Алматы (727)345-47-04 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Волгоград (844)278-03-48 Вологра (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89

Россия +7(495)268-04-70

Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81

Казахстан +7(727)345-47-04

Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саранск (8342)22-96-24 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Суртут (3462)77-98-35 Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97

Тверь (4822)63-31-35

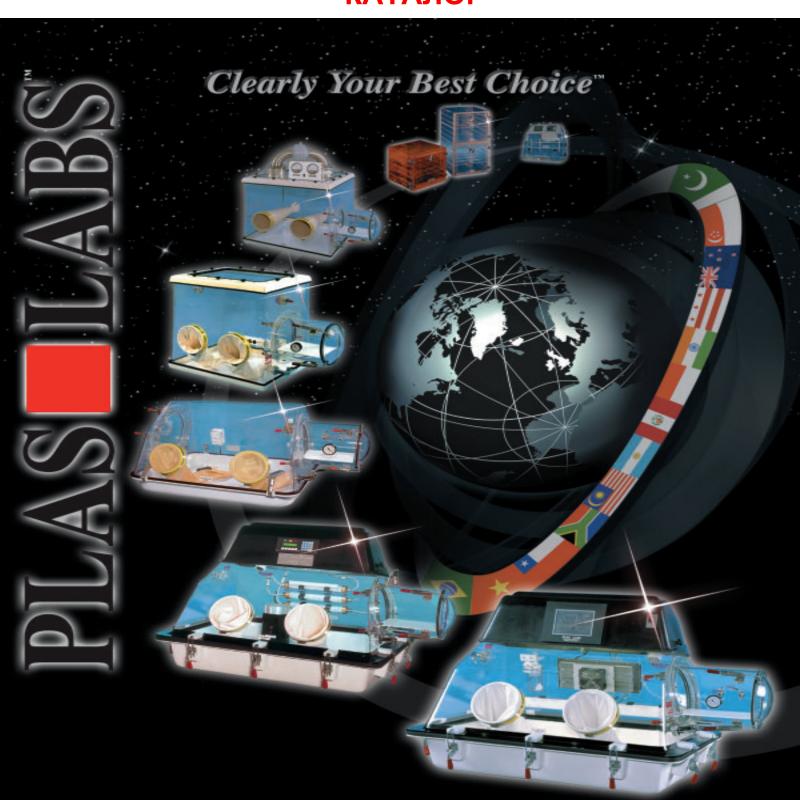
Узбекистан +998(71)205-18-59

Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Улан-Уда (3012)59-97-51 Ульяновск (8422)24-23-59 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93

Киргизия +996(312)96-26-47

https://plas-labs.nt-rt.ru || pbf@nt-rt.ru

КАТАЛОГ



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

Automatic Controlled Atmosphere (Anaerobic) Chamber (Touch Screen Controlled)	NEW!
Automatic Controlled Atmosphere (Anaerobic) Chamber ("PLC" Controlled)	NEW!
Controlled Atmosphere (Anaerobic) Chamber	
Closed Loop Containment Isolator Glove Box	
Nitrogen Dry Box	
Basic Glove Box, Single Operator	
Compact Glove Box (#830-SERIES)	
Compact Glove Boxes with HEPA Filtration	
Compact Glove Boxes with Access Doors & Automatic Locks	NEW!
Germicidal Work Station (Still Air Enclosure)	
La Petite Glove Box Re-engineered Style!	NEW!
PCR (UV) Chamber	NEW!
Low Velocity Fume Hoods	NEW!
Isolation & Containment Chambers	
Isolation & Sterility Chambers	NEW!
Biotoxin & Decontamination Chambers	NEW!
Custom Unit Capabilities (Containment & Drug Processing)	
Desiccator Cabinets (Clear and Light Sensitive Units)	
CO ₂ Lab Chambers (Heavy Duty)	
Stainless Steel Desiccators	
Stainless Steel Glove Box (Integrity) Re-engineered Product!	
Vacuum Chambers (Multi Purpose)	
ACCESSORIES FOR ALL CHAMBERS AND GLOVE BOXES	
Major Accessories (Devices)	NEW!
Major Accessories (Devices)	NEW!

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

HEPA Filtration Components & Variations	
HEPA Filtration Components & Variations (Continued)	
Suspended Shelf (Storage) Systems	NEW!
Entry Port (Plug) Variations	
Atmosphere Purification & Sterilization	NEW!
Stainless Steel Support Carts (Trolleys)	
Microscope & Inspection Lens	NEW!
Glove Box & Isolator Gloves	
Valve & Gauge Variations	NEW!
Miscellaneous Accessories	NEW!
Miscellaneous Accessories (Continued)	NEW!

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 are:

- Password protected, configurable "PID" controlled.
- Inert gas hookup capability.
- White ambidextrous Hypalon™ 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 valves 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[™] 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[™] 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).

"NEW PRODUCT"

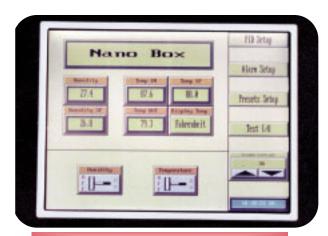


#890-THC & #890-THC/EXP

Product Specifications

Troduct op cententions		
Inside Dimensions	41" w x 28" d x 26" h 1,040mm x 712mm x 660mm h	
*Outside Dimensions	55" w x 35" d x 38" h 1,400mm x 890mm x 965mm h	
Approximate Volume	17.3 Cubic Feet 489 Liters	
Electrical Requirements	N. American 115-120 Volts,60 Hz. 10 Amps Export Model 220-240 Volts,50 Hz. 5 Amps.	
Maximum Working Pressure	6.0" of W.C. (1.49kPa)	
Approximate Shipping (crated) Weight	250 Pounds 112.5 Kilos	

*Includes Transfer Chamber



Close up of computer interface screen

AUTOMATIC "PLC" CONTROLLED ATMOSPHERE ISOLATOR/GLOVE BOX (ANAEROBIC CHAMBER)

This chamber has been designed for automatic atmosphere control when working with Oxygen sensitive materials, product containment needs, and/or general isolation control. The chamber features an internal "PLC" control system with multifunctional operator interface.

This glove box is perfect for working in anaerobic conditions.

Features included are:

- Internal "PLC" control system.
- Three (3) drying train canisters filled with Molecular Sieve™ and quick dis-connects.
- White ambidextrous Hypalon™ gloves.
- Two (2) 1/4" hose barb (tubing) gas connections.
- "Bright Light" system (40,000 hour lamp guarantee).
- Programmable Catalyst Heater unit with two
 (2) Palladium (Pd) filled canisters.
- Multiple electric outlet (socket) strip. UL, CSA, and CE approved.
- Two (2) ground key cock valves for purging the main chamber.
- Standard 24 month warranty (Not gloves or consumables).

The operator can program these features:

- The number of purging cycles.
- Gas selection (inert or anaerobic blend).
- Drying train reaction time frame.
- Pressure "hold" function.
- Anaerobic gas reaction time frame.
- Selection of chamber to be purged (Main or transfer).

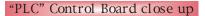


SIMPLICITY-888 & SIMPLICITY-888/EXP With Catalyst Heater Unit and Palladium Canisters

Product Specifications

Inside Dimensions	41" w x 28" d x 26" h 1,040 mm x 712 mm x 660 mm h
*Outside Dimensions	55" w x 35" d x 38" h 1,400 mm x 890 mm x 965 mm h
Approximate Volume	17.3 Cubic Feet 489 Liters
Electrical Requirements	N. American 115-120 Volts, 60 Hz. 10 Amps. Export Model 220-240 Volts, 50 Hz. 5 Amps.
Maximum	6.0" of H ₂ 0
Working Pressure	1.49kPa
Approximate Shipping (crated) weight	250 Pounds 112.5 Kilos

*Includes transfer chamber.





The operator interface continually displays the "PLC" functions and working pressures within the main chamber or transfer chamber. It can also support an additional 4-20 mAmp analog input. These inputs are used to create your own unique atmosphere chamber. Examples are percentage of O₂ analyzer, humidity information, etc.



#800-HEATER w/#800-PC

The programmable Catalyst Heater has two basic functions. It reduces trace amounts of Oxygen that enter the main chamber and it maintains incubation temperatures from ambient up to 42 degrees C.

*Refer to Accessories Section for more details about this device.

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 SieveTM 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).

Did you Know?

Molecular Sieve™ can absorb 20-25% of its own weight in water (H₂0).



#855-AC with Catalyst Heater Unit #855-AC/EXP (Export Model)

Refer to #800-ONEG and dimensions on page #7.

Features included are:

- 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" (305 mm) long x 11" (280 mm) 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

The Drying Train Function.

The drying train includes its own vacuum pressure pump and six (6) polycarbonate canisters filled with Molecular Sieve™. 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 SieveTM acts as an atmosphere purifying medium. Most impurities produced by research will adhere to the granules. It also acts as a drying agent as moisture is produced. As moisture is absorbed, the Molecular SieveTM will turn color to a dark brown.

The Molecular SieveTM can be rejuvenated by heating in a hot oven for three (3) hours at 450° F.

NOTE: You must remove the Molecular Sieve $^{\text{TM}}$ 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).

Electrical requirements:

North American 115-120 Volts, 60 Hz. 15 Amps. Export models 220-240 Volts, 50 Hz. 8 Amps.

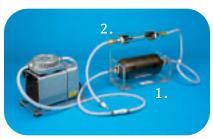


#855-ACB for Multiple Operators #855-ACB/EXP for Export Use

Product Data	#855-AC	#855-ACB
I.D.	41"w x 28"d x 26"h 1,040 mm x 710 mm x 660 mm h	60"w x 38"d x 31"h 1,520 mm x 960 mm x 790 mm h
O.D. Includes Transfer Chamber	55"w x 35"d x 38"h 1,400 mm x 890 mm x 970 mm h	76"w x 47"d x 42"h 1,930 mm x 1,190 mm x 1,070 mm h
Approximate Volume	17.3 Cubic Ft. 489 Liters	40.9 Cubic Ft. 1,157 Liters
Approximate Shipping Wt. (Crated)	250 Pounds 113 Kilos	300 Pounds 136 Kilos

#800-ONEG Oxygen reducing accessory w/pump 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 #41.

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.



- 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.
- 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[™] 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).



#870-CLC with Stainless Steel Support Cart #870-CLC/EXP Export Model with Trolley

Product Details	#870-CLC & #870-CLC/EXP
I.D.	56"W x 35"D x 27" high 1,423 mm x 890 mm x 690 mm h
O.D. (Includes Transfer Chamber)	82"W x 47"D x 53" h 2,080 mm x 1,190 mm x 1,350 mm h
Approximate Volume of Isolator.	40 Cubic Feet 1,157 Liters
Approximate shipping weight of isolator & Cart. Two (2) Crates.	Isolator @ 300 Lbs. 136 Kilos. Cart (Trolley) @ 140 Lbs. 64 Kilos

Electrical requirements.

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

NOTE: Activated Carbon (charcoal) filters are also available for this unit. Four (4) different compositions can be used. Refer to Catalog Accessories Section and contact us for details.



#870-CLC & #870-CLC/EXP (Close up of top shroud)

Working with fine powders and chemicals?

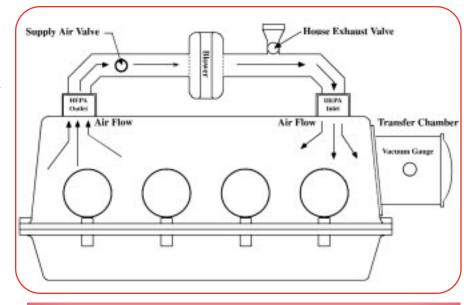
The #800-AS/SPI Ionizer emits both negative and positive ions. The non air assisted static eliminator does not cause any air turbulence because there is no internal fan (blower). No particle contaminant's are introduced into the isolator. It is perfect for working with fine powders and chemicals. Refer also to page #34.



#800-AS/SPI (Anti-Static unit) #800-AS/SPI/EXPORT Model

Electrical requirements.

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



#870-CLC Atmosphere Flow Schematic (Front view)

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.

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 that are included:

- 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[™].
- 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™ 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.

Did you Know?

Molecular Sieve™ can be recharged in a hot oven at 450°F for 3 to 4 hours. You must remove the sieve from the plastic canisters before baking however.



