

# DRI SYSTEMS

- Energy Recovery Ventilators
- Custom Air Handling Units
- Direct/Ducted Evaporative Coolers
- Treated Fresh Air Units
- Central Air Purification Systems
- Indirect Evaporative Coolers
- Dedicated Outdoor Air Systems
- Hygiene Air Handling Units
- Active Chilled Beams

**DRI Air Handling Unit (DAHU) range is**



- Casing Deflection
- Air Leakage
- Thermal Transmittance
- Thermal Bridging



We at **PAHWA**<sup>TM</sup>GROUP have been serving HVAC&R industry for more than 50 Years through our Flagship Companies **Bry-Air**<sup>®</sup> & **DRI**<sup>®</sup>.

The focus is on the technologies which benefits all the Stakeholders including our Clients/End Users, Consultants, Contractors and Partners towards a Sustainable Green Environment. DRI provides Innovative Air solutions for air treatment & Green Buildings. A full range of standard & custom air handling units are available. Given the range of our products & technology, DRI is the only truly custom AHU Company in Asia.

A fast growing HVAC&R company with a global footprint, DRI is also a global provider of components for Energy Recovery, Indoor Air Quality (IAQ) & Fresh Air Treatment.

**DRI**<sup>®</sup> Evaporative Cooling Solutions are available under **ARCTIC**<sup>®</sup> brand, to help cool large areas economically.

**Over 700,000 square feet of state of the art manufacturing facilities**



Corporate Office, Gurugram



Gurugram (1)



Gurugram (2)



Manesar (1)



Manesar (2)



Bhiwadi

**World-class R & D and Testing Facilities**



**ECO FRESH**<sup>TM</sup>  
Energy Recovery  
Wheels



**ECO DRY**<sup>TM</sup>  
Desiccant Dehumidifying  
Rotors & Cassettes



**ECO SCRUB**<sup>TM</sup>  
Gas Phase  
Filtration



**ECO BEAM**<sup>TM</sup>  
Active  
Chilled Beams



# Our Products are Heart of all Systems



Energy Recovery Wheels



Desiccant Dehumidifying Rotors & Cassettes













Evaporative Cooling Pads



Gas Phase Filters

## Products Certifications

 <p>Heat Recovery Wheels HRW Model: MS - 200 MS - 270A</p>	 <ul style="list-style-type: none"> <li>Heat Recovery Wheels</li> <li>Desiccant Dehumidification Cassettes</li> </ul>	 <p>Energy Recovery Ventilators</p>	 <p>Honeycomb Chemical Filter</p>
 <p>Heat Recovery Wheels HRW Model: F1 200 Series, F2 200 Series Sensible: EC - 100, 200, 270 EZ - 100, 200, 270 EH - 100, 200, 270</p>	 <ul style="list-style-type: none"> <li>Heat Recovery Wheels</li> <li>Desiccant Dehumidification Cassettes</li> <li>Evaporative Cooling Pads</li> </ul>	 <p>Desiccant Dehumidification Rotors</p>	 <p>Heat Recovery Wheels</p>
		 <p>Quality Management System</p>	 <p>Environmental Management System</p>



# DRI Air Handling Units (AHUs) are certified as per AHRI standard 1350

AHRI standard 1350 Certified



## Rating of Central Station Air-handling Unit Casing

Table 1. Casing Deflection Rating Class

Class Deflection, $CD_x$	Rating Differential Static Pressure, in $H_2O$	Maximum Normalized Deflection, in/in of Span
$CD_1$	10	0.0033(1/300)
$CD_2$	8	0.0042(1/240)
$CD_3$	6	0.0042(1/240)
$CD_4$	4	0.0042(1/240)
$CD_5$	1	$\geq 0.0042(1/240)$

Table 2. Casing Air Leakage Rating Class

Class-Leakage, $CL_x$	Maximum Casing Air Leakage Rate, $CL_r$ , cfm/100 $ft^2$ (at $Pr=1$ in $H_2O$ )
$CL_1$	1
$CL_2$	2
$CL_3$	3
$CL_6$	6
$CL_{12}$	12
$CL_{24}$	24
$CL_{100}$	100

Table 3. Casing Thermal Transmittance Rating Class

Class-Thermal Transmittance, $CT_x$	Thermal Transmittance without Leakage (U), Btu/hr/ $ft^2/^\circ F$	Thermal Transmittance with Leakage (U), Btu/hr/ $ft^2/^\circ F$
$CT_1$	$U \leq 0.14$	$U \leq 0.16$
$CT_2$	$0.14 > U \geq 0.23$	$0.16 > U \geq 0.26$
$CT_3$	$0.23 > U \geq 0.36$	$0.26 > U \geq 0.39$
$CT_4$	$0.36 > U \geq 0.55$	$0.39 > U \geq 0.61$
$CT_5$	$U > 0.55$	$U > 0.61$

Table 4. Casing Thermal Bridging Rating Class

Class - Thermal Bridging, $CB_x$	Thermal Bridging Factor, kb
$CB_0$	$kb \geq 0.8$
$CB_1$	$kb \geq 0.8$
$CB_2$	$0.8 > kb \geq 0.60$
$CB_3$	$0.60 > kb \geq 0.40$
$CB_4$	$0.40 > kb \geq 0.20$
$CB_5$	$kb < 0.20$

DRI Air Handling Unit (DAHU)  
DAHU Range: 1700 CMH – 60000 CMH



# Our Systems Portfolio



Chilled Beams



Energy Recovery Ventilators



Treated Fresh Air Units



Air Purification Systems



Dedicated Outdoor Air Systems



Dedicated Outdoor Air Systems with Refrigeration on Board



Hygiene Air Handling Units



Kitchen Exhaust Unit

## Evaporative Cooling Systems



Portable



Spot/Free Flow



Ducted



Indirect-Direct (2/3 Stage)



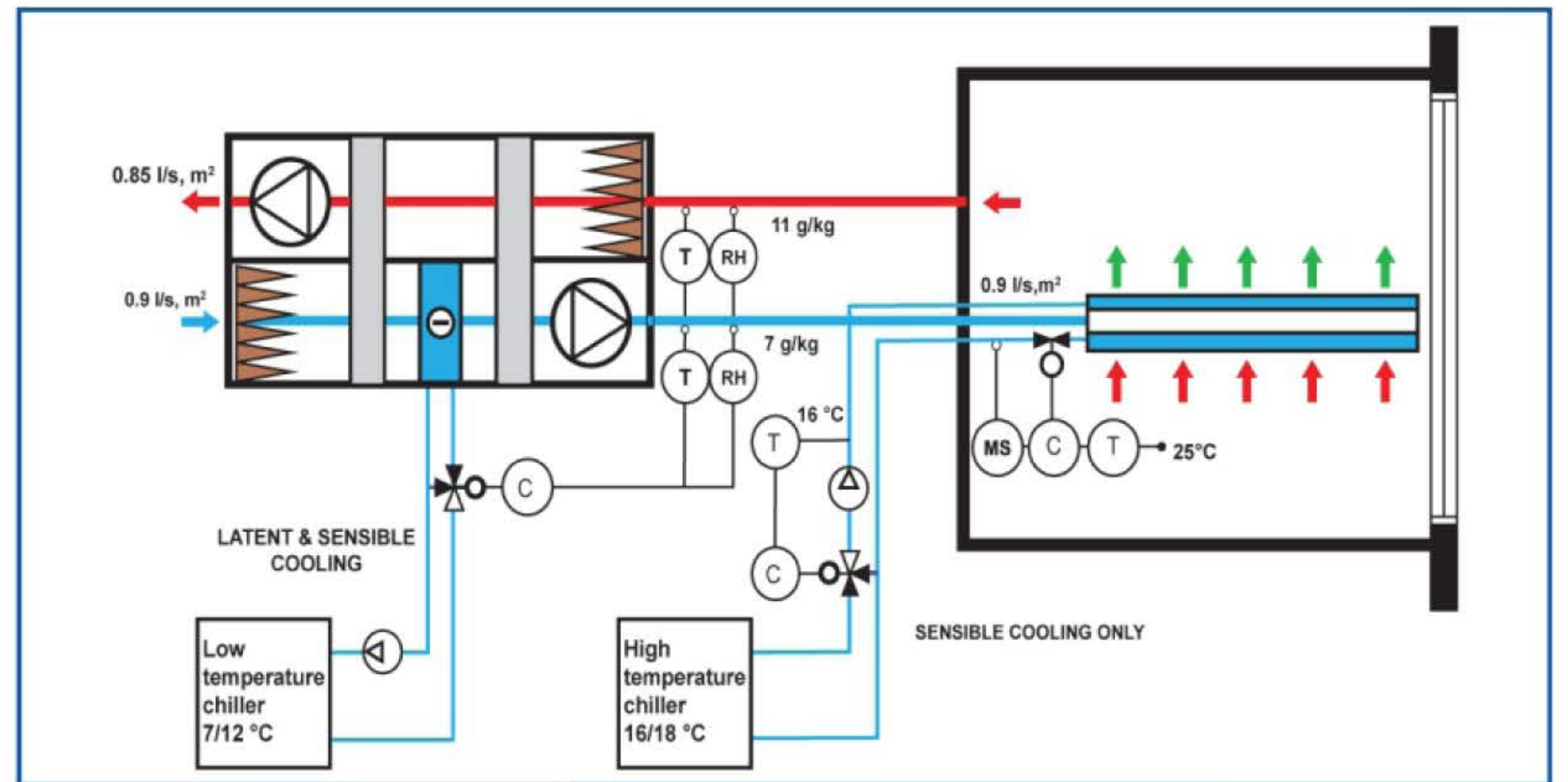
# **DRI<sup>®</sup> ECOBEAM**

## CHILLED BEAMS

### Pairing EcoBeam with DOAS

As *EcoBeam* have higher induction ratio, less primary air is needed to induce the room air and therefore building can be designed based on fresh air requirement only. This also allows using *DOAS (Dedicated Outdoor Air System)* units for air handling with integrated energy recovery and moisture removal. As the primary air volume is reduced, the supply air needs to be dehumidified to become

dry enough to carry out all internal moisture loads. This can be ensured with *DRI ULTIMA*, where double-wheel with cooling coil is able to remove enough moisture from primary air.



