



Your Comprehensive Solution  
for Comfort

Innovation Beyond Boundaries





# Simplicity can be synonymous with quality.

When developing an HVACR system, you don't require complexity. What you need are solutions. At ECOAIR®, we handle the intricacies for you. Every aspect of our work — from engineering to post-installation service — is crafted to simplify your path to success



## A comprehensive system solution.

Through thorough prototype modeling, we craft products that boast heightened efficiency while maintaining lower installation and operational costs. Designed for easy installation, operation, and maintenance, everything is constructed for seamless integration throughout your HVAC system, enabling you to concentrate on pleasing your customers.

## Tailored to meet your requirements.

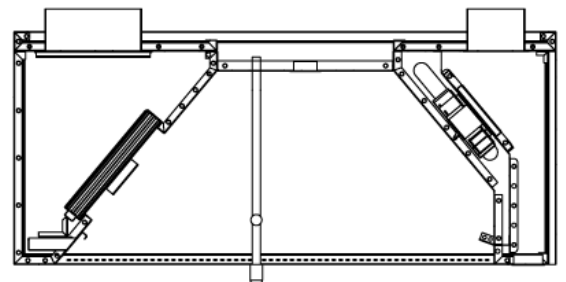
We are dedicated to creating a structure that breathes and operates as expected. Offering a diverse range of product styles, sizes, features, and accessories, we provide the flexibility to meet both your functional and aesthetic needs. Our experts, coupled with our computer-aided product selection program (CAPS), assist you in selecting, configuring, and viewing real-time drawings. We then streamline the process of building and delivering your entire HVAC system with ease and efficiency.

## A singular, reliable source.

As a prominent manufacturer of commercial air movement and control equipment, manufacturing and engineering HVAC products, we offer you peace of mind. You can trust that you are obtaining a complete HVAC system from a single, dependable provider.

## Excellence and diligence at every stage.

Prior to installation, our products undergo comprehensive testing for structural integrity, aerodynamic performance, sound levels, mechanical operation, vibration, temperatures, environmental impact, and more. Our products hold various certifications, including AMCA, UL, NSF, and ETL. We engineer and manufacture our products with longevity in mind, supported by robust warranties, ensuring their reliability for years to come. With a nationwide network of over 2,000 factory-authorized service providers, we conduct thorough inspections and tests to ensure proper installation and functionality, following the manufacturer's recommendations. This commitment ensures your kitchen operates safely and efficiently.





## **We handle the challenges for you.**

Throughout every stage of the process, we take responsibility and strive to eliminate hassles and confusion by leveraging our extensive expertise to simplify even the most intricate issues. Our commitment to 100% transparency means no hidden expenses or add-on costs. Your kitchen ventilation system will be meticulously engineered to align with your operation, reflecting our straightforward dedication to responsiveness, accountability, and integrity in all aspects of our work.

## **ECOAIR SYTEMS**

<b>KITCHEN HOODS</b>	<b>PAGE 6</b>
<b>KITCHEN ECOLOGY UNIT</b>	<b>PAGE 12</b>
<b>AIR CONDITIONING</b>	<b>PAGE 14</b>
<b>VENTILUX FANS</b>	<b>PAGE 16</b>
<b>EAKON AIR FILTRATION</b>	<b>PAGE 20</b>
<b>HIGH PURITY</b>	<b>PAGE 22</b>
<b>GULLFOSS WATER FILTRATION</b>	<b>PAGE 24</b>
<b>CONTROLS &amp; AUTOMATION</b>	<b>PAGE 28</b>
<b>TECHNICAL SERVICES</b>	<b>PAGE 30</b>

## Product Categories



Ventilation



Refrigeration



Air Conditioning



Filtrations



Control Systems



Energy Saving  
Solutions

## Our Brands

GULLFO<sup>TM</sup>

Ventilux<sup>®</sup>

 **EAKON**

 **KWANTLEN**  
CONTROLS & AUTOMATIONS



# VENTILATION

## Memberships



## Certifications



VDI 2052- part1  
DIN-EN 16282 -6: 2020-



## ECOAIR KITCHEN HOODS

ECOAIR provides a diverse range of kitchen hood styles and configurations, offering flexible size ranges to accommodate almost any space and application requirement. Our kitchen hoods are also equipped with various configurable options and accessories to cater to your specific needs.