#850-NB with optional shelf accessory*
#850-NB/EXP for Export use

*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 Specifications

Product Data	#850-NB	#850-NBB
I.D.	41"w x 28"d x 26"h 1,040 mm x 710 mm x 660 mm h	60"w x 38"d x 31"h 1,520 mm x 960 mm x 790 mm h
O.D. Includes Transfer Chamber	55"w x 35"d x 38"h 1,400 mm x 890 mm x 970 mm h	76"w x 47"d x 42"h 1,930 mm x 1,190 mm x 1,070 mm h
Approximate Volume	17.3 Cubic Ft. 489 Liters	40.9 Cubic Ft. 1,157 Liters
Approximate Shipping Wt. (Crated)	250 Pounds 112.5 Kilos	300 Pounds 135 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 OPERATOR USE

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 and #CART-GBB, and #800-CPS/02.

Working with fine powders and chemicals?

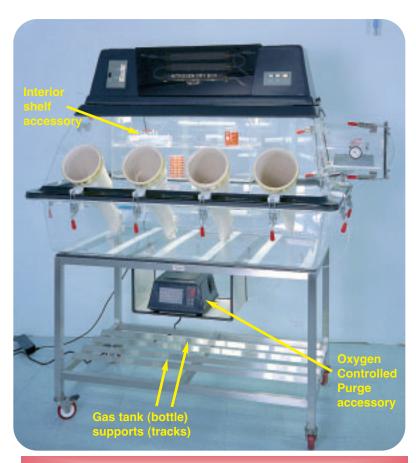
The #800 AS/SPI "Counter SPI" ionizer emits alternating positive and negative Ions that eliminate static electricity within the glove box. It is non-air assisted (no fan), so there is no atmosphere turbulence inside the chamber. Additionally, no particle contaminants are introduced because of the ionizer.

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



#800-AS/SPI Anti-Static unit

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 accessories #850-NBB/EXP for Export Use

Optional accessories shown above include:
#800-CART/GBB Refer to page #42
#800-SHELF-II Refer to page #38
#800-CPS/O2 Refer to page #35
(Oxygen Controlled Purge Unit)

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.

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 Page #11 and our "Accessories Section" of this catalog.

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

Basic Features that are included:

- 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 ambidextrous Hypalon™ 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).

Did you Know?

The acceptable leak rate (on volume) for glove boxes is .05% per hour. This is an established standard by The American Glove Box Society.



#818-GB & #818-GB/EXP Basic Glove Box

Product Specifications

Product	#818-GB	#818-GBB
Data	#818-GB/EXP	#818-GBB/EXP
I.D.	41"w x 28"d x26"h 1,040 mm x 710 mm x 660 mm h	60"w x 38"d x 31"h 1,520 mm x 960 mm x 790 mm h
O.D.	55"w x 35"d x 27"h	76"w x 47"d x 32"h
Includes Transfer	1,400 mm x 890 mm	1,930 mm x 1,190 mm
Chamber	x 685 mm h	x 812 mm h
Approximate	17.3 Cubic Ft.	40.9 Cubic Ft.
Volume	489 Liters	1,157 Liters
Approximate Shipping Wt. (Crated)	250 Pounds 113 Kilos	300 Pounds 135 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) "Banjo™" type attachment fittings are included and mounted on the glove box. This is a special quote item. Refer to pages #40 and #46.

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 HypalonTM 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.



- H.E.P.A. Filtration systems to $.3\mu$ @ 99.99%.
- 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 \emptyset (254 mm) gloves and ports.
- The "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 #38.

Did you Know?

One (1) Cubic Foot is equal to 28.3 Liters in volume.



#818-GBB (Domestic Model) #818-GBB/EXP (Export Model)

Refer to page #12 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.
- Industrial/Contract Research Applications.
- 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. Refer to page #27. 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 #15 and #17.

What's included with the glove box (Basic Features):

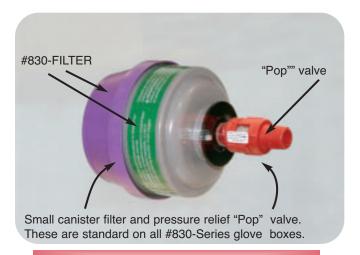
- Clear acrylic plastic main body (3/8" [10 mm] thick).
- Removable top section for easy installation of equipment.
- Four (4) key cock valves for purging. Two (2) on the main body and two (2) on the transfer chamber.
- All clamps adjustable to compensate for normal wear.
- White ambidextrous Hypalon™ 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 Compact Glove Box #830-ABC/EXP (Export Model)



#830-FILTER (HEPA & CARBON)

#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.

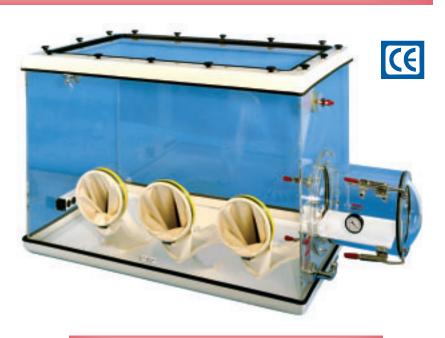
COMPACT GLOVE BOXES ADDITIONAL INFORMATION

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 #17 and Specifications Chart below.

Did you Know?

Acrylic Glove Boxes and Chambers are 12% less permeable (through the wall leakage) than Vinyl Glove boxes or Bags.



#830-ABD and #830-ABD/EXP (Export)

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

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

	#830-ABC Two (2) gloves.	#830-ABB Two (2) gloves.	#830-ABD Three (3) gloves.	#830-ABE Four (4) gloves.
I.D.	28"w x 23"d x 29" h 710 mm X 580 mm x 740 mm h	35"w x 29"d x 30" h 890 mm X 740 mm x 760 mm h	48"w x 29"d x 32" h 1,220 mm X 740 mm x 810 mm h	60"w x 29"d x 32" h 1,524 mm X 740 mm x 810 mm h
O.D. Includes Transfer Chamber	43"w x 24"d x 31" h 1,100 mm X 610 mm x 790 mm h	49"w x 30"d x 31" h 1,250 mm X 760 mm x 790 mm h	63"w x 31"d x 35" h 1,600 mm X 790 mm x 860 mm h	76"w x 32"d x 35" h 1,930 mm X 812 mm x 890 mm h
Top Opening	17" x 23" 432 mm x 585 mm	24" x 29" 610 mm x 735 mm	24" x 42" 610 mm x 1,065 mm	24" x 54" 610 mm x 1,370 mm
Approximate Volume	10.8 Cubic Ft. 306 Liters	17.6 Cubic Ft. 498 Liters	25.8 Cubic Ft. 730 Liters	32.2 Cubic Ft. 912 Liters
Approximate Shipping Weight (Crated)	230 Pounds. 104 Kilos	275 Pounds. 125 Kilos	310 Pounds. 141 Kilos	400 Pounds 182 Kilos
Access Door Opening (Optional)	15.5" x 22" h 400 mm x 560 mm h	21.5" x 22" h 546 mm x 560 mm h	21.5" x 24" h 546 mm x 610 mm h	21.5" x 24" h 546 mm x 610 mm h

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 pages #14 & 15.

"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™ 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 5μ (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.

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

Variations in different types of filters are:

- 1. HEPA'.s
- 2. ULPA's
- 3. Activated Carbon (Charcoal). Four (4) different compositions. Refer to pages #36 & 37.



#830-ABB/CLC (Closed Loop Glove Box)
#830-ABB/CLC/EXP (Export-Closed Loop Glove Box)



#830-ABC/SPCL/800-HEPA/S (Open Exhaust Style) #830-ABC/EXP/SPCL/800-HEPA/S (Export)

1.

2.



#830-ABC/SPCL/800-HEPA/D (Open Exhaust Style)
#830-ABC/EXP/SPCL/800-HEPA/D (Export)

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 #18 #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).

We now offer a new automatic door locking system for these transfer chambers. Catalog #800-DOOR/ILOCK.



#830-SHELF-ABC

Catalog **#830-SHELF-ABC**, Suspended shelf accessory. Total shelf capacity is about 150 Petri dishes depending upon chamber size. Refer also to page #38.



#830-CP/11 #830-CP/11/EXP (Export model)

Please refer to page #15 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.



Square Transfer Chamber with #800-DOOR/ILOCK

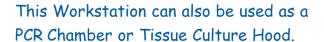
NOTE: Maximum working pressure on this style transfer chamber is 6.0" of H_2O (0.44" of H_3O).

When one door is opened, the other door locks automatically. Locking force is 120 Lbs. Refer to page #47 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. High impact clear PETG units or amber "light sensitive" units are also available.



Features included with the product:

- 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.
- Formed plastic bottom with "spill guard." This for easy clean up.
- 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.

#820-TCH Specifications

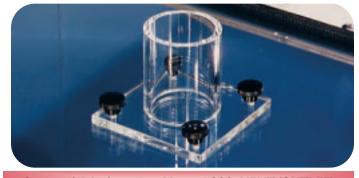
I.D.	41"w x 28"d x 17"h 1,040 mm x 710 mm x 432 mm
O.D. (w/Flange)	44"w x 29"d x 30"h 1,118 mm x 736 mm x 762 mm
Sash Opening	8.5" h x 27.5 long 216 mm x 700 mm
Shipping Weight (Crated)	110 Pounds 50 Kilos



#820-TCH Germicidal Workstation #820-TCH/EXP Workstation (Export Model)



Workstation Sash for Draft Control featuring Iris Diaphragms.



Optional Workstation Vent #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 diameter is 4"Ø (102 mm).

"LA PETITE" GLOVE BOX

Plas Labs 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 (40) years of experience helped make this glove box very user friendly and inexpensive.

Basic Features

- 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™ 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 Hypalon™ 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).

Specifications

	#815-PGB
I.D.	31.5" w x 25.5" d x 21.5" h 800 mm x 650 mm x 545 mm
O.D. Includes Transfer Chamber	49" w x 29" d x 22" h 1,245 mm x 740 mm x 558 mm
Approximate volume	9.5 Cubic Ft. 269 Liters
Approximate shipping weight (Crated)	75 Pounds 35 Kilos

A Re-Engineered Product!



Catalog #815-PGB
Catalog #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 (51 mm) • 0.5 kPa

2.0" WC (51 mm)
 5.0 MBAR
 0.5 kPa
 .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. $^{\text{TM}}$ 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.

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 of the Product.

- "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) Chamber & #825-PCR(UV)EXP Chamber

Product Specifications

I.D.	23.5"w x 17"d x 21" h 597 mm x 432 mm x 530 mm
O.D.	24"w x 18"d x 28"h 610 mm x 457 mm x 711 mm
Shipping Weight (Crated)	110 Pounds 50 Kilos

NOTE: If HEPA filtration is preferred, refer to Catalog **#825-PCR/HEPA** illustrated on page #21.

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 (μ) 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.

Electrical requirements.

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



#825-PCR/HEPA #825-PCR/HEPA/EXP (Export Model)

Product Specifications

I.D.	23.5"w x 17"d x 21" h 597 mm x 432 mm x 530 mm
O.D.	26"w x 23"d x 28"h 610 mm x 457 mm x 711 mm
Shipping Weight (Crated)	112 Pounds 51 Kilos

Additional Features of the Basic #825-PCR. (Refer also to page #20.)

- "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.
- No tools required to change over the HEPA filter.
- Fan (ventilator) noise level is rated at less than 40 dBA.
- Formed in place liquid barrier to facilitate easy clean up of spills.
- Standard twenty-four (24) month warranty (Not consumables-filter).

LOW VELOCITY FUME HOODS (IMPROVED FEATURES)

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

These units can be used with your in house exhaust system or our accessory #900-EXTRACT, Fume Extraction Unit. All units are ASHRAE 110 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. Refer to page #40.

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.

All units include the following:

- Standard 24 month warranty (Not consumables-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).
- 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.

Did you Know?

The air we breathe is only 20.9% Oxygen. The rest of our air is made up of various other gases such as Nitrogen.



