

# Anaerobic Chambers: Vinyl, Aluminum & Polymer Gloved and Gloveless



**Polymer**



**Vinyl**



**Aluminum**

## Applications:

- Anaerobic microbiology research
- Clinical microbiology
- Controlled biochemical assays
- Protein crystal growth
- Biofuels and environmental microbiology
- Specialized cell culture incubation

# Anaerobic Chambers



Vinyl: pg 4



Aluminum: pg 10



Polymer: pg 16

The Coy vinyl chamber was the first developed especially for anaerobic microbiology, and it is now the anaerobic chamber of choice for the majority of users who employ an anaerobic process.

Coy also offers both economical polymer and sturdy aluminum chambers. Our modular construction and accessories allow us to tailor a chamber that meets your needs.

**At Coy Laboratory Products, we pride ourselves on asking you the right questions so that we can deliver you exactly the right product for your application.**

## Configurations and Types

- Vinyl, polymer or aluminum
- Heated or unheated, or unheated with incubator
- Gloved or gloveless

## Standard Features – All Coy Anaerobic Chambers

- Automatic or manual airlock with vacuum pump & tubing
- Gas regulator(s) with tubing and fittings
- Catalyst fan box(es) (heated or unheated)
- Stak-Pak with Catalyst (two per fan box)
- Six-receptacle plug strip
- Feed-thru adaptor(s)

## How Coy Anaerobic Chambers Work

All Coy Anaerobic Chambers operate with a hydrogen gas mix reacting with a palladium catalyst to remove excess oxygen. Key components of Coy Anaerobic Chambers are the gas (user supplied), the catalyst, the catalyst fan box, temperature control accessories (if needed) and the airlock. All chambers require the addition of two gas sources, a background gas (typically N<sub>2</sub>) and a gas mix containing 5% H<sub>2</sub> with the balance comprised of any inert gas such as N<sub>2</sub>, CO<sub>2</sub>, or Ar. A palladium catalyst in a Stak-Pak is placed over the circulation source called a catalyst box (sometimes referred to as a fan box). The gas mix with H<sub>2</sub> gas is circulated through the catalyst and removes O<sub>2</sub> by forming a water molecule. Generally, O<sub>2</sub> levels equilibrate to 0-5 parts per million (ppm). After initial establishment of the anaerobic atmosphere, the gas mix (H<sub>2</sub> 5%) should be refreshed every 5-10 days and the catalyst rejuvenated by heating it. The airlock is used to reduce O<sub>2</sub> levels prior to the transfer of samples in and out of the chamber to avoid large spikes of O<sub>2</sub> into the system.

## Anaerobic Chambers Interior Work Area L x D

Vinyl	inches	millimeters
Type A	59 x 32	1499 x 813
Type B	78 x 32	1981 x 813
Type C	42 x 32	1067 x 813

Aluminum – gloveless or with gloves		
1 Person	41 x 23	1041 x 584
2 Person	71 x 23	1803 x 584

Polymer – gloveless or with gloves		
3 foot	35 x 23	889 x 584
4 foot	47 x 23	1194 x 584
5 foot	59 x 23	1499 x 584

### Catalyst Fan Box

Made up of a fan to circulate the air and a tray to hold the Stak-Pak, the fan box may be heated, with digital display/controls (shown here) or unheated.

### Stak-Pak with Catalyst

The catalyst is contained within wire mesh called a Stak-Pak. The catalyst is alumina pellets coated with palladium which provide a meeting ground for hydrogen and oxygen molecules. Additional wire mesh containers may be filled with other material and stacked in multiples of up to three in order to solve issues in the chamber such as moisture (desiccant) or chemical contamination (activated charcoal). The unique design of the Stak-Pak with Catalyst allows it to be stacked on a fan box and still maintain proper air flow.



## Incubation and Heaters

For applications that require incubation with temperature control, Coy has several solutions. The advantages and disadvantages of these options should be factored into your selection.

### Anaerobic chamber with heater option

The entire chamber becomes an incubator. Incubation capacity is limited only by the size of the chamber. Disadvantages include larger temperature variations and a less comfortable work area when compared to an unheated chamber with incubator option. It is a less expensive solution than purchasing an unheated chamber with an incubator.

### Anaerobic chamber with incubator option

An unheated chamber with an incubator has the advantage of incubation with more precise temperature control when compared to the same process with just a heater in the chamber. The chamber also is more comfortable to work in than a heated chamber. The disadvantage is the limited incubation capacity and odd-size containers may not fit in it.

### Anaerobic chamber with heater and incubator option

The advantage is that the heater can be kept turned off until the incubator reaches overflow capacity at which point it can be turned on. While this is a best of both worlds choice, it is more expensive. Only Coy Vinyl Anaerobic Chambers can be retrofitted in the field with an incubator. All three types of anaerobic chambers can have a heater specified at initial purchase or later.

## How Coy Vacuum Airlocks Work



Coy vacuum airlocks (manual or automatic) remove O<sub>2</sub> from ambient conditions to achieve acceptable levels of O<sub>2</sub> prior to transfer to/from the chamber. The airlock reaches the low O<sub>2</sub> level through a multiple vacuum/purge procedure. The standard factory procedure is to pull a vacuum to 20" of mercury, then purge back to 1" of Hg using an inert background

gas. Another cycle is repeated with the inert gas. A third cycle is performed with the H<sub>2</sub> gas mix used for anaerobic work. On the third and final purge, the vacuum level is brought back to ambient with just a slight vacuum left to hold the seal. The seal is easily broken by the user when opening the door. Automatic airlocks are equipped with an advanced electronic program that allows adjustments in vacuum levels, number of cycles, calibration of pressure sensors, and programmable profiles, depending on the type of work being done in the chamber. All vacuum pumps are equipped with moisture traps to prevent excess moisture from the chamber or gas tanks from entering the pump. This helps prevent pump vane rusting, which can significantly damage the pump. Manual airlocks operate with the user turning ball valves for the gas and pump while monitoring the vacuum levels. Automatic airlocks operate with the touch of a button.

### Vacuum Airlock Door (Updated in 2006)



This update to the airlock door has a spring-loaded corner pivot which allows the door to swing up while parallel to the airlock, saving valuable space. Older Coy airlocks may be retrofitted in the field with the new style door and updated digital electronics.

Airlock Specifications		COY Type A, B or C Vinyl Anaerobic Chamber	COY 1 or 2 Person Aluminum Anaerobic Chamber (Gloved or Gloveless)	COY 3, 4 or 5 ft. Polymer* Anaerobic Chamber (Gloved)	COY 3, 4 or 5 ft. Polymer* Anaerobic Chamber (Gloveless)
		<b>VACUUM AIRLOCK SPECIFICATIONS</b>			
Airlock Interior Dimensions/ Capacity	Inches (LxDxH)	13.6 x 13.6 x 13.4	13.6 x 13.6 x 13.4	NA	NA
	Millimeters (LxDxH)	345 x 345 x 340	345 x 345 x 340	NA	NA
Capacity (100 MM petri dishes)	Inches (WxH)	150	150	NA	NA
	Millimeters (WxH)	203 x 279	203 x 279	NA	NA
Automatic or Manual Airlock Operation		Both	Both	NA	NA
Airlock Transfer Time		< 60 seconds	< 60 seconds	NA	NA
Adjustable Vacuum Levels		S	S	NA	NA
Adjustable # of Cycles		S	S	NA	NA
Self-Calibrating Pressure Sensor		S	S	NA	NA
9 Different Memory Profiles		S	S	NA	NA
Gas Low Alarms		S	S	NA	NA
<b>PURGE AIRLOCK SPECIFICATIONS</b>					
Airlock Interior Dimensions/ Capacity	Inches (LxDxH)	NA	NA	12 x 10 x 14	12 x 10 x 14
	Millimeters (LxDxH)	NA	NA	305 x 254 x 355	305 x 254 x 355
Capacity (100 MM petri dishes)	Inches (WxH)	NA	NA	50	50
	Millimeters (WxH)	NA	NA	228 x 305	228 x 305
Automatic or Manual Airlock Operation		NA	NA	Both	Automatic
Airlock Transfer Time		NA	NA	60 - 190 seconds	60 - 190 seconds
Digital Time Display		NA	NA	A	S
Adjustable Purge Time		NA	NA	A	S
Sliding Airlock Shelf		NA	NA	A	A

### Purge Airlock

The purge-only units operate by flushing background gas into the airlock to push out excess oxygen prior to opening the interior door. Ideal purge times are provided by Coy for various O<sub>2</sub> levels. Automatic units allow the user to preset a specific time to purge the airlock with a simple touch of a button. With manual units, the user operates ball valves and times the purge. Purge units, while initially less expensive to purchase than vacuum airlocks, generally have a higher operational cost and a longer transfer time.

\*Can be customized with vacuum airlock S = Standard equipment on this unit A = Accessory available for additional cost NA = Not available for this product

## Model 10 Gas Analyzer for Oxygen/Hydrogen

Patented analyzer constantly monitors and displays both atmospheric oxygen and hydrogen levels at a fraction of the cost of two separate analyzers. Visible and audible alarms alert the operator.



## Shelves

The three-shelf sturdy metal shelving units are designed with lips to help hold petri dishes, flasks, well plates and other items.

## Equipment Entry Port

Large equipment entry port is capped and secured in place after equipment is installed.



