

COMPOUNDING ISOLATORS

MINIMIZE RISK

MAXIMIZE COMPOUNDING ACCURACY





NuAire PharmaGard Compounding Aseptic & Containment Isolators are engineered to maximize work productivity by providing a comfortable and ergonomically correct environment.

PharmaGard Compounding Aseptic (CAI) and Containment (CACI) Isolators provide a sterile work environment for the compounding of hazardous and non-hazardous drugs. PharmaGard creates true HEPA filtered laminar airflow at 20 air changes per minute within both the work zone and interchange areas to assure ISO Class 5 conditions. Utilizing laminar flow assures a continuous stream of HEPA filtered air

across the work zone and interchange areas assuring sterility and minimizes cross contamination. Once the air is through the work area, the airflow is split from front to rear. The airflow then proceeds under the work tray, up the rear divider panel where it is recirculated or exhausted.

The PharmaGard PR is a Compounding Aseptic Isolator that meets the USP 797 Standard for aseptic compounding of non-hazardous drugs. ►



The PharmaGard NTE is a Compounding Aseptic Containment Isolator that meets the USP 800 Standard for handling hazardous drugs. ►



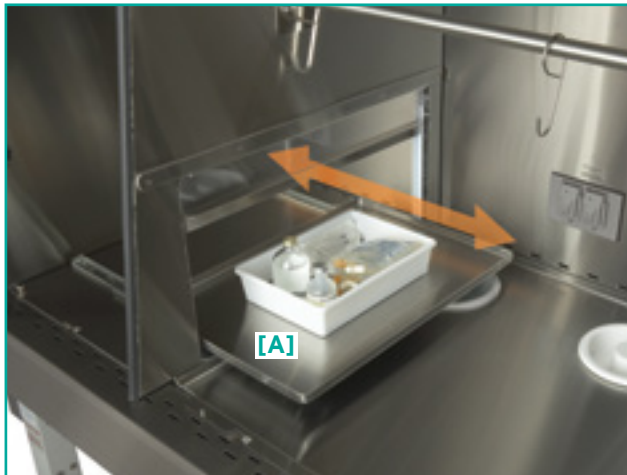
Ergonomically Designed for Your Workflow

PharmaGard Compounding Aseptic and Containment Isolators offer the best possible user ergonomics.

Ergonomic features on the PharmaGard include:

Sliding Work Tray

Located in the transfer compartment, the sliding work tray **[A]** provides a seamless transition when entering compounding materials into the work zone. The stainless steel work tray is mounted on ball bearing brackets to smoothly enter compounding materials into the sterile work area.



Counter Balance Inner Transfer Window

The transfer window counter balance **[B]** is isolated from sterile product inside the inter-chamber wall. The window moves easily up or down with one finger. A security lock on NR and NTE units ensures the inner transfer door remains locked if the outer door is open.



Ability to sit or stand at a range of heights

The isolator design maximizes knee/thigh clearance to improve posture and the adjustable base stand allows for optimization of leg and upper body support.



Expanded Vision Zone and Work Zone

PharmaGard isolators offer greater visibility due to cool white lighting and open sight lines. The largest effective work zone **[C]** helps reduce arm / neck / shoulder strain. Large oval glove ports **[D]** extend the reach of the user, and three IV bar locations **[E]** provide proper compounding height/distance.



Sharps and Waste System to Save You Space



The PharmaGard allows a user to dispose of waste and sharps directly from the sterile work zone. Two waste containers [A] are accessible through covered negative pressure drop tubes to maintain sterility inside the work area and containment on the isolator exterior.



Once a container has been filled and is ready for replacement, PharmaGard allows the end user to individually change out each container when needed.



After the waste or sharps container lid has been sealed, follow these steps:



Step 1. Release locking mechanism by pulling handle.



Step 2. Pull down and out container tray. Remove container block.



Step 3. Remove container from guides and replace.

