotoxin containment (left) and a decontamination chamber. They are negative pressure units and include three different special filter set ups.

- #1. Molecular Sieve.
- #2. Activated Carbon.
- #3. HEPA Filters.

Isolators are available with interlocking stainless steel support carts (trolleys) with Marine Edge tops. These tops are a safety feature in case of liquid spills.

Units as shown are set up for connection to house exhaust systems.

Some Samples of Custom Built Isolators



What can we build for you?

### Drug Processing Station & Isolators Set-Up in Train

Illustrated are two special #818-GBB glove boxes coupled together used as a drug processing station for multiple operators.

Units are set up for connection to house exhaust systems.

Isolators are available with interlocking stainless steel support carts (trolleys) with Marine Edge tops or safety.

Note: All isolators can be constructed of clear PVC or PETG if VHP sterilization is planned. Banjo<sup>™</sup> fittings are included. Refer to page 44.



818-GBB/SP (double set-up)

#### Available Certification services.

- 1. I.Q. &. O.Q. Certification.
- 2. Factory Acceptance Test (F.A.T.) Certification.
- 3. HEPA Filtration Certification (By outside 3rd party agency).

### **Custom Capabilities & Projects**

PLAS LABS, INC.<sup>®</sup>. is committed to providing high quality research equipment at a fair price. We realize that unique research protocols may require individualized equipment. We offer the following special services:

- · Design Engineering. • New Product Development.
- · Custom Service/Maintenance Schedules. • Customized Operator Manuals.
- CAD Drawings.
- F.A.T. Documentation.
- On Site Training.
- I.Q. & O.Q. Documentation. · Various Materials of Construction, Eg., Light Sensitive Protection, Stainless Steel, Static-Dissipative Acrylic, Clear PVC, and PETG.

Our design engineering team adheres to the most up to date guidelines from the following organizations:

• Third Party Certification.

- International Society for Pharmaceutical Engineering.
- American Biological Safety Association.
- · American Association for Lab Animal Science.

- · American Glove Box Society. • U.S. National Institutes of Health.
- U.S. Centers for Disease Control.
- The World Health Organization (The Laboratory Biosafety Manual).

Temperature & Humidity controlled glove box for analysis material.



Ventilated Balance Enclosure with sample prep glove box for mobile laboratory.



Automatic Rapid Purge Down glove box for packaging in low moisture (< 1% Rh).



Negative pressure HEPA filtered glove box with temperature, humidity, and oxygen control. For Tuberculosis type research.



Packaging glove box weith HEPA/Carbon filtration.



Containment glove box with double HEPA filtration package.



Containment glove box with 24" OD transfer chamber.



Fitzmill glove box with temperature and humidity control.



Containment enclosure for table press.



Glove box Tritium Research.



Drying cabinet with HEPA filtered flow.

### **Acrylic Desiccator Cabinets**

(Refer to page 33 for complete list of sizes.)

#### Clear and Light Sensitive Units. Our Desiccators are designed to protect, store, or assist in transporting critical materials and prevent their contamination.

They are dust and moisture free cabinets that safeguard valuable research specimens or sensitive electronic components. You may easily observe the status of your components without opening the door.

Under a slight positive N2 charge they prevent moisture from penetrating the molecular structure of stored components.

Amber colored units "CGA" are very effective for protection from harmful U.V. rays for light sensitive components.

NOTE: #861-CG and #861-CGA doors open from the side. All other models open from the top and bottom.

### Features Include:

- · Units are all stackable with non-slip "grip tight" feet.
- · Standardized construction means interchangeable
- shelves. • All shelves have perforated slots (holes) for optimum gas circulation.
- All Desiccators with two or more cubicles have a built in divider for added strength.
- Units are constructed of optically clear "jeweled" acrylic.
- Slip-a-part hinges are standard.
- · Sealing clamps are springloaded for uniform locking tension.
- Built in hygrometer (Rh) gauge.
- · All units have "door guards" to prevent warping and possible loss of internal atmosphere.
- Closed cell gasketing does not take a set.
- All shelves spaced at 2" (50.8 mm).
- Special "gasket guard system" prevents gaskets from taking a set and causing a leak.
- Each cubicle includes two (2) Nylon gas serrated nipples 1/8" & 1/4" (90 degree elbows with hose barbs).













860.5-CG/NS



### Stackable Desiccators

The 860-CG/NS and 860.5-CG/NS are stackable with non-slip "grip tight" feet.



860-CGB/NS, Black Acrylic Desiccators



862-CG/NS

### **Multiple Cubicle Desiccator Cabinets**

(Refer to page 33 for complete list of sizes.)

These multiple cubicle desiccator storage cabinets are much safer than individually stacked units. All of these storage units are mounted on stainless steel support carts (trolleys) with casters and remain stable during transportation.

Transparent amber colored units provide U.V. protection for light sensitive materials.

Three (3) standard sizes are available and custom fabrication is welcomed.

### Benefits of the storage cabinets:

- Complete visibility of stored contents.
- Unitized construction eliminates "tip overs".
- Safe air tight storage of critical components.
- U.V. degradation is eliminated using amber units.
- Easy to transport from lab to lab.
- · Ideal for Clean Room applications.
- Moisture sensitivity problems are eliminated.

### What's included with desiccator storage cabinet:

- Standard 24 month warranty.
- · Clear or amber models.
- · Unitized construction for greater durability and strength.
- Two (2) shelves with slots included per cubicle.
- Two (2) Nylon gas nipples included per cubicle.
- · Stainless steel support frames (trolleys) with casters, brakes and locks.
- Interior volume of each individual cubicle is 3.8 Cu. Ft (107 L).
- Closed cellular (one piece) gasket.
- All doors have "anti-warp" framework and heavy duty "swell" latches.
- Exterior rear plenum with flow meter.

#### Optional accessories (Refer to Accessories Section).

- Controlled Purge System, Catalog #800-CPS.
- Pressure relief valve, Catalog #800-PRV.
- Additional shelves.
- · "Anti-Sag" supports allow for extra weight capacity.
- Extra desiccant storage trays.
- Small or large flow meters.

NOTE: Interior dimensions of all cubicles are 23.5" x 23.5" x 11.75" h (596 mm x 596 mm x 298 mm h).

All door openings are 22.50" x 9.25" h (570 mm x 235 mm h).











Refer to page 33 for a complete list of desiccator part numbers and dimensions.

### **Stainless Steel Desiccators**

We are pleased to offer various sizes of heavy duty stainless steel desiccator cabinets. These units are constructed of highly polished #304 stainless steel and feature unitized construction.

We have over fifty (50) years experience building thermoplastic desiccators. This knowledge is now put to use in our stainless steel units.