ECOAIR stands as a pioneer in grease extraction, offering the most efficient mechanical grease filters on the market, applicable to all of our Type I hoods. Our state-of-the-art manufacturing processes and employment of superior materials guarantee a high-quality product that is not only efficient but also aesthetically pleasing.

## STANDARD KITCHEN HOODS

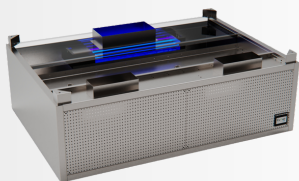
ECOAIR Commercial Kitchen Hoods integrated with Eco Curtain Controlled Capture Air Curtain technology is a highly efficient kitchen ventilation hood designed for all types of cooking especially for any cooking. The accumulation of cooking grease inside ventilation ducts and ventilation equipment is a fire hazard. Highly efficient ECOAIR NKV Series baffle filters capture large sized grease particles and prevent them from entering the exhaust ducts.



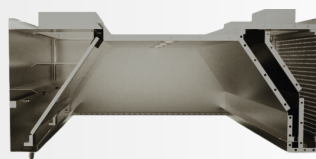
### Standard Features

<b>Material</b>	: SS-304, 320 grit sheet	<b>Other Accessories</b>	: TAB Port, Duct Spigots
<b>Sheet Thickness</b>	: 1.0 - 1.2mm thick	<b>Mounting</b>	: Slotted Channels
<b>Primary Filtration</b>			
<b>Model</b>	: NKV Series Baffle Filters, UL Listed	<b>Optional Features</b>	
<b>Certification</b>	: UL 1046 / NSF 2 / VDI 2052-1	- SS-316, SS-316L Material	
<b>Compliance</b>	: VDI 2052-1 tested (98% @ 10 microns) : Flame protection tested to EN 16282-6	- Light fittings, with dimmable 2800K – 6000K color temperature	
<b>Lighting</b>	: IP65 & Fire rated LED Spotlights	- <b>NOVIO Demand Controlled ventilation systems</b>	
<b>Product Feature</b>	: Eco-Curtain Controlled Capture Air Curtain	- Built-in Damper in Spigot	
<b>Manufactured to</b>	: ISO 9001 / 140001 / 45001	- IP65 & fire rated Panel lights	
<b>Compliance</b>	: DW-172 / NFPA 96 / ASTM F1704	- Fire suppression system	

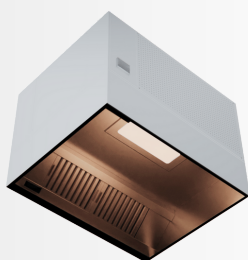


**UV KITCHEN HOODS**

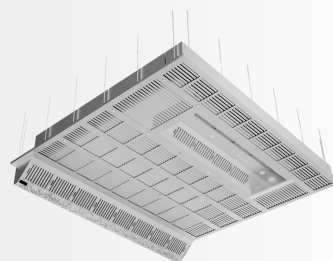
- Equipped with Eco-Curtain Capture Air Technology
- Compliance to DW/172
- DCKV System, ZOÉ, factory mounted or retrofitted
- Inbuilt UV Control and Monitoring System
- High Efficient UV Lamps

**WATER MIST HOODS**

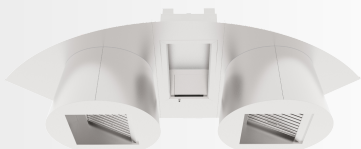
- Equipped with Water Mist Monitoring System
- Equipped with Auto wash System (Optional)
- Inbuilt drain pump system with water reservoir (Optional)
- Mist On-demand system, optimizes water usage (Optional)

**VENTLESS HOODS**

- Equipped with Eco-Curtain Capture Air Technology
- A ductless range hood consisting fan w/ motor, along with modular ESP and HEPA filter, charcoal filter, that removes grease particles, odor, and smoke, filters it, and recirculates clean air back into the kitchen.

**VENTILATED CEILING HOODS**

- Curated for clients based on their specific kitchen set-up.
- Uses grease filter plenums and supply air diffusers.

**ECO-VELOCI HOODS**

- Specifically designed for show cooking areas were low to medium duty and other tabletop equipment.
- High efficiency with maximum energy conservation.
- Simple and efficient design leads to low maintenance cost.