## Feed-Thru Adaptor

Electrical wiring, tubing or cords are input through two feed-thru adaptors.

## Aluminum Frame Support

The tubular aluminum frame supports the vinyl chamber and is mounted on a padded plywood base that is covered with a foam pad and heavy vinyl. Hold-down rods secure vinyl to the base.



## Vinyl Glove Box Seams

Radio frequency welded seams; glove port has double-lapped seams for added strength.



### Model 2000 Forced Air Incubator for Vinyl Chamber

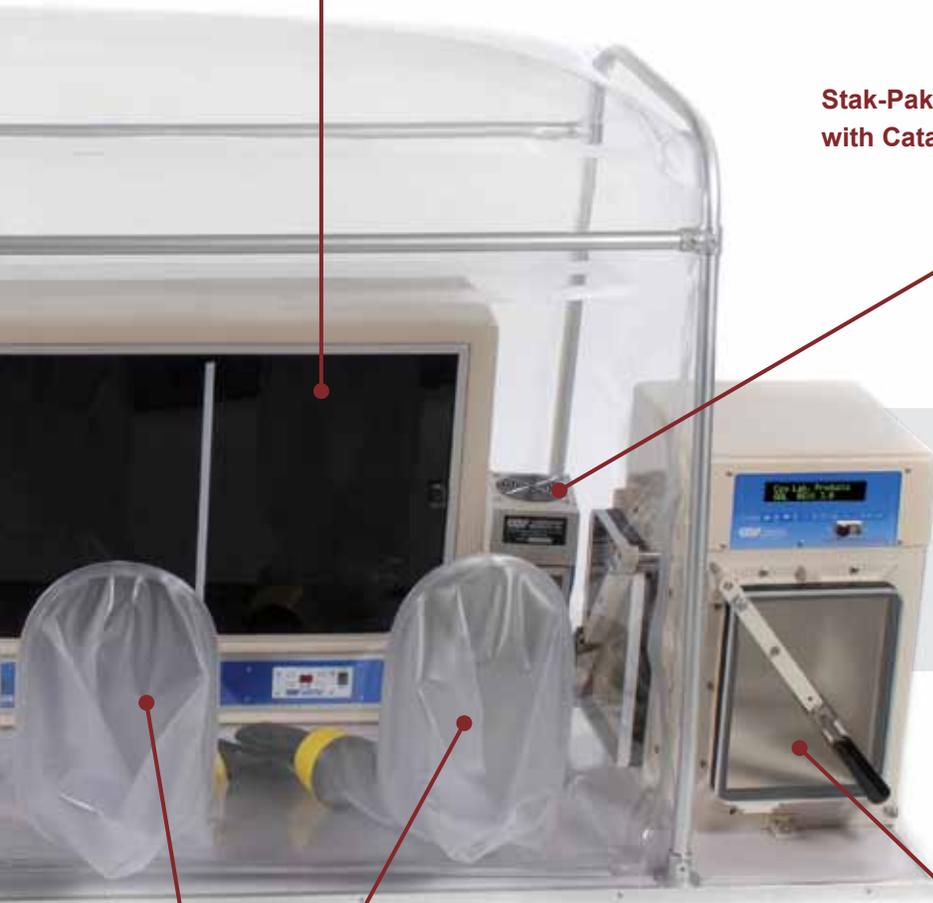
Custom engineered to create a constant-temperature environment without heating the entire chamber. Sliding doors save space.

### Catalyst Fan Box (HEATED OR UNHEATED)

Made up of a fan to circulate the air and a tray to hold the Stak-Pak with Catalyst, the fan box may be heated or unheated. The catalyst fan box circulates chamber air through the catalyst to remove O<sub>2</sub>.



### Stak-Pak with Catalyst



# Vinyl Anaerobic Chamber

### Airlock Door (Updated in 2006)

This update to the airlock door has a springloaded corner pivot which allows the door to swing up while parallel to the airlock, saving valuable space.



### Glove Ports

Oval-shaped glove ports are constructed of a special highly flexible vinyl frosted to prevent cracking and gas leakage at bend points.

### Automatic Airlock

Automatic airlocks remove O<sub>2</sub> from ambient conditions to achieve acceptable levels of O<sub>2</sub> for anaerobic work. The O<sub>2</sub> is removed prior to opening the interior door and entry into the anaerobic chamber. The airlock reaches the low O<sub>2</sub> level through a multiple purge/vacuum procedure. Digital controls allow adjustments in vacuum levels, number of cycles, calibration of pressure sensors, and programmable profiles, depending on the type of work being done in the chamber. See page 3 for airlock details. Manual airlocks are also available.

# Vinyl Anaerobic Chambers



## THREE MODELS AVAILABLE:

### TYPE A

- Includes one pair of gloves, one ABS plastic work pad, two fan boxes, four Stak-Paks with Catalyst

### TYPE B

- Includes two pairs of gloves, two ABS plastic work pads, two fan boxes, four Stak-Paks with Catalyst

### TYPE C

- Includes one pair of gloves, one ABS plastic work pad, one fan box, two Stak-Paks with Catalyst

## Standard Equipment and Features

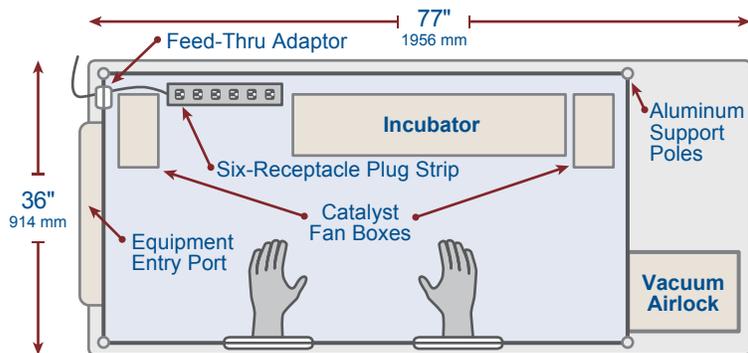
- Vacuum pump
- Vacuum airlock with moisture trap that prevents moisture from being drawn into pump
- Setup and care kit
- Chamber front made of optically clear, pressed, polished 30 mil vinyl with 40 mil vinyl bottom extending 2"/51 mm up on all sides

- Mounted on a 3/4"/19 mm padded plywood base with heavy vinyl cover which prevents cuts and punctures to the bottom of the chamber
- Tubular aluminum frame
- Gas mix regulator and nitrogen background gas regulator plus tubing and fittings
- Large equipment entry port (27"/686 mm diameter) opposite the airlock is capped and secured in place with supplied vinyl adhesive after equipment is installed
- Electrical wiring, tubing or cords are input through two feed-thru adaptors, 2"/51 mm and 1 1/2"/38 mm
- Latex gloves (size large) are placed over a special cuff and then situated on the permanently attached vinyl sleeves and secured with the supplied vinyl adhesive, allowing replacement of damaged gloves without affecting the chamber's atmosphere. The sleeves are made of 15 mil flexible vinyl that allows maximum mobility and dexterity. Optional neoprene gloves available.

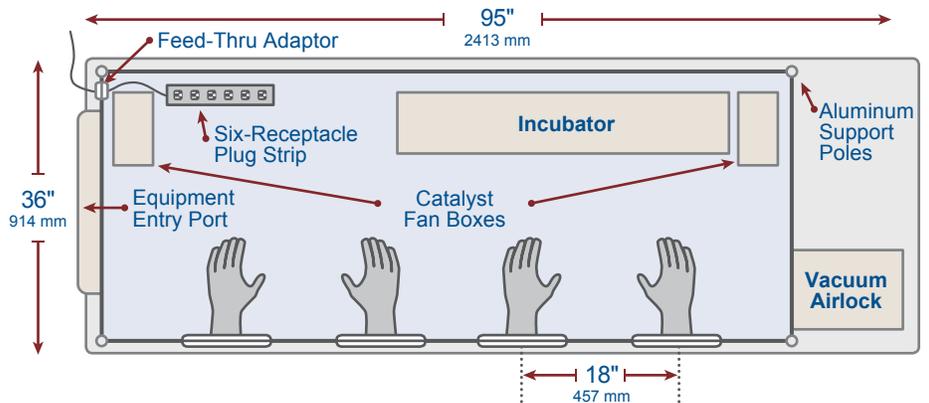
## Why Choose Coy Vinyl?