#900-LVFH with #900-EXTRACT and #900-CART-LVFH

Dimensions of the LVFH units:

#900-LVFH/24

Inner work surface @ 23.250"w (590 mm) x 19"d (483 mm) Outer dimensions @ 24"w (610 mm) x 27"d (685 mm) x 28"h (712 mm)

#900-LVFH/36

Inner work surface @ 35.250"w (895 mm) x 19"d (483 mm) Outer dimensions @ 36"w (915 mm) x 27"d (685 mm) x 28"h (712 mm)

#900-LVFH/48

Inner work surface @ 47.250"w (1,200 mm) x 19"d (483 mm) Outer dimensions @ 48"w (1,219 mm) x 27"d (685 mm) x 28"h (712 mm)

#900-CART-LVFH

All carts (trolleys) are the same height @ 32" (813 mm) and the same depth @ 27" (685 mm).

NOTE: The cart (trolley) width will vary according to the same width as the Fume Hood.

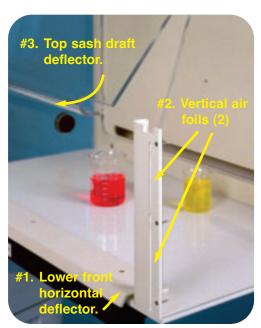
Electrical requirements for all components:

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

LOW VELOCITY FUME HOOD COMPONENTS

Optional types of Fume Extraction filters. Specify preferred type when ordering:

- #900-LVFH/HEPA/CARB, Combination HEPA and Non-Impregnated Carbon. Absorbs most alphatic and aromatic hydrocarbons, solvents, organic vapors, aldehydes, keytones, alcohols, organic acids, esters, sulfur compounds, and odors.
- #900-LVFH/CARB (A). Impregnated Carbon filter for alkaline type fumes.
- #900-LVFH/CARB (B). Impregnated Carbon filter for ammonia or amines.
- #900-LVFH/CARB (C). Non-Impregnated Carbon filter for absorption of aromatic hydrocarbons, organic vapors, keytones, alcohols, organics acids, esters, Nitrogen compounds, and odors.
- #900-LVFH/HEPA. The main HEPA (particle) filter for the Extraction Unit. Rated at 99.99% at 0.3μ (microns).



#900-LVFH Close up of Air Foils

NOTE: Air foils are:

- #1. Lower front horizontal deflector.
- #2. Vertical air foils (2).
- #3. Top sash draft deflector.

All ASHRAE 110 Compliant



#900-EXTRACT
Portable fume extraction unit (Optional)

The Fume Extraction Unit is a variable speed suction housing that can include your choice of filters such as HEPA or Impregnated Carbon. Filter sizes are 12" (305 mm) x 24" (610 mm).

Suction speeds can be adjusted from "0" up to 250 CFM face velocity. As the filter resistance builds up, you can compensate for it by increasing the suction speed.



#900-CART-LIFT
Adjustable Electric Lift Tables (Optional)

The #900-CART-LIFT Electronic Height Adjustment Table has been designed to provide ergonomically correct operating heights to ensure maximum operator comfort. Widths will vary according to the width of the fume hood selected. Refer to page # 22.

ISOLATION AND CONTAINMENT UNITS

Isolation Systems Engineered for Specific Research Projects.

Select and start with a basic housing size and add your desired features to develop the exact isolator for your research needs.

Our rigid acrylic isolators provide complete transparency (no hidden corners), long term strength (durability), and freedom from through the wall leakage of atmosphere. Permeation rate is minimized. Resistance to permeation is 12% better than flexible vinyl style units.

The optical quality and durability of acrylic does not become brittle and crack with age. PETG units are also available as an option if VHP sterilization is anticipated. "Banjo™" type fittings are included for VHP applications.

Multiple station units offer the benefit for greater productivity and efficiency during sequential procedures. Units may also be attached in train if required. Refer to Catalog #800-T Transfer Chamber "T" in the Accessories Section. Page #48.

Features included with each isolator:

- Standard 24 month warranty (Not gloves or consumablesfilters).
- The top and bottom sections are each formed of one (1) piece optically clear acrylic .375" (950 mm) thick.
- Joining gaskets are closed cell neoprene and doubled layered 1" (25.4 mm) thick for long term durability.
- Stainless Steel quick acting (adjustable) clamps and strikes.
- Ambidextrous, white Hypalon™ gloves for superior U.V. and chemical resistance.
- Stainless Steel glove port rings for added security.
- Transfer chamber at 12" long (305 mm) x 11" Ø (280 mm) I.D. NOTE: Other sizes available.
- Two (2) ground key cock valves for purging the transfer chamber.
- White leveling tray for transferring liquids into the main chamber.
- Rigid doors on the transfer chamber allow for complete purging and include adjustable stainless steel clamps.
- Rounded "Easy Clean" corners on the top and bottom sections.

NOTE: Dimensions and product details for all Series #800-RPL isolators are listed on page #25.



#805-RPL Isolator (Double Rack System)

Electrical requirements:

Amp requirements will vary as to the features selected. North American 115-120 Volts, 60 Hz. Export Models 220-240 Volts, 50 Hz.

The entire isolator system can be safely relocated from lab to lab by merely unplugging the electrical connection.



Catalog #800-SHELF-II (Sliding shelf accessory)

The sliding shelf accessory greatly increases the holding capacity of the isolator. Our shelf is designed to keep the valuable floor area uncluttered. No shelf supports eliminate cleaning problems on the floor. Shelf can be pushed to rear of the isolator when not in use. Refer to Accessories Section for additional shelf details. Page #38.

ISOLATION UNITS & STERILITY ISOLATOR DATA

Our Sterility Isolator, Catalog #881-SI has been designed to provide a sterile, particle free working environment. The HEPA filtration system maintains a slight positive pressure in the main chamber ensuring complete product isolation. The HEPA fan unit has an adjustable speed control.

The isolator can be sterilized using most of the commercially available sterilants. If needed, VHP set ups are also available. NOTE: Port plugs must be used for VHP procedures.

Access to the main working chamber is achieved through our Hypalon^m glove system. Our unique bare hand entry port system is also available if preferred.

All isolator systems can be safely moved from lab to lab by merely unplugging the electrical connection.

Sterility Isolator (#881-SI) Features Include:

- Standard 24 month warranty (Not entry system or consumables).
- "Bright White" bottom work surface .375" thick (950 mm).
- Large HEPA filter size 24" (610 mm) x 48" (1,220 mm) x 6" (152 mm) thick. Same size as inner work surface area.
- Optically clear .375" thick (950 mm) acrylic construction.
- Large 10"Ø (254 mm) bare hand entry system.
- Large square transfer chamber with two (2) purging valves.
- Multiple electric outlet (socket) strip, hospital grade.
- Removable shelf.
- Adjustable speed control (70-140 FPM).
- "Bright Light" system (40,000 hour lamp guarantee).
- U.V. sterilization system (254 nm).

Some available accessories:

- Iris diaphragms.
- Flow meter set ups (PSI & Pascals) Refer to page #46.
- Static elimination Ionizers (Draft free).
- "Banjo™" type fittings for VHP sterilization.
- Glove port plugs. Refer to page #39.
- "Dip (Dunk) Tank" entry system with lid.
- Automatic Transfer Chamber "interlock" system. Refer to page #47.
- Stainless steel cushioned cart (Trolley).

Available Certification services. Refer to page #27.

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



#881-SI, Sterility Isolator #881-SI/EXP, Export Model Sterility Isolator

Electrical requirements:

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

Product Specifications

Model Number	Approximate Volume	Isolator Dimensions I.D. Base and Height	Approximate Shipping Wt.
#881-SI	30.2 Cu. Ft 854 Liters	58" w x 29" d x 31" h 1,472 x 737 x 787 mm Overall Dimensions (O.D.) 78" w x 30" d x 45" h 1,982 x 762 x 1,144 mm	180 Pounds 83 Kilos
#800-RPL	20.7 Cu. Ft 586 Liters	Overall Dimensions (Ω D) I	
#802-RPL	36.5 Cu. Ft 1,033 Liters	48" w x 32" d x 34" h 1,210 x 810 x 840 mm Overall Dimensions (O.D.) 58" w x 42" d x 36" h 1,470 x 1,070 x 915mm	186 Pounds 85 Kilos
#805-RPL	40 Cu. Ft 1,132 Liters 56" w x 32" d x 35" h 1,420 x 810 x 840 mm Overall Dimensions (O.D.) 64" w x 43" d x 36" h 1,620 x 1,090 x 915 mm		197 Pounds 90 Kilos
#806-RPL	72" w x 32" d x 35" h 1,830 x 810 x 860 mm Overall Dimensions (O.D.) 81" w x 41" d x 36" h 2,060 x 1,040 x 915 mm		235 Pounds 106 Kilos

BIOTOXIN CONTAINMENT & DECONTAMINATION CHAMBERS

Some Samples of Custom Built Isolators.

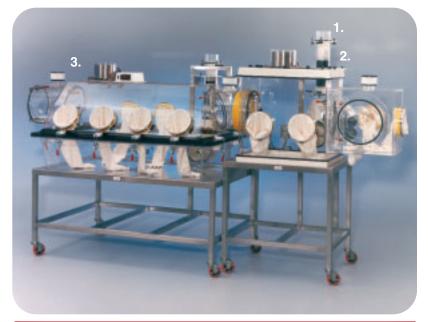
Illustrated are two special units coupled together for biotoxin containment (left) and a decontamination chamber. They are negative pressure units and include three different special filter set ups.

- #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.

Refer to pages 12 & 15 for dimensions.



#818-GBB/SP (left) & #830-ABB/SP (right)

What can we build for you?

DRUG PROCESSING STATIONS & 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.

Refer to pages 12 & 15 for dimensions.

Note: All isolators can be constructed of clear PVC or PETG if VHP sterilization is planned. Banjo™ fittings are included. Refer to page #46.



#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 agency).

CUSTOM CAPABILITIES AND PROJECTS

Some Additional Samples of Custom Built Isolators.

PLAS ■ LABS 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.
- I.Q. & O.Q. Documentation.
- Custom Service/Maintenance Schedules.
- Customized Operator Manuals.
- Third Party Certification.

- CAD Drawings.
- F.A.T. Documentation.
- On Site Training.
- 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:

- 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).



Conditioning and Weighing Diesel Particulate Filters

Two stainless steel glove boxes with automatic temperature and dew point controls, blower, and HEPA filter system for auto emission studies.



A Special "Nanotechnology" Unit

Compact glove box with temperature and humidity control with data logging capabilities. Designed for use in Nanotechnology studies.



Small Tablet Press Isolator

Penicillin Processing Isolator

A Drug Transfer Isolator

Isolator for transferring pharmaceutical tablets from a press to a table coater. Includes sanitary fittings, spray ball with quick disconnect and transfer chamber.

Isolator designed to house a small tablet press. Includes inlet/outlet HEPA system, hermetically sealed feed throughs, removable top and transfer chamber

ACRYLIC DESICCATOR CABINETS

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 N_2 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.

All Desiccators Include These Features

- Units are all stackable with non-slip "grip tight" feet.
- Standardized construction means interchangeable shelves.
- All shelves have perforated slots (holes) for optimum gas saturation.
- 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 "Poron" 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-CGA, #860.5-CG, #861-CG, #862-CG

Static dissipative or clear PVC units are also available.



#800-FLOW/D

Useful for careful adjustment of flow rate.



#800-PRV (Pressure Relief)

Minimizes the chance for explosion or implosion.

Refer to page #46 for these accessories specifications.

Desiccator Specifications

Model Number	Color	Number of Cubicles	Number of Shelves	Number of Shelf Positions	Desiccator Sizes W x L x H
860.5-CG 860.5-CGA	Clear Amber	One (1)	Two (2)	Two (2)	12 x 12 x 6" 305 x 305 x 152 mm
860-CG 860-CGA	Clear Amber	One (1)	Two (2)	Five (5)	12 x 12 x 12" 305 x 305 x 305 mm
861-CG 861-CGA	Clear Amber	Two (2)	Four (4)	Ten (10)	12 x 12 x 24" 305 x 305 x 610 mm
862-CG 862-CGA	Clear Amber	Two (2)	Four (4)	Ten (10)	18 x 18 x 18" 457 x 457 x 457 mm
863-CG 863-CGA	Clear Amber	I I Wo (2) I Eour (4) I	Ten (10)	24 x 18 x 24" 610 x 457 x 610 mm	

MULTIPLE CUBICLE DESICCATOR CABINETS

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 cabinets.