They are ideal when gathering samples in the field, or just moving materials safely from lab to lab. They are unbreakable.

We welcome custom sizes and you may choose either safety glass or static dissipative plastic viewing panels on the doors.

Sensitive Flow Meters and other accessories such as grounding features are available.

#### Stainless Steel units include:

- Standard 24 month warranty.
- Constructed of 16 Gauge, 304 stainless steel.
- Full length stainless steel hinge.
- Adjustable stainless steel sealing clamps.
- Safety glass front viewing panel.
- Adjustable shelf positions.
- Two (2) stainless steel shelves included.
- Two (2) ground key cock gas valves.
- Non skid foot pads.
- Closed cellular silicone gasketing.
- Optional formed white plastic desiccant tray.
- Flow meter (0-10 LPM) included.
- Pressure relief valve (Catalog **#800-PRV**) included.

#### Benefits of the stainless Steel desiccators:

- Units are easily grounded if necessary.
- Stainless Steel construction eliminates breakage.
- Increased service life (durability).
- Higher levels of vacuum/pressure are attainable.
- Increased chemical resistance.
- "Outgassing" is eliminated.



861-SS with optional 800-FLOW/D with gas valves



860-SS with optional 800-FLOW/D

| Model<br>Number | Number<br>of Shelves | Interior Size<br>w x d x h                     | Approximate<br>Shipping<br>Weight |
|-----------------|----------------------|------------------------------------------------|-----------------------------------|
| 860-SS          | 2                    | 12" x 12" x 12"h 305 mm<br>x 305 mm x 305 mm h | 40 Pounds<br>18.5 Kilos           |
| 861-SS          | 2                    | 12" x 18" x 24"h 305 mm<br>x 457 mm x 610 mm h | 50 Pounds<br>23 Kilos             |
| 862-SS          | 2                    | 20" x 18" x 30"h 508 mm<br>x 457 mm x 762 mm h | 85 Pounds<br>40 Kilos             |

### **Desiccator Specifications**

| Model Number                                                | Color                                         | Desiccator Size<br>W x L x H          | Number of<br>Cubicles | Number of<br>Shelves | Number of<br>Shelf Positions |
|-------------------------------------------------------------|-----------------------------------------------|---------------------------------------|-----------------------|----------------------|------------------------------|
| 860-CG.5/NS<br>860-CGA.5/NS<br>860-CGB.5/NS<br>860-CGS.5/NS | Clear<br>Amber<br>Black<br>Static Dissipative | 12" x 12" x 6"<br>305 x 305 x 152mm   | One (1)               | Two (2)              | Two (2)                      |
| 860-CG/NS<br>860-CGA/NS<br>860-CGB/NS<br>860-CGS/NS         | Clear<br>Amber<br>Black<br>Static Dissipative | 12" x 12" x 12"<br>305 x 305 x 305mm  | One (1)               | Two (2)              | Five (5)                     |
| 861-CG/NS<br>861-CGA/NS<br>861-CGB/NS<br>861-CGS/NS         | Clear<br>Amber<br>Black<br>Static Dissipative | 12" x 12" x 24"<br>305 x 305 x 3610mm | Two (2)               | Ten (10)             | Ten (10)<br>(5 per cubicle)  |
| 862-CG/NS<br>862-CGA/NS<br>862-CGB/NS<br>862-CGS/NS         | Clear<br>Amber<br>Black<br>Static Dissipative | 18" x 18" x 18"<br>457 x 457 x 457mm  | Two (2)               | Four (4)             | Ten (10)<br>(5 per cubicle)  |
| 863-CG/NS<br>863-CGA/NS<br>863-CGB/NS<br>863-CGS/NS         | Clear<br>Amber<br>Black<br>Static Dissipative | 24" x 18" x 24"<br>610 x 457 x 610mm  | Two (2)               | Four (4)             | Ten (10)<br>(5 per cubicle)  |

### Mutiple Cubicle Desiccators with rear plenum, stainless steel support cart and casters

| Model Number                          | Color                                | Desiccator Size<br>W x L x H              | Number of<br>Cubicles | Number of<br>Shelves | Number of<br>Shelf Positions |
|---------------------------------------|--------------------------------------|-------------------------------------------|-----------------------|----------------------|------------------------------|
| 860-10/CG<br>860-10/CGA<br>860-10/CGS | Clear<br>Amber<br>Static Dissipative | 48" x 24" x 66"<br>1,219 x 610 x 1,676mm  | Ten (10)              | Twenty (20)          | Five (5) per<br>cubicle      |
| 860-8/CG<br>860-8/CGA<br>860-8/CGS    | Clear<br>Amber<br>Static Dissipative | 48" x 24" x 62"<br>1,219 x 610 x 1,574mmw | Eight (8)             | Sixteen (16)         | Five (5) per<br>cubicle      |
| 860-6/CG<br>860-6/CGA<br>860-6/CGS    | Clear<br>Amber<br>Static Dissipative | 48" x 24" x 50"<br>1,219 x 610 x 1,270mm  | Six (6)               | Twelve (12)          | Five (5) per<br>cubicle      |
| 860-5/CG<br>860-5/CGA<br>860-5/CGS    | Clear<br>Amber<br>Static Dissipative | 24" x 24" x 66"<br>610 x 610 x 1,676mm    | Five (5)              | Ten (10)             | Five (5) per<br>cubicle      |
| 860-4/CG<br>860-4/CGA<br>860-4/CGS    | Clear<br>Amber<br>Static Dissipative | 24" x 24" x 60"<br>610 x 610 x 1,524mm    | Four (4)              | Eight (8)            | Five (5) per<br>cubicle      |
| 860-3/CG<br>860-3/CGA<br>860-3/CGS    | Clear<br>Amber<br>Static Dissipative | 18" x 18" x 27"<br>457 x 457 x 685mm      | Three (3)             | Six (6)              | Five (5) per<br>cubicle      |

### "Integrity" Stainless Steel Glove Box

PLAS LABS, INC.<sup>®</sup> is pleased to offer our re-engineered stainless steel glove box which is based upon our over fifty (50) years of experience. This rugged unit is ideal for applications in the field as well as the lab. Catalog **#819-SS/GB**.

Unitized construction provides complete integrity for protection of operators. Samples can be gathered and studied in the field or moved back to your laboratory as needed. Complete integrity is maintained.

### **Product Benefits**

- Complete portability from lab to lab.
- · Easy to load large bulky equipment.
- The unit does not "out gas".
- Increased chemical resistance of stainless steel.
- Excellent for low humidity (Rh) requirements.
- Neutral (non-reactive) environmental work.
- Complete safety for transferring anaerobic field samples.
- Units can be coupled together for multiple user operations.