### Applications

Chilled beams can be used in buildings where outdoor air is treated (dehumidified) before supplying it into spaces and infiltration of outdoor air is in control. Also the internal moisture (latent) loads need to be at moderate primary air volume sufficient to avoid condensation. Therefore, the typical applications are:

#### Hospital Patient Rooms



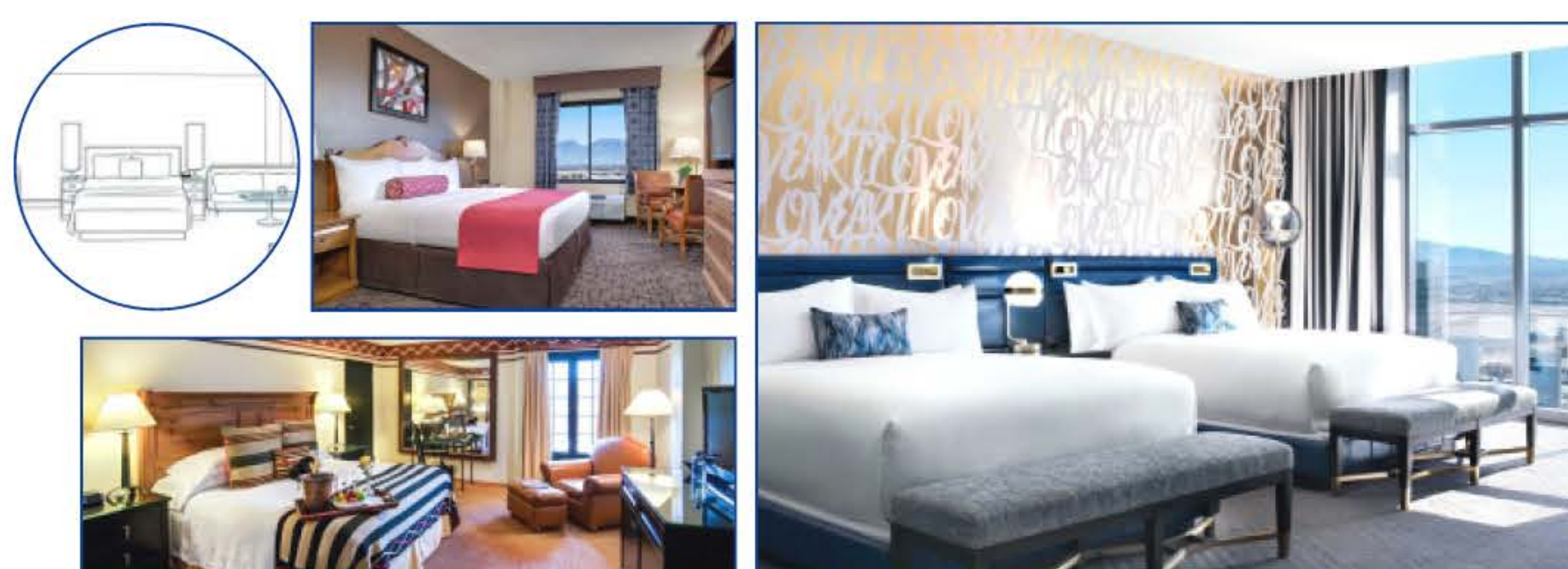
#### Schools



#### Commercial Office Buildings



#### Hotel Rooms



#### Laboratories





# **DRI<sup>®</sup> ECOBEAM**

## CHILLED BEAMS

### Silent Air Conditioning



ECB-C-601 Concealed



ECB-C-602 Concealed



ECB-C-603 Concealed



ECB-C-604 Concealed



ECB-C-605 Concealed



ECB-C-151 Concealed



ECB-E-301 Exposed



ECB-E-451 Exposed



ECB-E-452 Exposed

## **Multi-Service ECOBEAM**

EcoBeam ECB-M-451

Exposed multi-service chilled beam

- Multi-service unit with various options available
- High cooling capacity with low primary air volume
- 2-way discharge towards the surface above the unit
- Exposed installation, min. 100mm free space required above the unit
- End connection of air duct and pipes
- Condensation collection trays
- Various perforation options available



LED-light, smoke detector, daylight & occupancy sensor, PA speaker





# Energy Recovery Ventilators with

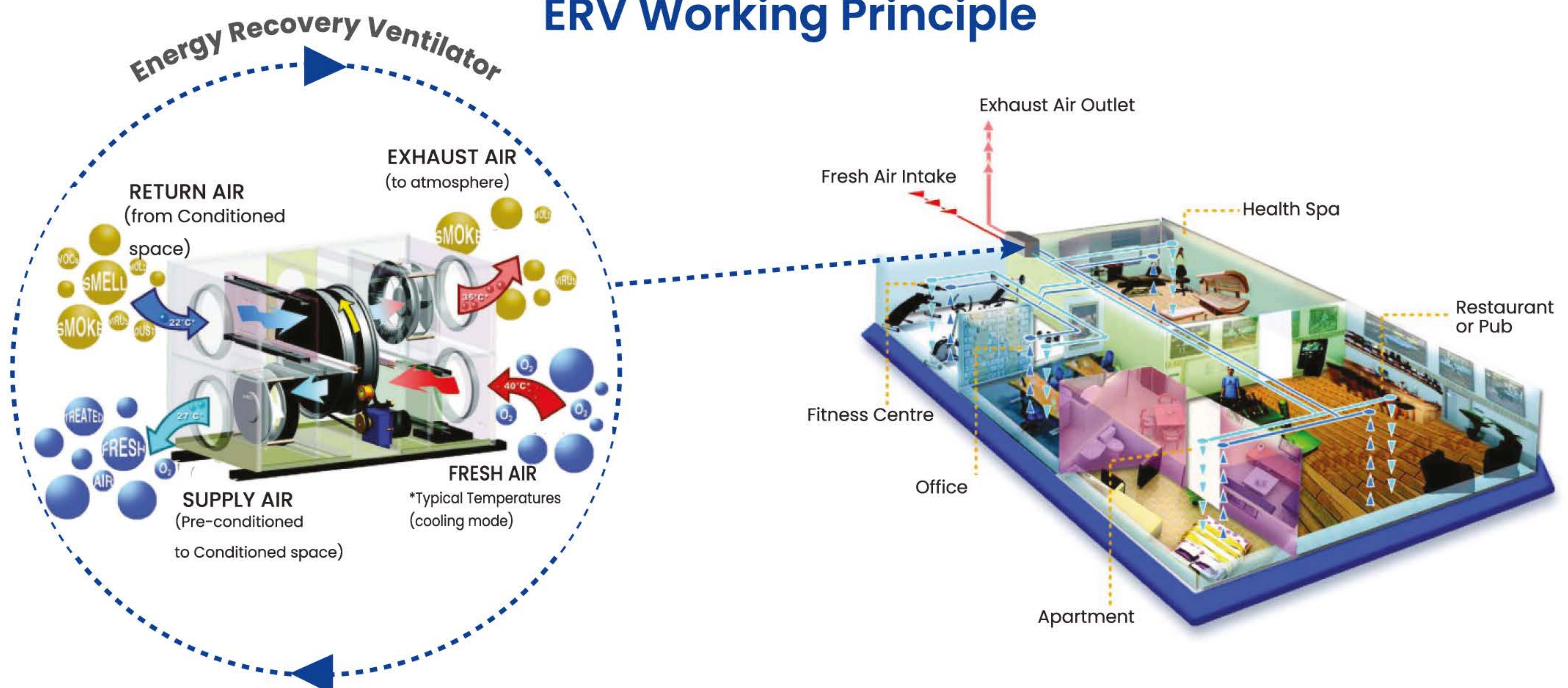


Only air-conditioning is not enough,  
you need fresh air for healthy environment



**DRI ERV<sub>i</sub>** adds pre-cooled fresh air to conditioned spaces without the need to increase tonnage of existing AC. It ensures that you get the right air quality as per international and domestic norms used the world over in offices, condominiums, hotels, hospitals, auditoriums, multiplexes, schools, healthcare centers, pharma industry, etc.

## ERV Working Principle



Unlike ERV most split, vrv and vrf air-conditioners, only recycle and cool stale indoor air



## ERV Models ERV 80/100<sub>i</sub> – ERV 3000<sub>i</sub>



ERV – 150<sub>i</sub>



ERV – 500<sub>i</sub>



ERV – 800<sub>i</sub>



ERV – 1000<sub>i</sub>



ERV – 2000<sub>i</sub>



ERV – 3000<sub>i</sub>

Selection software available

DRI ERV<sub>i</sub> is the first choice of an HVAC engineer and architect as it provides triple advantage of:  
**Better IAQ • Energy Saving • Humidity Control**