- Standard 24 month warranty.
- Clear or amber models.
- Unitized construction for greater durability and strength.
- Three standard cubicle set ups (sizes) are available.
- 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) Poron 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).



#860-CGA/10 (For light sensitive materials)



#860-CG/8 (Clear unit)

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.

Lab Chamber Features:

- 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) Poron 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.



#800-FLOW/D (Accessory)

Optional Flow Meters enable the operator to establish and monitor a constant flow of CO₂ at lower volumes.

Refer also to page #46.



#850-LCS and #850-LCM

Lab Chamber Specifications

Lab Ghamber Specifications			
Catalog Number	Sizes W x L x H	Number of Shelves	Number of Cubicles
850-LCS	12" x 12" x 6" 305 mm x 305 mm x 152 mm	Two (2)	One (1)
850-LCM	12" x 12" x 12" 305 mm x 305 mm x 305 mm	Two (2)	One (1)
850-LCL	12" x 12" x 24" 305 mm x 305 mm x 610 mm	Four (4)	Two (2)
850-1L	18" x 18" x 18" 457 mm x 457 mm x 457 mm	Two (2)	One (1)
850-2L	24" x 18" x 24" 610 mm x 457 mm x 610 mm	Four (4)	Two (2)
850-3L	24" x 24" x 24" 610 mm x 610 mm x 610 mm	Four (4)	Two (2)
850-4L	36" x 36" x 36" 914 mm x 914 mm x 914 mm		Four (4)

NOTE: Amber plastic is available to protect your light sensitive materials.

Clear PVC or static dissipative plastic also available.



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 forty (40) 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 units:

- 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.

Refer to page #46 for Flow Meter Specifications.

Stainless Steel Desiccator Specifications

Model Number	Number of Shelves	Interior Size W x D x H	Approximate Shipping Wt.
860-SS	2	12" x 12" x 12"h 305 mm x 305 mm x 305 mm h	40 Pounds 18.5 Kilos
861-SS	2	12" x 18" x 24"h 305 mm x 457 mm x 610 mm h	50 Pounds 23 Kilos
862-SS	2	20" x 18" x 30"h 508 mm x 457 mm x 762 mm h	85 Pounds 40 Kilos



#800-FLOW/D

Refer to page #46 for specifications.

Did you Know?

In the U.S.A. there are about 2,080 work hours in one
(1) year. (Less

coffee breaks!)

"INTEGRITY" STAINLESS STEEL GLOVE BOX

PLAS LABS is pleased to offer our re-engineered stainless steel glove box which is based upon our over forty (40) 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.



Catalog #819-SS/GB Interior View

A Re-Engineered Product!



Catalog #819-SS/GB Catalog #819-SS/GB/EXP (Export model)

Product Data	Catalog #819-SS/GB
I. D.	40"w x 29"d x 27" h 1,020 mm x 740 mm x 690 mm h
O.D. Includes Transfer Chamber	53"w x 30"d x 34" h 1,350 mm x 765 mm x 864 mm h
Approximate Volume	17.3 Cubic Ft. 489 Liters
Approximate Shipping Weight (Crated)	275 Pounds 125 Kilos

What's included in the glove box:

- Standard 24 month Warranty (Not 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™ gloves (10"Ø [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.

MULTI-PURPOSE VACUUM CHAMBERS

These fine vacuum chambers are similar in design to our glove box transfer chambers that have been used for over forty (40) years.

Custom sizes and shapes are available.

Product benefits include:

- 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.
- Eliminates the need messy vacuum grease.

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

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



#800-VAC Horizontal Configuration-Set Up



#800-VAC Vertical Configuration-Set Up

Accessories for all Chambers and Glove Boxes Major Devices

PLAS ■ LABS 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!

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



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

Accuracy: \pm 1% of full scale.

Resolution: 0.1ppm for ranges <100 ppm.

1.0 ppm for ranges >100 ppm.

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-DOI, Digital Oxygen Indicator #800-DOI/EXP Export Model



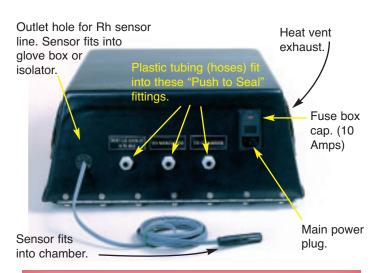
#800-AS/SPI "Counter Spi" Ionizer #800-AS/SPI, Export Model

Emits alternating positive and negative Ions. This is a non-air assisted static eliminator (no blower-fan). No particle contaminant's are introduced into the chamber or glove box. This is a perfect device for working with fine powders and chemicals. Effective range is 36" (915 mm).

#800-HCB, Humidity Control Box #800-HCB, Export Model

This device 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.



#800-HCB/IG, Humidity Control Box Rear View

Accessories for all Chambers and Glove Boxes MAJOR DEVICES (CONTINUED)



Major NEW products !!

#800-CPS, Controlled Purge System #800-CPS/EXP Export Model

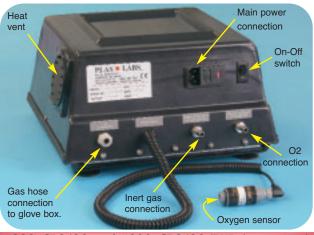
This device has been designed to monitor and control positive pressure within any of our glove boxes, isolators, or desiccators.

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 and #800-CPS/O2/EXP

This accessory is specifically for Oxygen use only. It includes all the features of the basic unit above.



#800-CPS/O2 and #800-CPS/O2/EXP (rear view)

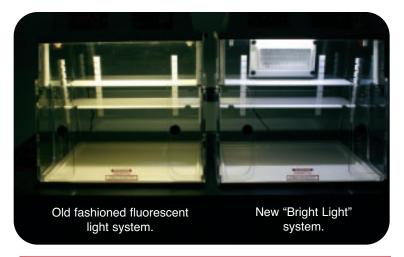


#800-BACTI (Microcinerator™) #800-BACTI/EXP Export Model

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

The Microcinerator[™] 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 #800-BLS/EXP Export Model

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 this page.



#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.



#800-HEPA/P mounted on #800-PUMP For export use specify #800-PUMP/EXP

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-MAGNA, Magnehelic Gauge-In Pascals (Export) #800-MAGNA, Magnehelic Gauge-In Inches of H₂O

These gauges are used to monitor filter effectiveness and efficiency. They indicate when it is time to change your filter(s). Refer also to page #46 for more details on operation.





#800-HEPA/S (Single filter typical set up)

The single filter set up includes 8"Ø (203 mm) HEPA filter, .4 μ micron pre-filter, blower (fan), mounting plates, and **#800-MAGNA set** (Refer also to page #37 & #46.)

Accessories for all Chambers and Glove Boxes

HEPA FILTRATION VARIATIONS & COMPONENTS (CONTINUED)



#800-HEPA/S and #800-HEPA/S/EXP for export models (External view with exhaust outlet connector)

Additional Filtration components (not shown).

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

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

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



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

NOTE: Refer also to page #16 for more details on double HEPA filtration systems.



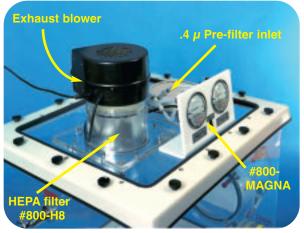
#800-HEPA/S with filter access door open Internal view (When changing filters)

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 boxes

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.

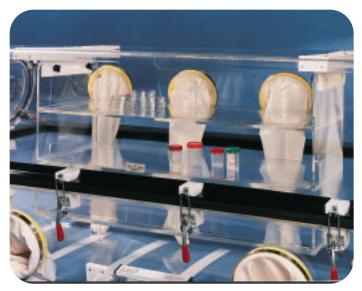
Sliding shelves can be pushed to the rear of the chamber when not in use.

#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)



#800-SHELF-II (Multiple Station Glove Box)

#800-SHELF-I, For chamber models #818-GB, #850-NB, #855-AC, #888-SIMPLICITY, 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 high x

 $12 = 144 \times 2$ shelves = 288 dishes Total shelf capacity = 348 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.

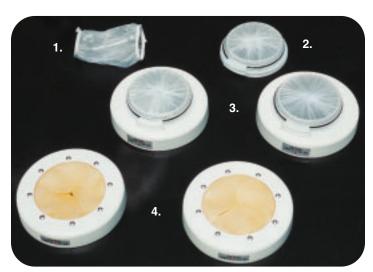
Catalog #800-SHELF-830 SUSPENDED SHELF.

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 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™ Sold in pairs only. Ten (10"Ø) diameter (524 mm) ports are also available.

NOTE: #800-IRIS/MOUNT FACTORY MOUNTED IRIS DIAPHRAGMS. Refer to #800-IRIS for description.

Did you Know?
These Bare Hand
entries can be
mounted on any glove
box or isolator.

GLOVE PORT PLUGS



#800-PLUG & #815-PLUG (La Petite Unit)

Plug Applications

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

NOTES about our new Carbon filter types and set up.



Typical Carbon Filter for glove boxes and isolators. Refer to notes this page.



Typical Carbon Filter for glove boxes and isolators. Refer to notes this page.



#818-GB/SPCL for use with a VHP sterilizer

NOTE: "VHP" sterilization requires a special plastic, such as clear PVC or PETG. "Banjo TM " style purge fittings are included with the glove box.



Close up of "BANJO™" style purge fitting Catalog #800-BANJO. Refer to page #46.

Carbon Filter Specifications and Types.

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

Accessories for all Chambers and Glove Boxes

ATMOSPHERE PURIFICATION (CONTINUED)



#800-HEATER & #800-PC Specify Export or Domestic

#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.

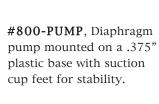
#800-PC (3.) Palladium Canister filled with 1/2 Lb. of Palladium (Pd). Canisters sold separately.

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 ($\rm H_2O$) vapor. The Drying Train #800-DT (see below) then removes the vapor as needed.

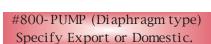


#800-ONEG Oxygen Removal System #800-PUMP Pump not included

#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.



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



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-DT Drying Train with Pump Specify Export or Domestic

#800-DT removes unwanted moisture (H₂O) from the internal atmosphere of the glove box. Includes pump, hoses, and three (3) canisters filled with Molecular SieveTM (#800-DESI).

#800-DESI includes three (3) canisters filled with Molecular SieveTM and hoses with quick disconnects. Pump not included.

Additional Items for Filtration.

#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.

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 horizontal gas tank support racks which provide greater tank handling safety and flexibility.

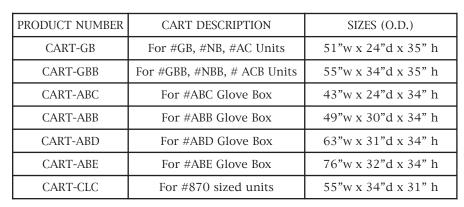
Also available in a "knocked down" (unassembled) version. See information below.



#800-CART GB with gas tank support racks

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.



Custom Sizes and Designs available



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



Insert casters and tighten.



Force fit the four legs (uprights).



Place top on four legs & press into place.



#800-Cart KD

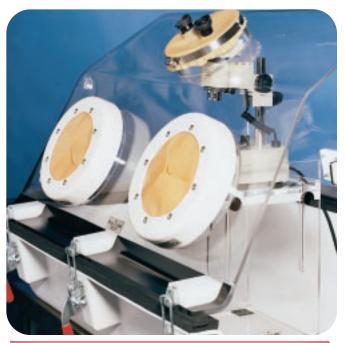
SAVES SHIPPING COSTS!

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 and #800-BH/CONV

#800-MICRO MICROSCOPE VIEWING PORT is

6.25" Ø (159 mm) and includes the port, Hypalon™ cover, and stainless steel worm clamp. The Hypalon™ 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.

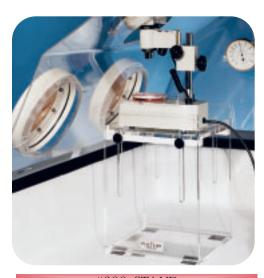
#800-BH/CONV BARE HAND CONVERSION KIT.

Refer to page #39 for complete details.



#800-I/LENS (Inspection Lens)

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.