### Two sizes of Transfer Chambers are available.

- 1. Standard 11" I.D. (280 mm) x 12" long (305 mm)
- 2. Special size 17" I.D. (455 mm) x 12" long (305 mm)

#### Electrical requirements:

North American 115-120 Volts, 60 Hz. 15 Amps. Export Models 220-240 Volts, 50 Hz. 7.5 Amps.





### 819-SS/GB

819-SS/GB/Exp, Export Model

| Product Data                                            | 819-SS/GB                                              | 819-SS/GBB                                            |
|---------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------|
| Internal<br>Dimensions                                  | 40"w x 29"d x 27" h<br>1,020 mm x 740 mm x<br>690 mm h | 60"w x 38"d x 31"h<br>1,520mm x 960mm x<br>790mm h    |
| Outside<br>Dimensions<br>(Includes transfer<br>chamber) | 53"w x 30"d x 34" h<br>1,350 mm x 765 mm x<br>864 mm h | 76"w x 47"d x 32" h<br>1,930mm x 1,190mm x<br>812mm h |
| Approximate<br>Volume                                   | 17.3 Cubic Ft.<br>489 Liters                           | 40.9 Cubic Ft.<br>1,157 Liters                        |
| Approximate<br>Shipping<br>Weight<br>(Crated)           | 275 Pounds<br>125 Kilos                                | 325 Pounds<br>148 Kilos                               |

#### What's included with the 819-Series:

- · Standard 24 month warranty. (Not on gloves or consumables).
- Rugged 12 Ga. stainless steel housing.
- Safety glass viewing port.
- Optically clear transfer chamber for viewing samples.
- Four (4) ground key cock valves for purging.
- Total front panel access for large equipment.
- Adjustable stainless steel hardware throughout.
- Ambidextrous white Hypalon<sup>TM</sup> gloves (10" $\emptyset$  [254mm]).
- "Bright Light" system (40,000 hour lamp guarantee).
- Polycarbonate inner transfer chamber door. (No out-gassing).
- Multiple electric outlet (socket) strip, hospital grade.
- Dual (gas piston) lifters on the front door.
- Neoprene gasketing standard.

### "Integrity" Stainless Steel Glove Box for Multiple Operators

Our 819-SS/GBB style Glove Box includes all of the same features as our 819-SS/GB, but it has greater capacity. The 819-SS/GBB includes four (4) gloves for multiple operators.





819-SS/GBB/Exp, Export Model Optional Accessories for the 819-Series



819-SS/GB/SP, Special 819-Series Glove Box 819-SS/GB/SP shown with extra transfer chamber (800-TRANS/CH) and double HEPA filtration package (800-HEPA/D)

Rapid Transfer Port

The RTP, "Rapid Transfer Port" provides containment during material transfer. For use with stainless steel transfer canister.



### Lab (CO2) Chambers, Heavy Duty Units

The modest cost of these units enables the investigator to easily dedicate one chamber for one specific research project.

These superb cabinets have superior strength and sealing characteristics, utilizing heavier gauge transparent acrylic plastic with formed top corners to minimize section joints.

The structural integrity of the cabinets ensures economy in the cost of operation. After the initial gas purge to clear a cabinet loaded with sensitive components, gas consumption is reduced to an absolute minimum. This is because the cabinet will not flex or deform resulting in gas leakage. When pressurized with an inert gas, no significant change in pressure level occurred over a five (5) day test.

### **Product Benefits**

- Standard 24 month warranty.
- Heavy gauge .375" and .500" thick transparent jeweled acrylic plastic.
- Spring steel tension clamps for uniform gasket pressure.
- Non slip feet for stacking.
- Closed cellular (one piece) gasket.
- Unique "gasket guard" system to prevent gaskets from taking a "set."
- Lightweight, easily transportable. Handles are available.
- Shelves are spaced at 2" (50.8 mm).
- Adjustable perforated shelves for complete atmosphere movement throughout the chamber.
- Nylon inlet and outlet gas nipples, hose barb style, size 1/8" & 1/4" hose barbs.



| Part    | Sizes                                       | Number      | Number      |
|---------|---------------------------------------------|-------------|-------------|
| Number  | wxlxh                                       | of Shelves  | of cubicles |
| 11001   |                                             | 01 01101/00 |             |
| 850-LCS | 12" x 12" x 6"<br>305mm x 305mm x 152mm     | Two (2)     | One (1)     |
| 850-LCM | 12" x 12" x 12"<br>305 mm x 305 mm x 305 mm | Two (2)     | One (1)     |
| 850-LCL | 12" x 12" x 24"<br>305 mm x 305 mm x 610 mm | Four (4)    | Two (2)     |
| 850-1L  | 18" x 18" x 18"<br>457 mm x 457 mm x 457 mm | Two (2)     | One (1)     |
| 850-2L  | 24" x 18" x 24"<br>610 mm x 457 mm x 610 mm | Four (4)    | Two (2)     |
| 850-3L  | 24" x 24" x 24"<br>610 mm x 610 mm x 610 mm | Four (4)    | Two (2)     |
| 850-4L  | 36" x 36" x 36"<br>914 mm x 914 mm x 914 mm | Eight (8)   | Four (4)    |

# CHAMBERS AND GLOVE BOXES

## Multi-Purpose Vacuum Chambers

These fine vacuum chambers are similar in design to our glove box transfer chambers that have been used for over fifty (50) years. Custom sizes and shapes are available.

#### **Product Benefits**

- Low to medium vacuum maintenance. Down to -25" of Hg.
- Useful for degassing and freeze drying processes.
- Easy for transporting contamination and moisture sensitive components.
- Can be used in the vertical or horizontal positions.
- Complete transparency gives visual awareness of your project materials.

### Vacuum Chamber features include:

- Standard 24 month warranty.
- Two (2) ground key cock valves for purging.
- Main chamber is removable from the white base.
- Formed "bell shaped" ends for greater safety.
- Heavy duty .500" thick jeweled acrylic.
- White base includes non-slip feet.
- Vacuum gauge.
- Greaseless Neoprene "O" ring.
- Stainless steel hardware.
- Bright white leveling tray.

