# CHAMBERS AND GLOVE BOXES

# Controlled Atmosphere (Anaerobic Chamber) Glove Box

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

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

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

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

#### Some typical applications include:

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

#### The Basic Chemical Reaction.

The internal atmosphere is drawn off the floor of the glove box and is pushed up through the heating elements and the warm Palladium (Pd) pellets. The Hydrogen in the special gas mixture then reacts with trace amounts of Oxygen to create water vapor. The excess water vapor is then absorbed by the Molecular Sieve $^{\mathsf{TM}}$  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).



## 855-AC, Anaerobic Chamber

855-AC/Exp, Export Model

#### **Basic Features Include:**

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

#### Electrical requirements.

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