**DOWN DRAFT HOODS**

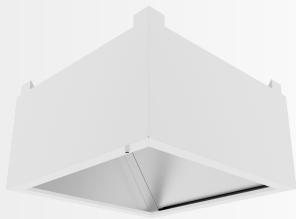
- Max. Extraction Efficiency with Min. Noise levels.
- Compliance to DW/172
- 1~1.2mm thick SS-304, 320 grit sheet
- Inbuilt filtration Systems to Remove Smoke, Grease and Odor particles
- High Efficiency Baffle filters

**PORTABLE COOKING STATIONS**

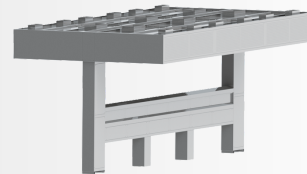
- Max. Extraction Efficiency with Min. Noise levels.
- Compliance to DW/172
- 1~1.2mm thick SS-304, 320 grit sheet
- Inbuilt filtration Systems to Remove Smoke, Grease and Odor particles
- High Efficiency Baffle filters

**ECO WALL MODULAR SYSTEMS**

- Modular Design
- Inbuilt Filtration to Remove Smoke and Odor Particles
- Portable Design and Easy Maintenance
- High Efficiency with Low Noise Levels

**CONDENSATE HOODS**

- Compliance to DW/172 - SE
- 1~1.2mm thick SS-304, 320 grit sheet
- Use of angled internal baffles and deflectors to achieve efficient condensation.

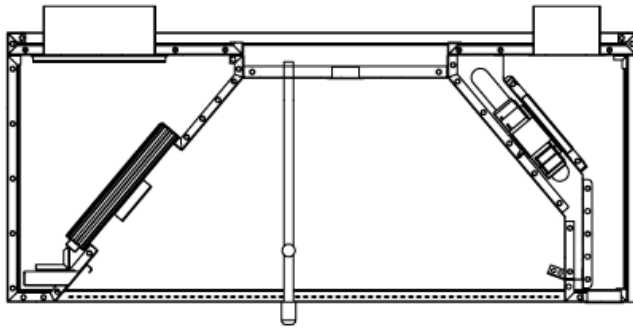
**SERVICE DISTRIBUTION UNIT**

- Removes Strong kitchen odors and smoke efficiently
- Grease filters ensure Optimal Kitchen Quality
- 1~1.2mm thick SS-304, 320 grit sheet
- Maximum Extraction with Minimal Noise.



## DEMAND CONTROL KITCHEN VENTILATION

- Achieve remarkable energy savings ranging from 40 to 50%, ensuring a return on investment within 12-24 months.
- This innovative solution maximizes profits while minimizing carbon footprint, ensuring occupant comfort in diverse climates.
- Enjoy hassle-free installation and maintenance with easy cleaning features. Benefit from a 100% sealed and watertight construction.



NOTES

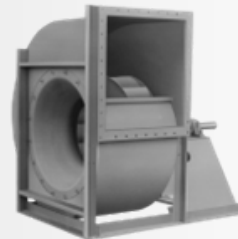


# KITCHEN ECOLOGY UNIT

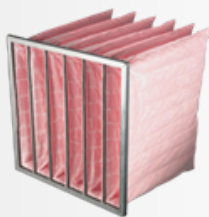


**ELECTROSTATIC PRECIPITATOR**

- Solid state power module control
- Ionization section voltage 12000V / 6000V
- Maintenance & fault alarm signal indicators
- Integration with ZOÉ DCKV system
- Applicable standards: UL-786 / CE

**BLOWER SECTION**

- Centrifugal backward inclined arrangement
- Optional SISW / DIDW type, depending on cooking load.
- Integration with ZOÉ DCKV system.
- Internal or external installation
- UL762 / Fire Rated / Local guidelines

**MULTI STAGE PARTICULATE FILTER**

- Removal of coarse, grease and smoke.
- Pressure monitoring across each stage
- Side / Front removal method.
- Applicable standard: UL 900

**ODOR CONTROL SECTION**

- Multiple technologies for odor control.
- Common technologies used:
  - Gas phase filtration
  - Ozone Generators
  - UV-C Filtration
  - Odor Neutralizers / Spray System

**CONTROLS SECTION**

- The controls section involves complete controlling of PCU systems with ease.
- Starter / VFD integrated / PLC integrated
- Integration with ZOÉ DCKV system

**OPTIONAL COMPONENTS**

- Fire Dampers / Fire Stat / DPS / DPT / Inspection Window & Light
- Fire Suppression System / Non-return Dampers.