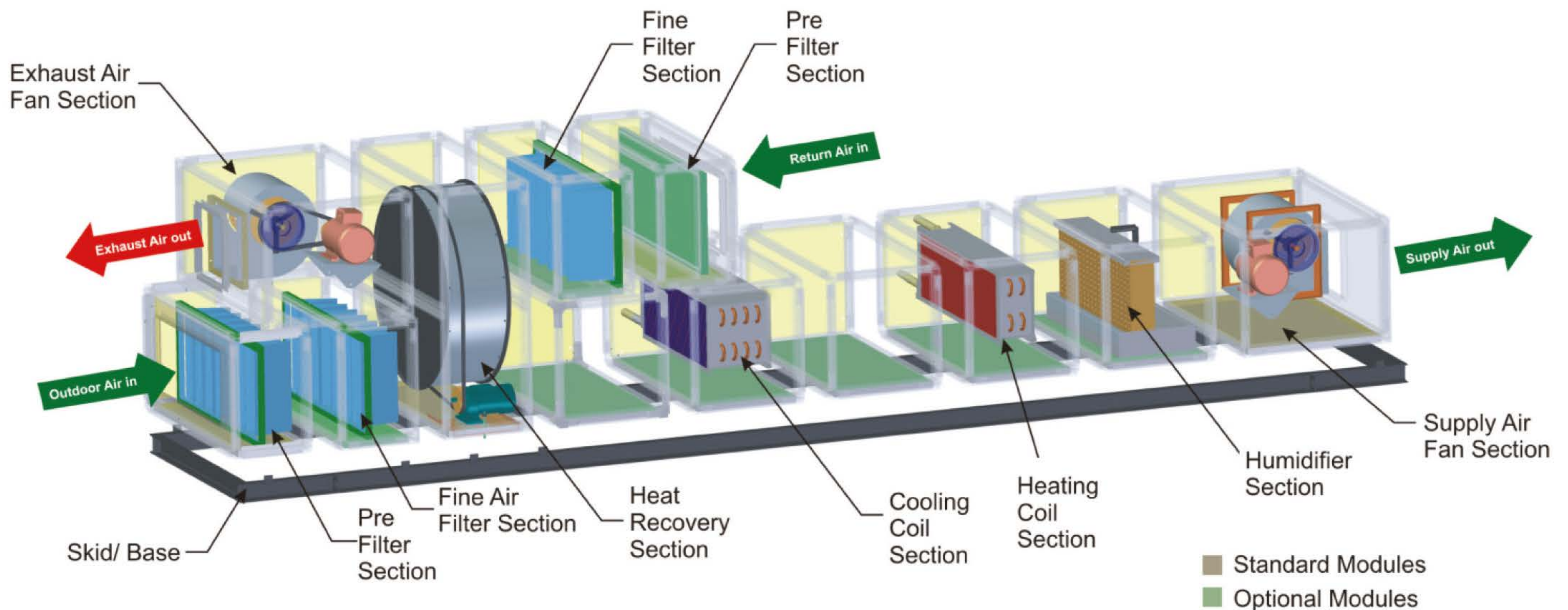


# FLEXAIR™

## TFAs Series

### The Next Generation of Fresh Air Units

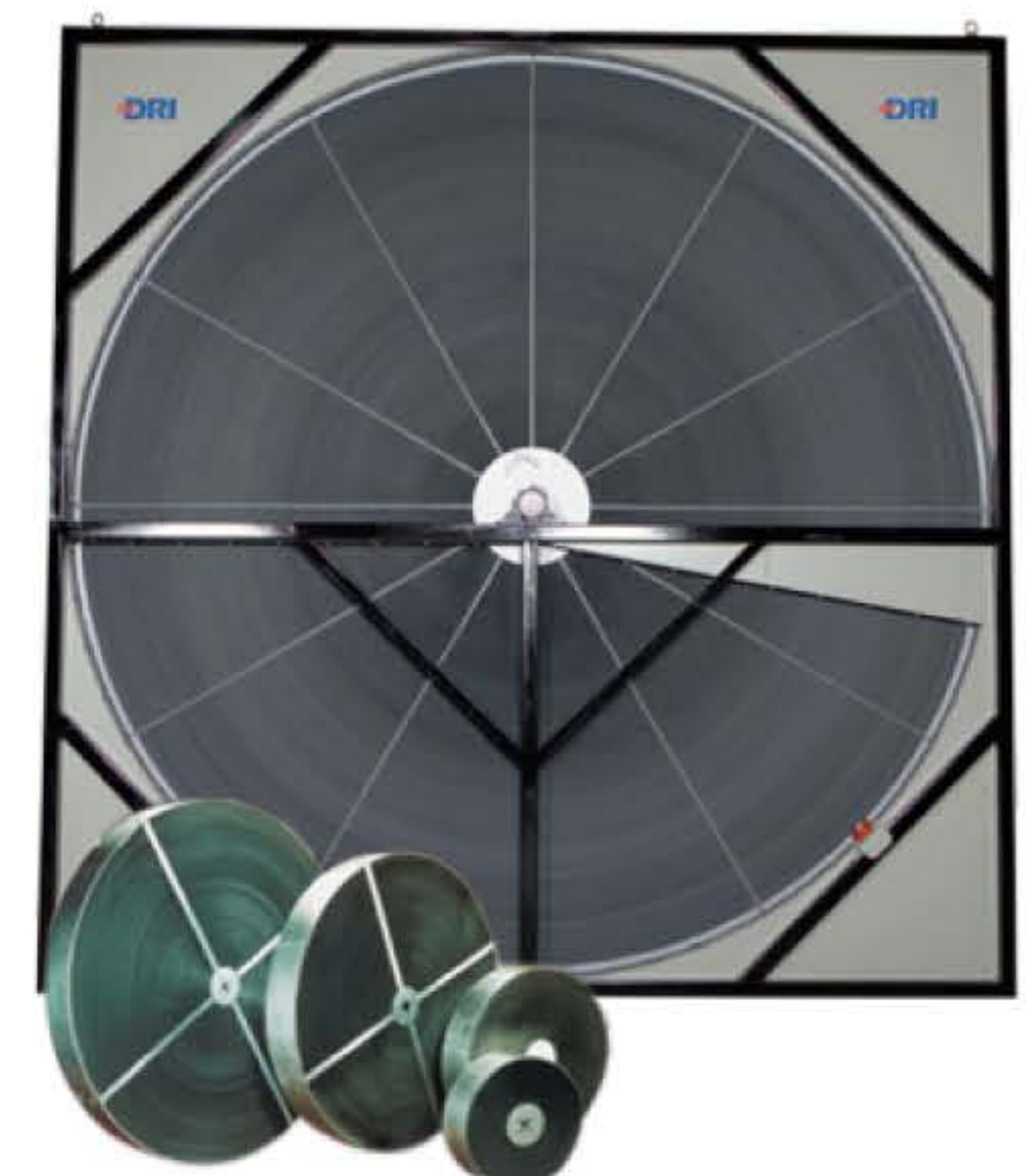
#### Operating Mechanism



The new **FlexAir** Treated Fresh Air Units with **Ecofresh** Molecular Sieve Coated Heat Wheel inside provides a complete solution for IAQ and Energy Saving in a single unit, with the option to add modules for cooling, heating, humidification, high efficiency filtration, mixing, sound attenuation, etc.

#### Benefits of EcoFresh beyond payback and enhanced energy saving

- Almost no cross-contamination, specially, the adjustable purge section rules out the cross-contamination of the air stream (less than .04%)
- Over 80% energy recovery both latent and sensible. Ideal for tropical climates where latent loads are 2-3 times the sensible load
- Special labyrinth sealing arrangement ensure no cross leakage of air stream between the supply and exhaust section
- Most advanced technology & Certified/Tested in international labs
- Wheel edges hardened to suit marine/coastal application needs
- Best LCC (Life Cycle Cost)



Molecular sieve coated Heat Wheels

#### Why **FLEXAIR**™

- Ensures good IAQ
- Reduced Aircon and thus, saves energy costs
- Helps qualify for LEED Certification



# **FLEXAIR™**

## **TFAs Series**

Selection software available

**Ensures good IAQ in Hotels, Auditoriums, Multiplexes and other large air-conditioned spaces !**

**FlexAir TFAs** are perfect for cold and dry climates as well as hot and humid climates. FlexAir TFAs help to maintain IAQ and humidity in conditioned sectors like :

- **Hospitality:** Hotels, Restaurants, Pubs, Bars, Discotheques
- **Healthcare:** Hospitals, Nursing Homes, Operation Theatres, Nurseries, Burn Wards
- **Commercial Areas:** Supermarkets, Departmental Stores, Office Buildings, Conference Facility
- **Educational & Recreational Areas:** Schools, Auditoriums, Bowling alleys
- **All other conditioned spaces**
- **Ideal for:** Healthcare & Pharmaceutical Industry

## **Some of Our TFA Installations**



**Bahrain**



**Kenya**



**UAE**



**Bangladesh**



**India**



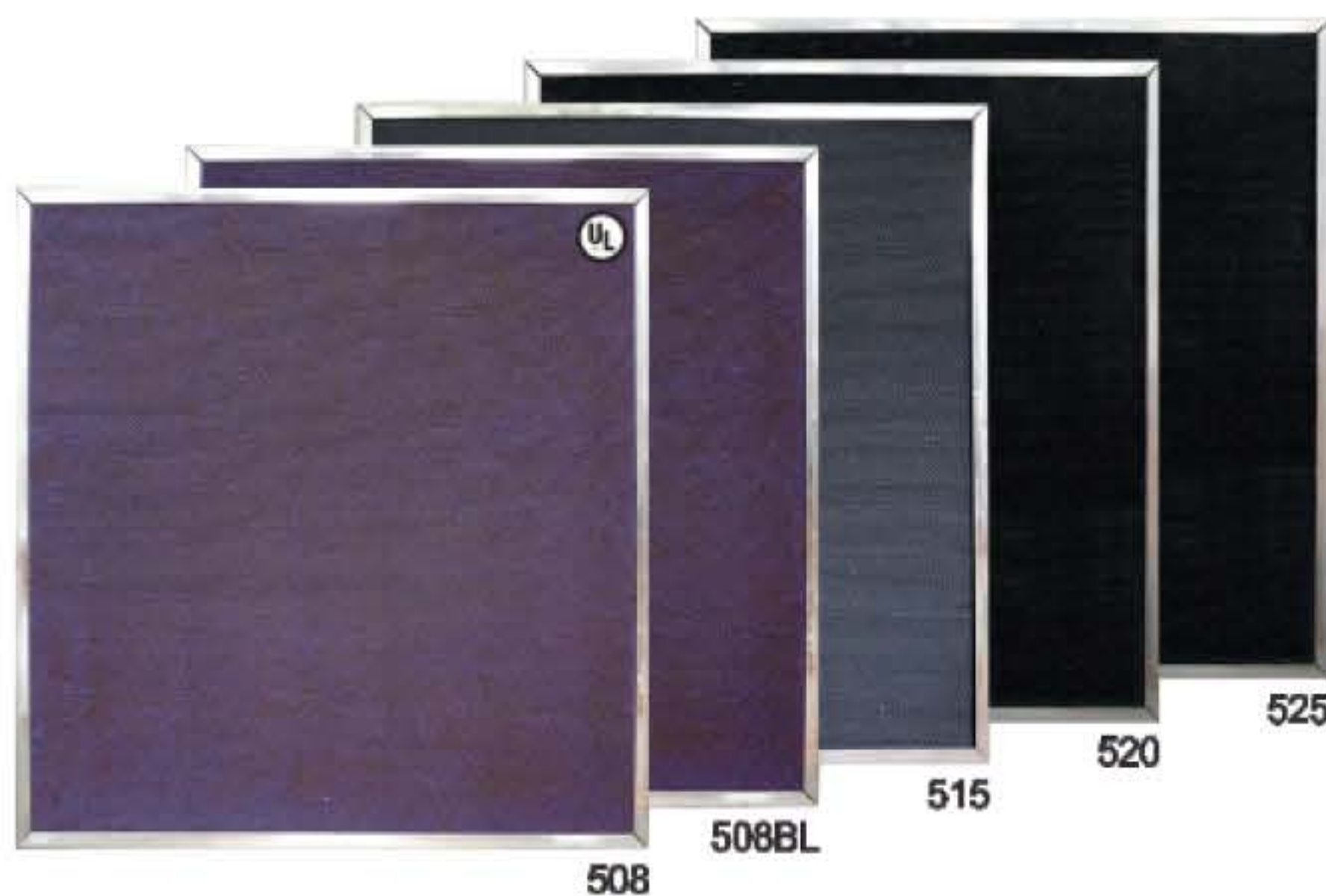
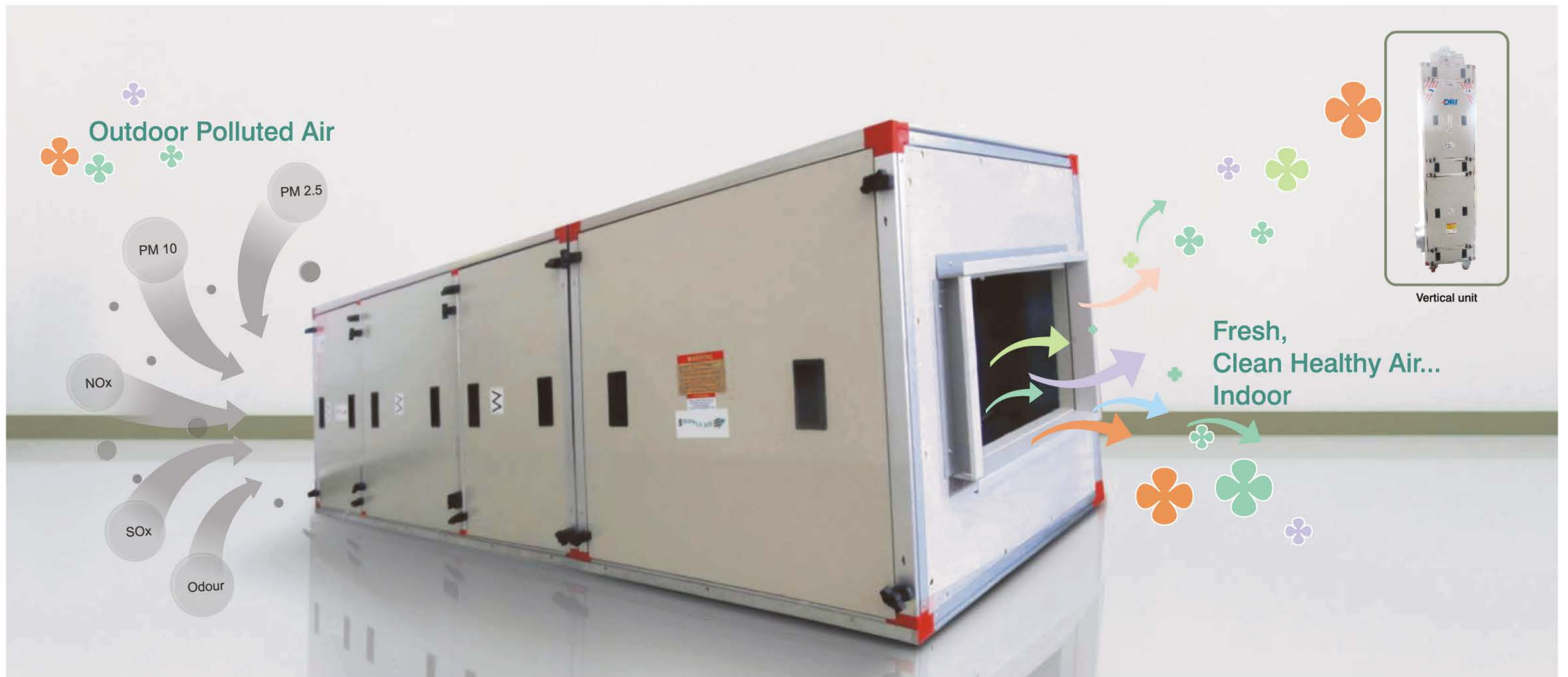
**India**