#### Useful Accessories:



**800-PUMP**, Diaphragm Vacuum Pressure Pump (110 or 220/240 volts).

Export Model: 800-PUMP/Exp



**800-PRV**, Pressure Relief Valve. Lessens chance for implosion or explosion.

| Catalog<br>Number | Approximate<br>Volume              | Size                        |
|-------------------|------------------------------------|-----------------------------|
| 800-VAC/S         | 1,350 Cubic In.<br>22 Cu. Liters   | 14" x 12"Ø<br>355mm x 305mm |
| 800-VAC/L         | 3,200 Cubic In.<br>52.5 Cu. Liters | 14" x 18"Ø<br>355mm x 457mm |



800-VAC, Horizontal Configuration Set-Up 800-VAC/Exp, Export Model



800-VAC, Vertical Configuration Set-Up 800-VAC/Exp, Export Model

# Accessories for all Chambers and Glove Boxes: Major Devices

PLAS■LABS, INC.<sup>™</sup> offers a complete line of beneficial accessories for chambers, isolators, and glove boxes. Select the important accessory that will help you in your research success!

**#800-DOI**, Digital Oxygen Indicator continuously displays and monitors chamber PPM levels.

 $\pm$  1% of full scale.

#800-AS/SPI, Emits alternating positive and

negative Ions. This is a non-air assisted static

contaminant's are introduced into the chamber or glove box. This is a perfect device for working with fine powders and chemicals. Effective range

eliminator (no blower-fan). No particle

### "We produce research equipment that helps you produce results!

0.1ppm for ranges <100 ppm. 1.0 ppm for ranges >100 ppm.



800-DOI 800-DOI/Exp, Export Model

The **800-HCB**, Humidity Control Box accurately controls and maintains Rh levels inside any our of chambers, isolators, or glove boxes. **NOTE**: Order **#800-HCB/IG** for inert gas dehumidification applications.

Accuracy:

**Resolution**:

is 36" (915 mm).



800-HCB/IG, Humidity Control Box Front view



Outlet hole for Rh sensor line. Sensor fits into glove box or isolator.

Plastic tubing (hoses) fit into these "Push to seal" fittings. Electrical requirements for all products this page: North American: 115-120 Volts 60 Hz.

International (Export): 220-240 Volts 50 Hz. 2.5 Amps.

5 Amps.



800-AS/SPI 800-AS/SPI/Exp, Export Model

**800-RH/HH**, is an ideal everyday spot-checking tool for glove box users The sensor provides reliable measurement while the user interface with graphical trend display makes daily operation quick and easy. User interface is available in 10 languages.

In addition to relative humidity and temperature, the 800-RH/HH can display five calculated humidity parameters (absolute humidity, dew point, enthalpy, mixing ratio, wet bulb), all available in both metric and non-metric units.

#### **Specifications:**

at 0 ... +40°C ±1.5% RH (0...90% RH)

±2.5%RH (90...100% RH) at -10 ... 0°C ±3.0% RH (0...90% RH) +40 ... +60°C ±4.0%RH (90...100% RH)

Temperature measurement range: -10 ... +60°C Measurement probe: Interchangeable

# Accessories for all Chambers and Glove Boxes: Major Devices



Major NEW products!

800-CPS, Controlled Purge System 800-CPS/Exp, Export Model This device has been designed to monitor and control positive pressure within any of our glove boxes, isolators, or desiccators.

The unit features a programmable logic controller that continuously displays the chamber pressure as well as the desired "set point." Once you have entered your desired set point, (from 0.0 to +2.0" WC or 0 to +500 Pa), the controller will automatically maintain that point.



800-CPS/O2, Oxygen Controlled Purge System Front view

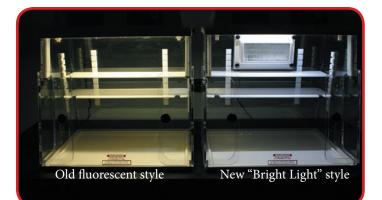




The BACTI Microcinerator<sup>™</sup> sterilizes metal loops and needles without the need for an open flame. Aerosaling of micro-organisms is eliminated.

The Microcinerator<sup>™</sup> protects technicians from dangerous gases, flames and spatter. Loops or needles are sterilized within 5-7 seconds.

The ergonomic design reduces hand fatigue and allows the technician to access the burner from five (5) various positions. Suction cup feet provide great stability!



800-BLS, "Bright Light" system

Our new "Bright Light" system is guaranteed to have a 40,000 hour bulb life. Illumination of the glove box or isolator is dramatically increased. Heat production is minimized making the unit much more comfortable in which to work.

#### Electrical requirements for all products this page: North American: 115-120 Volts 60 Hz. 5 Amps. International (Export): 220-240 Volts 50 Hz. 2.5 Amps.

# Accessories for all Chambers and Glove Boxes: HEPA Filtration Variations & Components

We offer HEPA filtration setups in several different configurations depending upon your application need. All setups include our **#800-MAGNA**, Magnehelic Gauge indicators.

### HEPA filters can be in the following shapes:

- A. Round. Catalog **#800-H8**. Our standard "Multi-Purpose" filter.
- B. Rectangular. For PCR and special isolators.
- C. Canister (Capsule). Catalog **#800-HEPA/P**. For filtering pressure overflows.

NOTE: Our Carbon (Charcoal) filters can also be mounted onto our HEPA filters. Four (4) styles available. Refer to photo on this page.

### Refer to page 25 for different carbon filter options.



800-HEPA/P Canister (Capsule Style) Can be used for chamber pressure overflow and/or mounted on our diaphragm pump.

Traps impurities before they can be exhausted into the room atmosphere.



Electrical requirements for all products this page: North American: 115-120 Volts 60 Hz. 5 Amps. International (Export): 220-240 Volts 50 Hz. 2.5 Amps.



800-MAGMA/Exp, Magnehelic Gauge (In Pasccals) Export 800-MAGMA, Magnehelic Gauge (In Inches of H20) These gauges are used to monitor filter effectiveness and

These gauges are used to monitor filter effectiveness and efficiency. They indicate when it is time to change your filter(s). Refer to page 50 for additional information.





800-HEPA/S (Single HEPA filter set-up

The single filter set up includes 8"Ø (203 mm) HEPA filter, .4  $\mu$  micron pre-filter, blower (fan), mounting plates, and **#800-MAGNA** set.

# Accessories for all Chambers and Glove Boxes: HEPA Filtration Variations & Components



800-HEPA/S (External view with exhaust outlet connector.)

Additional Filtration components (not shown).

**#CF-50/9 Carbon Filter** "Spun Media" pad, 9"Ø, (229mm Ø) Color black. Twelve (12) per package.

**#GF-50-B9 Glass media Filter Pad** ,9"Ø (229mm Ø) Color pink, five (5 μ) microns. Twelve (12) per package.

**#MF-50/9 Spun Polypropylene Pre-filter Pad,** 8" $\emptyset$  (203mm  $\emptyset$ ) diameter. Color white, point four (.4  $\mu$ ) microns. Twelve (12) per package.