#800-STAND

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 ■ LABS offers one piece gauntlet style gloves in four (4) different materials. They are:

1. Butyl™ Catalog #800-GB-Series (Not shown).

Hypalon™ Catalog #800-GH-Series.
 Latex Catalog #800-GLLP-Series.
 Neoprene™ 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:

Butyl™ Catalog #800-GA-BUT-Series.
 Hypalon™ Catalog #800-GA-HYP-Series.
 Neoprene™ Catalog #800-GA-NEO-Series.
 Nitrile™ Catalog #800-GA-NIT-Series.

Refer to photo below.



One piece gauntlet style gloves



Replaceable hands for gauntlet sleeves

NOTES: The #800-GH Hypalon™ glove is the standard glove used on most Plas ■Labs products.

The #800-GLLP (latex glove) is the primary glove used on the La Petite glovebox (Catalog #815-PG).

Some port diameters are available in three (3) sizes ranging from 7" \emptyset (178 mm) to 10" \emptyset (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 #45.

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

- 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. Refer also to page #39.

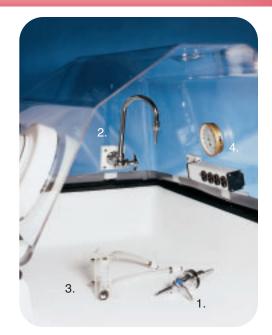
Specification Chart

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				
Optional hand replacement for use	with 800-GH/S, sleeve only. 8	00-GOS, glove o	ver sleeve connect	or, is needed	for use with
the hand replacements and sleeves					
800-GA/BUT/7	Hand Replacement	Butyl	n/a	7"	. 015"
800-GA/BUT/8	Hand Replacement	Butyl	n/a	8"	. 015"
800-GA/BUT/9	Hand Replacement	Butyl	n/a	9"	.015"
800-GA/BUT/10	Hand Replacement	Butyl	n/a	10"	.015"
800-GA/HYP/7	Hand Replacement	Hypalon	n/a	7"	.015"
800-GA/HYP/8	Hand Replacement	Hypalon	n/a	8"	.015"
800-GA/HYP/9	Hand Replacement	Hypalon	n/a	9"	.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 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"

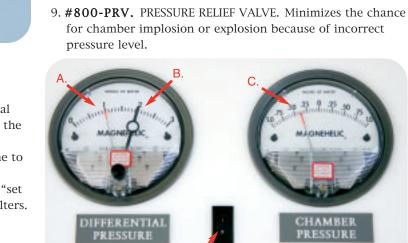
Accessories for all Chambers and Glove Boxes VALVE AND GAUGE VARIATIONS

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 (Unmounted). 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 for convenience. 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).



- 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™ 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° elbow if desired. Specify N₂ or VAC (Vacuum) valve label.
- for chamber implosion or explosion because of incorrect



#800-MAGNA Magnehelic Gauge Package (H2O)



#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.

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

#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).

NOTE: Other sizes can be requested (Special quote).



#800-CMPTR COMPUTER INTERFACE KIT

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.

THE NEW "INTERLOCK SYSTEM" for Transfer Chamber doors.



#800-DOOR/ILOCK AUTOMATIC DOOR LOCK SYSTEM Exterior door open and inner door locked



#800-DOOR/ILOCK AUTOMATIC DOOR LOCK SYSTEM Exterior door open and inner door locked

This automatic door locking system prevents both transfer chamber doors from being opened at the same time. The interlock system does not work unless one door is opened. 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 ADDITIONAL MISCELLANEOUS ACCESSORIES

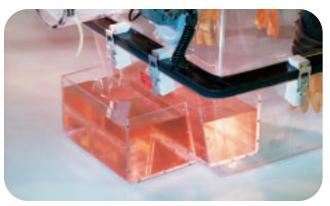
"No project is too small!"

PLAS LABS 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.

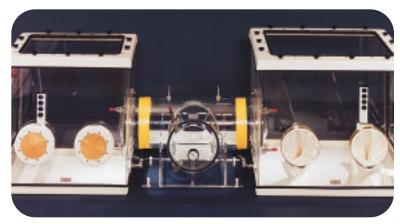
"New Dip Tank"

#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 germicidal solution to sanitize items being introduced into the chamber.



#800-TANK, GERMICIDAL (DIP) DUNK TANK

#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

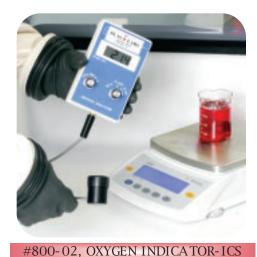
#800-GTREG, Gas Tank Regulator.

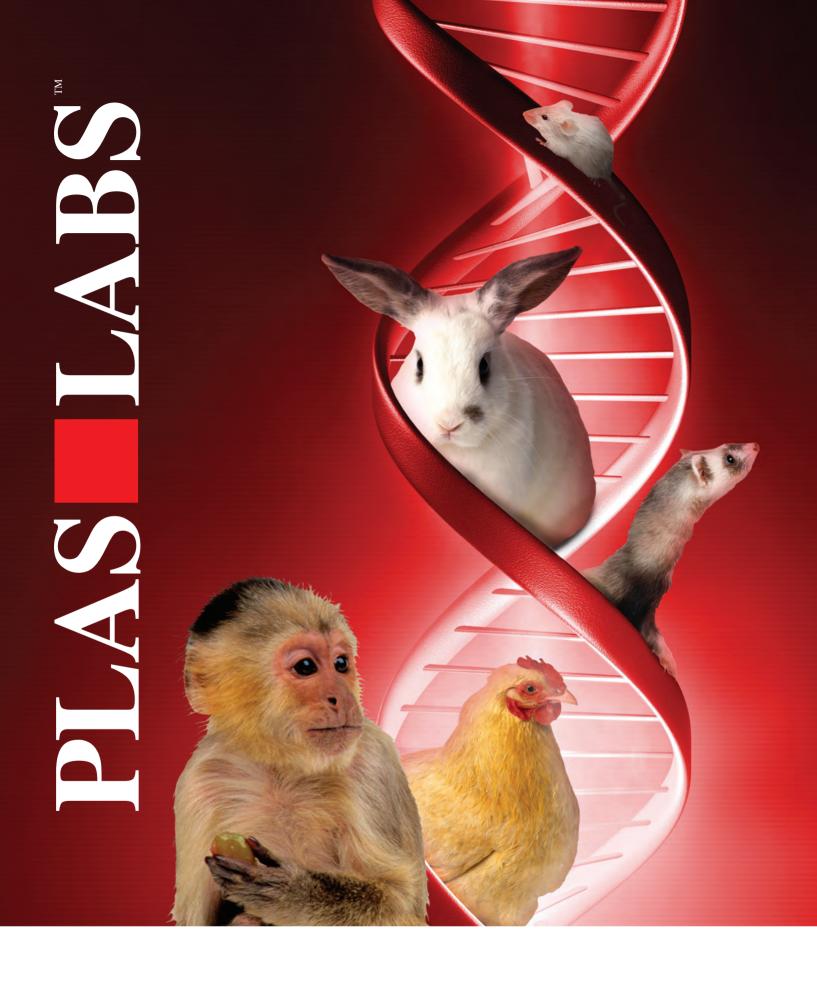
Regulator features two stainless steel diaphragms that will not contaminate the gas stream and is resistant to in-board diffusion. The design also features low dead volume (internal volume), which minimizes particle generation. Kit includes 5 feet of hose, (.250 I.D. x .500 O.D.) and attachment clamp.



#800-GTREG

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





Intensive Care System

Plas Labs offers an Intensive Care System in three configur tions. This system goes far beyond the conventional oxygen door and cage unit.

Th s unit is a self-contained life support system which provides a controlled environment designed to regulate temperature and oxygen levels. These conditions are essential in caring for the critically ill or injured patient. This method of treatment has been proven significant in increasing the likelihood of successful post-operative recovery.

Our units are the only ones available which have been conceptualized and designed from the ground up for animal intensive care use. Grounded casters included for O2 work.

Since their introduction in 1970, these Intensive Care Units have been selected by nearly every major veterinary school, U.S. government research facility, pharmaceutical testing laboratory, and many progressive private veterinary clinics. They have been shipped all over the world.

"Touch Screen" Controlled!

Intensive Care Components

Th s advanced system is a PLAS LABS exclusive.



NEW EASY-TO-USE TOUCH-SCREEN DISPLAY!



ICS-I/TS

Did You Know?

The air we breathe is only 20.9% oxygen (O₂). The rest of our air is comprised of other gases such as Nitrogen (N₂).

The Advanced Self Contained Environment

Features of The ICS Systems

- Each unit is enclosed within stainless steel for durability, ease of cleaning, and sanitation.
- Metabolism/Waste Pan
- Plastic Coated False Floor
- HEPA Filtration Systems with Magnehelic [™] Gauge
- The entire unit is mounted on a steel frame for structural integrity.
- The animal compartment is a separate unit attached to the frame which provides for replacement should the cage be damaged.
- Heavy duty stainless steel grounded casters with brakes, locks, and zerk fittings are standard.
- Operators' manual and standard 12 month warranty.

Performance Specifi ations

- Animal capacity up to 125 pounds (ICS-l)
- Cage temperature variable from 55 to 120 degrees F
- Temperature accuracy plus/minus 2 degrees F
- Air change rate 1 cage volume/minute
- C02 absorption capacity 24 hours
- Temperature stabilization approximately 15 minutes heat/20 minutes cool
- Humidity can be increased, but not reduced.
- Power requirements 120 Volts 60 Hz, Amperes 20 amps.
 - International 220/240 Volts 50 Hz, Amperes 10 amps.
- HEPA Filter effici cy: .3μ @ 99.9%





ICS-DT/TS

Optional Accessories

- Clear Acrylic Cage Divider
- Sliding Shelf Package
- Custom Light Packages

Refer to page 7 for additional options

Cage Compartment

- 1. Solid 1/4" acrylic door sealed between two stainless steel frames.
- 2. Stainless steel hinge runs the entire length of the door. This provides durability, long life, and assures a tight fitting seal.
- 3. Examination door enables easy access to the patient without having to disturb the entire cage environment.
- 4. Oxygen meter and probe.
- 5. Animal compartment is a seamless, molded fiberglass cage with coved corners for ease of cleaning.
- 6. Access ports for I.V., E.K.G. and computer interfaces.
- 7. Animal compartment atmosphere exhaust.
- 8. Animal compartment atmosphere inlet.



ICS-II/TS

Th s unit is ideal for use with small hooved animals.



Lower Compartment

- 1. Nebulizer for dispensing medicants, vaporizes directly into therapy compartment.
- 2. Humidity sensor.
- 3. Soda sorb tray for atmosphere purifi ation.

Available Sizes		Width	Depth	Height
	Overall	53"	30"	76"
ICS-I/TS		134 cm	76 cm	193 cm
103-1/13	Animal Area	38"	28"	33"
		96 cm	71 cm	83,8 cm
	Overall	100"	42"	46"
ICS-II/TS		254 cm	107 cm	117 cm
103-11/13	Animal Area	65"	36"	35"
		165 cm	92 cm	89 cm
	Overall	81.5"	33"	84"
ICS-DT/TS		207 cm	83,8 cm	213 cm
103-1/13	Animal Area	41"	28"	33"
		104 cm	71cm	83,8 cm

EIC Ward System

Standard FIC animal cubicles can be mounted together on a stainless steel support frame. This gives the investigator flexibility to house different size animals in the same "Ward".

They are ideal where space for animal housing is at a premium. Because they are totally enclosed systems, multiple species can be housed in the same room.

Individual filters and outlets can be set up to flow into the house exhaust system.

Units illustrated at left include lower trap "clean out" door, high temperature waste pans, and programmable convection heaters. All standard Ward units include casters with brakes and locks.

Safety features prevent overheating. Both 115-120 volt and 220-240 volt models are available.



FIC Wards System



Programmable convection heater (left) easily mounts on the exterior of the cubicle door using a large thumb knob. Heater is formed of high temperature plastic.

Desired temperatures are set by depressing either "up" or "down" arrow button. The sensor then automatically regulates the internal temperature of the animal cubicle. The internal atmosphere is continually recirculated and treated to maintain your desired temperature.