# AIR CONDITIONING

Certifications



### Air Handling Units



- EUROVENT certified units ( EAPS Range )
- Airflow Range: 500~50,000 CFM
- Dedicated Selection Software - Ecoair Select
- AMCA Certified Blower w/ IE2/IE3 Motors
- AHRI Certified Coils & UL Listed Filters

### Air Cooled Condensing Units



- Capacity Range: 27 kW – 162 kW at T3 conditions.
- Hermetic Sealed Scroll compressor
- Direct drive axial type fans w/ ext. rotor motor
- Refrigerant: R407c, R410a,
- Compliance to ESMA Standard
- Filter drier, side glass, expansion valve, ball valve with charging port

### Fan Coil Units



- AHRI 440 Certified chilled water fan coil units.
- Static Pressure Range: 0~150 Pa
- Dedicated Selection Software
- Available in Ceiling Concealed, Ducted, Wall Mounted, Decorative & Cassette Units
- Optional features: Double skin panels, Stainless steel drain tray, EC Motors, Powder coated cabinet can be provided.

### Rooftop Package Units



- Nominal Capacity: 5 – 30 Ton
- Refrigerant: R410a
- Hermetic Sealed Scroll compressor
- Direct drive axial type fans w/ ext. rotor motor
- AMCA Certified Blower w/ IE2/IE3 Motors
- Compliance to ESMA Standard

### VRF Units & Split Units



- Capacity ranges from 8 HP to 32 HP outdoor unit as a single module with ultra wide operating range of (-5 to 56C) for cooling and (-27 to 26C) for heating.
- VRF outdoor has a wide voltage range, adjustable ESP upto 110Pa with auto restart and auto addressing functions.
- 8 stage oil return technology, duty cycle operation and backup operation, easy installation service.
- ESMA Certified Units

### Energy Recovery Ventilators



- Uses plate heat exchangers for reliability.
- Airtight separation of outdoor and exhaust air.
- No moving parts for a longer service life.
- ER paper for high moisture permeability and tear resistance.
- Blocks larger-diameter odor molecules for clean fresh air.
- Fashionable and silent with precision molding.
- Employs micro punch anechoic technology for quiet operation.
- Includes a bypass function for versatility.
- High airproof feature for efficiency.
- Designed for easy maintenance.

# Ventilux

Certifications

Applus<sup>+</sup>

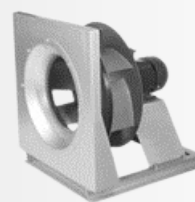


### Up-Blast Exhaust Fans



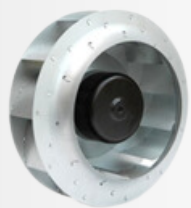
- Airflow Range: 300~52,000 m<sup>3</sup>/h (176~30,588 CFM)
- Static Pressure Range: 100~700 Pa (0.4~2.81 in.WG.)
- Drive Types: Direct/ Belt drive
- Mounting Types: Rooftop
- Applications: Rooftop ventilation / Explosion proof air supply and exhaust / Smoke removal

### Plug / Plenum Fans



- Nominal Size: 280 - 900 mm
- Motor Power max.: 18/45 kW
- Available in EC / AC / Squirrel cage Motors

### EC Fans



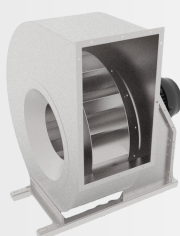
- Operational efficiencies up to IE5
- Air Volume range: 0-4,500 m<sup>3</sup>/h
- Static Pressure range: 0-700 Pa
- Operational temperature: -25°C - 60°C
- Drive Type: EC Motor
- Applications: Air intake and exhaust, heat dissipation

### Centrifugal SISW / DIDW Fans



- Airflow Range: 300~30,000 CFM
- Static Pressure Range: 136~1,400 Pa
- Drive Type: Belt/ Direct drive
- Mounting Types: Base Mount/ Ceiling Hung
- Applications: Commercial ventilation / Kitchen fume exhaust

