

# *atmospheric enclosures*

# Alpha Series Glovebox Systems

The field proven Alpha Series atmospheric enclosures provide compact and effective platforms for environmental control with excellent price to performance value. The Alpha Series is excellent for production as well as research and development applications. The Alpha is available in two sizes, one for projection welding applications and the other for seam sealing or general industrial use. Straight forward controls allow the operator easily operate oven, vacuum and inert gas backfill controls.



*Alpha Series with Integrated Seam Sealer*

- Configurations available for integrated seam sealing, projection welding, or stand-alone industry use.
- Stainless steel construction with exterior epoxy finish for easy maintenance, ergonomically designed safety glass viewing window with interior lighting. Two glove ports with built-in armrests.
- Antechamber to transfer tools and product into enclosure
- Optional vacuum bakeout oven with temperature range of ambient to -125°C with an option for higher temperatures.
- Secure oven door with locking mechanism.
- Easy access, clean antechamber
- Standard oil-free vacuum pump with vacuum oven.
- Calibrated to NIST standards.
- CE certification available.
- Valves and flow meters for control of inert gas backfill of antechamber and optional oven



*Alpha Series Optional Vacuum Bakeout Oven*



*Vacuum Oven Controller Unit*



## ALPHA SERIES ATMOSPHERIC ENCLOSURES SPECIFICATIONS

### Enclosure

<i>Viewing windows:</i>	Double laminated safety glass
<i>Glove ports:</i>	2
<i>Dimensions</i>	Seam sealing enclosure –
<i>W x D x H In. (cm):</i>	44.5 x 35 x 20 (113 x 89 x 37)
	Projection welding enclosure –
	33.5 x 24 x 14.5 (85 x 61 x 37)
<i>Enclosure Construction:</i>	1/8" (3.18cm) welded seam stainless steel
<i>Pressure Control:</i>	Manual set rotometer
<i>Lighting:</i>	15-watt fluorescent (each chamber)
<i>Input Voltage:</i>	208-240 volts, 50/60 Hz, single phase
<i>Input Current:</i>	15 amps (no oven); 30 amps (with oven)
<i>Gas Input:</i>	N <sub>2</sub> @ 60 psig

### Vacuum Bake Oven (Optional)

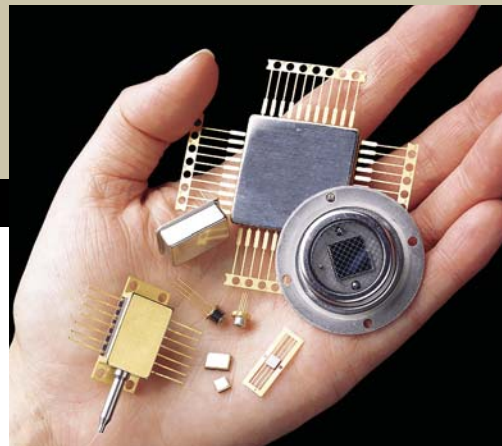
<i>Type:</i>	304 electro-polished stainless steel construction
<i>Size (Internal):</i>	14"D x 7-5/8"H x 7-5/8" W (36cm x 19cm x 19cm)
<i>Backfill Rate:</i>	10 scfh (.283 scmh)
<i>Backfill Pressure:</i>	4" water column (10.16cm water column)
<i>Maximum Temp:</i>	125°C standard, 200°C optional
<i>Safety Oven Temp:</i>	Setpoint 25°C over oven temperature max. ±10°(factory set)
<i>Vacuum:</i>	Dry pump 830 mbars (standard) Oil rotary vane pump $5 \times 10^{-2}$ mbars (40 mTor) (optional) Dry pump $1.2 \times 10^{-1}$ mbars (90 mTor) (optional)
<i>Controls:</i>	Temp set control: Ambient -125° (200°C optional) Backfill: On/Off Vacuum: On/Off
<i>Door:</i>	Black anodized door with integrated lock
<i>Chilled Water:</i>	Needed for 200°C optional oven

### Front-Loading Interchange

<i>Type:</i>	Front-loading, flush type. Polycarbonate construction.
<i>Size (Internal):</i>	8"W x 11.25"D x 8"H (20cm x 28cm x 20cm)
<i>Flush Rate:</i>	0-100 scfh (0-2.83 scmh)
<i>Controls:</i>	Adjustable Rotometer



Alpha Series with  
Integrated Projection Welder



### Optional Accessories

#### Gas analyzers:

Oxygen, helium, moisture

#### Gas mixers:

Manual set or automated for two and three gases

#### Gas purification units:

Manual or Automated

#### Water chiller:

Portable Water Chiller (P/N 138-00019-003)

Your Local Representative



### Benchmark Division

1820 S. Myrtle Ave. • P.O. Box 5033 • Monrovia, CA 91017-7133 USA

Tel: (626) 303-5676 • FAX: (626) 359-7930

E-Mail: sales@unitekbenchmark.com

Internet <http://www.unitekbenchmark.com>

Specifications subject to change without notice.  
Copyright© 2005 Miyachi Unitek Corporation. The material contained herein cannot be reproduced or used in any other way without the express written permission of Miyachi Unitek Corporation. All rights reserved.