- Large, useable workspace and interior space because of the pliability of the vinyl and large glove ports that allow the user to reach higher and deeper into the chamber
- Easier to maintain more stringent anaerobic conditions
- Vinyl chambers use less gas because they expand and contract, compensating for volume changes associated with short gas injections or hands entering and exiting the chamber
- More economical to operate than rigid chambers that expel gas to the lab, wasting expensive anaerobic gas mix
- Flexibility of chamber lets user rest elbows on padded base rather than on a narrow rigid entry port, reducing fatigue
- At the end of the chamber's life, a new chamber can be attached to the existing airlock at a fraction of the cost of a completely new chamber set-up with airlock
- Operator productivity is improved because of the ease of entering the flexible chamber with attached latex gloves
- Reliable to operate; it is easy to solve issues before the anaerobic environment is compromised
- Life-cycle costs are lowest of the three types of chambers we offer
- Easy to custom size to fit your applications and space without large increases in cost or delivery time

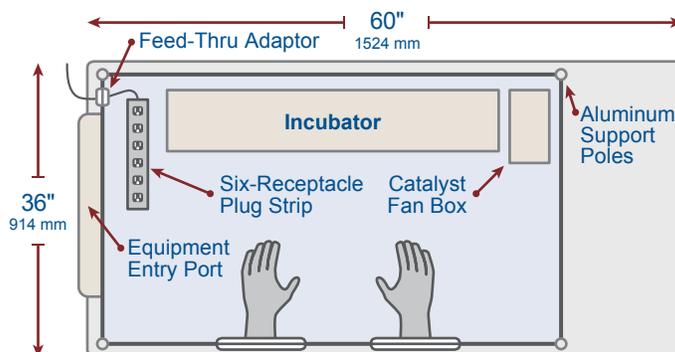
### Type A



### Type B



### Type C



**Please note that the dimensions given represent the overall size of the base. Typical placement of fan boxes and airlocks is shown. Some optional equipment is shown as well.**

# Options and Accessories for Vinyl Anaerobic Chambers

## Model 10 Gas Analyzer for Oxygen/Hydrogen



This patented analyzer constantly monitors both oxygen and hydrogen levels within a chamber at a fraction of the cost of two separate analyzers. The unit monitors both oxygen and hydrogen directly from the chamber atmosphere. The analyzer's constant LED display

keeps users continually informed of minute changes in oxygen and hydrogen levels and provides the operator the opportunity to make adjustments. If there is an incorrect gas mix or a problem with valves and regulators, users are alerted by visible and audible alarms. Use of the Model 10 Gas Analyzer can typically pay for itself. For example, labs can use less-expensive, non-certified gas mixes by employing the Model 10. This enables labs to reduce operating costs while also protecting against possible gas mix concentration issues. Voltage outputs are available as an upgrade to new and existing Model 10 units. The outputs allow the readings to transfer to a data logger, chart recorder or computer program, which is especially helpful when 24-hour documentation is required.

### Model 10 Gas Analyzer Specifications

	Oxygen	Hydrogen
<b>Range</b>	0-1999 ppm O <sub>2</sub>	1-100% H <sub>2</sub>
<b>Resolution</b>	+/- 1 ppm	+/-0.1% H <sub>2</sub>
<b>Accuracy</b>	1% of FS	1% of FS
<b>Drift Due to Temperature</b>	1 ppm O <sub>2</sub> / °C from 29°C	<0.1% H <sub>2</sub> / °C from 29°C
<b>Noise Level</b>	<1 ppm O <sub>2</sub>	<0.1% H <sub>2</sub>
<b>Alarms</b>	Adjustable from 0-1999 ppm Flashing LED Audible alarm that can be silenced	Preset non-adjustable <1% H <sub>2</sub> and >10% H <sub>2</sub> Flashing LED over 10% H <sub>2</sub> Flashing LED under 1% H <sub>2</sub> Audible alarm that can be silenced

## Model 2000 Forced Air Incubator for Vinyl Chambers



This incubator is custom-engineered to create a constant-temperature environment in vinyl chambers. Unlike cube-shaped incubators with swingout doors, the Model 2000 features a streamlined shape and sliding doors. There is no wasted space in front of the incubator for door clearance.

Uniform heating results from forced air being drawn horizontally across the inside face of the door panels and from around the incubator's outer shell. Solid-state electronics allow precise monitoring and control of heat output. A bright LED digital display provides a readout of the incubator's actual mean temperature and allows the operator to set the desired temperature. The Model 2000 is available in a standard unit with a temperature range of up to 40°C or in a higher-range unit up to 65°C. The incubator maintains a uniform temperature with a maximum deviation of +/- 1°C from the setpoint. It has a capacity of 475 standard (100 mm) petri dishes and is available in 110 or 220 volts.

## Large-Capacity Automatic Dehumidifier



This easy-to-maintain unit is used in highmoisture-content vinyl anaerobic chambers and provides a way to remove moisture without using a desiccant. The dehumidifier operates as a simple cold wall to condense moisture from the air; a drain removes excess moisture from the chamber.

Controls allow the user to adjust the amount of humidity for various environmental factors. The unit fits in the equipment entry port and can be added to existing units in the field.

## Three-Port Airlock

Plan for laboratory growth by specifying a three-port airlock at the time of initial chamber purchase. The airlock will provide maximum growth potential because a Coy add-on chamber can be purchased and installed at a later date without the cost of the airlock. The three-port vacuum airlock allows easy transfer of samples from one chamber to the other without compromising chamber interior atmospheres. Outside door swings out from opening.

## Add-On Chamber

Any size vinyl add-on chamber can be installed on a three-port airlock to allow a lab flexible, simplified growth. Two chambers attached to one airlock saves space and connects work areas, allowing either separate research to be done or simultaneous experiments with differing atmospheric conditions, temperature or background gas.

## Extra Sleeves, Gloves and Glove Ports

A chamber can be economically equipped for additional users and applications with extra pairs of latex gloves and attached sleeves if they are requested at time of purchase.

## Microscope View Port



Microscopes become more valuable tools for intrachamber work with the use of this optically clear flexible vinyl sock. The sock is sealed to the chamber wall and is installed directly over the microscope's eyepieces, enabling easy use of the oculars. This accessory is recommended

particularly for chambers with more than two gloves because it allows the microscope to be located away from the airlock door opening and allows a work area to be sited within the chamber interior near the microscope. Orders for this option should indicate the distance from the table to the top of the microscope eyepieces.

## Feed-Thru Adaptor



Two feed-thru adaptors (2"/51 mm and 1½"/38 mm) are supplied as standard to meet customer needs for electrical wiring, tubing or any type of cord that needs to be sealed through the chamber wall. Customers may order additional feed-thru adaptors as factory-installed options.

## Shelves



Vinyl chambers have sturdy metal shelving. The three-shelf units are designed with lips to help hold petri dishes, well plates and other items. Shelving units are 10½"/267 mm deep and 36"/914 mm, 28"/711 mm or 16"/406 mm long to optimize shelf space within various-sized vinyl chambers.

## Recirculating Atmosphere Filtration System (HEPA)



This system filters the chamber atmosphere and controls contamination by particles 0.3 micron and larger. The external pump-activated system has the filter mounted outside of the chamber. The system draws the internal atmosphere out of the chamber, through the external filter and back into the chamber. Equipped with

quick-disconnect fittings, the filter is fast and easy to change without compromising filter and chamber integrity. Other types of filters can be added to meet other filtration needs.

## Gas Injection System



Coy's automatic gas injection system frees the operator from worrying about having enough hydrogen to maintain an anaerobic environment. The system injects the hydrogen gas mix into the chamber on a fixed time schedule for a fixed time period, allowing users to leave the chamber unattended for days at a time. Laboratories achieve improved performance and ease of use when the

gas injection system is teamed with the Coy Model 10 Gas Analyzer.

## Incandescent Flaming Device with Foot Switch



Flaming a bacteriological loop and the edge of a culture tube inside a chamber is easy with Coy's incandescent flaming device. The flaming unit is plugged

into an electrical outlet inside the chamber. It is operated by a foot switch and routed through the chamber wall via the feed-thru adaptor. The device is activated only briefly, and the flaming has little or no effect on the chamber temperature.

## Stak-Paks with Desiccant

These paks provide an inexpensive way to remove small amounts of moisture from a system. Desiccant is contained between two wire mesh sheets so that chamber air can be circulated through the desiccant. The paks are designed to be stacked together so that multiple layers of desiccant can be added to the catalyst. No more than three paks are recommended for each fan box in order to maintain proper chamber air flow. Desiccant can be rejuvenated following the same procedure and schedule that is used for the catalyst.

## Stainless Steel Pan

This simple work pan covers the entire chamber floor and has a raised padded lip to prevent spills. It is ideal for use with caustic chemicals and can improve the life of the chamber.

## Overhead Lights

These simple, bright fluorescent lights are mounted outside of the chamber to improve visibility. Integrated into the chamber design, they are available in two standard sizes and 110 or 220 volts.

Options and Accessories for Anaerobic Chambers	Coy Anaerobic Chamber Models				
	Type A, B or C Vinyl	1 Person Aluminum (Gloved or Gloveless)	2 Person Aluminum (Gloved or Gloveless)	3, 4 or 5 ft. Polymer (Gloved)	3, 4 or 5 ft. Polymer (Gloveless)
Heated Chamber	0	0	0	0	S*
Automatic or Manual Airlock	0	0	0	0	0
Three-Port Airlock factory upgrade	0	0	0	NA	NA
Add-on chamber, available only with three-port airlock	A	NA	NA	NA	NA
Extra Sleeves and Gloves	0	0	0	0	0
Microscope Sock	0	0	0	0	0
Additional Feed-Thru Adaptor	0	0	0	0	0
Shelves	A	S	S	A	S
Recirculating Atmosphere Filtration System (HEPA)	A	A	A	A	A
Model 10 Gas Analyzer for Oxygen/Hydrogen	A	A	A	A	A
Voltage output for Model 10 Gas Analyzer	A	A	A	A	A
Incubator, Model 2000, high temperature, up to 65°C	A	NA	A*	NA	NA
Incubator, Model 2000, low temperature, up to 40°C	A	NA	A*	NA	NA
Incubator, Model 2002, high temperature, up to 65°C	NA	A	A	A	A
Incubator, Model 2002, low temperature, up to 40°C	NA	A	A	A	A
Gas Injection System	A	A	A	A	S
Incandescent Flaming Device with Foot Switch	A	A	A	A	A
Stak-Paks with Desiccant	A	A	A	A	A
Large Capacity Automatic Dehumidifier	A	NA	NA	NA	NA
Stainless Steel Pan	A	NA	NA	NA	NA
Overhead Lights, fluorescent, 24" or 48"	A	A	A	A	A

0 = Factory installed option to be specified at time of order, additional charges apply

S = Standard equipment on this unit

S\* = Unheated Gloveless Polymer Chambers not available

A = Accessory available for additional cost

A\* = Special consideration required

NA = Not available for this product

### Large Side Door

Allows easy introduction of necessary equipment.



