

# atmospheric enclosures

# AX5000 Glovebox

## The Most Advanced Atmospheric Enclosure in the Industry

The Miyachi Unitek AX5000 Atmospheric Enclosure is a rugged, tight, Windows® computer-controlled atmospheric enclosure. It provides a safe, easy-to-access and easy-to-use enclosure optimized for hermetic sealing. Constructed of Type 304 internally polished stainless steel for easy maintenance, the AX5000's sturdy tubular steel frame provides solid support for all automation and motion requirements. The enclosure features an easily-removed safety glass viewing window. The window is equipped with glove ports that have built-in armrests and butyl gloves. The design of the AX5000 conforms to ergonomic standards, allowing comfortable use for a broad range of body types. It provides maximum dexterity, visibility, comfort and range of motion.



<b>Features</b>	<b>Benefits</b>
<b>Historical and real time graphical display</b>	Real time glovebox operating parameters, atmospheric conditions and status.
<b>Independent vacuum pumping systems on all ovens and antechambers</b>	Provide maximum package protection. Each pumping system is dedicated to completely and automatically evacuate its designated chamber.
<b>Wide variety of vacuum oven configurations</b>	Meets diverse production flow and bakeout requirements. Exclusive closed-loop computer control and monitoring of each oven surface, include heated shelves, ensures their temperature stability.
<b>Automatic push button inner and outer doors on ovens and antechambers</b>	Make the AX5000 doors easy to operate.
<b>Fully-integrated automatic electronic gas pressure control system</b>	User-selectable set points, includes oil-less check valve.
<b>Integrated moisture, oxygen, argon, and helium monitoring</b>	Real-time environmental control. Set points can be selected to trigger alarms or inhibit processes. Digital output provided for interface to your process equipment.

# AX5000 – Provides the ultimate in computer-controlled atmospheric enclosures.

The AX5000 is an ideal glovebox system for precise control of moisture, pressure or the gas composition of a processing environment. This state-of-the-art atmospheric enclosure provides fully-integrated computer control of all elements of the system including enclosure pressure, interior and exterior doors, gas and moisture analysis and control instrumentation, vacuum ovens and antechambers. Within the glovebox an inert environment can be maintained with ultra-low moisture and oxygen levels to meet the most demanding process standards. The system operating software is easy to learn and easy to use. It resides on the Microsoft Windows® operating system.



## Additional Features and Options

- A broad choice of vacuum pumping systems – oil-less, cryogenic, turbo-molecular – depending upon the requirements of your process.
- Redundant oven temperature protection to guard against over-temperature conditions.
- Integrated single on dual column gas dry/oxygen removal option to deliver ultra-low moisture and oxygen environments.

## Standard Configurations

Enclosure Length:	48" (1219 mm)	56" (1423 mm)
Enclosure Depth (Floor):	39" (965 mm)	39" (965 mm)
Enclosure Depth (Top):	29" (736 mm)	29" (736 mm)
Enclosure Height:	36" (914 mm)	36" (914 mm)
Glove Ports:	2	4

Other configurations and custom sizes available

## GLOVEBOX SPECIFICATIONS AND OPTIONS

Features	
<b>Antechambers and Ovens</b>	
Configuration Options	End, front, rear loading
Heating	Wall heating or heated shelves
Temperature	0-200° C std., higher available
Vacuum Pumps	Rotary Vane, Dry, or Turbo Pumps
<b>Analysis and Monitoring Capabilities</b>	
Oxygen Detection Range	0-1000 PPM or %
Moisture Detection Range	0-150 PPM or ° C dewpoint
Helium Monitoring	%
Argon Monitoring	%
<b>Utilities</b>	
Electrical	5-wire, 208VAC, 3-phase, 30 amps, 50/60 Hz OR 5-wire, 380-415VAC, 3-phase, 30 amps, 50/60 Hz
<b>Inputs</b>	
Environmental gas	60psi (415kPa)
Automatic Door gas	80psi (550kPa)
Chilled Water	Needed for oven flange cooling
Not required with optional water re-circulator	

Features	
<b>Gas Purification</b>	
Single Column	30 CFM (51 m <sup>3</sup> /hr)
Dual Column	Moisture and/or oxygen removal
Automatic Dual Column	
<b>Gas Mixers</b>	
Manual Set Mixers	Two and three gas versions
Automatic Closed Loop Mixer	Two gases
<b>Others</b>	
Soot Removal Systems	30 CFM (51 m <sup>3</sup> /hr) or 100 CFM (170 m <sup>3</sup> /hr)
CDRH Class 1 Eyesafe Window	Wavelength based on application
Light Tower	Indicates glovebox or process status
Tool Interchange	Floor access, front loading
Safety	Light curtain, interlocks

Specifications are subject to change without notice.

## Automatic sliding inner doors



Your Local Representative

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**MIYACHI UNITEK™**

Corporate Office: 1820 S. Myrtle Ave. • P.O. Box 5033 • Monrovia, CA 91017-7133 USA  
Tel: (626) 303-5676 • FAX: (626) 358-8048 • info@muc.miyachi.com  
www.muc.miyachi.com • ISO 9001 Certified Company  
24/7 Repair Service: 1-866-751-7378

MEXICO Sales Office:  
Pedro Rosales de Leon 7946-200  
Fraccionamiento Las Misiones  
Ciudad, Juarez, Chihuahua Mexico  
Tel: +52.656.623.2719  
FAX: +52.656.617.6058  
mxsales@muc.miyachi.com

SOUTH AMERICA Sales Office:  
Tel: +55 (11) 3712-2389  
Fax: +55 (11) 3712-2389  
sasales@muc.miyachi.com

ASIA Sales Office:  
Unit D, 20/F, Infotech Centre  
21 Hung To Road  
Kwun Tong, Hong Kong  
Tel: +852 2833-6998  
FAX: +852 2833-6672  
asiapacific@muc.miyachi.com

EUROPE Sales Office:  
Miyachi Europe B.V.  
Schootense Dreef 21  
NL-5708 HZ Helmond  
The Netherlands  
Tel: +31 492-54-22-25  
FAX: +31 492-53-62-22  
info@muc.miyachi.com

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