# Central Air Purification Systems

Enhance IAQ Protect yourself against pollution



**DRISORB™ Series**  
Honeycomb  
Chemical Filters



**BRYSORB™ Series**  
Granular Media

- Dilutes / flushes out indoor pollutants using clean outside air and further prevents infiltration by positively pressurizing the area
- Outside air, proper particulate and chemical filtration is required before the air is introduced into the space

## Acceptable levels

Particulate matter (PM <sub>2.5</sub> )	24 h mean < 25 µg/m <sup>3</sup>	WHO Air Quality Guideline
Particulate matter (PM <sub>10</sub> )	24 h mean < 50 µg/m <sup>3</sup>	WHO Air Quality Guideline
Carbon dioxide (CO <sub>2</sub> )	< 1000 ppm	ASHRAE 62.1-2013
Sulphur dioxide (SO <sub>2</sub> )	24 h mean < 20 µg/m <sup>3</sup>	WHO Air Quality Guideline
Nitrogen dioxide (NO <sub>2</sub> )	1 h mean < 200 µg/m <sup>3</sup>	WHO Air Quality Guideline
Ozone (O <sub>3</sub> ) 8 h mean	< 100 µg/m <sup>3</sup>	WHO Air Quality Guideline
Carbon monoxide (CO)	8 h mean < 75 ppm	ASHRAE 62.1-2013
Formaldehyde	< 0.1 mg/m <sup>3</sup>	ASHRAE 62.1-2013



# APS Models



FAPS-500V



FAPS-1500U



FAPS-2000H



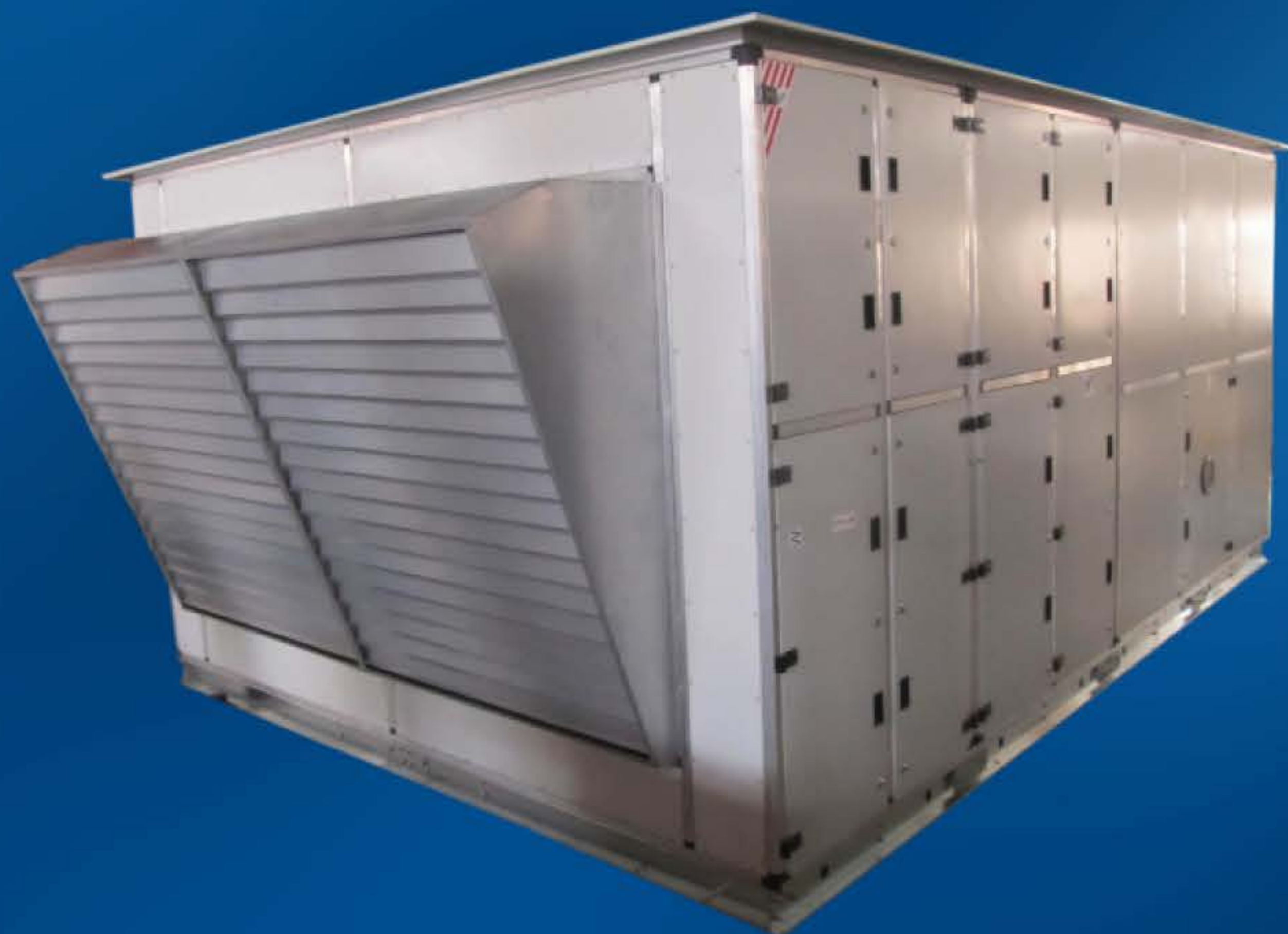
FAPS-2000U



FAPS-2000V



FAPS-4200V



FAPS-1700



FAPS-6000

## Enhance IAQ with Healthy Life



Residences



Classrooms



Offices



Hotels



Embassy



# **DRI DOAS** **Dedicated Outdoor Air Systems**

World's Largest Range of DOAS with advanced Controls, Sensors and Connectivity

Ideal for The "Moisture Centric" tropical countries.

Achieves both RH control and energy recovery.

## **DRI DOAS** **ULTIMA**


- Designed to supply air at low dew point using chilled water coil
- Ultimate for the Moisture Centric tropical Countries Achieves both RH Controls & Energy recovery
- Uses unique passive dehumidification wheel for extra dehumidification



## **DRI DOAS** **ZENITH**

- Possibility of obtaining substantial lead points
- Good RH control in all the seasons
- Reduced installed tonnage & lower power consumption of HVAC system
- Uses Sensible heat exchanger for reheat & increasing energy recovery



 **SMART EMS** Energy Management System is an intelligent controller with imbedded logic which modulates various components, air flows and rotor speed, based on inputs from dual and other in built sensors, for varying outside air parameter / conditions.