Documentation and Surveillance Training in the Pharmacy

US Pharmacopeia (USP) calls for the documentation of standard operating procedures (SOPs) and the development of a medical surveillance programs. NuAire has developed easy add-on accessories and built-in options to help with the documentation process.

Monitor and Keyboard/Mouse Arm


The addition of a monitor and keyboard/mouse arm allows technicians to easily access and follow compounding SOPs. Workflow documentation can be entered throughout the compounding process.



Video Surveillance Cameras

Video Cameras

One or more cameras can be added to a PharmaGard back wall or mounted to the front of the control panel to monitor the healthcare worker, document compounding processes or spill control procedures, etc.



◀ The optional stainless steel Front Camera Mount, available from NuAire, allows for the mounting of many different types of cameras outside the cabinet.



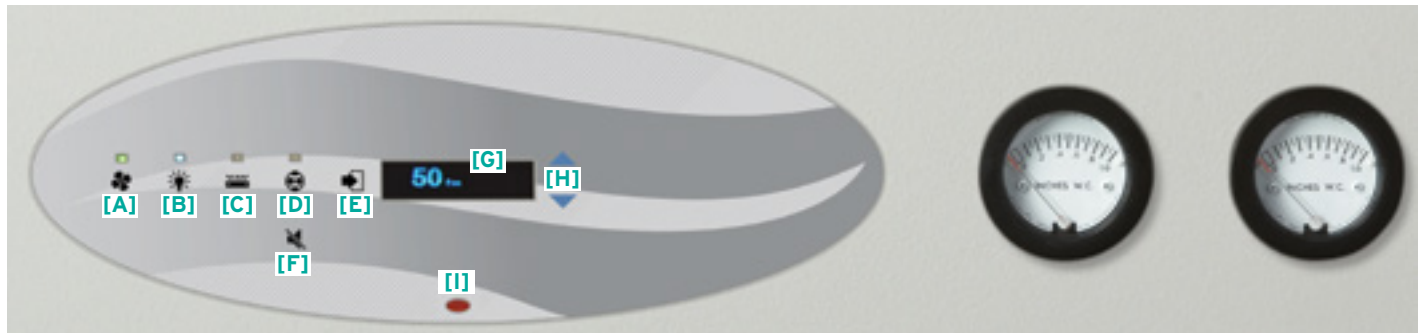
▲ A video camera isolated from the sterile work area by a glass panel can be added to the back wall of a PharmaGard.

Electronic Control System (ECS)

Each **PharmaGard Electronic Control System (ECS)** is designed for high user adoption. Easy to read on/off switches make each PharmaGard simple to operate. Visual indication of system operations is shown through mini-helic gauges that monitor pressures within the interchange and main chamber.

Compounding Aseptic Isolators (CAI)

The Pressure Monitor displays the positive static pressure within the main chamber. The pressure monitor is calibrated in “inches of water gauge” pressure. The pressure monitor will read the same as the main chamber minihelic gauge and in addition, allow a low/high alarm limit point to be set. The default alarm limits is set to 0.10” w.g. low and 0.50” w.g. high. See optional equipment section for greater detail.



- [A] The Blower key indicates and controls ON/OFF power to the blower.
- [B] The Light key indicates and controls ON/OFF power to the fluorescent light.
- [C] The UV Light key indicates and controls ON/OFF power to the UV light (optional).
- [D] The Outlet key indicates and controls ON/OFF power to the outlets.
- [E] The Enter key is used to select item on display or accept and enter current item, function or value.

- [F] The Silence key allows a user to silence an audible alarm for 15 minutes. After 15 minutes if the alarm condition continues, the alarm will repeat.
- [G] The FlowGard OLED screen displays a variety of cabinet functions as well as display cabinet performance.
- [H] The Arrow Adjustment keys allow user interaction for various functions.
- [I] The Red Alarm LED indicates any alarm condition.