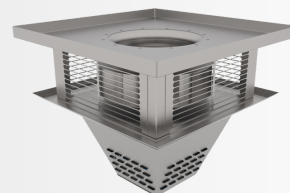
### 400C / 2hr Fire Rated Fans



Applus<sup>+</sup>

- Airflow Range: 200~18,000 CFM
- Static Pressure Range: 75~2,000 Pa
- Drive Type: Direct drive
- Certified by APPLUS
- Applications: Industrial ventilation / Explosion proof air exhaust / Kitchen fume exhaust

### Down Blast Centrifugal Fan



- Down blast exhaust fans are ideal for both roof and wall mounted installations, making them versatile for various applications.
- These fans are specifically designed for commercial and light industrial use, making them suitable for a wide range of settings such as schools, hospitals, and office buildings.
- With their ability to effectively remove air and odors, down blast exhaust fans are a reliable choice for ventilation needs in diverse environments.

### Cabinet Centrifugal Fan



- Cabinet centrifugal fan designed for car park exhaust and fire-resistant applications.
- Penta post design and strong aluminum joints for a sturdy framework.
- Panels made of durable pre-painted galvanized sheet steel for protection.
- High-performance centrifugal impeller made from steel sheet, available in backward or forward curved options.
- Thoroughly tested, meets 400C/2hour performance criteria for reliable operation in extreme conditions.

### Inline Centrifugal Fan



- Handles hot air up to 120 °C, even with grease (with grease filters) in challenging conditions.
- Ideal for ventilation in restaurant kitchens, café kitchens, industrial bakeries, and welding operations.
- Designed to eliminate contaminated air and gases from welding processes.
- Efficient ventilation in high-resistance conditions.
- Suitable for extracting grease-laden hot air in various settings, including restaurant kitchens, café kitchens, and industrial bakeries

### Inline Tube Axial Fan



- Uses propeller blades for parallel airflow to the rotating shaft.
- Highly recommended for industrial and commercial sectors.
- Ideal for space-limited process applications.
- Generates large airflow volume in low-pressure conditions.
- Diverse applications: removes heat, smoke, and fumes, aids drying processes, and provides comfort and process cooling.
- Versatile for both supply and exhaust configurations.

## NOTES



TM

# EAKON

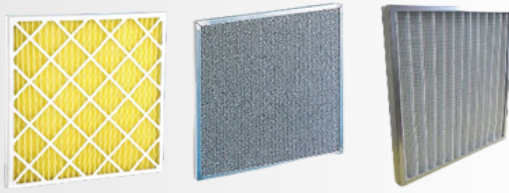
## Memberships



**NAFA**  
National Air  
Filtration  
Association



### Prefilters



- General coarse filtration purposes in commercial/ residential applications.
- High arrestance, dense, washable/ disposable media
- Filter class available: G1 - G4 (as per EN779)
- Synthetic & Glass Fiber media
- Complies UL900

### Medium & Fine Filters



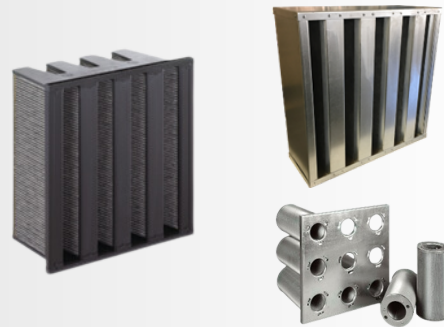
- Assembled with high particle efficiency media.
- Low in pressure drop, leak proof construction ensuring high dust holding capacity.
- Filter class available: M5 – F9 (as per EN779)
- Synthetic & Glass Fiber media
- Complies UL900

### EPA & HEPA Filters



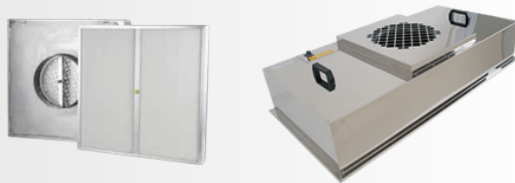
- For providing ultra clean air into clean rooms, pharma, hospitals & other healthcare industries.
- Tested as per EN 1822 standards and supplied with Test certificates.
- Filter class available: E10 – H14 (as per EN1822)
- Glass Fiber media
- Complies UL900