800-HEPA/D. Open exhaust (double) HEPA filtration system.



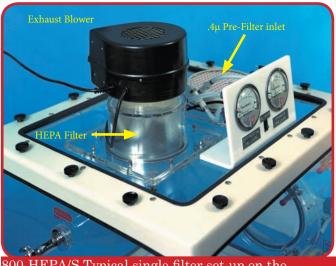
800-HEPA/S with filter access door open. Internal view (when changing filters)

Special Carbon filter types available

**#800-CARBON/A** Replacement Carbon Filter (8"Ø) (203 mm) diameter. One (1) per package. Impregnated Carbon Filter for alkaline type fumes.

**#800-CARBON/B** Replacement Carbon Filter (8"Ø) (203 mm) diameter. One (1) per package. Impregnated Carbon Filter for ammonia or amines.

#800-CARBON/C Replacement Carbon Filter (8"Ø)
(203 mm) diameter. One (1) per package.
Non-Impregnated Carbon Filter for absorption of aromatic hydrocarbons, organic vapors, keytones, alcohols, organic acids, esters, Nitrogen compounds, and odors.



800-HEPA/S Typical single filter set-up on the 830-Series Glove Box

# Accessories for all Chambers and Glove Boxes: Suspended Shelf Packages

Suspended (sliding) Shelf packages can be added to most of our various glove boxes, isolators and chambers. They greatly increase the culture plate holding capacity of the chamber.

Sliding shelves can be pushed to the rear of the chamber when not in use.

**#800-SHELF-I**, Suspended Sliding Shelf for Single Operator units. Plate capacity is about 340. Fabricated of .375 thick clear acrylic, with shelves spaced at 7" (178 mm) apart. The entire assembly is suspended from the chamber top to keep the floor area uncluttered. Overall size is 18" (457 mm) high x 18" (457 mm) wide x 10" (254 mm) deep.

**#800-SHELF-II**, Suspended Sliding Shelf for Multiple Operator units. Plate capacity depends upon model used. Fabricated of .375 thick clear acrylic, with shelf spacing 9" (228 mm) apart. The entire assembly is suspended from the chamber top to keep the floor area uncluttered. Overall size is 22" high (560 mm) x 16" deep (406 mm). Length depends upon chamber model selected.



800-SHELF-830 (Shelf for 830-Series units) Typical suspended shelf set-up.



#800-SHELF-I, For chamber models #818-GB, #850-

NB, #855-AC, #857-OTA, and #890-THC.

Plate Holding Capacity if dish size is 100 x 15 mm.

| Top tier capacity (5 plates high). | =    | 60 dishes           |
|------------------------------------|------|---------------------|
| Tiers 2 & 3 capacity 12 plates his | gh x |                     |
| $12 = 144 \ge 2$ shelves           | =    | <u>288 dishes</u>   |
| Total shelf capacity               | =    | $348 	ext{ dishes}$ |

**NOTE**: If the area under the shelf assembly is to be used for additional plate storage, then add 84 more plates.

#### Suspended shelves for #830-SERIES glove boxes.

#### Catalog #800-SHELF-830 SUSPENDED SHELF.

The total number of shelves for the #830-SERIES glove boxes will vary based upon the overall size of the chamber selected. Once you have selected the #830 chamber size you want, contact us about the corresponding shelf size to fit.

The photo on left is a typical set up for the **#830-ABC** Compact Glove box. Each shelf has a capacity of fifty (50) Petri Dishes (plates), for a total 3 shelf capacity of 150. If plates are to be stored below the shelves, there is room for an additional forty (40) plates, making a total of 190 plates.

# Accessories for all Chambers and Glove Boxes: Entry Port Variation

PLAS LABS, INC.® offers numerous variations for access to the internal environment of a glove box or isolator.



#### 1. **#800-IRIS/S**

REPLACEMENT IRIS SLEEVES and CUFFS. Refer to #800-IRIS for description.

#### 2. **#800-IRIS**

IRIS DIAPHRAGMS (UNMOUNTED). A flexible cuff is rotated to tighten around the operators arms. Opening diameter is 6" (152 mm) I.D. Sold in pairs only.

#### 3. #800-IRIS/CONV

IRIS DIAPHRAGMS CONVERSION SET Iris diaphragms are mounted on formed plastic caps that fit over our standard glove port rings. Twist into place. Sold in pairs only.

#### 4. #800-BH/CONV

BARE HAND ENTRY PORT CONVERSION. These ports are 8"Ø (203 mm) in diameter and consist of five (5) pleats of flexible Hypalon<sup>™</sup> Sold in pairs only. Ten (10"Ø) diameter (524 mm) ports are also available.



### GLOVE PORT PLUGS



**#800-PLUG & #815-PLUG** Glove Port Plugs are used for sealing ports during:

- Glove change over.
- Bare-hand entry change over.
- Iris diaphragm change over.
- When ports are not needed.



Insert plug into port opening and rotate red knob (tighten) until port is sealed.

# Accessories for all Chambers and Glove Boxes: Atmosphere Purification & Sterilization Items

When your research requires inner atmosphere purification and/or sterilization, we have the answer for your needs. Particle filtration, harmful vapors, or just static removal devices are readily available for your glove box or isolators.

Our sterilants and cleaners are all F.D.A. approved.

There are several commercially available sterilizing agents and technologies that can be used on our cast acrylic isolators and glove boxes. These include:

- CLIDOX-S<sup>™</sup> Sterilant by Pharmacal Labs<sup>™</sup>.
- Chlorine Dioxide Gas Tablets (MB-10 Tablets by QUIP Labs<sup>TM</sup>).
- Formaldehyde.
- Diluted isopropyl alcohol. 70% in water (Bactericide).
- Diluted ethyl alcohol (Virucide).
- Chlorine (sodium hypochlorite) 5 g/Liter.

Notes about our new Carbon filter types and set-up.



• **#800-HEPA/CARB**. Combination HEPA and Non-Impregnated Carbon absorbs most aliphatic and aromatic hydrocarbons, solvents, organic vapors, aldehydes, keytones, alcohols, organic acids, esters, sulfur compounds, and odors.

• **#800-CARB (A)**. Impregnated Carbon filter for alkaline type fumes.

• **#800-CARB (B)**. Impregnated Carbon filter for ammonia or amines.

• **#800-CARB (C)**. Non-Impregnated Carbon filter for absorption of aromatic hydrocarbons, organic vapors, keytones, alcohols, organics acids, esters, Nitrogen compounds, and odors.



NOTE: "VHP" sterilization requires a special plastic, such

as clear PVC or PETG. "BanjoTM" style purge fittings are included with the glove box.