PharmaGard Digital Monitor Electronic Control System (ECS)

Compounding Aseptic Containment Isolators

The PharmaGard Digital Monitor uses an integrated digital pressure transducer to monitor positive (CAI) or negative (CACI) pressure. System operational health is displayed visually through system LEDs. Each color represents specific condition outlined below:

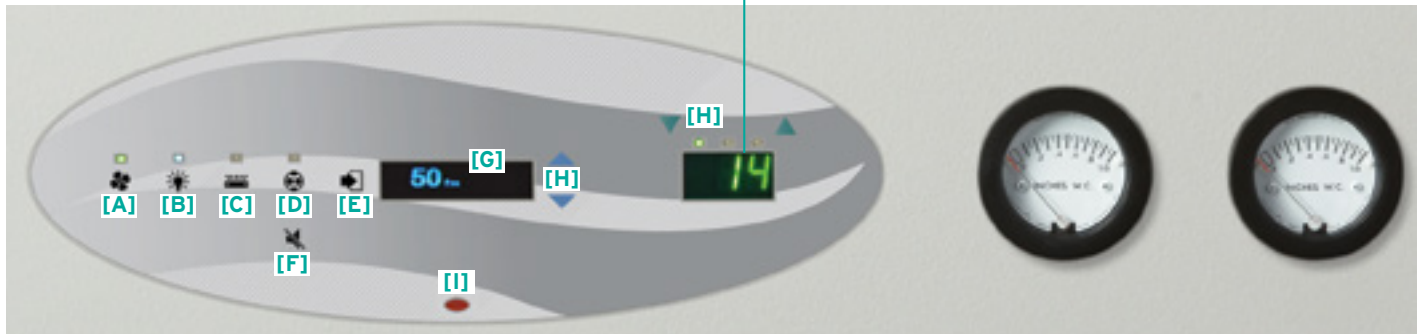
Green = Acceptable Pressure

Yellow = Caution, near alarm point

Red = Alarm Condition

In the event of an Alarm Status a audible alarm will sound notifying the end user the system no longer offers protection. The PharmaGard Digital Monitor comes standard on models NU-NR800 and NU-NTE800 and is an optional upgrade on model NU-PR797.

The PharmaGard Pressure Monitor displays the negative static pressure within the main chamber. The pressure monitor is calibrated in "inches of water gauge" pressure. The pressure monitor will read the same as the main chamber manihelic gauge and in addition, allow a low/high alarm limit point to be set. The default alarm limits is set to - 0.05" w.g. high and - .50" w.g. low.

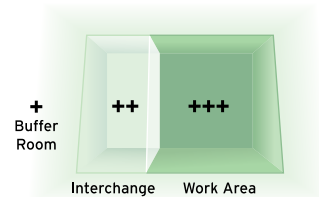


- [A] The Blower key indicates and controls ON/OFF power to the blower.
- [B] The Light key indicates and controls ON/OFF power to the fluorescent light.
- [C] The UV Light key indicates and controls ON/OFF power to the UV light (optional).
- [D] The Outlet key indicates and controls ON/OFF power to the outlets.
- [E] The Enter key is used to select item on display or accept and enter current item, function or value.

- [F] The Silence key allows a user to silence an audible alarm for 15 minutes. After 15 minutes if the alarm condition continues, the alarm will repeat.
- [G] The FlowGard OLED screen displays a variety of cabinet functions as well as display cabinet performance.
- [H] The Arrow Adjustment keys allow user interaction for various functions.
- [I] The Red Alarm LED indicates any alarm condition.

Compounding Aseptic Isolators (CAI) for Non Hazardous Drugs

The PharmaGard PR creates a **positive pressure** clean air [ISO Class 5] controlled environment specifically for aseptic compounding of non-hazardous drugs. The HEPA filtered work area maintains a positive pressure relative to the interchange compartment, which operates at a positive air pressure relative to the surrounding room. These two levels of protection minimize the possibility of contamination migrating into the work zone.