### Gas Phase Filters



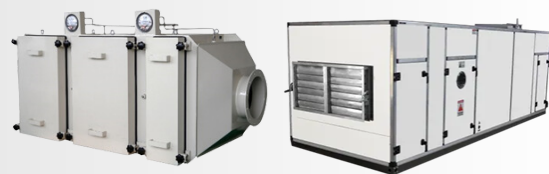
- Odor & other toxic gas removal applications.
- Full range of Activated Carbon / Alumina / Impregnated media filter & modules
- Designed & selected models for target gases.
- Robust in design & customized in various toxic gas applications

### High Purity - Terminal Housings



- Engineered & constructed for providing ultra clean air to protect clean rooms, pharmaceutical companies, hospitals, food industries.
- Terminal HEPA Units are factory tested for leakages.
- Provisions for In-site Leak Test.
- Fan Filter Units provided with silent EC/AC fans to push air into the cleanroom space.

### High Purity - Ducted Housings



- Engineered & constructed for providing ultra clean air as well as extracting contaminated air to & from clean rooms, pharmaceutical companies, hospitals, oil & gas, and other critical facilities.
- Specifically designed for critical applications such as chemical gas treatment and biohazard applications.
- BIBO and Chemical Filter units



# HEALTHCARE AND PHARMA



### Ducted Filtration Units (DFU)



- **PureDAF** Series Single skin / Double skin filtration units suitable for ducted filtration applications.
- Various combination of filter stages can be provided.
- Filters shall be of accessed thru side / front withdrawal type.
- HEPA Filters shall be accompanied with proper locking mechanism to prevent leakages

### Terminal Filtration Units (TFU)



- **Altair** Series Filter Units suitable for terminal filtration.
- Provided with HEPA Filters and aerosol test ports.
- Perforated Diffusers
- Available in SS304 / SS316 / MS Powder Coated Constr.
- Applications: Hospital & Pharma applications.

### Bag-In Bag-Out (BIBO) Units



- **PureSAFE** Series Bag In/Bag (BIBO) HEPA filter housings - Containment systems that are designed to filter dangerous biological, carcinogenic or radioactive contaminants from air.
- These housings designed to contain the filtered contaminants in a sealed housing until such time as the filter media needs replacement

### Fan Filtration Units (FFU)



- **Magnair** Series Fan Filter Modules
- Powered with EC / AC fans
- Suitable for bringing HEPA Filtered laminar air inside cleanrooms.
- Provision for BMS integration provided for fan grid.
- Available in SS304 / SS316 / GI / MS Powder Coated Constr.
- Optional pre/chemical filtration stages are provided on top

### Chemical Filter Units



- Engineered & constructed for providing chemically clean air into and out of clean rooms, pharmaceutical companies, hospitals, oil & gas, and other critical facilities.
- Specifically designed for critical applications such as chemical gas treatment and biohazard applications.
- Compliance with ISA 71.04 as per site conditions.

### Laminar OT Module



- **Hospair** Series Laminar Flow HEPA Modules
- Suitable for HEPA Filtered laminar air
- Provided w/ Mini-Pleat HEPA Filters & aerosol test ports
- Perforated Diffusers
- Available in SS304 / SS316 / MS Powder Coated Constr.
- Applications : OT rooms and other cleanrooms



# GULLFO<sup>TM</sup>

Memberships



### Whole House Filtration Systems



- Also known as Big Blue or Jumbo Filtration
- Available in Standing as well as Bracket type.
- 1/ 2/ 3 stages considering PP Sediment, CTO, GAC etc.
- Pressure release valve for easy removal.
- Available in 20" & 10" length with 2.5" or 4.5" housing type

### Multi-stage Filtration Systems



- Suitable for Commercial Kitchen Equipment
- 1/ 2/ 3/ 4 stages considering options of PP, ACF, ATS, UF, RO, etc.
- Large flow and high processing capacity
- Efficient removal of heavy metals and residual chlorine adsorption capacity, longer filter life.
- Quick removal of filter element and Low maintenance cost.

### Softeners



- Optional 2-in1 and modular parts.
- Simple, electronic system for easier programming.
- Self-cleaning brine injector reduces maintenance.
- Only regenerates when needed, saving salt and water.
- Singular rotary disc seal means longer product life and less maintenance.
- The product is light in size and long in service life.