### Automatic Pressure Relief Valve (rear of unit)

Vents excess pressure to the room or a fume hood.



### Feed-Thru Adaptor

Input location for electrical wiring, tubing and cords.



### Catalyst Fan Box (Heated or Unheated)

Made up of a fan to circulate the air and a tray to hold the catalyst, the fan box may be heated or unheated. The catalyst fan box circulates chamber air through the catalyst to remove O<sub>2</sub> by forming a water molecule.



### Stak-Pak with Catalyst

### Arm Port Plug

Slides and fits tightly into the arm hole of a chamber to make an airtight seal when the gloves are being changed or when the gloveless sleeves are idle. No additional effort required.



### Gloveless Sleeve (pictured) or Sleeve-Length Glove

Provides access to the chamber. Gloveless sleeve eliminates oxygen before entering the chamber without compromising anaerobic conditions.





### Model 10 Gas Analyzer

Patented analyzer constantly monitors and displays both atmospheric oxygen and hydrogen levels at a fraction of the cost of two separate analyzers. Visible and audible alarms alert the operator.

### Patented Diaphragm Top

Allows the chamber to physically adjust to the user's hands entering and exiting the glove box thus saving gas. There's no waiting for expensive electronics to compensate so there is no glove fight-back.



### Ball Valve

For rapid purging to establish initial atmosphere or to re-establish, as necessary.



# Aluminum Anaerobic Chamber



### Shelves

Adjustable-height polycarbonate interior shelves provided in sets of two.

### Automatic Airlock

Automatic airlocks remove  $O_2$  from ambient conditions to achieve acceptable levels of  $O_2$  for anaerobic work. The  $O_2$  is removed prior to opening the interior door and entry into the anaerobic chamber. The airlock reaches the low  $O_2$  level through a multiple purge/vacuum procedure. Digital controls allow adjustments in vacuum levels, number of cycles, calibration of pressure sensors, and programmable profiles, depending on the type of work being done in the chamber. See page 3 for airlock details. Manual airlocks are also available.

### Vacuum Airlock Door (Updated in 2006)

This update to the airlock door has a spring-loaded corner pivot which allows the door to swing up while parallel to the airlock, saving valuable space.

# Aluminum Anaerobic Chambers



## AVAILABLE IN TWO SIZES, EACH GLOVED OR GLOVELESS

### 1 PERSON:

Includes one fan box, two Stak-Paks with Catalyst, two sets of adjustable shelves, two glove ports

### 2 PERSON:

Includes two fan boxes, four Stak-Paks with Catalyst, four sets of adjustable shelves, four glove ports

### Standard Equipment and Features

- Constructed from epoxy-coated aluminum (1/8"/3 mm thick) with clear polycarbonate or acrylic (1/4"/6 mm thick) front
- Advanced silicone adhesives and sealants
- Leakproof self-sealing fasteners
- Viewing screen provides interior shadow-free ambient light
- Large side door located opposite the airlock allows introduction of equipment
- Airlock is equipped with moisture trap to prevent moisture from being drawn into the pump
- Patented diaphragm top
- Adjustable interior shelves
- Gas mix regulator and nitrogen background gas regulator plus tubing and fittings

- Automatic or manual vacuum airlock available (right-side placement standard; left side available upon request)
- Heated or unheated chambers with optional incubators available

## Gloved Aluminum Chamber

### Standard Features

- Neoprene sleeves with fitted latex gloves and arm port plugs
- Cuff length gloves can be easily replaced without affecting the chamber's atmosphere

## Gloveless Aluminum Chamber

### Standard Features

- Operator's arms and hands may enter the chamber through a gloveless sleeve with cuff without compromising anaerobic conditions
- Vacuum system (foot operated) creates a low O<sub>2</sub> atmosphere in the gloveless sleeves prior to operator removing arm port plugs. This allows handling and inspection of samples barehanded or with surgical gloves
- Arm port plugs seal the chamber when operator is not working in the chamber or when changes need to be made to the cuff or sleeve

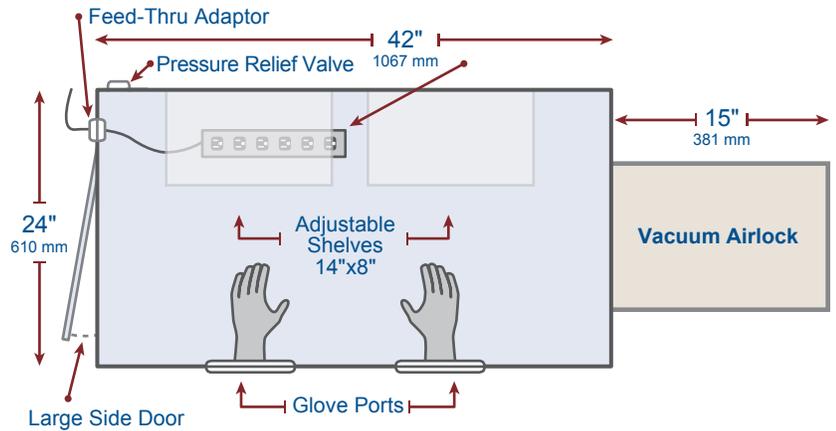
## Why Choose Coy Aluminum?

- Especially useful when harsh chemicals will be used in or near the unit
- Patented diaphragm top compensates for small volume changes, decreasing gas loss
- Durable and replaceable view screen ensures years of use and fewer leaks over time
- Facilitates handling heavy equipment or tooling inside the chamber

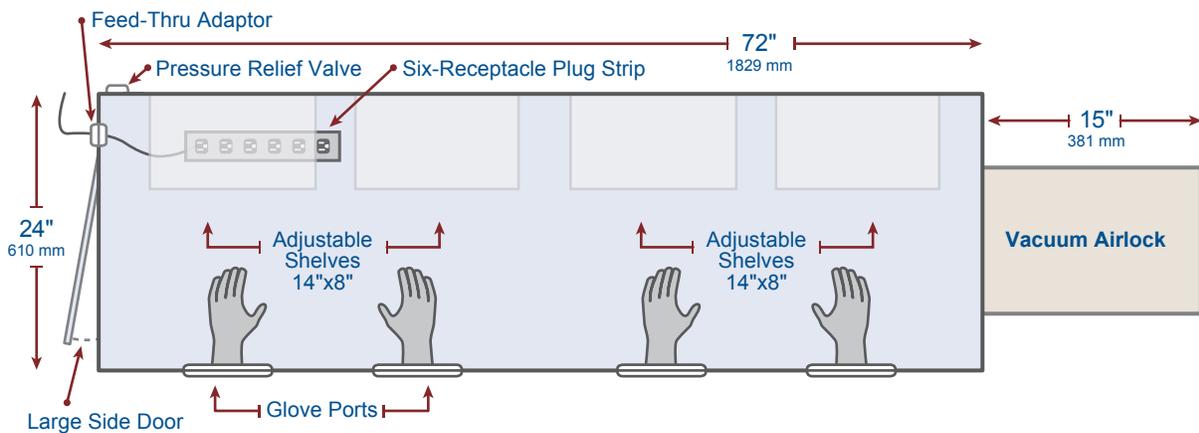
## Why Choose Gloveless?

Especially useful for clinical applications when tactile efficiency or manual dexterity is an issue, or when the strictest anaerobic environment is unnecessary

### 1 Person



### 2 Person



# Options and Accessories for Aluminum Anaerobic Chambers

## Model 10 Gas Analyzer for Oxygen/Hydrogen



This patented analyzer constantly monitors both oxygen and hydrogen levels within a chamber at a fraction of the cost of two separate analyzers. The unit monitors both oxygen and hydrogen directly from the chamber atmosphere. The analyzer's constant

LED display keeps users continually informed of minute changes in oxygen and hydrogen levels and provides the operator the opportunity to make adjustments. If there is an incorrect gas mix or a problem with valves and regulators, users are alerted by visible and audible alarms.

Use of the Model 10 Gas Analyzer can typically pay for itself. For example, labs can use less-expensive, non-certified gas mixes by employing the Model 10. This enables labs to reduce operating costs while also protecting against possible gas mix concentration issues. Voltage outputs are available as an upgrade to new and existing Model 10 units. The outputs allow the readings to transfer to a data logger, chart recorder or computer program, which is especially helpful when 24-hour documentation is required.

