

Stainless Steel Glove Boxes: Series 300

- Provides a clean, air-tight, controlled environment for a wide range of manufacturing processes in semiconductor, pharmaceutical, and other industries
- Air Lock features recessed polyurethane seals and heavy-duty latches and hinges for enhanced durability and sealing performance
- Side flanges simplify insertion/removal of process equipment and allow easy addition of ovens and air locks
- Removable arm ports can be interchanged to meet specific requirements and accept a wide variety of gloves
- Select single model (with two glove ports) or twin model (with four glove ports)

The Series 300 Stainless Steel Controlled Atmosphere Chamber provides a hermetically sealed environment for such manufacturing operations as resistance welding of semiconductor hybrids, parts degassing, temperature and humidity testing, and chemical mixing in a non reactive environment.



Optional gas purge controls automatically—

- establish a Class 1 particle-free environment
- maintain a humidity set point down to 0% RH/0.5 ppm(v) H₂O
- minimize system recovery time
- provide precise gas mixtures for leak testing and other processes

Configure a turnkey system to your process specifications—

- Humidity Controllers
- Process Gas Mixers
- Gas Cooler/Heater
- Recirculation Filtration Module
- Pass-Through Ovens
- More!

- A. DewWatch™ Humidity Controller
- B. Glove Box Dual Purge™ System
- C. Air Lock
- D. 4-Port Twin Chamber (No. 1694-04)
- E. Vacuum Nitrogen Pump
- F. Pass-Through Oven (No. 5401-00)

Solutions for Controlled Environments and Cleanrooms.



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A wide safety glass viewing window is tightly installed using gasketed seals that ensure minimum vapour loss and stand up to positive pressures. A fluorescent light fixture, cord and switch are mounted to the exterior of the chamber to ensure proper illumination without contaminating the internal environment or posing a combustion hazard in the presence of flammable gases.

Convenient Access, Optimal Versatility

These chambers come standard with removable arm ports (two or four, depending on the model selected) that are double-gasketed and bolted to the chamber wall for strength and optimal seal integrity. They can be easily removed and replaced with either iris arm ports or custom ports designed to meet specific requirements. (Order gloves separately.)

Like our other stainless steel chambers, all Series 300 models also feature side access flanges that allow easy attachment of process modules (ovens and air locks) and also permit "cascading" of several chambers in series. These flanges are easy to remove and reinstall and feature a "U-channel" double-gasketed seal that guarantees the integrity of the internal environment.

Air Locks Allow Convenient Access

These glove boxes can be outfitted with air locks that maintain the integrity of the controlled environment without sacrificing convenience.

All air locks are pre-mounted to a side flange that is easy to install on the Series 300 chamber; select locks for right- or left-side installation. They minimize nitrogen loss and contamination inflow while parts are introduced or removed, particularly when equipped with their own gas controls. Their safety glass viewing windows are sealed with one-piece, nonadhesive compression gaskets. On a custom basis, air locks can be ordered with dual mounting flanges to "cascade" several atmospheric chambers in series. All air locks include a .125" NPT pipe-tapped opening for connection of purge gas and a .25" NPT outlet to accommodate an Automatic RB[®] (Relief/Bleed) Valve.

Note: For vacuum requirements up to 29.9" Hg, select a Series 400 Atmospheric Chamber along with Vacuum Antechamber.

Nitrogen Controls Ensure Low-Humidity, Contamination-Free Atmosphere

Two plugged .75" NPTF openings—an inlet in the upper left corner of the back panel and an outlet in the lower right corner of the back panel—allow you to purge the chamber with nitrogen in order to guarantee an environment free of contaminants and moisture. For optimal processing conditions, select Glove Box Dual Purge™ System and NitroWatch[®], which work in tandem to provide completely automatic gas purging.

The Dual Purge System delivers a variable nitrogen purge into the glove chamber. During normal operation, it provides a continuous low-flow purge to maintain a positive pressure that blocks out contaminants. In the event of a sudden pressure drop, it activates a high-flow purge to block out contaminants and to quickly purge any moisture or particles that do enter the chamber.

The NitroWatch provides automatic low-humidity control. It monitors the internal relative humidity, and activates the high-flow purge when the moisture climbs above an adjustable set point. For ultra-low humidity requirements, select the DewWatch™ instead, which works with the Dual Purge System to automatically maintain moisture levels as low as 0.5 ppm(v). The Automatic RB[®] (Relief/Bleed) Valve ensures safe pressure relief with these control systems and also functions as a check valve, ensuring that no moisture or contaminants enter the chamber in the event of a negative pressure. For economical operation, gas can be directed from the RB Valve outlet to an adjacent air lock, thereby conserving nitrogen consumption.

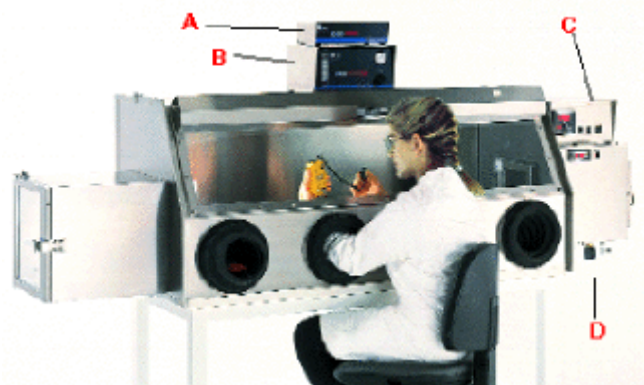
Select the single or twin model; twin glove boxes feature two pairs of glove ports to accommodate two operators (order gloves separately). Other system options include a filter/blower module for filtering and recirculating purge gas or purifying exhaust; self-balancing ionizing equipment for complete static safety; and a variety of gas mixers and analyzers for use in precisely controlled gas environments.