### Water Dispensers



- Options for Ambient / Cold / Sparking water
- Provided with mechanical outlet (electronic upon request)
- Built-in Carbonizer & Ice-bank Cooling System

### Reverse Osmosis Systems (Residential & Commercial)



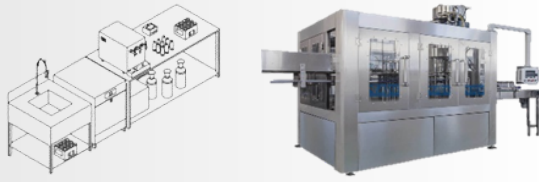
- Available in 100 GPD - 2000 GPD Flow rate.
- Optional TDS adjustment valve (for 2000GPD).
- Higher recovery rate from 1.5:1 to 2:1
- Compact sizes.
- Quick removal of filter element and Low maintenance cost.

### Reverse Osmosis Systems (Industrial)



- Works with any type of water or artesian well water.
- Handles high water hardness levels as well as iron. Prevents limescale deposits and corrosion of commercial or household appliances.
- Available in 0.25 – 2T/h flow rate capacity.
- Saves up to 50% of energy costs.
- Intelligent permeate recovery of up to 95%
- Cost-effective operation and maintenance, User friendly & Fully automatic.

### Water Bottling Stations



- Available in manual / semi-auto / fully auto options
- Available for Glass Bottles and 5 Gallon PET Bottles
- Range of 500 – 2000 BPH Units for Glass Bottles & Range of 50 – 200 BPH Units for PET Bottles
- Options for Ambient / Cold / Sparking water
- Complete installation, training, maintenance support.

### Glass Bottles



- Range of bottle designs available.
- Range of capacity (300 - 1500 ML)
- Range of cap designs (screw/crown/cork/ring pull/rip off)
- Custom Branding & Labelling of bottles



[illegible]

# CONTROLS AND AUTOMATION

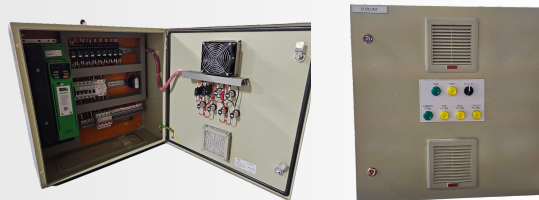


### PLC Control Panels



- System: Form 2 Assembled in Al Fanar, Rittal, RR, Ked Brooke enclosures system.
- Standard: IEC 61434-2
- Construction: Form 2
- Versions: Fixed.
- Material: Electro-galvanized sheet steel (1.5mm thickness).
- Treatment: 7 -stage zinc phosphating spray treatment.
- Finishing: Epoxy powder coated 80-120 micrometers.
- Paint: RAL7032 / 7035
- Mounting: Floor/Wall mounted.
- Accessories: Mounting Plate Key-locked handle.
- PLC Using Schneider, Siemens, Beckhoff, Delta, Allen Bradley

### HVAC Control Panels & Motor Control Centers



- Construction: Form 1-2 assembled in Al Fanar/ RR / Ked Brooke enclosures.
  - Manufactured in compliance with BSEN / IEC 61439-2 international standards.
  - Duty / standby selection through BMS, cyclic relays and 24 hour timers.
  - Assembled in Al Fanar, Rittal, RR, Ked Brooke enclosures system.
  - Level control relays and probes for solenoid valves are imported from the best quality manufacturers in Europe.
  - Safe and cost-effective control logic are provided.
- Applications in residential buildings, resorts, malls and villas.



IOT Systems

# TECHNICAL SERVICES



### MEP Retrofits & Installations



### AMC Maintenance & AMCs



### TAB Services



### MEP Designs



### Consulting & Site Surveys

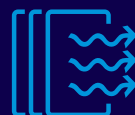
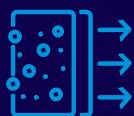






[ecoairgroup.com](http://ecoairgroup.com)





**Warehouse B2, Umm Dera , Umm Al Quwain, UAE**

**+971 6 530 2991 | [info@ecoairgroup.com](mailto:info@ecoairgroup.com)**