Stainless steel draft deflectors (right) dissipate warm air exhaust preventing a direct draft on the animal. They also prevent the animal from gaining access to the heater unit itself or escaping during heater cleaning.



A utoclavable Isolation Units (FIC)



FIC-36-4



FIC-30-2 front view



FIC-30-2 rear view

Autoclavable, or steam sterilizable for Complete Sterilization

FIC units protect your animals and personnel from cross-contamination. They are ideal for both acute and chronic holding of animals.

Units are quiet, warm, and soft o the touch of the animal. The problem of hypothermia is eliminated.

These autoclavable isolation cubicles are matched die molded of hi-tech thermoset plastic. Each cubicle is easily removable from its support frame for sterilization. Polycarbonate doors have slip-a-part hinges making removal for sterilization easy.

All hardware is stainless steel and adjustable to compensate for wear. Casters are non-scuffing with locks, brakes, and zerk fittings. Support frame is stainless steel.

Each compartment includes its own blower, in-line on/off s itch and standard glass media filtration package. 120 volts 60 Hz, components are U.L./C.S.A. approved. 220 volt units are available. Standard filtration system has 5µm effici cy.

These isolation units are ideal for the research facility where space is at a premium.

Because each cubicle has its own filtration system, internal atmosphere can be exhausted through your house air removal system. Multiple species can be housed in the same room.

Refer to page 6 & 10 for HEPA filtration options. Refer to page 7 for additional options.

Did You Know?
In the U.S.A. there are about 2,080 work hours in one (1) year? Less considering coffee breaks!

The Portable Isolation Unit offers the same features as our autoclavable isolation units with some distinct advantages. The self sufficient environment can be easily transported from surgical suite to the post operative recovery area. The rechargeable battery pack ensures proper heating and ventilation in transport. Battery rated at 130 minutes of continuous use before recharging is necessary. Whether moving your patient across the research facility or across town, the Portable Isolation Unit is the answer.

The autoclavable, or steam sterilizable unit includes a stainless steel top to make a convenient work station.

Portable Isolation Units



FIC-36-1 FIC-24-1







H.E.P.A. Filtration also available!

FIC-30-1 with battery pack

FIC-30-1 rear view

FIC-30-1/SP with gloves

Model Number	Cubicle Size (ID) w x d x h	Outside Dimensions (OD) w x d x h	Cubicle Configur - tions	Possible Species	Approximate Volume	Approximate Shipping Weight
FIC-24	24" x 28" x 28" 61 x 71 x 71 cm	28.5" x 31" x 38.5" 72,4 x 78,7 x 97,8 cm	1, 2, 4, 6	Fowl, Felines, Rabbits	10.8 cu. ft 306 L	130 pounds 59 kilos
FIC-30	30" x 30" x 30" 76 x 76 x 76 cm	35.5 x 33 x 40.5" 88 x 84 x 103 cm	1, 2, 4	Fowl Felines Rabbits Primates	15.6 cu. ft 441 L	155 pounds 70 kilos
FIC-36	36" x 36" x 36" 91,4 x 91,4 x 91,4	40.5 x 39 x 46.5" 102,9 x 99 x 118,1 cm	1, 2, 4	Canines Primates	27 cu. ft 764 L	205 pounds 93 kilos



FIC-30-2/SP

With elevated stainless steel stand.

Standard Glass Media System

Our unique filter plates eliminate the need for tools. This mounting system is standard on all units. Rated @ MERV 4. All filtration components are mounted using the same slip-apart-hinge technique.

H.E.P.A. Filtration System

Our standard mounting technique is used when changing pre-filters and the H.E.P.A. filter itself. Rated at 99.99% @ $.3\mu m$.

Other Filtration Methods and Means

Molecular Sieve with Angstroms to suit. Activated Virgin Carbon. CO2 Removal (atmosphere purifi ation).

Possible Applications

- Temporary Conditioning of Control Test Animals
- Drug Abuse Research
- Veterinary Bacteriology and Mycology
- Toxicologic Pathology
- Reproductive (fertility) Studies
 - Environment (Hygiene) Exposure
- Nocturnal Studies Illumination Programmable



Pictured from left to right:

FIC-36-2 FIC-36-4 FIC-36-6

FIC Accessories

- Plastic coated support fl or
- Various filtration systems
- Interior shelf packages
- Shelf support package of plastic or metal shelves
- Interior lighting systems
- Feline resting perch
- Reducer to fit your in-house filtration and air-removal system

Additional Options

- A. Glove Ports
- B. Iris Diaphragms
- C. Feeding Ports
- D. Automatic Watering
- E. Tinted (shaded doors)
- F. Shelves
- G. Electric Outlets (inner)
- H. Lighting Systems
- I. Valves, air, gas, water
- J. HEPA Filtration
- K. Access ports. Refer to page 11.



Poultry Isolation Chambers



Vertical Style Unit with optional glove ports (800-PIU/PORTS) and access port (800-PIU/ACCESS/P.)

The Plas Labs' goal pertaining to H.E.P.A. filtration of its chambers is to ensure absolute filtration, yet make filter change-over simple and quick. Both the H.E.P.A. filter and blue pre-filters can be changed in seconds.

These poultry isolation units are designed to

protect both your fowl and personnel from cross contamination. They are ideal for either acute or chronic studies. The isolation cubicles are match die-molded of "hi-tech" thermoplastic allowing for autoclaving or steam sterilization. The problem of hypothermia is eliminated. Individual cubicles can be removed for cleaning, but it is not normally necessary. The polycarbonate doors are mounted using stainless steel "slip-a-part" hinges for easier cleaning.



Horizontal Style Unit with optional glove ports (800-PIU/PORTS) and access port (800-PIU/ACCESS/P.)

What's included with the standard Poultry Isolation Units:

- Match die-molded animal housings. With autoclavable or steam cleaning capabilities.
- Stainless steel support frame (trolley) with casters, brakes and locks.
- Removable polycarbonate front door with slip-a-part stainless steel hinges.
- High temperature gasket material.
- Electrical control panel can be removed during cleaning.
- Digital temperature controller and thermocouple.
- Red heat lamp with adjustable intensity.
- Gravity fed stainless steel feeder chute and adjustable feed box with sight gauge. Capacity: 6 to 12 pounds. (Depends on size of cubicle)
- Gravity fed adjustable watering "T" with two or three water cups. All stainless steel.
- Fast acting "squeeze" adjuster for the watering "T".
- Stainless steel floor grid.
- Formed white waste pan with rounded corners.
- Lower "trap" door for removing the waste pan. No disruption of the birds.
- Cylindrical H.E.P.A. filters for air make up and exhaust. Allowing for easy and quick filter changing.
- Reusable (hand washable) polyester pre-filters rated MERV 4.
- Squirrel cage blower for air make up or exhaust. Negative pressure standard, but positive pressure is available upon request. Includes an orifice for testing the H.E.P.A. efficiency. "DOP/PAO" testing capable.
- Electrical set-up for either 115-120 or 220-240 volts.
- Standard Plas Labs' 12 month warranty against defective materials and workmanship. (Not the gloves or the filters).

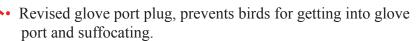


Back view of unit illustrating negative pressure with HEPA filtration.

HOUSING FEEDER & WATERING DETAILS



- New "Coiled" flexible water hose can easily be attached to your house water supply.
- New "Squeeze" adjustment for raising and lowering the water "T" system.
- Stainless steel watering cups and "T" bar.
- Feeder box in lower position. Seated in lower bracket for younger chicks.





- Stainless steel feed box with sight gauge. (Elevated position).
- Removable stainless steel grid floor.





 Stainless steel feeder chute and removable chute plug.



- Ambidextrous white Hypalon gloves. Glove port plugs are included. Plugs prevent birds from entering ports and suffocating. (Catalog: 800-PIU/PORTS)
- Access port for removing sick, injured, or dead birds. (Catalog: 800-PIU/ACCESS/P)
- Interior "anti-escape" shield (polycarbonate).

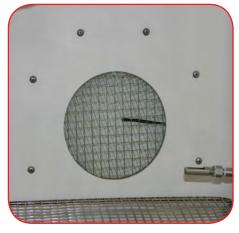
REMOVABLE WASTE PAN AND LOWER TRAP DOOR

- Each housing cubicle includes a formed white plastic waste pan that is removable without disturbing your birds.
- The lower trap door is standard, but can be eliminated if the customer prefers. Note: This photo illustrates the accessories; 800-PIU/PORTS and 800-PIU/ACCESS/P.•
- New "Sealed" living hinge for lower trap clean-out door.



HEPA FILTER & EXHAUST BLOWER HOUSING DETAILS

- Choose negative or positive pressure set-up. Pressure direction is determined by end-user's requirements.
- Filter housings have stainless steel "slip-a-part" hinges and clamps for easy removal when cleaning.
- Cylindrical H.E.P.A. filters are 8" (203 mm) in diameter. 99.99% @ .3µm.
- The blower housing also has the same "slip-a-part" hinge and clamping system.
- Pre-filters are hand washable, three $(.5\mu)$ micron spun polyester.



The thermocouple wire is inserted between the HEPA filter and inner cage wall.



Open clear plastic housing to install the replacement HEPA filter



The blue "pre-filter" is placed in front of the exhaust HEPA filter. Place pre-filter on the outside of the air make up filter.

REMOVABLE ELECTRIC CONTROL PANEL DETAILS

- All electrical controls are mounted on a stainless steel panel that can be removed in seconds for cleaning the isolation unit. Using our unique "Key Way" technique, no tools are required.
 - Two (2) upper "Key Way" slots for mounting or removing control panel.
 - New digital heat control module, #DBS 1000 for upper housing thermocouple. Just push a button and scroll to your desired temperature.
 - Temperature thermocouple. The tip is placed inside the exhaust H.E.P.A. filter housing. Same on the bottom H.E.P.A.
 - •• Electrical sockets for both the upper heat lamp and blower.
 - Variable speed controls for fans, (blowers).
 - 20 Amp Ground Fault Interrupter (G.F.C.I.). Safety socket. Reset button.
 - Electrical sockets for both the lower heat lamp and the blower.
 - New digital heat control module, #DBS 1000 for lower housing with thermocouple. Just push a button and scroll to your desired temperature.

ADDITIONAL ISOLATOR DETAILS

- All poultry isolator housings feature an interior red heat lamp. This special lamp provides warmth and minimizes healthy birds from attacking injured or sick birds.
- The light intensity (and heat) is controlled by the digital heat controller mounted on the outside of the isolator housing.

Catalog Number	Housing Size	Number of Housings
FIC-30-1-PIU	30" x 30" x 30"	One (1)
FIC-30-2-PIU	30" x 30" x 30"	Two (2)
FIC-30-4-PIU	30" x 30" x 30"	Four (4)
FIC-36-1-PIU	36" x 36" x 36"	One (1)
FIC-36-2-PIU	36" x 36" x 36"	Two (2)
FIC-36-4-PIU	36" x 36" x 36"	Four (4)

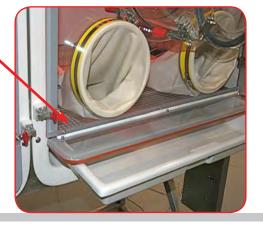


USEFUL ISOLATOR ACCESSORIES:

- Catalog #800-PIU/ACCESS/P, Access Port constructed of clear acrylic (Perspex) at 9.75" I.D. (248 mm ø) x 9.5" (241 mm) long, with formed clear doors, stainless steel hinges, and adjustable locks. This port is useful for removing sick, injured, or dead birds. It is mounted on top of the upper glove ports and below the lower housing glove ports.
- Catalog #800-PIU/PORTS, with Hypalon ambidextrous gloves and ports at 203 mm ø and including one (1) pair of white formed plastic glove port plugs. The plugs prevent birds from entering the glove ports and suffocating.
- New "Sealed" living hinge for lower trap clean-out door.







Hypoxia Chambers

Ideal for stem cell work!

Hypoxia Chambers

The new Hypoxia Chambers are ideal for tissue culture work, including cancer tumor cell and stem cell research. They feature a color operated "touch screen" for automatically controlling oxygen, temperature, and carbon dioxide levels.