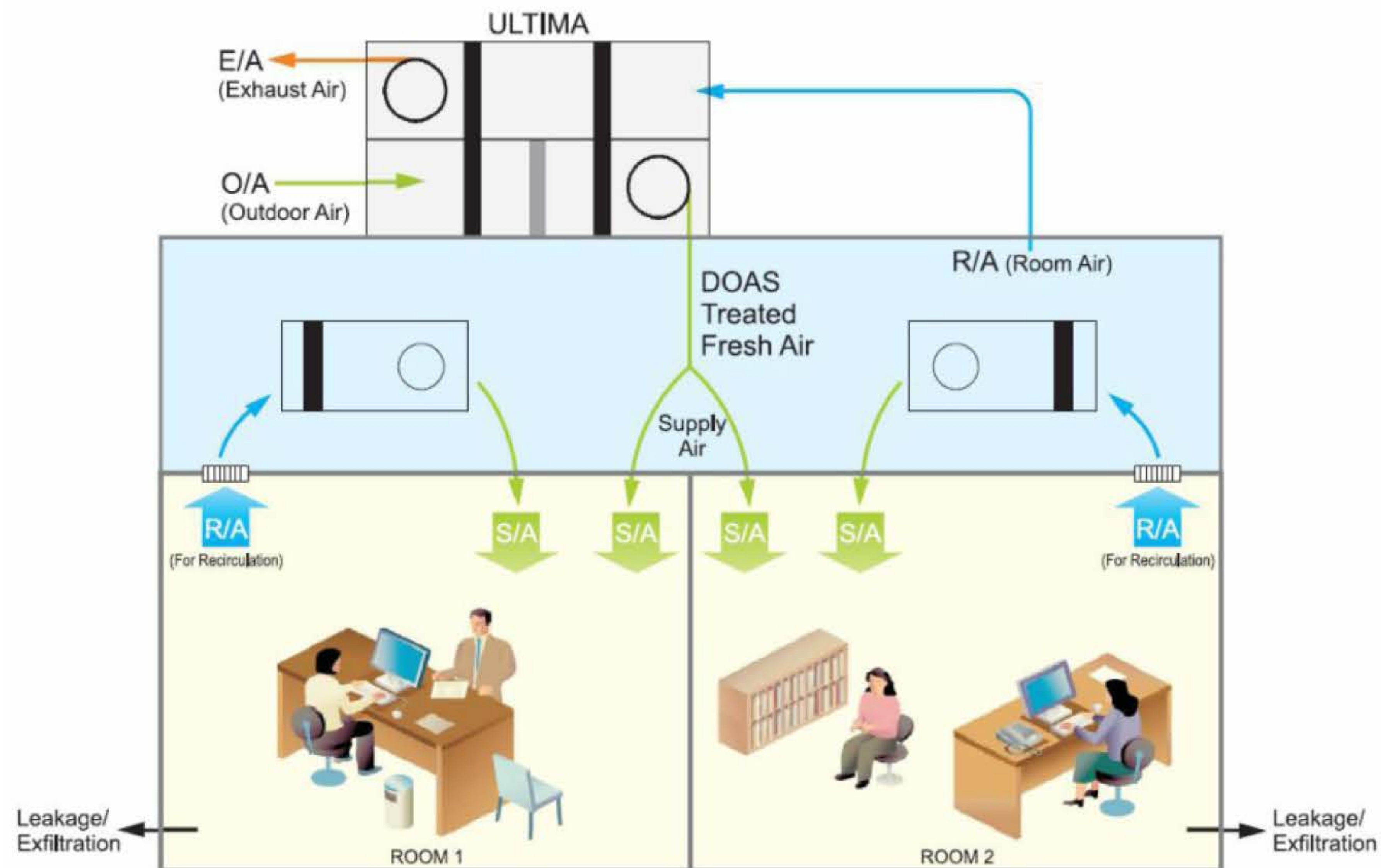
- Fully automatic micro processor controlled operation
- In built Demand Control Ventilation (DCV) option
- In built Dual sensors
- Can be connected with the Building management System (BMS) through suitable communication protocol



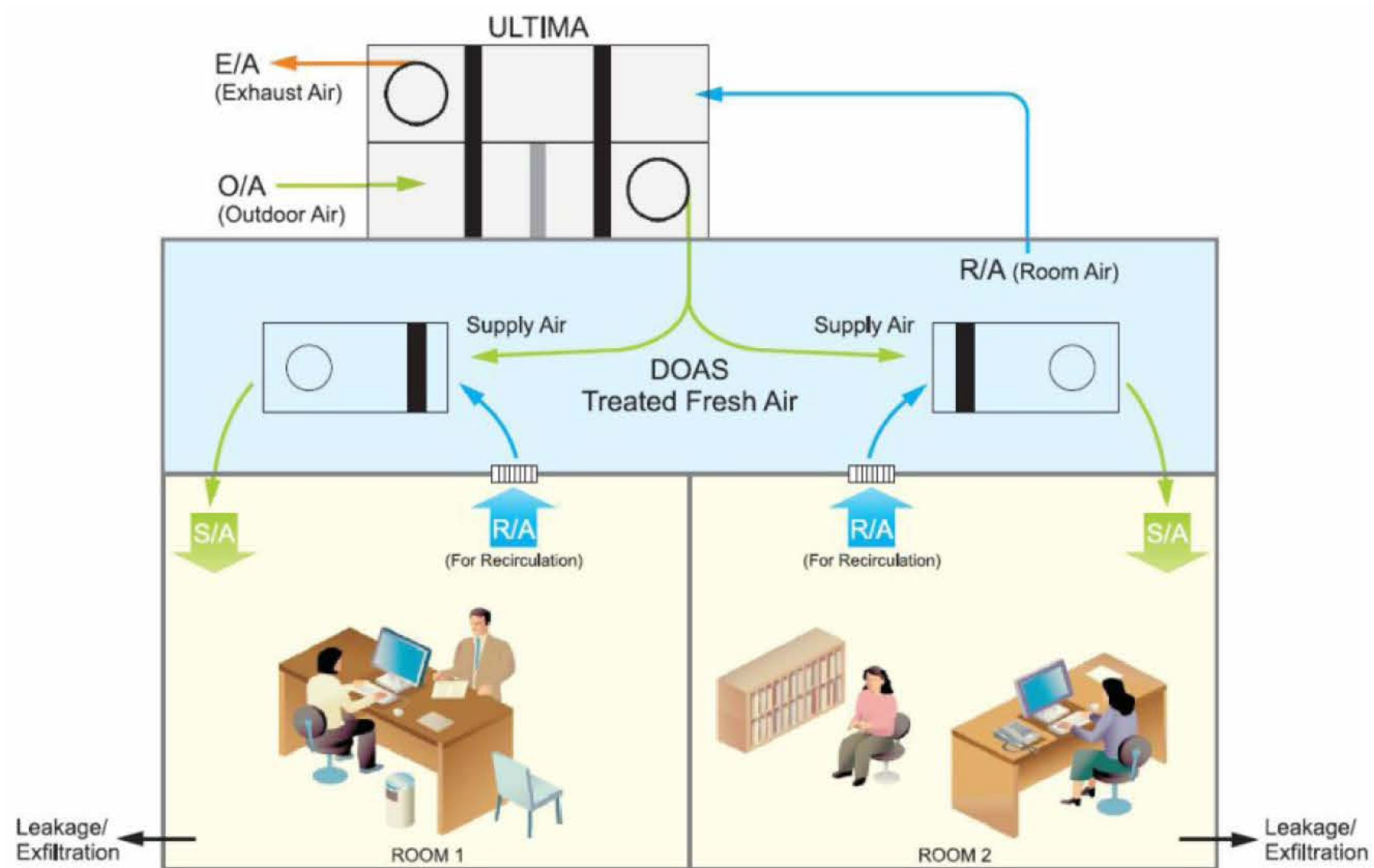
# **DOAS** Dedicated Outdoor Air Systems

## Installation Options:

### DOAS in Parallel with Terminal Equipment



### DOAS in series with terminal equipment



## Ideal for:



Office Spaces/IT Offices



Hotels/Hospitality



Hospitals/Health  
Care Facilities



Commercial Spaces/Malls

Substantial Green Building LEED Points for  
Energy saving (55%) approx • Improved IEQ\* • Innovative new technology

\*IEQ: Indoor Environmental Quality





## with Refrigeration on Board

### DRI HEXAIR – R series Fresh Air Package Unit

- Integrated with cooling units, helps free up space, simplifies installation, reduces operating cost & minimizes capital cost
- Gives you the ability to deliver cool and dehumidified air after energy recovery, cools using an onboard condensing unit independent of any chiller/chilled water supply or external condensing unit/VRF unit
- Delivered fresh air is closer to the room temperature in a neutral condition



### Power of Six

- Improved Indoor Air Quality
- Effective Humidity Management
- Proper Space Utilisation
- Highest Moisture Removal Efficiency (MRE)
- Free Reheat
- Utilises Waste Heat for Regeneration