Part number 800-BANJO





"Banjo" style purge fitting, 800-BANJO

Banjo style closure (sealing) valves.



818-GB/SPCL for use with VHP sterilizer

### Accessories for all Chambers and Glove Boxes: Atmosphere Purification (Continued)



800-HEATER & 800-PC

#### #800-HEATER (1.), Catalyst Heater Unit

Maintains correct incubation temperature levels and helps reduce trace amounts of Oxygen in the glove box. Includes **thermocouple** (2.) for temperature sensing. Place thermocouple at your desired height inside chamber.

**#800-PC (3.) Palladium Canister** filled with 1/2 Lb. of Palladium (Pd). Canisters sold separately. Canisters can be recharged by baking in a hot oven.

The heater draws the internal atmosphere off the floor and pushes it up across heating elements and Palladium pellets. Any trace amounts of Oxygen are then reduced into water (H2O) vapor. The Drying Train #800-DT (see below) then removes the vapor as needed.



800-ONEG Oxygen Removal System NOTE: Vacuum pump not included with 800-ONEG system.

**#800-ONEG** includes O2 indicator (1.) Oxygen Trap (2.) hoses and plastic holder.

**#800-ONEG** reduces O2 level down to 10-12 ppb. Must order as a set only.

NOTE: Glove box must be made anaerobic before attaching this system.



**#800-DT** removes unwanted moisture (H2O) from the internal atmosphere of the glove box. Includes pump, hoses, and three (3) canisters filled with Molecular Sieve<sup>TM</sup> (#800-DESI).

**#800-DESI** includes three (3) canisters filled with Molecular Sieve<sup>™</sup> and hoses with quick disconnects. Pump not included.

**#800-PUMP,** Diaphragm pump mounted on a .375" plastic base with suction cup feet for stability.

Includes an in-line on/off switch and five (5) feet of flexible hose. No quick disconnects.

800-PUMP, Vacuum Pump 800-PUMP/Exp, Export Model

Electrical requirements for all products this page: North American: 115-120 Volts 60 Hz. 5 Amps. International (Export): 220-240 Volts 50 Hz. 2.5 Amps.

|          | Authonal Reins for Philadon.                  |
|----------|-----------------------------------------------|
| CF-50/9  | Carbon filter pad, 9"Ø (228 mm). "Spun Media" |
|          | color black. Twelve (12) per package.         |
| GF-50-B9 | Glass media Filter Pad 9"Ø (228 mm) Color     |
|          | pink, (5 µ) microns. Twelve (12) per package. |
| MF-50/9  | Spunbound Polypropylene pre-filter, 9"Ø (228  |
|          | mm), color white, 0.4 μ non-hygroscopic.      |
|          | Twelve (12) per package.                      |
|          |                                               |

### Additional Items for Filtration.

## Accessories for all Chambers and Glove Boxes: Stainless Steel Support Carts (Trolleys)



These carts are very useful for increasing portability and laboratory space.

All carts have anti-scuff casters including brakes and locks. Carts also feature a cushioning system that minimizes vibration, shocks, and wear and tear on chambers.

Most carts feature lower horizontal gas tank support racks which provide greater tank handling safety and flexibility.

Also available in a "knocked down" (unassembled) version. See information below.



| PRODUCT NUMBER | CART DESCRIPTION               | SIZES (O.D.)        |
|----------------|--------------------------------|---------------------|
| CART-GB        | For #GB, #NB, #AC<br>Units     | 51"w x 24"d x 35" h |
| CART-GBB       | For #GBB, #NBB, #<br>ACB Units | 55"w x 34"d x 35" h |
| CART-ABC       | For #ABC Glove Box             | 43"w x 24"d x 34" h |
| CART-ABB       | For #ABB Glove Box             | 49"w x 30"d x 34" h |
| CART-ABD       | For #ABD Glove Box             | 63"w x 31"d x 34" h |
| CART-ABE       | For #ABE Glove Box             | 76"w x 32"d x 34" h |
| CART-CLC       | For #870 sized units           | 55"w x 34"d x 31" h |

# Stainless Steel "Knocked Down" Cart (Trolley)

The Knocked Down Cart (Trolley) size is 40" (1016 mm) w x 24" (610 mm) d x 34" (864 mm) h.



Kit includes: Main base frame, casters, uprights, and top.



Insert casters and tighten



Force fit the four legs (uprights)



Place top on for legs & press into place.



# SAVES ON SHIPPING COSTS!

## Accessories for all Chambers and Glove Boxes: Microscope & Inspection Lens Components

Visual inspection of your research components can be made without removing them from the isolator or glove box.

Our new inspection lens and microscope port accessories can be factory mounted on the viewing surface of any unit we manufacture.

### Refer to the photo on the right.



#### #800-MICRO

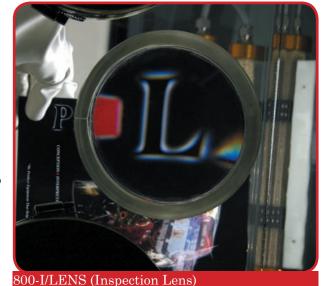
**MICROSCOPE VIEWING PORT** is 6.25"  $\emptyset$  (159 mm) and includes the port, Hypalon<sup>TM</sup> cover, and stainless steel worm clamp. The Hypalon<sup>TM</sup> cover allows the microscope oculars to protrude from the chamber to permit exterior viewing of your research materials. Specify single or double oculars.

#### #800-HYCOV

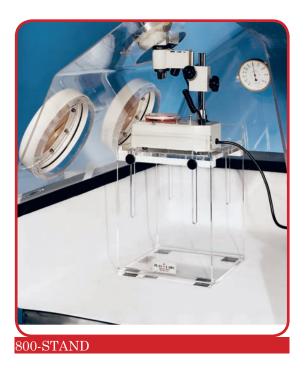
**REPLACEMENT COVER for the #800-MICRO**. Sold in pairs only. One with ocular hole(s) and one without for use when the microscope is not needed. Specify your preference when ordering.

#### #800-BH/CONV BARE HAND CONVERSION KIT.

Refer to page 43 for complete details.



The new inspection lens is rated having a focal length tolerance of  $\pm 1\%$  at 11.8" inches (300 mm). The diameter of the lens is 6" (152 mm). This is a "fused silica" glass lens of extremely high optical quality. Factory mounted only.



The #800-STAND has an adjustment span of 9" (228 mm) and is 16.5" (420 mm) high. The base has non-slip foot pads and is 8" x 10" (203 x 254 mm).