Basic Features Include:

- 8" color panel "Touch Screen" display.
- O2 sensor and CO2 sensor.
- Platinum RTD with sealing gland.
- N2, CO2, and O2 gas hook-up.
- Inert gas hook-up.
- Ethernet port connection for data-logging.
- Thermoelectric assembly (Peltier device).
- Password protected, configurable PID control.
- One touch, on screen data logging.
- Air circulation fan.



Did You Know?

Stem cells can often be induced to differentiate into different cell types?



856-HYPO, Glove Box

Optional perforated shelves

are available as an accessory. Part number: FIC-36-S.

Small Animal Hypoxia Chamber is available in three (3) different sizes:

FIC-24-1/HYPO, 24" x 24" x 24"

FIC-30-1/HYPO, 30" x 30" x 30"

FIC-36-1/HYPO, 36" x 36" x 36"



FIC-36-1/HYPO "Small Animal"

Product Specifications		
Oxygen (O2) range:	0-25%	
Oxygen Sensor Accuracy	± 0.25%	
Carbon Dioxide (CO2)	± 0-20%	
Range		
Carbon Dioxide sensor	± 0.2%	
accuracy		
Temperature Range	ambient to 40°C	
Temperature accuracy	± 0.3°C @ 0°C (class B accuracy)	
Parameter Control	± 1% or degree of set point	

Primate Chairs



517-CM

Did You Know?
The life span of an average Rhesus
Macaque is 20 - 30 years?

Plas Labs has been a leading manufacturer of primate chairs for over 45 years. All of our chairs have been developed, tested, and refined in some of the world's leading research facilities.

Each chair has been developed specifically for a particular species and its physiological structure.

Our chairs offer increased portability, speed of handling, and safety for both the handler and your valuable primate. A choice of two seat styles offers increased comfort in a more natural position for the primate.

These chairs are useful for acute or chronic studies. Rolling support carts enable the researcher to chair the animal in the housing area and safely move it to the lab.

Basic Features on All Chairs

- All surfaces that come in contact with the animal are tooled and highly polished to eliminate chafing and body lesions.
- All restraint plates are adjustable both horizontally and vertically.
- No tools are needed to adjust the chairs.
- Thoracic plates and waste pans are standard on each chair.
- Food bars allow for self-feeding and dietary rewards.
- Casters are anti-scuff with brakes and locks.
- Heavy gauge acrylic (optical quality) offers long run durability and total observation of your animal.
- Large hand knobs afford a good grip when hands are wet and slippery (safety factor).
- · No assembly required.

We offer custom fabrication services to manufacture chairs of your own design.

Refer also to our Rotational Primate Chair on page 17.





Primate chairs in typical production run.

Swing-a-way seat model.

500-K, Inhalation Helmets





Inhalation Helmets useful for the following Plas ■ Labs' primate chairs:

- 514-AG
- 515-SASR
- 517-CYNO
- 518-RPC

Primate Collar Adapter Plate





Table Top Primate Chair



Rotational Primate Chairs



Rotational Chair, 518-RPC



The next generation of primate chairs offers a diverse application for research capabilities. The restraining portion of the chair rotates a full 360° to position the primate for the individual researchers needs. The ergonomically correct back plate supports the primate in the full range of motion of the chair.

The chair is specifically designed for complete rotational studies of primates, eliminating awkward positions for the laboratory technician.

No tools are required for locking the chair at any angle, which enables the researcher to focus on the task at hand, as opposed to worrying about finding the proper tool to lock the chair into position.

Model Number			Package Includes	Available Accessories
511-SPT 512-SPC	I I		D	
511-SPT Squirrel 512-SPC "Saimiri Sciureus"		500 g to 1 kilo	D	
514-AG	514-AG African Green "Cercopithecus Aethiops"		В	A, D, F, I, K
515-SASR 518-RPC	l Rhegus "Macaca Mulatta" - I		B, C	A, D, F, I, K
517-CM Cynomolgus "Macaca Fascicularis"		2.5 to 8 kilos	B, C	A, D, F, I, K
520-BS	Baboon "Papio-Papio"	39 to 61 kilos	В, Н	A, H, K

Primate Chair Accessories

- **A. 500-A**, Watering "T" Bar with bottle holder
- **B. 500-B**, Adjustable Waste Pan
- C. 500-C, Urine Deflector
- **D. 500-D**, Table Top Leg Stand

- F. 500-F, Head Restraint Package
- H. 500-H, Safety Enclosure
- I. 500-I, Collar Adapter Accessory
- K. 500-K, Inhalation Helmet

Surgery & Examination Table





Battery Operated Surgery Exam Tables

Plas Labs now offers a new Battery Operated Surgical-Exam Table. The exam table includes a rechargeable battery pack with a 30-hour service life before recharging is necessary, a stainless steel I.V. bar with turning disc, stainless steel table surface with a height adjustment of $31\frac{1}{2}$ " - 45", stainless steel mounting rails with curry clamps and blocks, tilt and turn table surface, unbreakable rolling casters and an ergonomic "X-Shaped" pedestal with foot control

Part	Table Top	Animal	Height
Number	Dimensions	Weight	Adjustment
507-SET	51 x 21.5"	146-165 lbs.	min. 83 cm 32.5"
	130 x 55 cm	66-75 kg.	max. 123cm 48.5"

The rechargeable battery pack has a 30 hour service life before recharging is necessary. It eliminates bothersome and dangerouis electrical cords on the floor.



Table Top:

Stainless Steel with marine rim and liquid duct, 130 x 55 cm with stainless steel mounting rails (all four sides) 130 x 55 cm with four quick release blocks with Curry clamps, with one block holder with turning disc and stainless steel infusion holder.

Height Adjustment:

80-115 cm

31½" - 45"



Foot Switch

The pneumatic foot switch is a security feature of this table. There is no electric current between switch and drive. The column is a closed system, protected from moisture.

Load:

<220 pounds (<100 kg)



Mounting Rail

The mounting rail allows the attachment of various accessories, such as Curry-Clamp quick release blocks and infusion holders.



Tip Turn Mechanism

The Tip/Turn mechanism is easy and safe to handle. All positioning mechanisms function mechanically. The Tip/Turn or Tip mechanism functions on an opening/closing system.

Surgery Equipment



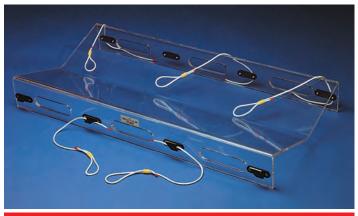
509-RS24, two sizes available: 24" and 30"

Surgery Board Features

- Formed, one-piece construction for long service life and durability.
- Center depressed slope for fast positioning of animal.
- Unique, fast acting tie down cam cleats.
- White, high temperature plastic and nylon components.
- Lightweight and easily portable.
- Uprights adjustable to elevate board for special positioning .
- Five (5) quick-tie, nylon restraint cords .
- Suction cup feet provide a steady work surface(N/A on 509 Series).



Model Number	Product Size	Approximate Animal Size
505-XRAY	36 x 17.5" 914 x 445mm	100 lbs. (45 kgs.)
508-MS	4.5 x 11" 114 x 280mm	up to 9" long
510-SS	8.125 x 16" 206 x 406mm	up to 12" long
509-RS24	12 x 24" 304 x 609 mm	up to 4 kilos
509-RS30	12 x 30" 304 x 762 mm	4 to 7 kilos



505-XRAY, X-Ray Positioner

The positioner is fabricated of .375" thick autoclavable clear polycarbonate. It includes five Nylon restraint cords and fast acting locking cam cleats. Four machined openings on the sides provide excellent non-slip griping of the device.

The positioner has three (3) uses:

- 1. An "X-RAY" positioner
- 2. An actual surgical board
- 3. A "Gurney" for transporting animals from the surgical suite to the recovery area.

Anesthesia Chamber

Plas Labs Anesthesia Chambers are available in four (4) standard sizes. Custom sizes are available.

All chambers include heavy duty construction of either smoked transparent acrylic or thermoset plastic (Clear, Smoke, or Black). Refer also to 900-RCS on page 21.

Features Include:

- Stainless Steel Hardware.
- · Removable False Floor.
- Two (2) Gas Nipples or Gas Valves on our larger units.
- · Closed Cellular Gasketing.



903-EC with optional oxygen analyzer 800-OA

Model Number	Suggested Animal	Interior Size w x d x h	Color	Volume
901-EC	Small Rodents	12 x 12 x 12"	Transp. Grey	28 liters
902-EC	Large Rodents	18 x 18 x 18"	Transp. Grey	95 liters
903-EC	Rabbits Felines, Small Canines	36 x 20 x 24"	Transp. Grey	224 liters
904-EC*	Felines Canines	28 x 24 x 28"	White Thermoset Plastic	264 liters

^{* 904-}EC is similar to FIC-24-1 on page 6

Did You Know?
One (1) cubic foot is equal to 28.3 Liters in volume?



903-EC with Gas Absorption System

903-EC shown with optional gas absorption system (800-DT/SS)

Applications

- Hibernation Studies.
- Euthanasia.
- Nebulizing Chamber.
- Air Pollution Studies.
- Special Gas Atmospheres.

Optional Accessories

- Oxygen Analyzer.
- Stainless Steel Floor.
- CO2 Absorption System with pump.
- Ground Key Cock Valves (N2, Air, Vac, Etc.).

Rodent Containment System



900-RCS

Simple to Use and Inexpensive for the Budget Minded Investigator.

This is the only available unit which can be used as a free flow or sealed system.

Our chamber may be used as an open or closed system. If an open system (free flow of air) is desired, align the holes on the top cone with the main clear cylinder. If not, realign the holes to affect the closed system. Once realigned, simply tape the top and the bottom to the main cylinder.

Accommodates mice, rats, gerbils, hamsters, and guinea pig sized animals. This inexpensive containment system is extremely useful for acute or chronic studies.

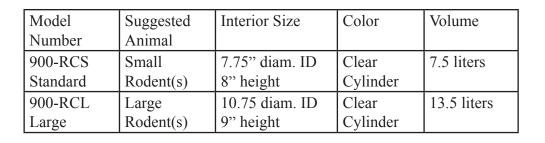
Applications

- Metabolism Studies
- C02 Collection
- Inhalation Work
- Euthanasia Chamber
- Isolation Requirements
- Anesthesia Techniques

System Includes:

- Two molded convex cones.
- One molded concave top for alternative watering technique.
- Clear cylindrical main housing.
- Two gas nipples $(1/8 \times 1/4 \text{ NPT hose barb style})$
- One roll of vinyl sealant tape.
- Metal tripod stand.
- Stainless steel floor grid.
- Fecal / urinary separator.

Did You Know? For most liquids, one (1) ounce is equal to thirty (30) ml. in volume?





900-10, "J" Feeder



Broome Style Restrainers

This is perhaps the most effective style available for three basic reasons;

- 1. Ease of use and access to the rodent.
- 2. Prevention of the animal's ability to turn
- 3. Safety for the animal handler.

Flat Bottom Restrainers

These convenient restrainers have been a research standard for over forty years. The adjustable tail stock can be inserted into any one of four positions. Apertures in the top and bottom provide easy access for injections or sampling. The pocket and holes in the front make it easy to anesthetize or feed the animal. Refer to page 23.

Rodent Injection Cone

This device is relatively new on the research scene. It is extremely useful for large quantity sampling where high speed and efficiency are required. It is completely transparent, durable, and easy to clean, suction cup feet offer a secure work device. Refer to page 23.

See Also:

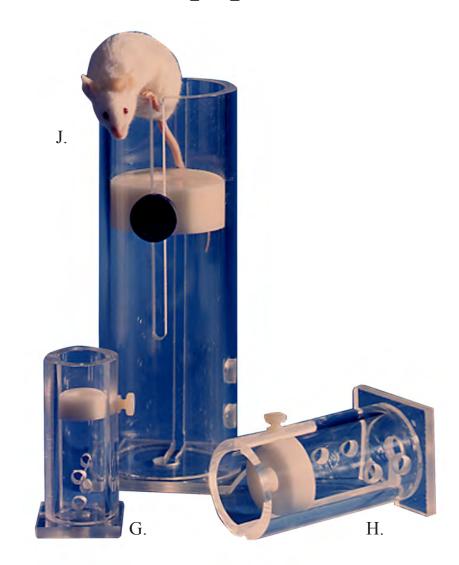
562-IRC, Illuminated Tail Injection Cone on page 25

Surgery Boards

Plas ■ Labs surgery boards are formed of one piece high-temp NorylTM for durability and ease of cleaning. Five adjustable Nylon cords are included. (Refer also to Page 19)

"Slip Into Something Comfortable!"