### Model 10 Gas Analyzer Specifications

	Oxygen	Hydrogen
<b>Range</b>	0-1999 ppm O <sub>2</sub>	1-100% H <sub>2</sub>
<b>Resolution</b>	+/- 1 ppm	+/-0.1% H <sub>2</sub>
<b>Accuracy</b>	1% of FS	1% of FS
<b>Drift Due to Temperature</b>	1 ppm O <sub>2</sub> / °C from 29°C	<0.1% H <sub>2</sub> / °C from 29°C
<b>Noise Level</b>	<1 ppm O <sub>2</sub>	<0.1% H <sub>2</sub>
<b>Alarms</b>	Adjustable from 0-1999 ppm Flashing LED Audible alarm that can be silenced	Preset non-adjustable <1% H <sub>2</sub> and >10% H <sub>2</sub> Flashing LED over 10% H <sub>2</sub> Flashing LED under 1% H <sub>2</sub> Audible alarm that can be silenced

## Model 2002 Forced Air Incubator for Rigid Chambers



The incubators for rigid chambers are sturdy wall-mounted units with five pull-out drawers for holding specimens for incubation. Each drawer features a system of slots, cavities and brackets for positioning petri dishes and well plates and securing them in place. The Model 2002 is equipped with solid-state electronics that allow precise monitoring and control of heat output. A bright LED digital display provides a readout of the incubator's

actual mean temperature and allows the operator to set the desired temperature. The Model 2002 is available in a standard unit with a temperature range of up to 40°C or in a higher-range unit up to 65°C. The incubator maintains a uniform temperature with a maximum deviation of +/- 1°C from the setpoint. Racks, designed to fit both petri dishes and well plates, have a capacity of 150 standard (100 mm) petri dishes or from six to 96 well plates depending on configuration and size.

*Note: A Model 2000 Incubator for Vinyl Chambers (see page 5) may be placed in 2-person aluminum chambers. See your Coy representative for details.*

## Three-Port Airlock

Plan for laboratory growth by specifying a three-port airlock at the time of initial chamber purchase. The airlock will provide maximum growth potential because a Coy add-on chamber can be purchased and installed at a later date without the cost of the airlock. The three-port vacuum airlock allows easy transfer of samples from one chamber to the other without compromising chamber interior atmospheres. Outside door swings out from opening.

## Add-On Chamber

Any size vinyl add-on chamber can be installed on a three-port airlock to allow a lab flexible, simplified growth. Two chambers attached to one airlock saves space and connects work areas, allowing either separate research to be done or simultaneous experiments with differing atmospheric conditions, temperature or background gas.

## Microscope View Port



Microscopes become more valuable tools for intrachamber work with the use of this optically clear flexible vinyl sock. The sock is sealed to the chamber wall and is installed directly over the microscope's eyepieces, enabling easy use of the oculars. This accessory is recommended particularly for chambers with more than

two gloves because it allows the microscope to be located away from the airlock door opening and allows a work area to be sited within the chamber interior near the microscope. Orders for this option should indicate the distance from the table to the top of the microscope eyepieces.

## Feed-Thru Adaptor



One feed-thru adaptor (1½ "/38 mm) is supplied as standard to meet customer needs for electrical wiring, tubing or any type of cord that needs to be sealed through the chamber wall. Customers may order additional feed-thru adaptors as factory-installed options.

## Shelves



Most rigid (polymer and aluminum) chambers come equipped with sets of adjustable-height shelves (8"D x 14"W / 203 mm x 356 mm). Chamber size determines the number of sets in each unit.

## Recirculating Atmosphere Filtration System (HEPA)



This system filters the chamber atmosphere and controls contamination by particles 0.3 micron and larger. The external pump-activated system has the filter mounted outside of the chamber. The system draws the internal atmosphere out of the chamber, through the external filter and back into the chamber. Equipped with quick-disconnect fittings, the filter is fast and easy to change without compromising filter and chamber integrity. Other types of filters can be added to meet other filtration needs.

## Gas Injection System



Coy's automatic gas injection system frees the operator from worrying about having enough hydrogen to maintain an anaerobic environment. The system injects the hydrogen gas mix into the chamber on a fixed time schedule for a fixed time period, allowing users to leave the chamber unattended for days at a time. Laboratories achieve improved performance and ease of use when the gas injection system is teamed with the Coy Model 10 Gas Analyzer.

## Incandescent Flaming Device with

Options and Accessories for Anaerobic Chambers	Coy Anaerobic Chamber Models				
	Type A, B or C Vinyl	1 Person Aluminum (Gloved or Gloveless)	2 Person Aluminum (Gloved or Gloveless)	3, 4 or 5 ft. Polymer (Gloved)	3, 4 or 5 ft. Polymer (Gloveless)
Heated Chamber	0	0	0	0	S*
Automatic or Manual Airlock	0	0	0	0	0
Three-Port Airlock factory upgrade	0	0	0	NA	NA
Add-on chamber, available only with three-port airlock	A	NA	NA	NA	NA
Extra Sleeves and Gloves	0	0	0	0	0
Microscope Sock	0	0	0	0	0
Additional Feed-Thru Adaptor	0	0	0	0	0
Shelves	A	S	S	A	S
Recirculating Atmosphere Filtration System (HEPA)	A	A	A	A	A
Model 10 Gas Analyzer for Oxygen/Hydrogen	A	A	A	A	A
Voltage output for Model 10 Gas Analyzer	A	A	A	A	A
Incubator, Model 2000, high temperature, up to 65°C	A	NA	A*	NA	NA
Incubator, Model 2000, low temperature, up to 40°C	A	NA	A*	NA	NA
Incubator, Model 2002, high temperature, up to 65°C	NA	A	A	A	A
Incubator, Model 2002, low temperature, up to 40°C	NA	A	A	A	A
Gas Injection System	A	A	A	A	S
Incandescent Flaming Device with Foot Switch	A	A	A	A	A
Stak-Paks with Desiccant	A	A	A	A	A
Large Capacity Automatic Dehumidifier	A	NA	NA	NA	NA
Stainless Steel Pan	A	NA	NA	NA	NA
Overhead Lights, fluorescent, 24" or 48"	A	A	A	A	A

0 = Factory installed option to be specified at time of order, additional charges apply

S = Standard equipment on this unit

S\* = Unheated Gloveless Polymer Chambers not available

A = Accessory available for additional cost

A\* = Special consideration required

NA = Not available for this product

## Foot Switch



Flaming a bacteriological loop and the edge of a culture tube inside a chamber is easy with Coy's incandescent flaming device. The flaming unit is plugged into an electrical outlet

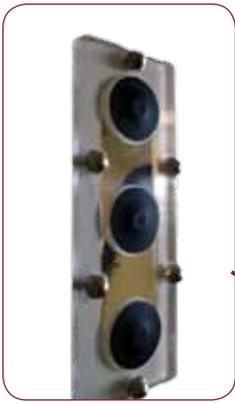
inside the chamber. It is operated by a foot switch and routed through the chamber wall via the feed-thru adaptor. The device is activated only briefly, and the flaming has little or no effect on the chamber temperature.

## Stak-Paks with Desiccant

These paks provide an inexpensive way to remove small amounts of moisture from a system. Desiccant is contained between two wire mesh sheets so that chamber air can be circulated through the desiccant. The paks are designed to be stacked together so that multiple layers of desiccant can be added to the catalyst. No more than three paks are recommended for each fan box in order to maintain proper chamber air flow. Desiccant can be rejuvenated following the same procedure and schedule that is used for the catalyst.

## Overhead Lights

These simple, bright fluorescent lights are mounted outside of the chamber to improve visibility. Integrated into the chamber design, they are available in two standard sizes and 110 or 220 volts.



### Automatic Pressure Relief Valve (rear of unit)

Vents excess pressure to the room or a fume hood.



### Additional Circulation Fan

Provides optimal air circulation; standard on the 4- and 5- foot polymer units (fan heated on 5-foot unit)

### Microscope View Port

This flexible vinyl sock fits directly over the eyepieces of your microscope, allowing them to extend through the wall of the glove box for easier use.



### Feed-Thru Adaptor

Input location for electrical wiring, tubing and cords



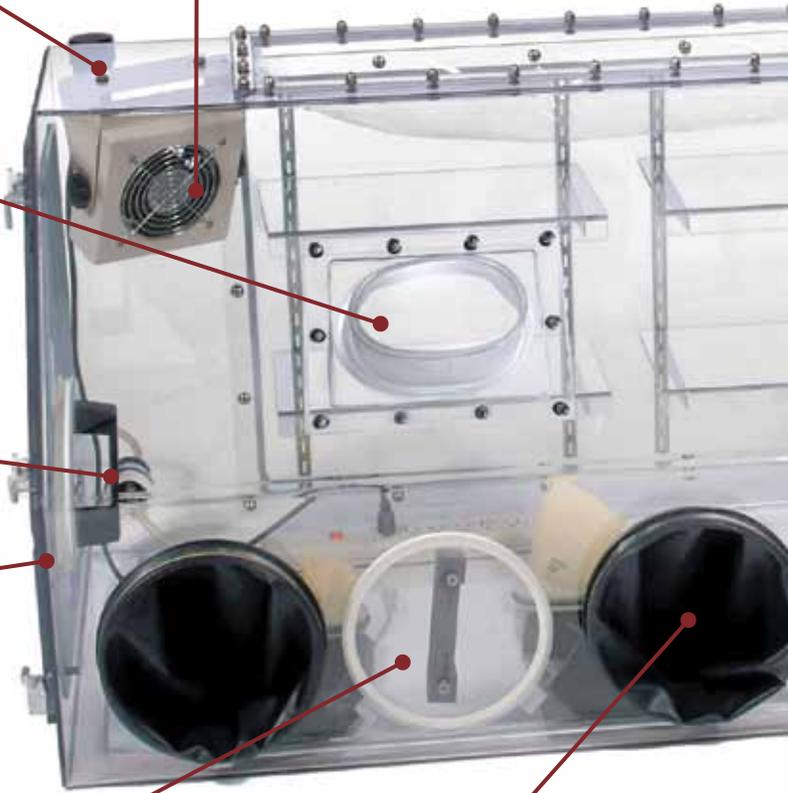
### Large Side Door

Allows easy introduction of necessary equipment.