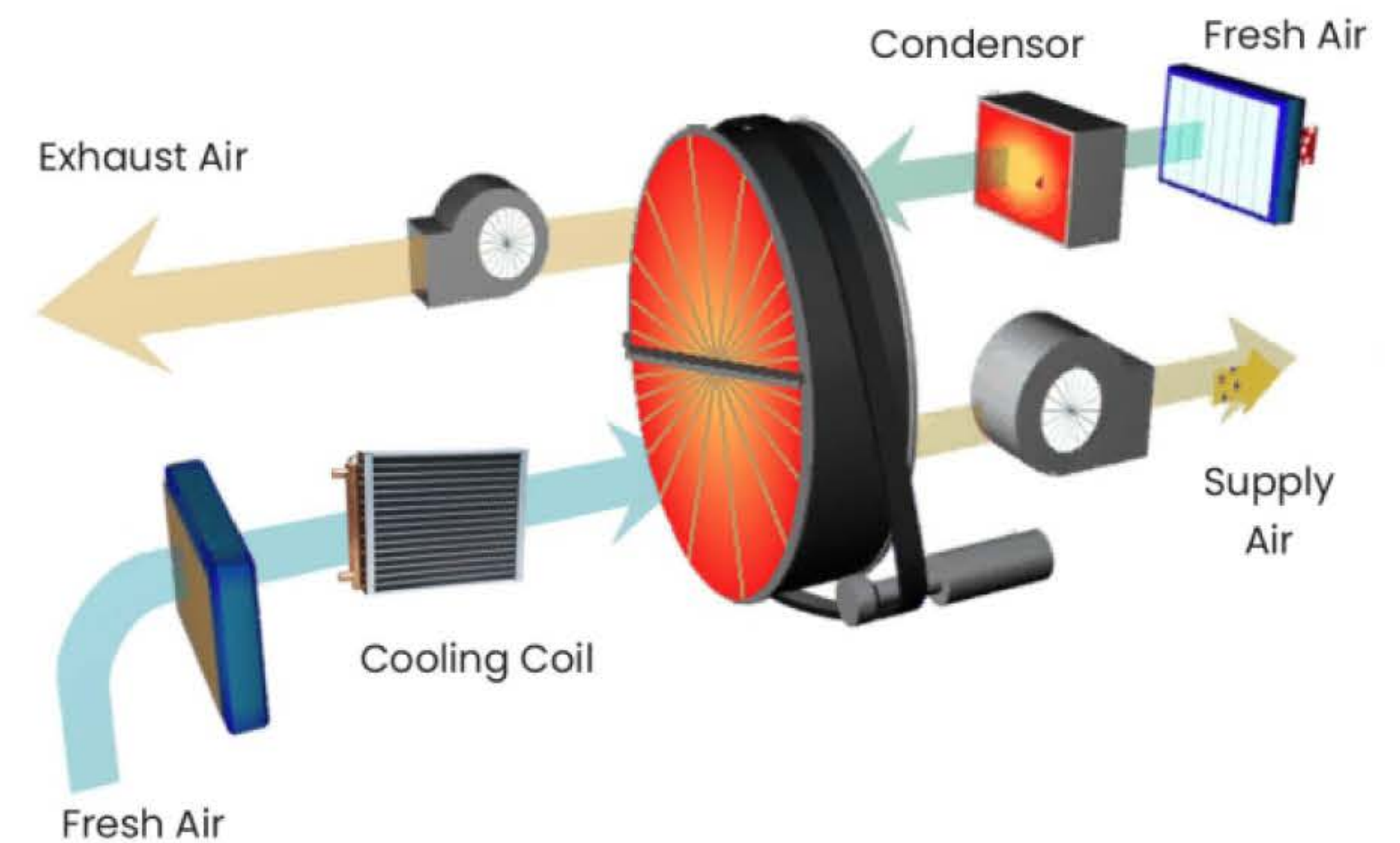




## with Refrigeration on Board

### DRI HEXAIR – MR series

- \* with active desiccant wheel and condenser heat regeneration
- **HEXAIR – MR** integrates desiccant dehumidification, cooling unit and energy recovery to maintain RH in conditioned spaces
- The system also utilizes waste heat to regenerate specially customized desiccant wheel series thereby increasing the moisture removal capacity
- The unit provides space neutral leaving temperature and low dew point to take care of room latent internal loads
- Dehumidification is at no extra energy cost, as it uses waste heat of condenser coil to regenerate the desiccant wheel
- The system is most energy efficient as it eliminates the need for energy guzzling over cooling and reheating. It works with a 100% outdoor air or can work on partial outdoor and re-circulation air





# Some of Our DOAS Installations



India



India



Malaysia



India



Indonesia



Malaysia



Malaysia



# Hygiene Air Handling Units for

## Health Care, Operation Theater & Pharmaceuticals Facilities

Only routine microbiological monitoring is not enough, every hospital should have given proper attention to airconditioning, ventilation & filtration system to keep the air environment clean & safe for patients. The role of HVAC is further very challenging in ultra-clean Operation Theatres, used for procedures such as Organ Transplant, Orthopaedic Surgery, Neurosurgery, etc. where bacterial contamination is relatively more critical.

### Solution

- DRI OT AHU's provides guaranteed safe environment in the OT. It fulfills the parameter of NAHB guidelines and provides clean air & a safe environment
- DRI OT AHU ensures the right air quality as per international standards used the world over, It recovers energy from exhaust air, resulting in a considerable reduction in installed tonnage and utility bills. They also assist in enhancing the Indoor Air Quality (IAQ), maintaining desired temperature and humidity, and increased productivity

### Components:

- Energy Recovery
- Cooling Section
- Heating Section
- Humidification Section
- Controls & Sensors
- Humidity Control



### Controls

On board/remote, following functions are available

- Temperature Control
- Humidity Control
- VFD (for Constant Air Volume)
- Controls on Board like: Weekly schedule/night mode
- Electrical boards: The electrical board is fitted with a mains supply switch and has all the components necessary for the full functioning of unit without trouble
- Variable frequency driven fans
- Control Panel: The electrical board supplied with the OT AHUs air-conditioners provide necessary isolation against harmonic and electromagnetic disturbance. It is manufactured to comply with all the protections required by the current standards

### Options :

- Stainless Steel Casing
- UV Light Section
- VFD
- Hepa Filter
- Refrigeration on Board (Condensing Unit)



# ENIRA

## Custom Air Handling Units (AHU)

### Designer's Delight

Fully factory assembled tested units Designed & manufactured as per dimensional needs and Client specifications.

### Customized Offered:

#### Product Type:

- Heat recovery
- Packaged with Direct expansion (DX) system on Board
- Custom profiles and custom aspect ratios
- Standard modular units
- Side by side units
- Vertical units
- Multiple fans
- Service platforms
- Dehumidification – active & passive
- Energy recovery – energy wheels, plate type, heat pipes

#### Application

- 50 CFM to 100,000 CFM (and larger...)
- Commercial applications
- Industrial applications
- Architectural profiled units

#### Construction

- Welded construction or corner post panel construction option
- Thermal break options & insulation options
- Hygiene construction options with special coatings
- Material options – MS, GI, SS, aluminum, aluZinc, pre coated sheet
- Fans : plug, centrifugal, fan wall & EC fans
- Construction for indoor & outdoor Installation
- Various skid options
- Size & air flow directions as per requirements
- On board control sensors & connectivity remote

#### Shopping Options

- Semi-knocked down / fully assembled



## Heating and Cooling:

### • Heating

- Electric Heaters
- Direct or Indirect gas fired heaters
- Hot water coil
- Steam
- Condenser heat, electric, gas, thermic fluids, solar
- Humidification – evaporative, pan type, atomizers

### • Cooling

- Chilled water
- Evaporative cooling
  - For humidification applications
  - For direct cooling & indirect cooling
- Humidifiers
- On board refrigeration: variable & fixed speed

## Factory Installed Control Options:

- Factory mounted wiring raceways and J-boxes for field control wiring
- Factory installed sensors, actuators, controllers
- Factory installed, Programmed DDC controllers and PLC controllers

## Electrical:

- Single point power panels
- Variable frequency drives
- Standard and EC Motors
- Conduit Runs

## Filtration:

- Standard and High MERV Rated Filtration
- Ultra-Violet Lights
- HEPA Filtration
- Bag-In/Bag-Out
- Gas Phase
- Electronic Filtration
- Standard or Angled Filter Racks
- All particulate & Gas Phase Filtration, Pre (G4) to HEPA (H14)



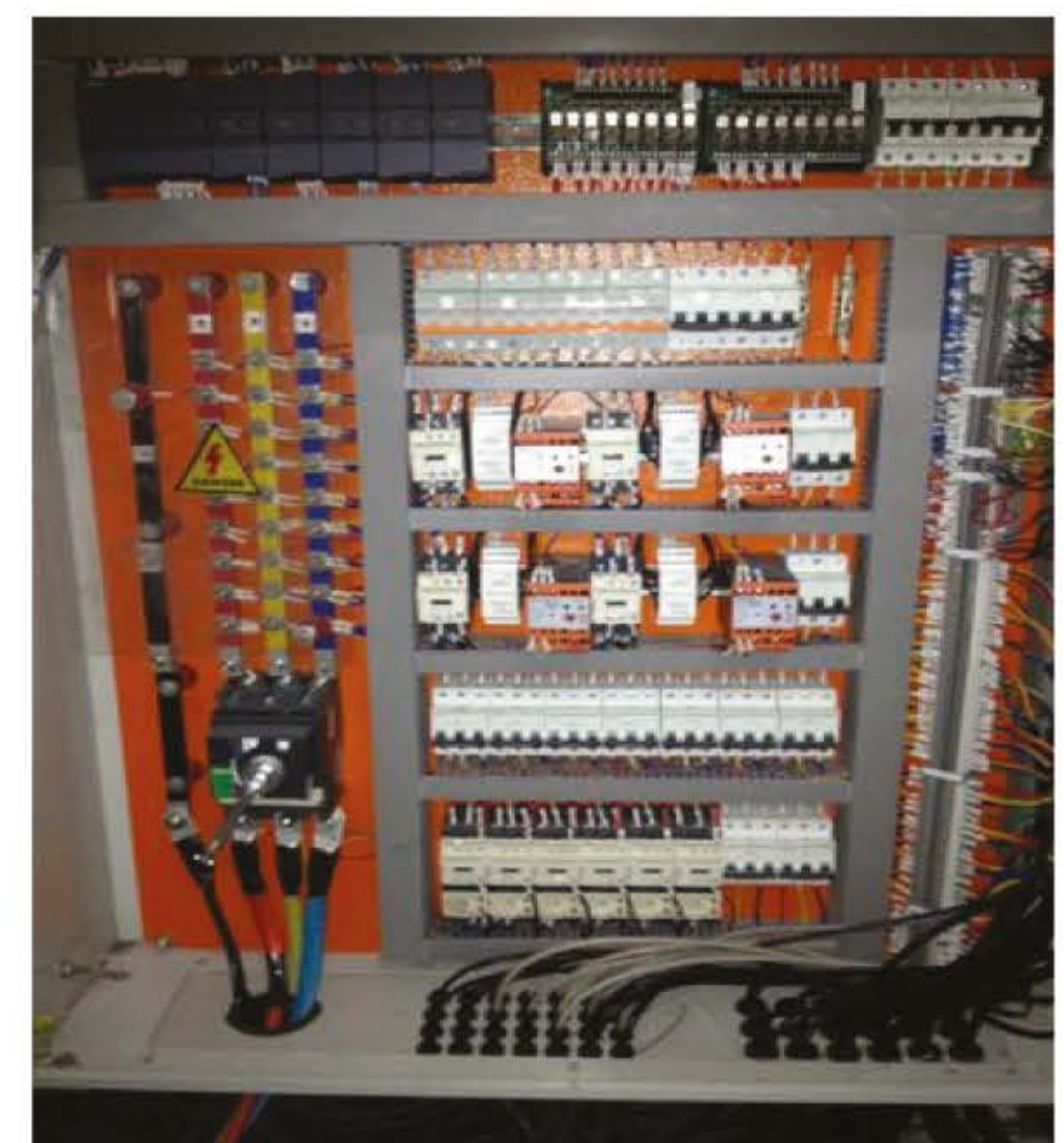
# Controls, Sensors and Connectivity

Fully integrated solutions for TFA & DOAS units with sensors, controls (for Varying ambient conditions) & connectivity

## Basic Electrical & Controls

Fully wired system comes with the following features:

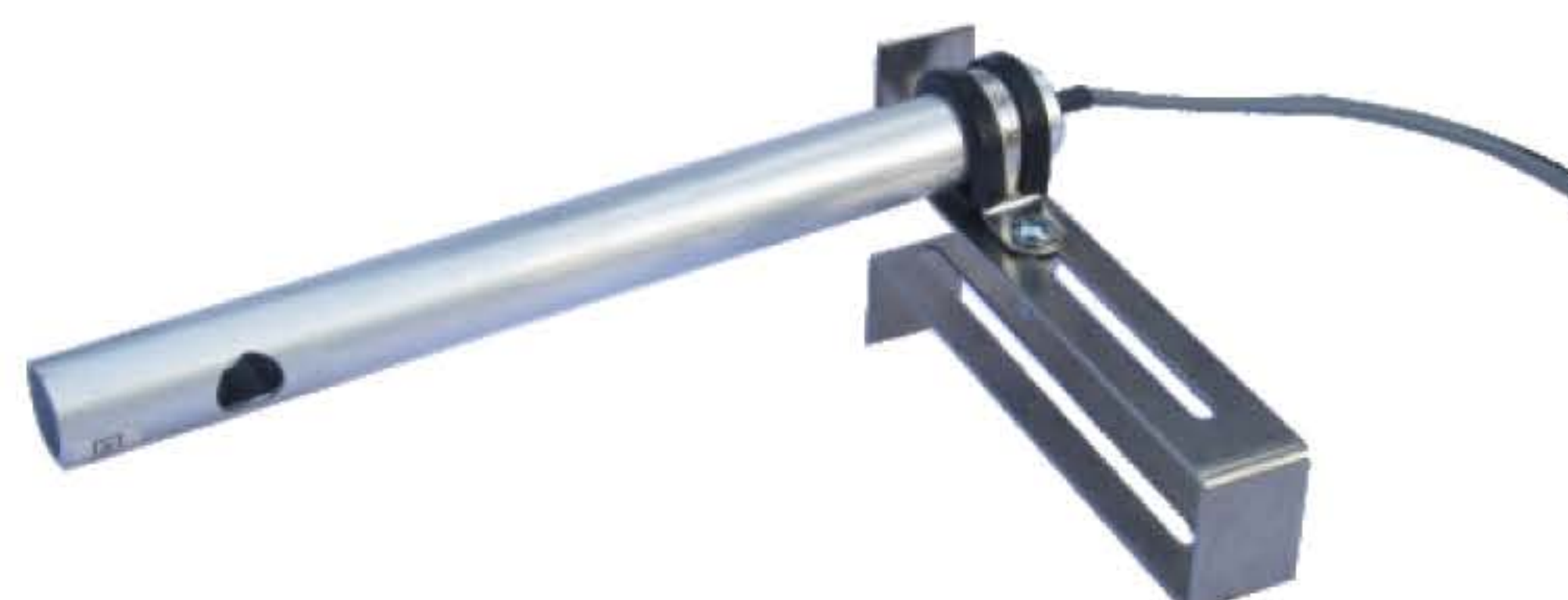
- IP 54 Control panel enclosure.
- Starters for Supply air Fan with (ON/OFF/Trip) indication.
- Starters for Exhaust air Fan with (ON/OFF/Trip) indication.
- Starters for Heat Recovery Wheel with (ON/OFF/Trip) indication.
- Optional Interlocking for Supply Air Fan, Exhaust Air Fan & Heat Recovery Wheel Drive Motors.
- Safety switches (door lock switches).
- Differential Pressure Switches for Indication of clogged/Dirty filters.



## Basic Control with Online Measurement

Fully wired system comes with display of :

- Temperature & Humidity of Outdoor, Return, Supply & Exhaust Air,
- Supply and Exhaust Airflows
- Effectiveness (as per Ashrae 84-2008)





## Fully Automatic Programmable “Controls and Touch Screen”

Fully wired control panel with following features:

- Dual (Temp. & RH ) sensors for Outdoor, Supply & Return air
- Coil off Temp. Sensor
- Differential Pressure Switches with indication of Clogged/Dirty filters
- Pressure transmitters for measuring pressure drop across the Energy Recovery Wheels & other Components.
- Variable frequency Drives for Supply & Exhaust Air Fan motors
- Touch Screen for setting up and on line display of Temp. & RH
- Effectiveness & Air flows displays.
- Remote monitoring.





# Kitchen Exhaust Unit DRI-ECU Series

## Important Features

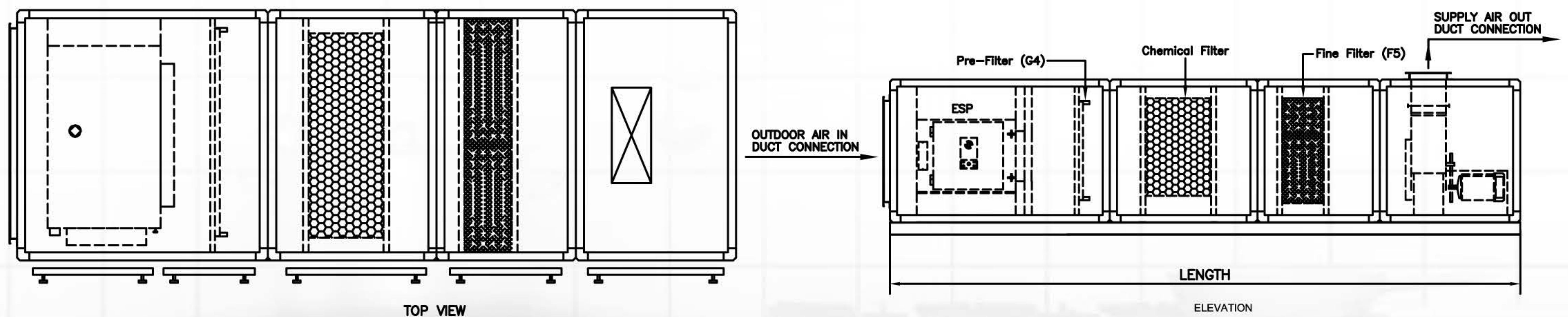
DRI Kitchen Exhaust units are designed to eliminate the oil, grease, dust particles, smoke, and odor from the kitchen exhaust. The units are engineered and constructed to meet today's market standards requirement of keeping the environment clean with a cost-effective, economical & easy to maintain system. Our units are designed to have the flexibility of installation on the roof top, ceilings, or any other area in the exhaust air stream to take care of the design constraints. Units are designed as per relevant standards.

## Typical Applications

- Restaurants
- Hospitals
- Mall's / food court
- Hotels

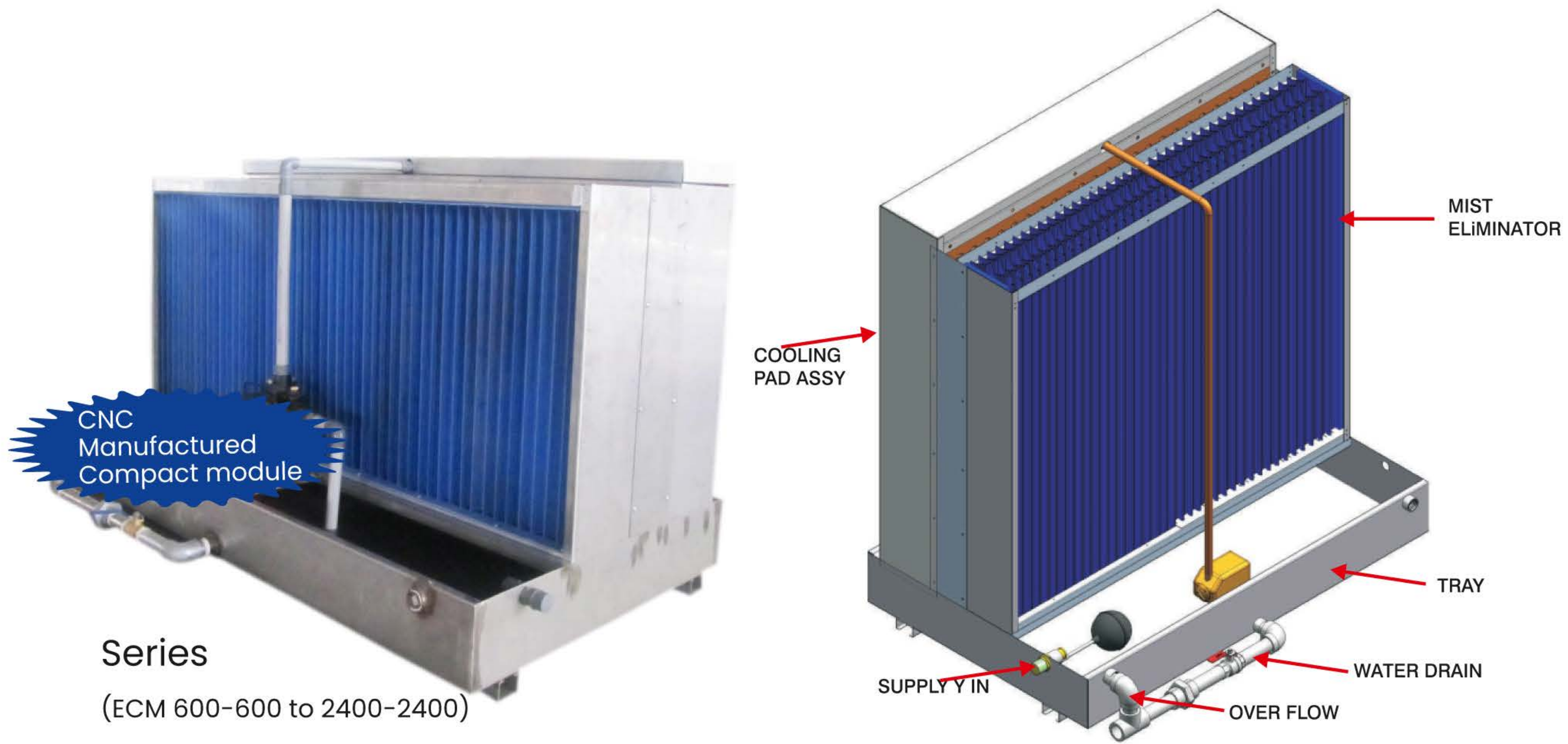
Options for UV Filtration, ESP wash module, UL rated fire dampers , variable frequency drive & HMI are also available on request.

