Technical Bulletin VAC 100603
Nexus Standard Laser Welding Glove Box System

Glovebox: Single Sided and Extra (3 Port) length. 62" width X 37" deep X 36" high, (1575 X 940 X 914 mm) stainless steel construction with removable end panels. 1" (25 mm) Aluminum tooling plate floor provides extra stability for motion control equipment. One (1) dual electrical junction box inside of glovebox.

Window: 1/4" (6 mm) LEXAN front panels, extended window bolts to allow for addition of customer provided, 1/8" (3 mm) Laser guard. Modified aluminum glove ports to ensure light tight seal around the laser guard

Customer Interface Panel: 17" X 26" (432 X 660 mm) Customer interface panel on main box, all feedthrus will be mounted on panel. Standard set includes two BNC Feedthrus and eight 8-pin Octal Feedthrus. Other interface penetrations available. Contact factory

Stand: Steel construction, supporting glovebox and holding panels with gas purification system, instrumentation and controls. Stand has casters, seismic hold down straps and height levelers.

Antechamber: 15" dia X 24" long (380 X 610 mm), stainless steel, mounted on right end panel
Mini-Antechamber: 6" dia. X 12" long (152 X 305 mm), stainless steel, welded to right end panel.

Gas Purification System: Single Purifier with 0-40 CFM (68 m³/h) blower, automatic isolation valves mounted into stand. 20 liters of O₂ and 2.3 Kg of H₂O absorption capacity (per mfg. specs.) Can achieve less than 1-PPM equilibrium. Includes standard 0.3-micron inlet and outlet filters on purification system. Dual purification upgrade available; see Ordering for part number

Power: Single point load center, specify either 110 VAC (15A) and 220 VAC, 3 f, (30A) both 60 Hz, or 220 VAC, 3 f, 50 Hz (35A)

Gloves: Included with each system, see options for selection
**Added Filtration**: Particulate Removal System with an extra hi capacity HEPA filter and 40 CFM (68-m³/h) suction placed at the point of generation.

**Nexus Instrumentation and Control**: Industrial computer that monitors and controls the complete Nexus system through an easy to use menu driven interface. Operator's four key keypad and color graphical display, Built in programmed control of purifier regeneration, lab pressure, purging and antechamber, Controls Antechamber Evacuation and Refill Control with user programmed timed purge and evacuation, Built in system diagnostics.

**Vacuum Oven**: Left side, Vacuum Oven Assy, 200 deg C, with controller and 8.8-CFM (250l/m @ 60 Hz) Scroll vacuum pump.

**Analyzers**: Integrated Oxygen Analyzer with sample pump, calibration and electrolytic fuel cell. Integrated Moisture Analyzer with Aluminum oxide probe and NIST traceable calibration. Control System monitors and displays the glovebox oxygen level from <1 PPM to 25% and displays the glovebox moisture level to <1-PPM (-80°C dew point).

**Top Light Assy**: Skylight type fluorescent light mounted on top of glovebox. Includes top skylight LEXAN panel installed into glovebox.

**Evacuatble Glove Port Cover**: Allows glove change with evacuation of glove volume to prevent contamination of glovebox atmosphere.

**Vacuum Pump**: 8.8-CFM (250l/m @ 60 Hz) Scroll pump (separate from oven vacuum pump) for glove box pressure control, antechamber evacuation and purification system evacuation included with each system.

**Safety Features**: Door limit switches, for the interior and exterior antechamber and oven doors, integrator to provide connection to their Laser control equipment.

## OPTIONS
Contact factory for large list of accessories and options

**Glove Options**:

<table>
<thead>
<tr>
<th>Type</th>
<th>Part Number</th>
<th>Note</th>
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<td>Gloves, Butyl Rubber, Ambidextrous 0.030&quot;</td>
<td>VAC 2682</td>
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<td>Special gloves quoted upon request</td>
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## ORDERING
Order Part Number
1) VAC 100603 for Nexus Assy, Single Purifier
2) VAC 101149 for Nexus Assy, Dual Purifier
3) Glove Style choice by part number

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VAC