### Arm Port Plug

Slides and fits tightly into the arm hole of a chamber to make an airtight seal when the gloves are being changed or when the gloveless sleeves are idle. No additional effort required.



### Gloveless Sleeve (pictured) or Sleeve-Length Glove

Provides access to the chamber. Gloveless sleeve eliminates oxygen before entering the chamber without compromising anaerobic conditions.

### Patented Diaphragm Top

Allows the chamber to physically adjust to the user's hands entering and exiting the glove box, thus saving gas. There's no waiting for expensive electronics to compensate so there is no glove fight-back.



### Integrated Catalyst Fan Box

Made up of a fan to circulate the air and a tray to hold the catalyst, the system is heated and has a built-in dehumidifier. The chamber air (gas mix with  $H_2$ ) is circulated through the catalyst which removes  $O_2$  by forming a water molecule.

### Ball Valve

For rapid purging to establish initial atmosphere or to reestablish as necessary.

### Control Panel

Includes controls and digital displays for temperature, humidity, the airlock and custom gas injection system control.

# Polymer Gloveless Anaerobic Chamber

### Automatic Purge-Only Airlock

An automatic purge-only airlock removes  $O_2$  from ambient conditions to acceptable levels prior to sample transfer into the chamber's strict anaerobic atmosphere. The airlock achieves the low  $O_2$  level through a simple purge procedure. Digital controls allow adjustments in purge time.

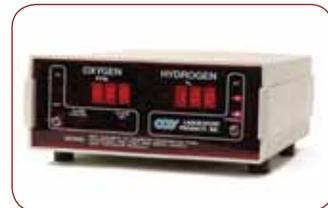
### Shelves

Adjustable-height polycarbonate interior shelves provided in sets of two.



### Model 10 Gas Analyzer for Oxygen/Hydrogen

Patented analyzer constantly monitors and displays both atmospheric oxygen and hydrogen levels at a fraction of the cost of two separate analyzers. Visible and audible alarms alert the operator. Available on all polymer units; located on a dedicated shelf above the airlock door (not shown in chamber photo above).





## THREE SIZES AVAILABLE:

- 3 Foot  
(with two arm ports)
- 4 Foot  
(with three arm ports)
- 5 Foot  
(with four arm ports)

## Standard Equipment and Features

- Solvent welded
- Patented diaphragm top
- Purge airlock is located on right side of the chamber unless requested otherwise at time of order
- Chamber manufactured from clear 1/4"/6 mm polycarbonate
- Two Stak-Paks with Catalyst
- Arm port plugs seal the chamber when operator is not working in it or when changes need to be made to the cuff, sleeve or glove

## Gloveless Polymer Chamber (pictured)

### Standard Features

- Automatic purge-only airlock
- Operator's arms and hands can enter the chamber through a gloveless sleeve with cuff without compromising anaerobic conditions

- Vacuum system (foot-operated) creates a low O<sub>2</sub> atmosphere in the gloveless sleeves prior to operator removing arm port plugs. By allowing handling and inspection of samples barehanded or with surgical gloves, the vacuum system offers better sample manipulation relative to a gloved system
- Automatic solid-state dehumidifier
- Gas mix regulator and nitrogen background gas regulator plus tubing and fittings
- Large side door (left side placement)
- Automatic, user-adjustable gas injection system
- Fully adjustable, automatic interior heating unit
- Adjustable interior shelves
- 4-foot (48"/1219 mm) unit has three glove ports, one of which is equipped with a sleeve-length glove to allow easy reach into the airlock for sample transfer, avoiding the gloveless sleeve process which can take up to 60 seconds
- Integrated catalyst fan box equipped with additional circulation fan (4-foot unit) or additional heated circulation fan (5-foot unit)

## Gloved Polymer Chamber

### Standard Features

- Neoprene sleeves with fitted latex gloves and arm port plugs; optional neoprene gloves available
- One gas mix regulator and tubing
- Manual purge airlock available (right side placement)
- Chamber available heated or unheated

## Why Choose Coy Polymer?

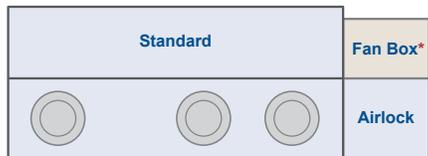
- Small customizable footprint enables chamber to fit into most spaces
- Units are low cost due to purge-only airlock
- Patented diaphragm top compensates for small volume changes, decreasing gas loss
- UV-resistant acrylic is also available for applications utilizing UV light inside the chamber
- Solvent welding ensures a strong, airtight structure that won't leak

## Why Choose Gloveless?

- When strictest anaerobic environment unnecessary
- Especially useful for clinical applications or when tactile efficiency or manual dexterity is an issue

## Port Locations for 4-Foot Chambers

Standard configuration has two glove ports with a third port on the right nearer the airlock. The centralized ports are gloveless but accessing the gloveless sleeve takes 30 to 60 seconds and is a drawback when the user simply wants to transfer samples. In the 4-foot gloveless units, this third port is advantageous because it has a sleeve-length glove equipped for faster access.



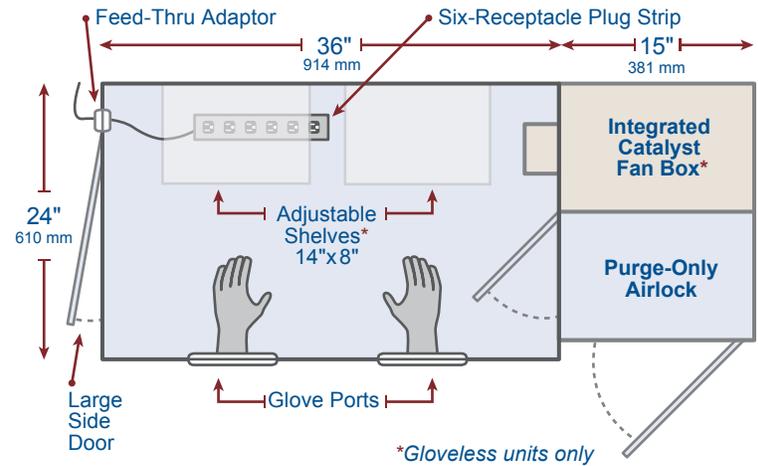
*\*Gloveless units only*

Optional glove port locations are evenly spaced across the chamber. This configuration is usually only used for microscope applications.

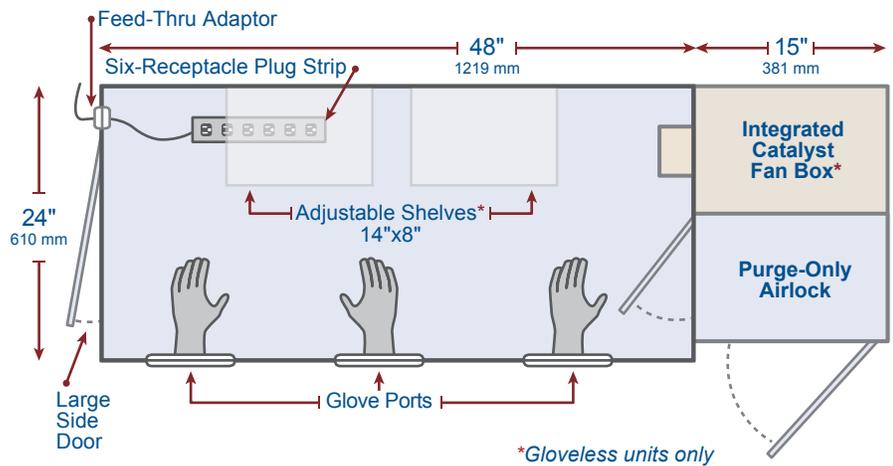


*\*Gloveless units only*

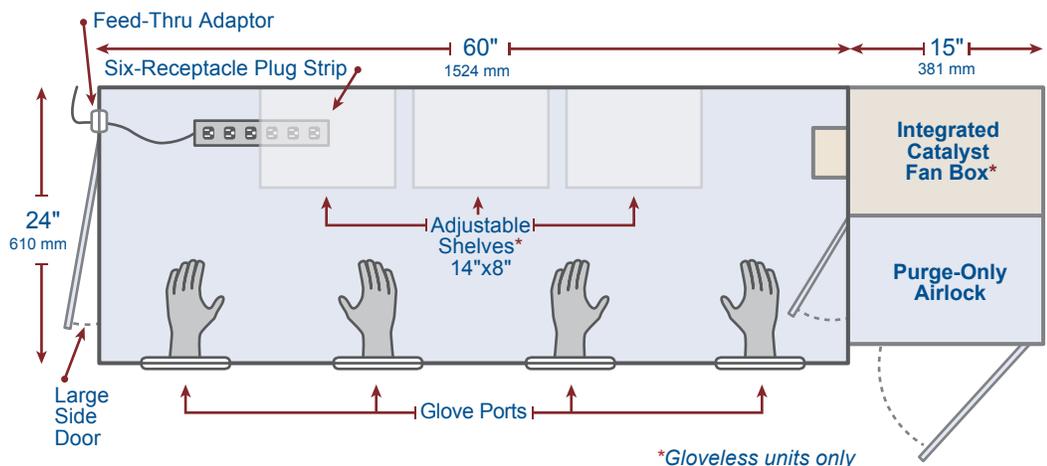
## 3 Foot



## 4 Foot



## 5 Foot



# Options and Accessories for Polymer Anaerobic Chambers

## Model 10 Gas Analyzer for Oxygen/Hydrogen



This patented analyzer constantly monitors both oxygen and hydrogen levels within a chamber at a fraction of the cost of two separate analyzers. The unit monitors both oxygen and hydrogen directly from the chamber atmosphere. The analyzer's constant

LED display keeps users continually informed of minute changes in oxygen and hydrogen levels and provides the operator the opportunity to make adjustments. If there is an incorrect gas mix or a problem with valves and regulators, users are alerted by visible and audible alarms.