### Accessories for all Chambers and Glove Boxes: Glove Box & Isolator Gloves

### Material selections.

PLAS**L**ABS,INC.<sup>®</sup> offers one piece gauntlet style gloves in four (4) different materials. They are:

- 1. Butyl Catalog #800-GB-Series (Not shown).
- 2. Hypalon<sup>™</sup> Hypalon<sup>™</sup> Catalog #800-GH-Series.
- 3. Latex Catalog #800-GLLP-Series.
- 4. Neoprene<sup>™</sup> Catalog #800-GN-Series.

#### Refer to photo on right.

We also offer glove box sleeves with replaceable hands. The four (4) different hand materials are:

- 1. Butyl Catalog #800-GA-BUT-Series.
- 2. Hypalon<sup>™</sup> Catalog #800-GA-HYP-Series.
- 3. Neoprene<sup>™</sup> Catalog #800-GA-NEO-Series.
- 4. Nitrile<sup>™</sup> Catalog #800-GA-NIT-Series.

Refer to photo below



One piece gauntlet style gloves



| NOTES: | The #800-GH Hypalon <sup>™</sup> glove is the standard glove<br>used on most PLAS■LABS,INC. <sup>®</sup> products. |
|--------|--------------------------------------------------------------------------------------------------------------------|
|        | The <b>#800-GLLP</b> (latex glove) is the primary glove used on the La Petite glovebox (Catalog <b>#815-PGB</b> ). |
|        | Some port diameters are available in three (3) sizes ranging from 7" $Ø$ (178 mm) to 10" $Ø$ (254 mm).             |
|        | Hand sizes are also available varying in size from 7" $Ø$ (177 mm) to 10" $Ø$ (254 mm).                            |
|        | Refer also to the gloves/hands data chart for additional details. Refer to page 49.                                |

Glove box sleeve with replaceable hand set up. Components are:

- 1. Typical sleeve with mounting cuff. Catalog #800-GH/S.
- 2. "O" rings for sealing glove to sleeve.
- 3. Hand (glove) replacement. Catalog #800-GA/NIT.

Note: Nitrile hand component illustrated (Both photos). Other hand materials available.



Replaceable hand set-up with gauntlet sleeve



Assembled hand/sleeve set-up

# Accessories for all Chambers and Glove Boxes: Glove Box & Isolator Glove Specifications

We offer 22 variations of gauntlet gloves and replacement hands for glove boxes and isolators. All of the gauntlet gloves (sleeves) can also be mounted onto our conversion kits. Conversion kits (formed plastic caps) can be mounted onto any of our glove boxes or isolators.

| Product Number                     | Description                          | Material           | Port Diameter         | Hand Size         | Thickness       |
|------------------------------------|--------------------------------------|--------------------|-----------------------|-------------------|-----------------|
| 800-GH/S                           | Sleeve Only                          | Hypalon            | 8"                    | n/a               | .015"           |
| 800-GOS                            | Glove over sleeve connector          |                    |                       |                   |                 |
|                                    | acement for use with 800-GH/S,       | sleeve only. 800-G | OS, glove over sleeve | connector, is nee | eded for use wi |
| the hand replaceme<br>800-GA/BUT/7 |                                      | D41                | n/a                   | 7"                | .015"           |
| 800-GA/BUT/8                       | Hand Replacement                     | Butyl              | n/a                   | 8"                | .015"           |
|                                    | Hand Replacement<br>Hand Replacement | Butyl              |                       | 8<br>9"           |                 |
| 800-GA/BUT/9                       | ^                                    | Butyl              | n/a                   | 9<br>10"          | .015"           |
| 800-GA/BUT/10                      | Hand Replacement                     | Butyl              | n/a                   | 10<br>7"          | .015"           |
| 800-GA/HYP/7                       | Hand Replacement                     | Hypalon            | n/a                   | 8"                |                 |
| 800-GA/HYP/8                       | Hand Replacement                     | Hypalon            | n/a                   | <u> </u>          | .015"           |
| 800-GA/HYP/9                       | Hand Replacement                     | Hypalon            | n/a                   |                   | .015"           |
| 800-GA/HYP/10                      | Hand Replacement                     | Hypalon            | n/a                   | 10"               | .015"           |
| 800-GA/NEO/7                       | Hand Replacement                     | Neoprene           | n/a                   | 7"                | .015"           |
| 800-GA/NEO/8                       | Hand Replacement                     | Neoprene           | n/a                   | 8"                | .015"           |
| 800-GA/NEO/9                       | Hand Replacement                     | Neoprene           | n/a                   | 9"                | .015"           |
| 800-GA/NEO/10                      | Hand Replacement                     | Neoprene           | n/a                   | 10"               | .015"           |
| 800-GA/NIT/7                       | Hand Replacement                     | Nitrile            | n/a                   | 7"                | .015"           |
| 800-GA/NIT/8                       | Hand Replacement                     | Nitrile            | n/a                   | 8"                | .015"           |
| 800-GA/NIT/9                       | Hand Replacement                     | Nitrile            | n/a                   | 9"                | .015"           |
| 800-GA/NIT/10                      | Hand Replacement                     | Nitrile            | n/a                   | 10"               | .015"           |
| One-Piece Gloves                   |                                      |                    |                       |                   |                 |
| 800-GB                             | One-Piece Glove                      | Butyl              | 8"                    | 9"                | .015"           |
| 800-GB/7                           | One-Piece Glove                      | Butyl              | 8"                    | 7"                | .015"           |
| 800-GB/8                           | One-Piece Glove                      | Butyl              | 8"                    | 8"                | .015"           |
| 800-GB/9/6                         | One-Piece Glove                      | Butyl              | 7"                    | 9"                | .015"           |
| 800-GB/9/10                        | One-Piece Glove                      | Butyl              | 10"                   | 9"                | .015"           |
| 800-GH                             | One-Piece Glove                      | Hypalon            | 8"                    | 9"                | .015"           |
| 800-GH/7                           | Two-Piece Glove                      | Hypalon            | 8"                    | 7"                | .015"           |
| 800-GH/8                           | One-Piece Glove                      | Hypalon            | 8"                    | 8"                | .015"           |
| 800-GH/10                          | One-Piece Glove                      | Hypalon            | 8"                    | 10"               | .015"           |
| 800-GH/8/10                        | One-Piece Glove                      | Hypalon            | 10"                   | 8"                | .015"           |
| 800-GH/9/10                        | One-Piece Glove                      | Hypalon            | 10"                   | 9"                | .015"           |
| 800-GH/9/6                         | One-Piece Glove                      | Hypalon            | 7"                    | 9"                | .015"           |
| 815-PGB, "La Petite                | e" Glove Box Gloves                  |                    | •                     |                   |                 |
| 800-GLLP                           | One-Piece Glove                      | Latex              | 7"                    | 9"                | .015"           |
| 800-GLLP/7                         | One-Piece Glove                      | Latex              | 7"                    | 7"                | .015"           |
| 800-GLLP/10                        | One-Piece Glove                      | Latex              | 7"                    | 10"               | .015"           |
| 800-GN                             | One-Piece Glove                      | Neoprene           | 8"                    | 9"                | .015"           |
| 800-GN/8                           | One-Piece Glove                      | Neoprene           | 8"                    | 8"                | .015"           |
| 800-GN/10                          | One-Piece Glove                      | Neoprene           | 8"                    | 10"               | .015"           |
| 800-GN/11                          | One-Piece Glove                      | Neoprene           | 8"                    | 11"               | .015            |
| 800-GN/9/6                         | One-Piece Glove                      | Neoprene           | 7"                    | 9"                | .015"           |

