



The Stovall Hybridization Oven

- Quick Heating
- Easy Cleaning
- Small Footprint

A Product of
STOVALL
LIFE SCIENCE, INC

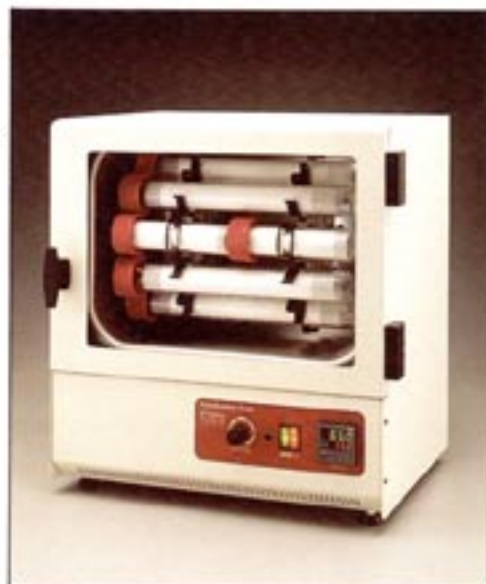
FEATURE/BENEFITS

- ❑ Quick Heating & Recovery. Quick heating from room temperature to 65° C in 5 to 14 minutes depending on number of bottles and amount of buffer.
- ❑ Seamless stainless steel chamber for easy cleaning and safe containment of spills. This is the only hybridization incubator on the market with this safety feature.
- ❑ Variable speed motor rotates the carousel from 0 to 22 rpm, allowing choice of optimum speed for probe or wash.
- ❑ The H010 unit holds 10 35mm x 300mm borosilicate bottles or 20 35mm x 150mm bottles.
- ❑ Optional carousel for larger diameter hybridization bottles. The larger diameter bottles (55mm to 70mm id) allow for no overlap of membrane filters.
- ❑ The small footprint of the oven conserves precious lab counter space. A second oven can stack on top of the first, if so desired.
- ❑ Microprocessor, PID temperature controller with 2 digital readouts holds temperature within +/- 0.1 degrees C. Two digital readouts, one for set point and one for actual oven temperature.
- ❑ A thermal fuse, controlled separately from the microprocessor temperature controller, protects the incubator from thermal runaway.
- ❑ Coated bottle retainer clips to protect bottles from scratches.
- ❑ Large polycarbonate window for excellent visibility.
- ❑ Carousel jog feature for convenient placement and retrieval of containers.
- ❑ Belt clutch provides safety slippage should anything interfere with the rotating carousel.
- ❑ One year warranty.

FASTER AND MORE EFFICIENT

The Stovall Oven improves upon other available incubators and ovens by increasing the speed of heating and cooling, providing a safer seamless heating chamber to contain spills, and offering an optional carousel for holding larger diameter hybridizing containers, all in a compact space. Other incubators take up to 45 minutes to heat from ambient to 65° C; the Stovall Oven takes five to fourteen minutes to reach 65° C, depending on the thermal load.

The rolling or rotating bottle technique for hybridizing Southern and Northern and Western blots, slot and dot blots and for in situ screening of plaque and colonies to specific probes is rapidly becoming the method of choice for researchers. The ease, convenience, safety and economy of using the same leak proof containers for incubations and washes has caused this shift from sealed bags to bottle techniques.



BETTER RESULTS/LARGE CAPACITY

In the rotisserie oven hybridizations are carried out in leak proof bottles rather than in plastic bags or boxes. With the bottle system the membrane is rolled into a spiral, placed into the bottle which is secured in the oven's carousel. The



membrane is saturated and drained in each revolution of the carousel ensuring two results: thorough and even exposure of the blots to probe or wash solutions and evenness of temperature through the averaging of any gradient which may exist within the heated chamber.

A sheet of nylon mesh separates the membrane where it overlaps itself and also separates where several blots are rolled together and put into the same bottle. This separation allows full exposure of the membrane to probe or wash solutions.

As many as ten large bottles or twenty small bottles may be rotated at the same time in the Stovall H010 Oven.

SAFETY AND CONVENIENCE

The deep drawn, stainless steel chamber of the Stovall Oven provides a seamless containment for any reagent spills. This containment is easy and convenient to clean and safer to manage than the awkward removal of spill trays in other hybridization units.

A proximate thermal fuse, independent of the temperature controller, protects the unit from thermal runaway.



ACCESSORIES AND OPTIONS



There are two models of the oven available, the H010 which holds two sizes of borosilicate glass bottles (35 x 300mm and 35 x 150mm) and the H04 which holds four large size acrylic bottles. A tube rack to hold six of either glass bottles is useful for safe storage of tubes and for probe and buffer wash additions.

The epoxy covered rack withstands heat and steam sterilization.

CONVENIENT AND RELIABLE OPERATION

The digital PID (Proportional/Integral/Derivative) controller which measures and controls chamber temperature adjusts set points simply and quickly by touch buttons. Dual LEDs display both actual and set-point temperatures continuously. A jog feature makes setting and retrieving bottles from the carousel simple and convenient. The strong blower and heater provide quick recovery of chamber temperature after bottles are reinserted.

The rotation speed of the carousel, from 0 to 22 rpm allows the researcher to optimize the speed for a particular probe and to vary the speed for best results when washing.



HYBRIDIZATION OVEN SPECIFICATIONS MODEL H010 AND H04

Temperature Range:	ambient + 5° to 95° C
Temperature Precision:	+ /- 0.1° C
Temperature Ramp:	3° - 9° C per minute depending upon thermal load
Temperature Controller & Display:	Microprocessor based PID controller with two digital readouts to 0.1° C
Temperature Sensor:	Thin film PRTD, shielded cable with ground
Carrousel Speed:	0 - 22 rpm
Carrousel Assembly Capacity:	
Model H010:	10 35mm x 300mm or 20 35mm x 150mm borosilicate bottles
Model H04:	4 70mm x 210mm or 4 55mm x 170mm acrylic bottles
Exterior Dimensions:	18¼" H x 17¼" W x 13½" D
Interior Dimensions:	10" H x 14" W x 9½" D
Weight:	Net 50 lbs. Gross 55 lbs.
Voltage:	
H010-1 & H04-1	115 volt 50/60 hz.
H010-2 & H04-2	230 volt 50/60 hz.

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