Use of the Model 10 Gas Analyzer can typically pay for itself. For example, labs can use less-expensive, non-certified gas mixes by employing the Model 10. This enables labs to reduce operating costs while also protecting against possible gas mix concentration issues. Voltage outputs are available as an upgrade to new and existing Model 10 units. The outputs allow the readings to transfer to a data logger, chart recorder or computer program, which is especially helpful when 24-hour documentation is required.

### Model 10 Gas Analyzer Specifications

	Oxygen	Hydrogen
Range	0-1999 ppm O <sub>2</sub>	1-100% H <sub>2</sub>
Resolution	+/- 1 ppm	+/-0.1% H <sub>2</sub>
Accuracy	1% of FS	1% of FS
Drift Due to Temperature	1 ppm O <sub>2</sub> / °C from 29°C	<0.1% H <sub>2</sub> / °C from 29°C
Noise Level	<1 ppm O <sub>2</sub>	<0.1% H <sub>2</sub>
Alarms	Adjustable from 0-1999 ppm Flashing LED Audible alarm that can be silenced	Preset non-adjustable <1% H <sub>2</sub> and >10% H <sub>2</sub> Flashing LED over 10% H <sub>2</sub> Flashing LED under 1% H <sub>2</sub> Audible alarm that can be silenced

## Model 2002 Forced Air Incubator for Rigid Chambers



The incubators for rigid chambers are sturdy wall-mounted units with five pull-out drawers for holding specimens for incubation. Each drawer features a system of slots, cavities and brackets for positioning petri dishes and well plates and securing them in place. The Model 2002 is equipped with solid-state electronics that allow precise monitoring and control of heat output. A bright LED digital display provides a readout of the incubator's

actual mean temperature and allows the operator to set the desired temperature. The Model 2002 is available in a standard unit with a temperature range of up to 40°C or in a higher-range unit up to 65°C. The incubator maintains a uniform temperature with a maximum deviation of +/- 1°C from the setpoint. Racks, designed to fit both petri dishes and well plates, have a capacity of 150 standard (100 mm) petri dishes or from six to 96 well plates depending on configuration and size.

## Microscope View Port



Microscopes become more valuable tools for intrachamber work with the use of this optically clear flexible vinyl sock. The sock is sealed to the chamber wall and is installed directly over the microscope's eyepieces, enabling easy use of the oculars. This accessory is recommended particularly for chambers with more than

two gloves because it allows the microscope to be located away from the airlock door opening and allows a work area to be sited within the chamber interior near the microscope. Orders for this option should indicate the distance from the table to the top of the microscope eyepieces.

## Feed-Thru Adaptor



One feed-thru adaptor (1½ "/38 mm) is supplied as standard to meet customer needs for electrical wiring, tubing or any type of cord that needs to be sealed through the chamber wall. Customers may order additional feed-thru adaptors as factory-installed options.

## Shelves



Most rigid (polymer and aluminum) chambers come equipped with sets of adjustable-height shelves (8"D x 14"W/203 mm x 356 mm). Chamber size determines the number of sets for each unit.

## Recirculating Atmosphere Filtration System (HEPA)



This system filters the chamber atmosphere and controls contamination by particles 0.3 micron and larger. The external pump-activated system has the filter mounted outside of the chamber.

The system draws the internal atmosphere out of the chamber, through the external filter and back into the chamber. Equipped with quick-disconnect fittings, the filter is fast and easy to change without compromising filter and chamber integrity. Other types of filters can be added to meet other filtration needs.

## Gas Injection System



Coy's automatic gas injection system frees the operator from worrying about having enough hydrogen to maintain an anaerobic environment. The system injects the hydrogen gas mix into the chamber on a fixed time schedule for a fixed time period, allowing users to leave the chamber unattended for days at a time. Laboratories

achieve improved performance and ease of use when the gas injection system is teamed with the Coy Model 10 Gas Analyzer.

## Incandescent Flaming Device with Foot Switch



Flaming a bacteriological loop and the edge of a culture tube inside a chamber is easy with Coy's incandescent flaming device. The flaming unit is plugged into an electrical outlet inside the chamber. It is operated by a foot switch and routed through the chamber wall via the feed-thru adaptor. The device is activated only briefly and the flaming has little or no effect on the chamber temperature.

## UV Light and UV Resistant Acrylic Upgrade

Provides uniform illumination and decontamination of the work area. Unique light reflector allows all UV light to be directed to the work area, providing more effective irradiation and eliminating contamination. UV Resistant Acrylic Upgrade is an upgrade of the entire chamber to material that absorbs UV light to protect the user.

## Stak-Paks with Desiccant



These paks provide an inexpensive way to remove small amounts of moisture from a system. Desiccant is contained between two wire mesh sheets so that chamber air can be circulated through the desiccant. The paks are designed to be stacked

together so that multiple layers of desiccant can be added to the catalyst. No more than three paks are recommended for each fan box in order to maintain proper chamber air flow. Desiccant can be rejuvenated following the same procedure and schedule that is used for the catalyst.

## Overhead Lights

These simple, bright fluorescent lights are mounted outside of the chamber to improve visibility. Integrated into the chamber design, they are available in two standard sizes and 110 or 220 volts.

Options and Accessories for Anaerobic Chambers	Coy Anaerobic Chamber Models				
	Type A, B or C Vinyl	1 Person Aluminum (Gloved or Gloveless)	2 Person Aluminum (Gloved or Gloveless)	3, 4 or 5 ft. Polymer (Gloved)	3, 4 or 5 ft. Polymer (Gloveless)
Heated Chamber	0	0	0	0	S*
Automatic or Manual Airlock	0	0	0	0	0
Three-Port Airlock factory upgrade	0	0	0	NA	NA
Add-on chamber, available only with three-port airlock	A	NA	NA	NA	NA
Extra Sleeves and Gloves	0	0	0	0	0
Microscope Sock	0	0	0	0	0
Additional Feed-Thru Adaptor	0	0	0	0	0
Shelves	A	S	S	A	S
Recirculating Atmosphere Filtration System (HEPA)	A	A	A	A	A
Model 10 Gas Analyzer for Oxygen/Hydrogen	A	A	A	A	A
Voltage output for Model 10 Gas Analyzer	A	A	A	A	A
Incubator, Model 2000, high temperature, up to 65°C	A	NA	A*	NA	NA
Incubator, Model 2000, low temperature, up to 40°C	A	NA	A*	NA	NA
Incubator, Model 2002, high temperature, up to 65°C	NA	A	A	A	A
Incubator, Model 2002, low temperature, up to 40°C	NA	A	A	A	A
Gas Injection System	A	A	A	A	S
Incandescent Flaming Device with Foot Switch	A	A	A	A	A
Stak-Paks with Desiccant	A	A	A	A	A
Large Capacity Automatic Dehumidifier	A	NA	NA	NA	NA
Stainless Steel Pan	A	NA	NA	NA	NA
Overhead Lights, fluorescent, 24" or 48"	A	A	A	A	A

0 = Factory installed option to be specified at time of order, additional charges apply

S = Standard equipment on this unit

S\* = Unheated Gloveless Polymer Chambers not available

A = Accessory available for additional cost

A\* = Special consideration required

NA = Not available for this product

## Removable Rear Panel

Larger equipment may be placed in the chamber through this removable panel (30"W x 19"H/762 mm x 483 mm). Numerous bolts and finger-tight nuts ensure an airtight and reliable seal. The bolt and nut sealing action takes longer to attach or remove than opening the side door.