### Accessories for all Chambers and Glove Boxes: Valve and Gauge Variations

Various valves, gauges, and meters can be added to any glove box, isolator, or desiccator. These are normally mounted in standard locations, but we can easily change set ups depending upon your own preferences.

1. **#800-IN/OUT**. COMPLETE VALVE PACKAGE Includes ground key cock valve, with flanges, and inner/outer serrated nipples.

2. **#800-GOFAU**. GOOSE NECK WATER FAUCET. Factory mounted internal faucet has a swivel goose neck. Useful for controlling water supply into the chamber. Includes serrated nipple and flange for easy hose connection.

3. **#800-FLOW**. FLOW METER KIT. Helps regulate gas flow at lower incoming pressures. Kit includes flowmeter, mounting bracket, hoses and ring clips. Range "0 -10 LPM." Refer to photo below also (#3).

4. **#800-HYGRO**. HYGROMETER (Large). Indicates inner level of chamber Relative Humidity (Rh).



#800-MAGNA. Magnehelic Gauge Package.

These Magnehelic gauges indicate the internal pressure levels of the HEPA filter system and the internal pressure of the glove box.

- A. This **RED** pointer indicates when it is time to change the HEPA filters.
- B. When the **RED** pointer lines up with this "set pointer," it is time to change the HEPA filters.
- C. This **RED** pointer will change because of HEPA filter variations in resistance.
- D. This is the main electrical power (On/Off) switch.



5. **#800-FLOW/D**. SMALL FLOW METER used for smaller chambers and desiccators. Helps regulate gas flow at lower incoming pressures. Kit includes flowmeter, mounting bracket, hoses and ring clips. Range "5-50 SCFH."

6. **#800-BANJO**. BANJO<sup>™</sup> TYPE FITTINGS for use with VHP sterilization equipment and procedures. O.D. is 1.375" (35 mm). I.D. is .875" (23 mm).

7. **#800-NLP.** SERRATED NIPPLE ONLY. Normally attached to the #800-VALVE on the inside of the chamber.

8. **#800-VALVE**. GROUND KEY COCK VALVE (Only). Valve with flange can also be mounted on a  $90^{\circ}$  elbow if desired. Specify N2 or VAC (Vacuum) valve label.

9. **#800-PRV**. PRESSURE RELIEF VALVE. Minimizes the chance for chamber implosion or explosion because of incorrect pressure level.



### Accessories for all Chambers and Glove Boxes: Miscellaneous Accessories

Numerous systems are available for gaining access into any glove box or isolator. Some of these can be set up so as not to disturb the interior atmosphere of the chamber.



**#800-BLANK/P** BLANKING PLATE PORT. Useful for attaching special cables and plugs. This kit includes a blank aluminum plate, fastening stainless steel nuts, bolts, and sealant. The blank plate itself is ready for machining as necessary by the end user. The hole cut out is 6" x 3" (152 x 76 mm) and the blank plate is 4.5" x 7.5" (190 x 114 mm). Custom sizes are available.



Permits interface connection between internal devices and your external computer. Kit includes stress relief plates, shielded computer cable (8 feet), stainless steel fasteners, and RS-232 connectors.

NOTE: Other connectors can be supplied.



This automatic door locking system prevents both transfer chamber doors from being opened at the same time. If one door is opened, the other door is locked in five (5) seconds. The locking mechanism is rated at 120 Lbs of force. This is for operator safety. It operates on a 12 volt system. Power supply is included.

#### Electrical requirements for this system:

North American: 115-120 Volts 60 Hz. 1 amp. International (Export): 220-240 Volts 50 Hz. 1 amp.

## Accessories for all Chambers and Glove Boxes: Valve and Gauge Variations

PLASLABS,INC.<sup>®</sup> offers a variety of unique miscellaneous accessories for our glove boxes, isolators, and chambers. All accessories are easily adaptable to standard or customized research equipment.

If you are doing research requiring unique enclosures, please contact us. We might be able to assist you in your research efforts.

#800-TANK, GERMICIDAL DIP TANK. Useful for quick entry into and out of the chamber. A "deep draw" bottom section of the chamber is required for this accessory. Package includes inner and outer tank with stainless steel exterior lid. Fill the tank with a germicidal solution to sanitize items being introduced into the chamber.

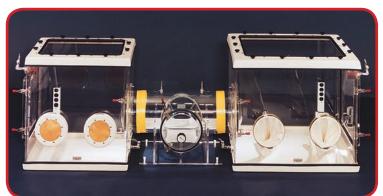


#800-GTREG, Gas Tank Regulator. Regulator features two stainless steel diaphragms that will not contaminate the gas stream and is resistant to in-board diffusion. The design also features low dead volume (internal volume), which minimizes particle generation. Kit includes 5 feet of hose, (.250 I.D. x .500 O.D.) and attachment clamp.

Very useful for scaling down high pressure levels prior to reaching flow meters. Domestic (US) thread styles only.



#800-T, "T" SHAPED TRANSFER CHAMBER. This is used for connecting two (2) glove boxes together. Included in the kit are a leveling support stand, one (1) extra vacuum gauge, two (2) extra gas key cock valves, two (2) leveling trays for liquids, and connecting tape. The center section has its own access door with stainless steel locking clamps.



800-T, "T" Shaped Transfer Chamber



#800-02, OXYGEN INDICATOR. A small hand held device to monitor Oxygen levels inside the chamber. It is battery operated and has an effective reading range of 0-100%.



Tallaght Business Park Whitestown, Dublin 24

Quatro House, Frimley Road Camberley, United Kingdom GU16 7ER

Tel: 08452 30 40 30 Fax: 08452 30 50 30 E-mail: info@labunlimited.com E-mail: info@labunlimited.co.uk Web: www.labunlimited.com Web: www.labunlimited.co.uk