Model	Size (nominal)	Electrical* (all sizes)	Overall Dimensions** W x D x H In. [mm]	Work Zone Dimensions (W x D x H) In. [mm]	Interchange Dimensions (W x D x H) In. [mm]	Net Weight
NU-PR797-400	4 ft. [1.2 m]	115 VAC / 60 Hz E: 230 VAC / 50 Hz	50 x 32 1/2 x 51 1/2 [1270 x 826 x 1308]	35 1/4 x 23 1/4 x 27 3/8 [895 x 591 x 695]	14 1/8 x 24 x 27 3/8 [359 x 610 x 695]	425 lbs. [193 kg.]
NU-PR797-600	6 ft. [1.8 m]		74 x 32 1/2 x 51 1/2 [1880 x 826 x 1219]	59 1/4 x 23 1/4 x 27 3/8 [1505 x 591 x 695]	14 1/8 x 24 x 27 3/8 [359 x 610 x 695]	575 lbs. [261 kg.]

* Specify models with appropriate letter suffix for electrical specifications. "NU-PR797-400E" for 230 VAC / 50 Hz **Exterior width dimension will increase 3" minimum for base stand



Performance Specifications:

ISO Class 5 Clean Air
50 fpm (0.25 m/s) Average Down Flow

Efficiency Features:

Ultra High Efficiency ECM Eon™ Motor
Motor Speed Controller
Internal Exhaust Damper

Superior Construction Features:

Monolithic 16/18 Gauge, Type 304 Stainless Steel Welded Pressure Tight Construction
Removable Control Center
Removable Stainless Steel Covered Work Tray
Stainless Steel Spill Trough with Drain Valve
Vibration Reducing Work Surface Support System
External Non-Glare 100 lm/ft² Fluorescent Lighting

Safety Features:

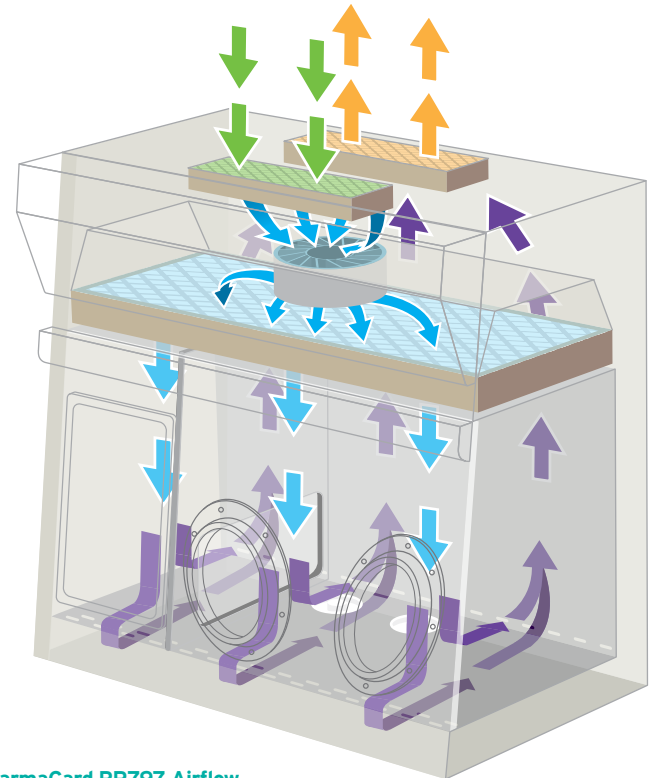
3" (76 mm) Supply HEPA Filter,
99.99 @ 0.3 Micron Efficiency Rating
HEPEX Zero Leak Airflow System
UL Listed

Standard Features:

Three (3) Position IV Bar w/ 6 hooks
Large Oval Glove Ports
Hinged Slanted Window
3/8" Thick Scratch Resistant Polycarbonate Window
Flexible Two-Piece Nitrile Sleeve / Glove
Front Filter Removal
Permanent Plenum with Supply Filter
External Fluorescent Lighting
Removable Work Tray
Metal Diffuser Over Supply Filter
Spill Trough with Drain Valve
One Duplex Outlet Back-wall
12 ft [2.5 m] Power Cord

Optional Features and Accessories*:

Sharps and Waste System
Hospital Grade GFI
LED Lighting
Additional Duplex Outlet
Base Support Stand
Auto Lift Base Stand
Additional Service Valves
Storage Pull-Out Trays
Heated Work-surface
Adjustable Footrest
Custom Solutions



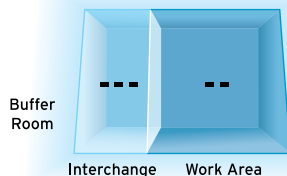
PharmaGard PR797 Airflow



* Note: some optional features are not approved by 3rd party listings.
Please contact NuAire information.

Compounding Aseptic Containment Isolators (CACI) for Hazardous Drugs

The PharmaGard NR and NTE create a negative pressure clean air [ISO Class 5] controlled environment for the aseptic compounding of hazardous drugs. The HEPA filtered interchange compartment maintains a negative pressure relative to the work area, which operates at a negative air pressure relative to the surrounding room. These levels of protection minimize the possibility of chemotherapy agents or other hazardous materials migrating from the work area into the surrounding room as well as minimizing the possibility of contamination migrating into the work zone.



Model	Size (nominal)	Electrical* (all sizes)	Overall Dimensions** W x D x H In. [mm]	Work Zone Dimensions (W x D x H) In. [mm]	Interchange Dimensions (W x D x H) In. [mm]	Net Weight
NU-NR800-400	4 ft. [1.2 m]	115 VAC / 60 Hz E: 230 VAC / 50 Hz	50 x 32 ¹ / ₂ x 51 ³ / ₄ [1270 x 826 x 1314]	35 ¹ / ₄ x 23 ¹ / ₄ x 27 ³ / ₈ [895 x 591 x 695]	14 ¹ / ₈ x 24 x 27 ³ / ₈ [359 x 610 x 695]	440 lbs. [200 kg.]
NU-NR800-600	6 ft. [1.8 m]		74 x 32 ¹ / ₂ x 51 ³ / ₄ [1880 x 826 x 1314]	59 ¹ / ₄ x 23 ¹ / ₄ x 27 ³ / ₈ [1505 x 591 x 695]	14 ¹ / ₈ x 24 x 27 ³ / ₈ [359 x 610 x 695]	590 lbs. [268 kg.]
NU-NTE800-400	4 ft. [1.2 m]		50 x 32 ¹ / ₂ x 61 [1270 x 826 x 1550]	35 ¹ / ₄ x 23 ¹ / ₄ x 27 ³ / ₈ [895 x 591 x 695]	14 ¹ / ₈ x 24 x 27 ³ / ₈ [359 x 610 x 695]	465 lbs. [211 kg.]
NU-NTE800-600	6 ft. [1.8 m]		74 x 32 ¹ / ₂ x 61 [1880 x 826 x 1550]	59 ¹ / ₄ x 23 ¹ / ₄ x 27 ³ / ₈ [1505 x 591 x 695]	14 ¹ / ₈ x 24 x 27 ³ / ₈ [359 x 610 x 695]	615 lbs. [279 kg.]