## Chamber Specifications

### COY Vinyl Anaerobic Chamber

### COY Aluminum Anaerobic Chamber

	COY Vinyl Anaerobic Chamber			Gloved		Gloveless	
	Type A Vinyl	Type B Vinyl	Type C Vinyl	1 Person	2 Person	1 Person	2 Person
<b>Total Chamber Footprint</b>							
Inches (LxDxH)	77 x 36 x 40 *	95 x 36 x 40 *	60 x 36 x 40 *	58 x 24 x 36	88 x 24 x 36	58 x 24 x 36	88 x 24 x 36
Millimeters (LxDxH)	1956 x 914 x 1016*	2413 x 914 x 1016*	1524 x 914 x 1016*	1473 x 609 x 914	2235 x 609 x 914	1473 x 609 x 914	2235 x 609 x 914
<b>Interior Work Area</b>							
Inches (LxD)	59 x 32	78 x 32	42 x 32	41 x 23	71 x 23	41 x 23	71 x 23
Millimeters (LxD)	1499 x 813	1981 x 813	1067 x 813	1041 x 584	1803 x 584	1041 x 584	1803 x 584
Chamber Capacity (100 mm petri dishes)	Up to 1,000	2,000+	Up to 600	Up to 600	Up to 1,000	Up to 600	Up to 1,000
<b>Number of Glove Ports</b>							
Glove Port Style	Oval	Oval	Oval	Round	Round	Round	Round
Inches (WxH or Dia.)	11 x 17	11 x 17	11 x 17	8	8	8	8
Millimeters (WxH or Dia.)	279 x 432	279 x 432	279 x 432	203	203	203	203
Glove and Sleeve Material	Vinyl sleeve with cuff length latex glove	Vinyl sleeve with cuff length latex glove	Vinyl sleeve with cuff length latex glove	Neoprene sleeve with latex glove	Neoprene sleeve with latex glove	Neoprene sleeve with latex cuff	Neoprene sleeve with latex cuff
<b>Chamber Temperature Control</b>							
Temperature Control Range	← +3°C ambient to 44°C; upgrade available to 65°C for all Coy chambers →						
Temperature Control Accuracy	← Work area: +/- 1°C for all Coy chambers →						
<b>Removable Equipment Entry</b>							
Type	S	S	S	NA	NA	NA	NA
Inches (WxH or Dia.)	27	27	27				
Millimeters (WxH or Dia.)	686	686	686				
<b>Large Side Door</b>							
Inches (WxH)	NA	NA	NA	17 x 29**	17 x 29**	17 x 29**	17 x 29**
Millimeters (WxH)				432 x 737**	432 x 737**	432 x 737**	432 x 737**
<b>Power Requirements</b>							
	← 120 V • 60 Hz • 15 amp or 220 V • 50 Hz • 7.5 amp for all Coy chambers →						

## Airlock Specifications

Interior Dimensions							
Inches (LxDxH)	13.6 x 13.6 x 13.4						
Millimeters (LxDxH)	345 x 345 x 340						
Capacity (100 mm petri dishes)	150	150	150	150	150	150	150
Automatic or Manual Airlock							
Airlock Transfer Time	Both						
	<60 seconds						

## Incubator Specifications

Internal Incubator							
Interior Volume	A	A	A	A	A	A	A
Cubic Feet	2.5	2.5	2.5	1.15	1.15	1.15	1.15
Liters	71	71	71	33	33	33	33
Capacity (100 mm petri dishes)	475	475	475	150	475 <sup>†</sup>	150	475 <sup>†</sup>

S = Standard equipment on this unit

A = Accessory available for additional cost

NA = Not available for this product

\* Actual height varies based on inflation

\*\* Not a perfect square or rectangle as the opening follows the chamber viewing angle.

† This capacity available when using the Model 2002 incubator which has a larger interior volume. Consult your Coy representative for details.



## Workbenches

We offer structurally strong, high-quality workbenches in depths of 24"/609 mm or 36"/914 mm and lengths of 48"/1219 mm, 60"/1524 mm, 72"/1829 mm and 96"/2438 mm. These laminate-topped tables have an industrial-grade, 45-pound, 1 1/8" thick core and a radius-front edge. All workbenches have 16-gauge steel, square-tube legs that adjust from 30" to 36" high with heavy adjusting bolts. Nickel-plated, self-leveling glides finish the legs. The workbenches have a capacity of 5,000 pounds and are easily assembled in under 20 minutes. These workbenches are compatible with all of our chambers.

## Chamber Specifications

## COY Polymer Anaerobic Chamber

Gloved

Gloveless

	3 foot	4 foot	5 foot	3 foot	4 foot	5 foot
<b>Total Chamber Footprint</b>						
Inches (LxDxH)	50 x 26 x 28	62 x 26 x 28	74 x 26 x 28	50 x 26 x 28	62 x 26 x 28	74 x 26 x 28
Millimeters (LxDxH)	1270 x 660 x 711	1575 x 660 x 711	1880 x 660 x 711	1270 x 660 x 711	1575 x 660 x 711	1880 x 660 x 711
<b>Interior Work Area</b>						
Inches (LxD)	35 x 23	47 x 23	59 x 23	35 x 23	47 x 23	59 x 23
Millimeters (LxD)	889 x 584	1194 x 584	1524 x 584	889 x 584	1194 x 584	1524 x 584
Chamber Capacity (100 mm petri dishes)	Up to 400	Up to 500	Up to 650	Up to 400	Up to 500	Up to 650
<b>Number of Glove Ports</b>						
<b>Glove Port Style</b>						
Inches (WxH or Dia.)	8	8	8	8	8	8
Millimeters (WxH or Dia.)	203	203	203	203	203	203
<b>Glove and Sleeve Material</b>						
<b>Chamber Temperature Control</b>						
Temperature Control Range	+3°C ambient to 44°C; upgrade available to 65°C for all Coy chambers					
Temperature Control Accuracy	Work area: +/- 1°C for all Coy chambers					
<b>Removable Equipment Entry</b>						
<b>Type</b>						
Inches (WxH or Dia.)	30 x 19	30 x 19	30 x 19	30 x 19	30 x 19	30 x 19
Millimeters (WxH or Dia.)	762 x 483	762 x 483	762 x 483	762 x 483	762 x 483	762 x 483
<b>Large Side Door</b>						
Inches (WxH)	18x18**	18x18**	18x18**	18x18**	18x18**	18x18**
Millimeters (WxH)	457x457**	457x457**	457x457**	457x457**	457x457**	457x457**
<b>Power Requirements</b>						
120 V • 60 Hz • 15 amp or 220 V • 50 Hz • 7.5 amp for all Coy chambers						

## Airlock Specifications

<b>Interior Dimensions</b>						
Inches (LxDxH)	12 x 10 x 14					
Millimeters (LxDxH)	305 x 254 x 356					
Capacity (100 mm petri dishes)	50	50	50	50	50	50
<b>Automatic or Manual Airlock</b>						
<b>Airlock Transfer Time</b>						
60-190 seconds						

## Incubator Specifications

<b>Internal Incubator</b>						
<b>Interior Volume</b>						
Cubic Feet	1.15	1.15	1.15	1.15	1.15	1.15
Liters	33	33	33	33	33	33
Capacity (100 mm petri dishes)	150	150	150	150	150	150

S = Standard equipment on this unit

A = Accessory available for additional cost

NA = Not available for this product

\* Actual height varies based on inflation

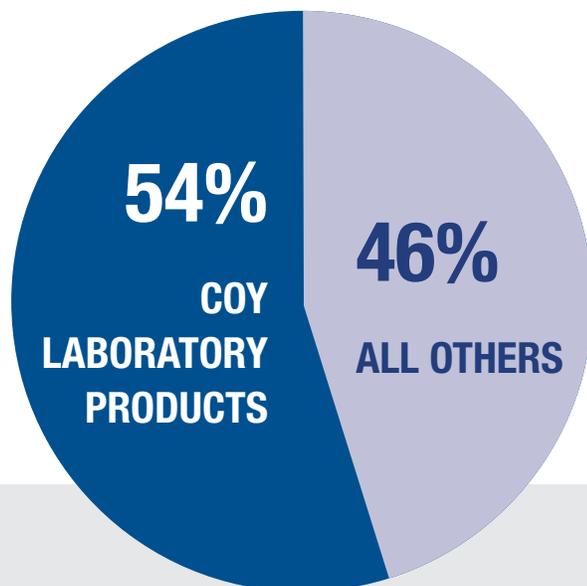
\*\* Not a perfect square or rectangle as the opening follows the chamber viewing angle.

† This capacity available when using the Model 2002 incubator which has a larger interior volume. Consult your Coy representative for details.

## We're About Relationships and Service

After nearly four decades of global success, at Coy Laboratory Products, we still focus on personal service. Our relationships with customers and attention to their individual needs have put Coy anaerobic chambers in laboratories and research facilities throughout the world. Our emphasis on service and our ability to fulfill specific customer requirements are made possible by the flexibility and versatility of our products.

The Coy formula of simple, basic product design plus interchangeability of tested components makes custom engineering easy. Many accessories can be used together to control multiple aspects of a chamber environment simultaneously. With Coy, you get a convenient, cost-effective chamber that works, day in and day out. When you contact Coy Laboratory Products, you stand a pretty good chance of actually talking to a member of the Coy family who will be ready to take your call and serve you! Contact us today.



### Coy Anaerobic Chambers The #1 Choice in Microbiology

Anaerobic chamber citations (%) in all American Society of Microbiology journals

- ➔ 54% Coy Laboratory Products
  - ➔ 46% All Other Anaerobic Chambers Combined
- (January 1998-January 2008)

### Coy O<sub>2</sub> Control Glove Boxes and Cabinets for InVITRO Studies.

Coy manufactures a line of O<sub>2</sub>-controlled glove boxes using a sensor and controller on a feedback loop system to control O<sub>2</sub> levels in 0.1% increments from 0 to ambient. Designed originally for cell biology studies, many traditional anaerobic microbiology researchers now use these units for microaerophilic studies. As an additional option the O<sub>2</sub> control system that powers these glove boxes can be added to any existing anaerobic chamber—contact Coy for further information.



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