Rodent Equipment



550-Series Broome Style Restrainers

Also, refer to our new illuminated rodent cone, part number 562-IRC, on page 25





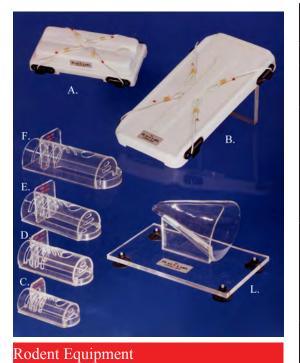


Photo Key	Model Number	Item	Product Size	Animal Range
A.	508-MS	Surgery Board	4.5 x 11"	up to 9" long
В.	510-SS	Surgery Board	8.125 x 16"	up to 12" long
C. D. E. F.	541-RR 542-RR 543-RR 544-RR	Flat Bottom Rodent Restrainer	1.5" diam. x 3.75" 2" diam. x 5" 2.5" diam. x 6" 3.25" diam. x 8"	15 to 30 g 30 to 125 g 125 to 250 g 250 to 500 g
G. H. I. J. K.	551-BSRR 552-BSRR 553-BSRR 554-BSRR 555-BSRR	Broome Style Rodent Restrainer	1" diam. x 3.75" 1.5" diam. x 5.5" 2" diam. x 8" 2.5" diam. x 8.5" 3.5" diam. x 9"	15 to 30 g 30 to 125 g 125 to 250 g 250 to 500 g 500 to 800 g
L.	561-RC	Injection Cone	5.75" long x 5" high x 4" opening	Mice: 15 to 30 g Rats: 500 to 600 g

All rodent restrainers are manufactured from clear materials to provide complete visual awareness of the state of your animal. We offer two styles of restrainers in four convenient sizes.

A special Broome Style unit for obesity studies, The Zucker Unit, is also offered. Catalog # 555-BSRR (Not illustrated).

Insertion Sequence

To place the animal in the Broome Style Restrainer, loosen and remove the nose piece and grasp the animal by the tail. Slide the animal's tail along the longer open groove until the animal is completely in the cylinder. Slide the nose piece into the short groove on the opposite side of the restrainer and place it up to the nose of the animal to ensure a snug fit.

This restrainer is perfect for injections or blood sampling.

Also, refer to our new illuminated rodent cone, part number 562-IRC, on page 25



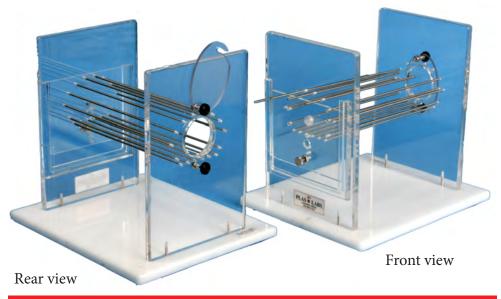
550-Series Insertion Sequence

Bowman Style Rodent Restrainer

The PLAS LABS 530-POR, Bowman Style Rodent Restrainer has been re-engineered and refined to accommodate larger sized animals up to 750 grams. The positions of the stainless steel rods around the rodent provide easy access for many types of research applications, especially obesity studies.

The rodent can quickly be inserted into the restrainer by removing several stainless steel upper rods, or through an access port hole in the rear upright. The access port hole features a polycarbonate locking door to prevent escape.

The front "guillotine" door can be adjusted and locked by using any one (1) of three (3) adjustment positions. The door has a stainless steel "spring loaded" lock. Suction cup feet on the white plastic base secure the device during use.



530-POR

Product Specifications

- Weight Range: 250 up to 750 grams.
- Maximum length of the rodent compartment is 9" (228 mm).
- Eighteen (18) stainless steel rods are adjustable up to 3.5" ø (89 mm)
- Rear access port opening is 2" ø (50.8 mm). The polycarbonate locking door is attached by a "nylock" fastener to prevent future operational loss.
- Overall height is 11" (279 mm).
- Base size is 10" x 12" (254 mm x 305 mm).
- Basic unit is constructed of .500" (12.7 mm) jeweled acrylic.
- Suction cup feet included for stability.



Close-up of rear locking door to prevent escape.



Door in the upper position locks the stainless rods in place.

I Illuminated Tail Vein Unit



562-IRC

Catalog Number: 562-IRC

Cone Dimensions: 5.75" long x 5" high x 4" opening Total Footprint Size: 8.5" x 10" (216mm x 254mm)

Light bulb warranty: 30,000 hours

Animal Weight Range: Mice: 15 to 30 grams Rats: 500 to 600 grams PLAS LABS now offers an "Illuminated Rodent Tail Vein Injection Cone". The new 562-IRC features our "Bright Light" illumination system with rechargeable batteries and recharge unit, clear plastic tail insertion cone, formed white base with suction cup "non-slip" feet, housing batteries, on/off switch, lights, and an electrical plug for recharging the batteries (100-240 VAC capacity.)

What's Included with the 562-IRC:

- Clear plastic tail insertion cone.
- Formed white plastic base containing batteries, "on / off" switch, and lights.
- Base used for recharging batteries. Two (2) included with system.
- Electrical plug for recharging batteries. (100 to 240 Volt capacity.)





Rabbit Equipment

"The only thing that wiggles is the nose!"

Plas Labs Rabbit Restrainers are clearly the best. They provide total observation of your valuable research animal.

All Rabbit equipment was originally developed in the early 1970's in research labs under actual research conditions.

We were the first to use clear acrylic materials to protect and safeguard your animals. Eliminates or minimizes back injuries.

Refer to animal weight ranges on page 27



503-XL, 502-AR, and 501-TC (top to bottom)

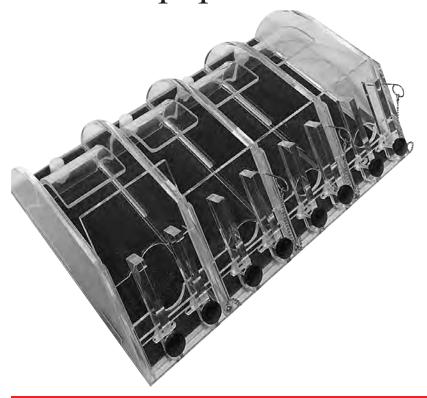
Basic Rabbit Restrainer Features

- Highly polished edges prevent chafi g, especially at the neck.
- Non-slip surface provides better footing and helps to calm animal. This is much safer and easier on the animal's foot pads.
- Clear acrylic aids in retaining body warmth. Hypothermia is eliminated.
- Unique curved back butt plate minimizes the risk of back injury. The plate is anatomically correct.
- Vertical head bars are adjustable and easily removable if not needed.
- Rear access hole for pyrogen testing (N/A on 501-TC).
- Stainless steel pin offers several fi e adjustment points for neck plate.
- Unit can be sanitized in a cage washer up to 180 degrees F° (82°C) or sterilized chemically.
- Non-slip base pads ensure unit stability.



502-AR in an Ophthalmological Study

Rabbit Equipment



_			
15-1	04-	\mathbf{D}	\neg
\sim			-/1
- //			

Model Number	Item	Product Size w x d x h	Animal Weight Range
501-TC	Rabbit Restrainer	6 x 24 x 5" 15 x 61 x 13 cm	4 to 7 kilos
502-AR	Rabbit Restrainer	6 x 18 x 6" 15 x 45 x 15 cm	up to 4 kilos
503-XL	Rabbit Restrainer	6 x 22 x 6.5" 15 x 56 x 17 cm	4 to 7 kilos
505-XRAY	X-Ray Positioner refer to page 19	18 x 36 x 4" 46 x 91 x 10 cm	up to 7 kilos
506-MS	Multi-Stall Rabbit Restrainer	size depends upon number of stalls required	up to 4 kilos per stall

Catalog Number	Description	
504-PT	Multiple Stall Rabbit	
	Restrainers (No head	
	bars or butt plates)	
	(Two Stalls)	
504-PT-2	(Four Stalls)	
504-PT-4	(Six Stalls)	
504-PT-6	(Eight Stalls)	
504-PT-8	, , ,	
506-MS	Multiple Stall Rabbit	
	Restrainers (with head	
	bars and butt plates)	
506-MS-2	(Two Stalls)	
506-MS-4	(Four Stalls)	
506-MS-6	(Six Stalls)	
506-MS-8	(Eight Stalls)	



CART-RR, Support Cart for Rabbit Restrainers

CART-RR, Stainless Steel support cart accommodates up to four rabbit restrainers. Includes non-scuff asters with brakes and locks. Cart size: 34" wide x 36" deep x 36" high

865mm x 915mm x 915mm

Ferret Restrainers

The Plas Labs' Ferret Restrainer is a modified version of a similar device initially described by Dr. Daniel McLain in the Volume #35, No. 7 issue of *Lab Animal Magazine*.®

The Plas Labs' units are offered in four (4) sizes taking into consideration the animals age, weight, and sex. The units are constructed of optical quality clear acrylic (Perspex), and a formed black plastic nose cone with an Acetal locking slide. The main restraining cylinder can be rotated 360° to provide complete access to the animal. All units are mounted on a white acrylic base plate with suction cup feet to guarantee reliable stability during testing procedures. Counter top space required is 11.5" x 21". (292 x 534mm)



571-FR

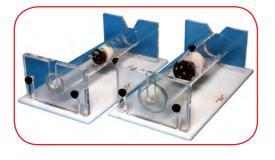
Catalog Number	Dimensions	Animal Weight Range
571-FR	64 mm ID x 18" long	400 to 700 grams
572-FR	79 mm ID x 18" long	650 to 1,000 grams
573-FR	88 mm ID x 18" long	1,000 to 1,700 grams
574-FR	101 mm ID x 18" long	1,500 to 2,000 grams

SCIENTIFIC NAME

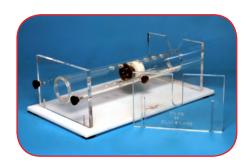
Mustela putorius furo

Taxonomy:

PHYLUM: Chordata CLASS: Mammalia ORDER: Carnivora FAMILY: Mustelidae







Ferret Restrainer Features:

Suction cup feet on all four (4) corners. Rear tailgate securing knobs. Two (2) typical on each unit. Nose cones can slide out to remove ferret Cylinder rotates to use access holes. Nose cones with securing knobs. (Breathing holes)

Guinea Pig Restrainers

(Cavia porcellus)

These clear acrylic restrainers provide complete visual awareness and status of your valuable animal. The plastic is warm to the touch and eliminates the problem of hypothermia.

Included with each restrainer are adjustable head restraint bars, an adjustable back "butt" plate, a stainless steel locking adjustment pin for the neck stock (three [3] positions), and an adjustable formed back support to minimize broken backs.

Also included is a non-slip floor material to provide secure animal footing and calm the animal.

If required, specific (ustom) modifi ations are available.



535-GP/S 535-GP/S

Catalog Number	Animal Age	Dimensions	Animal Weight Range
535-GP/S	5 weeks old	10cm x 17.75cm long	300-350 grams
535-GP/M	10 weeks old	11.1cm x 20.5cm long	500-600 grams



Close-up for rear butt plate.



Close-up of front. NOTE: Locking pin and head positioning bars.



Side view. NOTE: Black adjustable knobs for back plate.



Алматы (727)345-47-04 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владиваеказ (8672)28-90-48 Владикавказ (8672)28-90-48 Владикарказ (8422)49-43-18 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89

Россия +7(495)268-04-70

Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (47712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81

Казахстан +7(727)345-47-04

Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Нояборьск (3496)41-32-12 Новосибирск (383)227-86-73 Омск (3312)21-46-40 Ореп (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Пенза (8412)22-31-16

Беларусь +(375)257-127-884

Псков (8112)59-10-37

Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саранск (8342)22-96-24 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35 Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97 Тверь (4822)63-31-35

Узбекистан +998(71)205-18-59

Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Улан-Удэ (3012)59-97-51 Ульяновск (8422)24-23-59 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93

Киргизия +996(312)96-26-47