Note: These glove boxes are designed for use under positive or low-level (to 1" Hg) negative pressures. Higher-level vacuums (to 29.9" Hg) can be achieved in Vacuum Antechamber, which operates with the Series 400 chambers.

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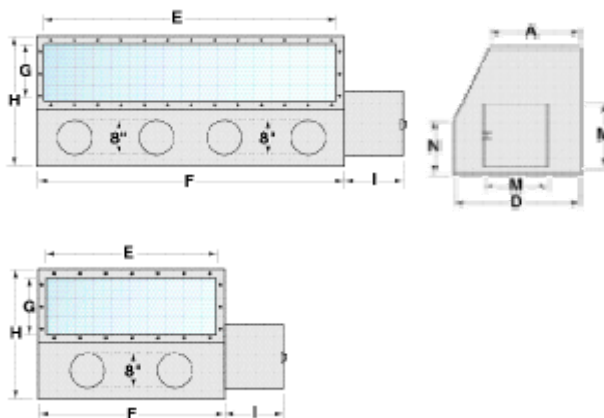


Air Lock Provides Convenient Access.

- A. NitroWatch®
- B. Dual Purge™ System
- C. Vacuum control Module
- D. Modular Vacuum Oven

Specifications

- Door Openings: 12.5" x 12.5" with gasketed doors supplied with air locks (see ordering information below); doors open inward.
- Arm Ports: 8" round with flange for connecting glove assembly
- Gas Ports: Tapped .75" NPT inlet (for connecting flow meter or Dual Purge™ System) and .75" NPT system pressure port; .75" NPT outlet (for connecting Automatic RB® Valve). Appropriate adapter inserts are supplied for any gas systems ordered.
- Light: 120VAC/60Hz fluorescent. For 220VAC/50Hz, add "-220" to the part number

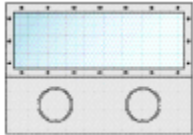


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Model	Glove ports	A	D	E	F	G	H	I	M	N
Single	2	16.56	24	28.25	35	11.75	24	16	14.75	11
Twin	4	16.56	24	54.75	59	11.75	24	16	14.75	11



Series 300 Atmospheric Chamber with no Air Lock Unit	
	Cat. #
Single	1694-01A
Twin	1694-02A

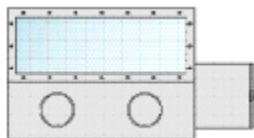


IonBar™ (with fan module)
Safe static neutralization.

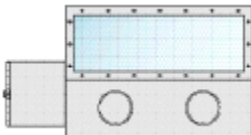
Cat. #

22" Long 2005-30

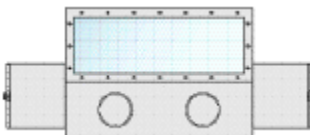
44" Long 2005-31



Series 300 Atmospheric Chamber with right hand Air Lock Unit	
	Cat. #
Single	1694-03A
Twin	1694-04A



Series 300 Atmospheric Chamber with left hand Air Lock Unit		
	Cat. #	\$/Each
Single	1694-05A	
Twin	1694-06A	



Series 300 Atmospheric Chamber with two Air Lock Units	
	Cat. #
Single	1694-07A
Twin	1694-08A



Stands for Series 300 Glove Boxes

Constructed of all-welded 2" square tubing. Select oven support for use with High-Performance Pass-Through Oven (No. 5401-00). All stands raise chambers 30" off of floor (add 3" for casters).

No. 1694-11

Powder-Coated Steel		Stainless Steel		
Chamber Only	Chamber and Oven	Chamber Only	Chamber and Oven	
Cat. #	Cat. #	Cat. #	Cat. #	
For Single Models (2 ports)	1690-03	5401-01	1694-09	1694-11
For Twin Models (4 ports)	1690-04	5401-02	1694-10	1694-12

Cat. #

Heavy-Duty Casters (set of 4, 2 with brakes) 1700-44

Other Optional Accessories

Phone: +44 [0] 1823 660665. sales@sirus-microtech.com Fax: +44 [0] 1823 665321
The Old Stables, Linden Hill, Wellington, Somerset, TA21 0DW, England
Company Reg No. 191 02 63 VAT Reg No: 429 0172 65

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	Cat. #
Dual Purge System	1603-57
NitroWatch System	9500-00A
NitroWatch Sensor	9500-02A
Stainless Steel Automatic RB Valve Required for operation with Dual Purge System	1606-60
Accordion Sleeve/Glove Combination 12"L, with size 9 gloves)	1689-06
High-Performance Vacuum Oven	Call
Modular Vacuum Oven	Call
Stainless Steel Arm Ports Can be retrofitted to any chamber with 8" cutouts	1694-50
Operating Manual	1800-13