## Example Unit Configuration





# Evaporative Cooling Modules for AHUs



Series

(ECM 600-600 to 2400-2400)



**Incorporating the new Fire Retardant EcoCool Evaporative Cooling Pads:**  
Special flame retardant material ensures total safety in a hazardous environment



**High Water Retention:**

Engineered from cross-sectional, specially treated fluted media capable of absorbing and retaining more water to provide maximum cooling efficiency. EcoCool Evaporative Cooling Pads take on more water almost 20 to 40% higher amount of water than many other international pads



**Long and extended life:**

Special protective edge coating lessens build-up of dust particles, thus, enhancing the life of pads



**High Structural Strength:**

Stiffening and rot resisting agents provide exceptional structural strength



**High Cooling Efficiency:**

Pads are designed, engineered and manufactured from a specially treated inorganic material which ensures exceptionally high evaporative efficiency



**Easy Maintenance:**

Low and very easy maintenance



**Low Operating Cost**

**Customised  
Options Available**

## Power Requirement

ECM 600-600 to ECM 1200-1200	90 Wt, 230v / 1 PH / 50 HZ
ECM 1500-1500 to ECM 1800-1800	180 Wt, 230v / 1PH / 50 HZ
ECM 2100-2100 to ECM 2400-2400	370 Wt, 230v / 1PH / 50 HZ

**Evaporative  
Cooling Modules  
for Air Cooled Chiller**







## Evaporative Cooling Solutions



Free Flow (Spot)  
Evaporative Coolers



Ducted/Direct  
Evaporative Coolers



Indirect Evaporative  
Cooling Systems (IDEC)



Dew Point  
Cooling Systems



Desiccant Cooling  
Systems (with IDEC)



Solar-Assisted Desiccant  
Cooling Systems (with IDEC)

### Features

- Metal body
- Highly cost efficient
- Very robust and durable
- Industrial & Commercial ducted air cooling Solutions
- Enhance productivity & reduce absenteeism
- Remove fumes & odour
- Design & Installation services also available



Evaporative Air Cooler Range





# Evaporative Spot and Portable Air Coolers

## Free Flow Portable Coolers



Free Flow Portable  
Evaporative Coolers  
APC - 20K

- Portable Industrial & Commercial air cooler on wheels are Ideal for Machine Operators, Small in assembly lines, Ware houses, Events, etc
- It has four side pads design, easy to install & maintain. It can be kept indoors also
- Multiple speed axial fan for high and better air spread
- Heavy-duty lockable caster wheels
- Low noise

## Free Flow Spot Coolers

### Advantages



Free Flow (Spot)  
Evaporative Coolers  
ATD - 10K

- High efficiency long life 60mm four side pads
- CNC fabricated high quality 16G powder coated / painted casing
- Quick and easy removal of cooling pad
- High efficiency fan
- Designed for low RPM to ensure low noise levels & trouble free operation
- High quality submersible pump for longer life
- Over flow, and auto cut arrangement provided for make-up water
- Caster wheels provided for rotation and direction change



ATD - 20K



ATD - 25K



ATD - 35K





## Direct/Ducted Evaporative Air Coolers



**Range Available upto ADC - 20K to ADC - L - 125 K**

- World's Best Performing Evaporative Air Coolers with highest cooling efficiency
- Built with high static pressure for comprehensive area coverage through long ducts and numerous grill for better air management
- AMCA (Air Movement and Control Association) Certified DIDW (Double Inlet Double Width ) Blowers
- Most robust, rustproof metal body with heavy duty pre-coated GSS (Galvanised steel sheet)
- Proudly made in India at our world-class manufacturing plant
- Branded Spares used for its manufacturing for an easy repair or replacement
- An environment-friendly air cooling solution
- Specifically designed for the cooling of large industrial and commercial spaces
- Trusted brand & innovative Technology
- Wide Range of models available to cool large areas economically
- Works well in harsh outdoor conditions
- Easy to install at the site No assembly required, no trial & error for motors
- Long, trouble-free life compared to cheap imported plastic body coolers
- Duct designing expertise provided by the company



**Ducted  
Evaporative Cooler Range**



**Customized  
Evaporative Air Coolers**





## Indirect – Direct Evaporative Coolers (2/3 Stage Cooling)



IDEC Systems provide most Economical Cooling Solutions for :

- Large Industrial & Commercial Spaces
- Utilize natural resources i.e. Air & Water for cooling the air
- Higher cooling with less moisture addition in air

### Advantages

- Drastic Reduction in Operational Costs (80%) Compared to Conventional Air-conditioning
- Significant Increase In Productivity
- Environmentally Friendly
- Best Possible Indoor Air Quality
- No Harmful Refrigerants

### IDEC Systems are suitable for

- Custom Solution:
  - Providing Cooling Solution for large spaces in Warm & Tropical Weather conditions
- Smart Operation Modes available for All Year Round Comfort
  - Single Stage Indirect Cooling
  - Two Stage Indirect + Direct Cooling
- Smart Controls:
  - Temperature & RH Sensors
  - TDS Sensors for maintaining water quality
  - Optional VFD to modulate supply working fan speed & air quantity



IDEC Installation  
at Packaging Plant



**Bry-Air®**

# Dehumidifiers

## Humidity Control

## Desiccant Dehumidification

Engineered Dehumidifier  
2500 CMH to 25000 CMH and above



Compact Dehumidifiers  
170 CMH to 3000 CMH



Bry-Air BrySmart® series (BBS)  
with Patented Technology



BryCool™



BryPool™ for Indoor  
Swimming Pool



Tray Dryer for  
Drying Seeds  
and Agro Products



Fli series  
Dehumidifiers



**Bry-Air®**

# Gas Phase Filtration

## Gas Phase Filtration Systems



Deep Bed System



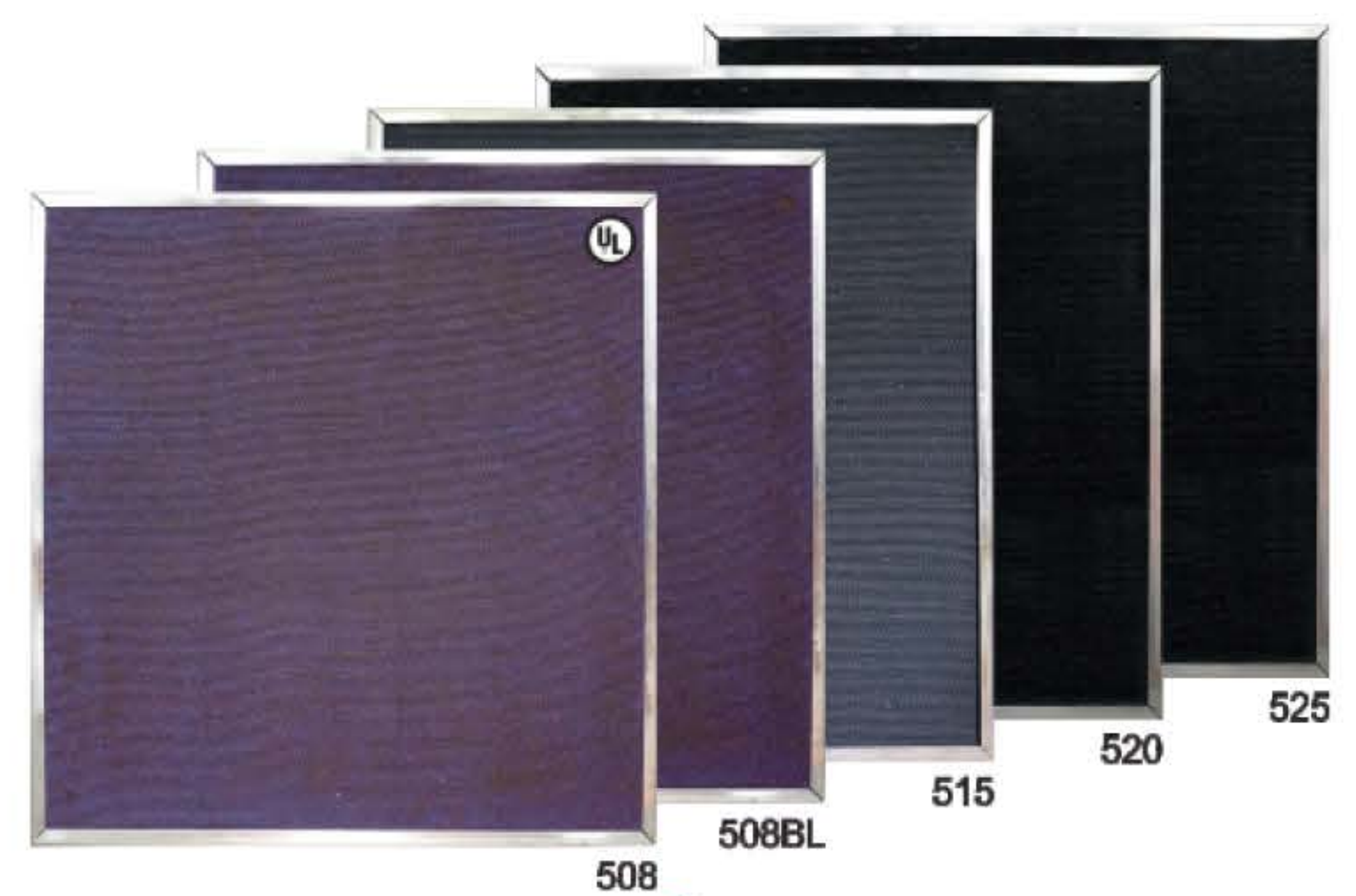
Control Room Air Purifier

Data Center Air Purifier



Odour Control Unit

Thin Bed System



Honeycomb Chemical Filters



Granular Media



Atmospheric Corrosivity Monitor



Corrosion Classification Coupon





## Systems Installation base in over 45 Countries



Brazil



UAE



Saudi Arabia



Oman



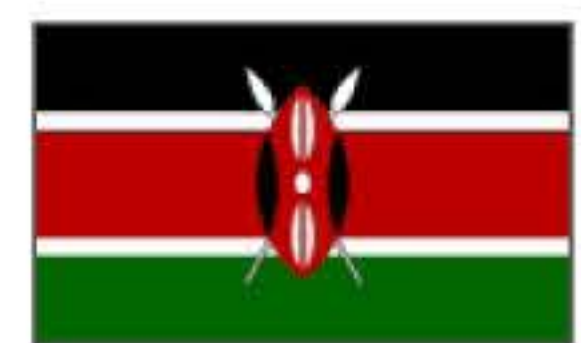
Bahrain



Qatar



Nigeria



Kenya



South Africa



Malaysia



Japan



Bangladesh



Sri Lanka



India



Thailand



Myanmar



Philippines



Vietnam



Indonesia



Australia



Mauritius



Singapore

and many more countries...

## We are never too far from you !



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Innovation is life

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