* Specify models with appropriate letter suffix for electrical specifications. "NU-PR800-400E" for 230 VAC / 50 Hz **Exterior width dimension will increase 3" minimum for base stand



Performance Specifications:

ISO Class 5 Clean Air
50 fpm (0.25 m/s) Average Down Flow

Efficiency Features:

Ultra High Efficiency ECM Eon™ Motor
Motor Speed Controller
Internal Exhaust Damper

Superior Construction Features:

Monolithic 16/18 Gauge, Type 304 Stainless Steel Welded Pressure Tight Construction
Removable Control Center
Removable Stainless Steel Covered Work Tray
Stainless Steel Spill Trough with Drain Valve
Vibration Reducing Work Surface Support System
External Non-Glare 100 lm/ft² Fluorescent Lighting

Safety Features:

3" (76 mm) Supply HEPA Filter, 99.99 @ 0.3 Micron Efficiency Rating
12" (305 mm) Exhaust HEPA filter, 99.99 @ 0.3 Micron Efficiency Rating
HEPEX Zero Leak Airflow System
UL Listed

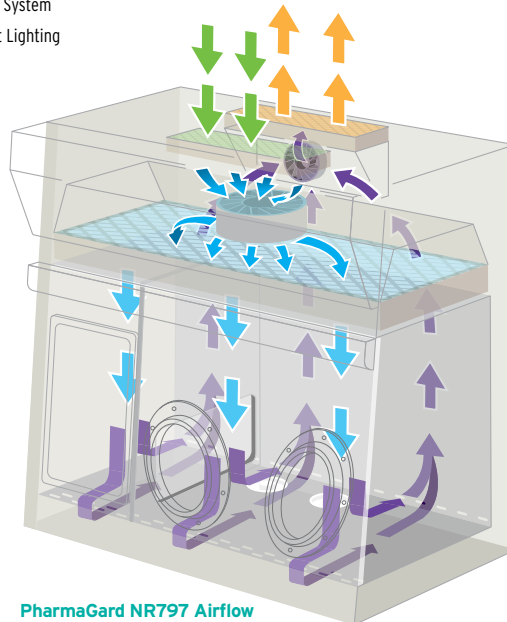
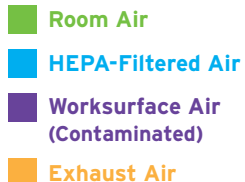
* Note: some optional features are not approved by 3rd party listings. Please contact NuAire information.

Standard Features:

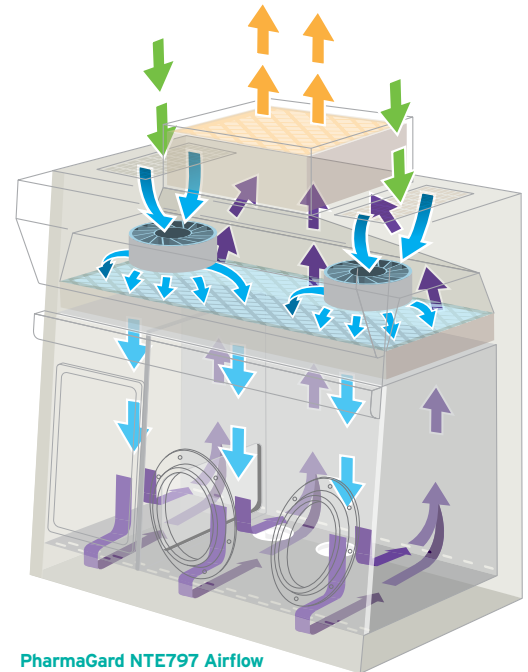
Three (3) Position IV Bar w/ 6 hooks
Large Oval Glove Ports
Hinged Slanted Window with Locks
3/8" Thick Scratch Resistant Polycarbonate Window
Flexible Two-Piece Nitrile Sleeve / Glove
Front Filter Removal
Permanent Plenum with Supply Filter
External Fluorescent Lighting
Removable Work Tray
Metal Diffuser Over Supply Filter
Spill Trough with Drain Valve
One Duplex Outlet Back-wall
12 ft (2.5 m) Power Cord

Optional Features and Accessories*:

