

Hypoxic chambers

O₂ control enviroment for *InVitro* studies



O₂ control glove boxes

O₂ control cabinets





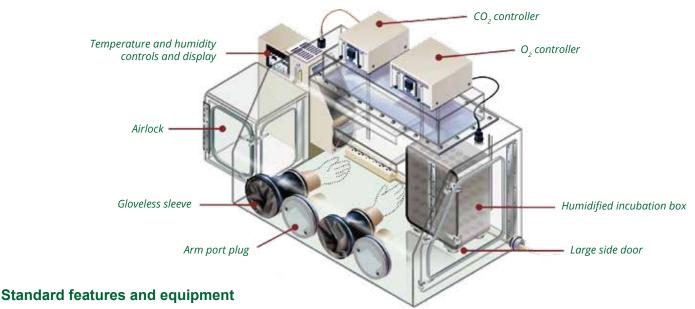
Hypoxic • Hyperoxic • Normoxic • Physiologic • Intermittent hypoxia • Pathologic

Flexible solutions. Reliable results.



Accelerate your biomedical research

O₂ control glove boxes for *InVitro* studies



- Control of O, and CO, in 0.1% increments
- Gloveless sleeves (operator's arms and hands may enter the box through a cuff-and-sleeve system without compromising the environment)
- Large side door for initial equipment installation
- Interior power supply
- Arm port plugs seal box when operator is not working in it
- Adjustable interior shelves
- Gloves may be attached to sleeves

Microscope view port

 Patented diaphragm top to compensate for small volume changes (e.g. hands entering), increasing user ergonomic comfort

Microscopes, which are valuable tools for intrabox work, are easier

to use with this optically clear, flexible vinyl port. The port is sealed to

the box wall and is installed directly over the microscope's eyepieces,

enabling easy use of the oculars. Cultures may go directly from incu-

bation to the microscope, allowing the researcher to see effects that

may be lost when an imaging and/or media change is done outside of a controlled environment. Custom sizing of glove boxes to fit specific

Ergonomic sliding airlock shelf for sample transfer

Adaptable to your specific needs

Recirculating atmosphere filtration system - HEPA

This capsule system filters the box atmosphere and controls contamination through a standard HEPA filter. The external pump-activated system has the filter mounted outside the box. Equipped with sealed, quick-disconnect fittings, the filter is fast and easy to change without compromising filter and glove box integrity. Other types of filters can be added.

UV light

A combination of fluorescent and 254-nanometer UV lights provides illumination and decontamination of the work area.

Anoxic upgrade kit

Coy offers a kit for upgrading O_2 control glove boxes to enable the user to create an anoxic environment, using catalyst reacting with a non-flammable hydrogen gas mix.

Imaging glove box: This alternative to microscope stage chambers and enclosures for live cell imaging provides a constant environment during media change, incubation and imaging.

microscopes is available.



Feed-thru adaptor

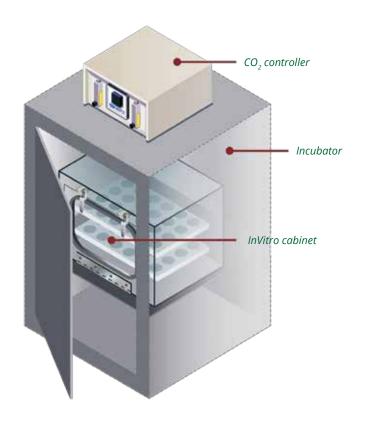
Electrical wiring, tubing or cords are input through factory-installed feed-thru adaptors sealed through the glove box wall.

Custom sizing for analytical equipment

Perform all analysis and manipulations in a controlled environment. Custom sizing and design allow for use of equipment such as a flow cytometer, plate reader, bio-reactor and more.



O₂ control cabinets for *InVitro* studies



Standard features and equipment

- O₃ controller and sensor
- Pressure relief valve
- Two sensor ports
- Circulation fan
- Gas inlet
- Pullout sliding shelves
- Humidification tray
- Adjustable leveling pads
- Factory calibrated for 0 20.9% O₂ operation

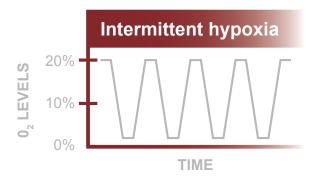
COY automatic CO, control system

Used in conjunction with the $\rm O_2$ controller, the $\rm Coy~CO_2$ controller allows for precise control and constant digital monitoring of $\rm CO_2$ gas inside the cabinet. The controller compares the measured $\rm CO_2$ level to a user-defined set point and controls the introduction of $\rm N_2$ or $\rm CO_2$ gas into the cabinet. The digital display allows the user to continuously monitor the cabinet $\rm CO_2$ level and adjust the level from 0-20% in 0.1% increments. Unlike other systems, this dual controller approach allows simultaneous bi-directional control of $\rm O_2$ and $\rm CO_2$, which is important since an adjustment in one gas can affect the level of the other setpoint. The digital display allows the user to monitor the $\rm CO_2$ levels constantly for 0-20% control in 0.1% increments.

Intermittent hypoxia (for dynamic O₂ cycling)

A ramp and soak upgrade is available as a factory-installed option for timed oxygen profile/cycle needs. The upgrade includes automatic cycling between multiple $\rm O_2$ setpoints plus voltage outputs that allow readings to transfer to a data logger, chart recorder or computer program. Transfer is especially helpful when 24-hour documentation is required.





O₂ control glove boxes for *InVitro* studies

Product details

Control ranges

O, CONTROL

Factory calibrated for 0-20.9% O₂ operation. Hyperoxic studies are possible.

CO, CONTROL

0-20% in 0.1% increments and control tolerance.

TEMPERATURE CONTROL

Factory calibrated for 0-20.9% O₂ operation. Hyperoxic studies are possible.

HUMIDITY IN GLOVE BOX

Controlled to create non-condensing environment.

HUMIDITY IN INCUBATION BOX

Standard sizes

POLYCARBONATE SIZES, INTERNAL WORKSPACE

1 person: 1041 x 584 x 584 mm

2 person: 1499 x 584 x 584 mm

Custom sizing available.

Contact us to discuss your needs.



O₂ control cabinets for *InVitro* studies

Product details

Custom sizing options

Though this cabinet comes in four standard-size units, we can economically custom size or configure a cabinet to your lab needs. With modular designs and accessories, and 40 years of in-house customization experience, Coy is flexible in its problem-solving approach.



Standard Sizes

O₂ control cabinet - model 1: 241 x 406 x 381 mm

1 shelf

O₂ control cabinet - model 2: 292 x 406 x 381 mm

2 shelf

O₂ control cabinet - model 3: 356 x 406 x 381 mm

3 shelf

O₂ control cabinet - model 4: 413 x 406 x 381 mm

4 shelf

Custom sizing available. Contact us to discuss your needs.