Sharps and Waste System
Hospital Grade GFI
LED Lighting
Additional Duplex Outlet
Base Support Stand
Auto Lift Base Stand
Additional Service Valves
Exhaust Transitions
Storage Pull-Out Trays
Adjustable Footrest
Custom Solutions



PharmaGard NR797 Airflow



PharmaGard NTE797 Airflow

Design Your Own PharmaGard NU-797

Popular Built-in Options & Accessories

Each laboratory is unique and every protocol can differ. Set your laboratory up for success by designing your own NuAire Biological Safety Cabinet. It can be as simple as adding a service valve or as involved as customizing the height of the work zone. NuAire can do it all. Invest in a product that lasts and is designed for your needs.



Back-wall Camera Mount



Front Camera Mount



Cord Pass-thru (NSF)



LED Lighting (Replaces Florescent Lighting)



Duplex and/or GFI Outlets



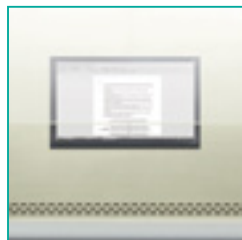
IV Bar and SST Hooks



Storage Bin



Sharps and Waste



Back-wall LCD Screen Mount



Ergotron® arm for monitor and keyboard/mouse



Replacement Waste Bins



TexWipe® Aseptic Cleaning Materials



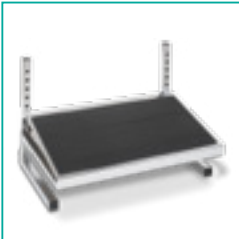
Motorized Base Stand



Telescoping Leg Leveler or Castor Base Stand



Bench Top Mount



Adjustable Foot Rest



Stainless Steel Turntable



Fixed Exhaust Canopy Transition w/ Alarm



Flex Duct



Manual and Automatic Butterfly Valves



8" (204 mm) to 10" (254 mm) Round Transition



TexWipe® Isolator Cleaning Wand



Airflow Alarms



Laboratory Cart



Silicone Connection Kit

Complete Your Pharmacy

NuAire offers a variety of Laboratory Equipment to meet the needs of the research, vivarium, pharmacy, environmental laboratory and more. Join the NuAire family and complete your laboratory with complementary NuAire Quality products.



LABGARD

Biological Safety Cabinets

AIREGARD^{ES}

Laminar Airflow Workstations



Custom Solutions

◀ NuAire custom solutions allow for sterile environments for any automation system: IV mixture, infusion compounding, syringe filling, and more.

Delivering product to the customer that is cost effective, exceeds their requirements, delivers product on-time, and increases productivity and profitability.

In every NuAire product you'll find brilliant but practical design, keen attention to detail in every phase of the fabrication and assembly process, thoroughly tested, outstanding value, and dependable service. These are the foundation for NuAire's international reputation, and practical reasons why NuAire is universally recognized as the finest. NuAire's Quality Policy to Satisfy Customers, Comply with Quality System Requirements and Continually Improve.

Sales and Service Like No Other NuAire employs a network of knowledgeable sales and service individuals some of which have been selling and servicing NuAire Laboratory Products since our inception in 1971.

Our Sales Representatives are located throughout the globe providing you with a local individual who can assist product selection, pricing, installation, training, and service throughout the life of your product. Once you buy a NuAire you're a part of our family and we'll work hard to satisfy your needs.

NuAire offers service-training classes and individualize assistance to service professionals in the laboratory community. These NuAire certified companies are located throughout the world allowing NuAire to provide service and assistance to the farthest corners of the earth. Have the option to select from multiple service vendors in your area to find a company that fits your needs.

Contracts, GPO's and many more! NuAire has a variety of Contracts set up through Group Purchasing Organizations, Government Associations, Health Systems, Universities and many more.



Your Local NuAire Partner



For more information please visit
www.nuaire.com or call **1.763.553.1270**

SHARE A PICTURE AND TAG YOUR NUAIRE ISOLATOR USING #MYNUAIRE

