



CONTEC AIRFLOW PROJECTS PVT. LTD.

ISO 9001:2008 Certified Company

ASSURED AIR QUALITY
& FLEXIBLE
COOLING SOLUTIONS

CUTTING EDGE TECHNOLOGY
IN AIR HANDLING SYSTEMS

DESIGNERS, MANUFACTURERS
& CONTRACTORS
FOR TURNKEY AIR CONDITIONING,
REFRIGERATION,
VENTILATION, COLD STORAGE &
BIO-CLEAN ROOM APPLICATIONS



DECADE'S EXPERIENCE IN OFFERING EXPERT ONE POINT COOLING SOLUTIONS FOR A WIDE
RANGE OF **COMMERCIAL, INDUSTRIAL & PHARMACEUTICAL APPLICATIONS.**

ADVANTAGE CONTEC AIRFLOW

Contec Airflow is a vibrant engineering enterprise catering to the HVAC industry for over a two decade's.

Its highly experienced professionals are well-versed with all standards from **ISO 14644** for clean rooms to ASHARE standards for comfort applications.

Contec Airflow also offers **validation/testing** as per these standards.

The **systematic documentation** provided by the company for its services enables its clientele to obtain various international approvals like **USFDA, UKMCA, South Africa MCC, Australia TGA, etc.**

Contec Airflow is one of the leading organisations which supports the industry especially the Pharmaceutical companies in maintaining high quality of cleanliness ranging from **Class 100 to Class 100,000**.

The company specializes in designing and installing a variety of non-standards jobs like **-40 degree Celsius** for bulk drugs and maintaining humidities of the order of **25% RH** for dry powder injectables to **10% RH** for diagnostics.

The unique, innovative, imaginative, yet professional approach of the company makes it an expert in both clean room and comfort applications.

Thus, when quality air-conditioning is required at a competitive price for any application right from cozy retreats to crowded banks to sterile pharmaceuticals, **Contec Airflow** is just a phone call away.

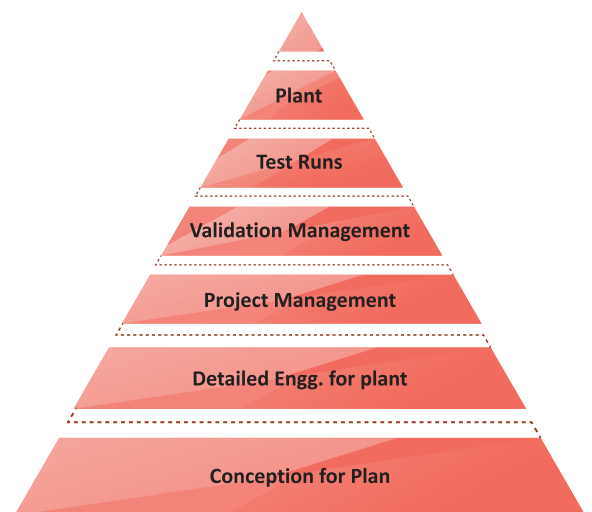
You will speak directly to our experienced professionals from various departments of sales, design, planning, installation and service to provide you with better solutions for your requirements.

TURNKEY PROJECT MANAGEMENT

Every air-conditioning and clean room installation is considered as a project with a unique feature of **timely completion, cost compliance and maintenance of quality standards**.

The organisation is engaged in design, supply, installation, validation and documentation of each and every contract awarded to it.

This avoids all hassles to the client for co-ordination, difference in opinion and unpredictable costs. Thus, enhancing a closer and easier control on the entire project & healthy clients relationship.



Upgradation as per WHO CGMP, USFDA,
UKMCA, TGA, South Africa MCC

MISSION STATEMENT

We believe **'The best way to excel.... is to do QUALITY WORK'**.
We strive to maintain our belief through customer satisfaction,
value for money, and product & service excellence.



OUR SERVICES

Designing and Contracting for turnkey **Air-conditioning, Refrigeration, Ventilation, Cold Storage and Bio-clean Room** applications.

The services being provided are much **more than traditional HVAC** considerations in terms of close containment with respect to particulates, microbials, temperature, humidity, pressure, air motion, vibration, noise and lightning as well as any other specific process variables.

Thus, **Contec Airflow** is an integrated solution to provide state of the art environmental control for high precision industries of Pharmaceuticals, Biotechnology, Food and Beverages, Electronics and Semi-conductors, R & D Labs, Photographic materials manufacturing industries etc.. **inline with latest IGBC norms.**

RANGE OF PRODUCTS

Contec Airflow has their inhouse production unit which state of the art facilities for manufacturing various products required for all HVAC applications. The various products manufactured include filters, dampers, risers, air handling units, grilles, diffusers, perforated sheets, laminar airflow benches, HEPA boxes etc.

Thus, almost all the products required for HVAC installations are manufactured in the factory. The factory, thus, acts as a strong backup force for the company, which helps in

- **Better Quality Control.**
- **Flexibility in Design.**
- **Faster Production, Hence, Timely Completion of the projects.**
- **More Systematic and Exhaustive Documentation.**

APPLICATIONS

☆ **HOSPITAL**

☆ **HOTEL**

☆ **PHARMACEUTICAL**

☆ **COMMERCIAL COMPLEX**

AIR / WATER COOLED SCREW CHILLER

Contec Airflow presents Blue Star make (pioneer in developing and manufacturing) Screw Chillers for various applications. These Chillers are energy efficient and robust in construction and are developed with latest technology which includes R134a optimized screw compressor, highly efficient DX cooler and air cooled condenser. The capacity range for the same are as follow.

Product Line up - Screw chiller						
			Capacity in TR			
Air cooled	Single compressor	110	140			
	Double compressor	182	250	280		
	Triple compressor	330	390	420		
			Capacity in KW			
Water cooled flooded AHRI certified	Single Compressor	705	775	845	985	1125
	Double Compressor	755	875	1065	1225	1395
Water cooled flooded	Single Compressor	385	535	625		
Water cooled DX	Single Compressor	345	525			
	Double Compressor	385	525	665		

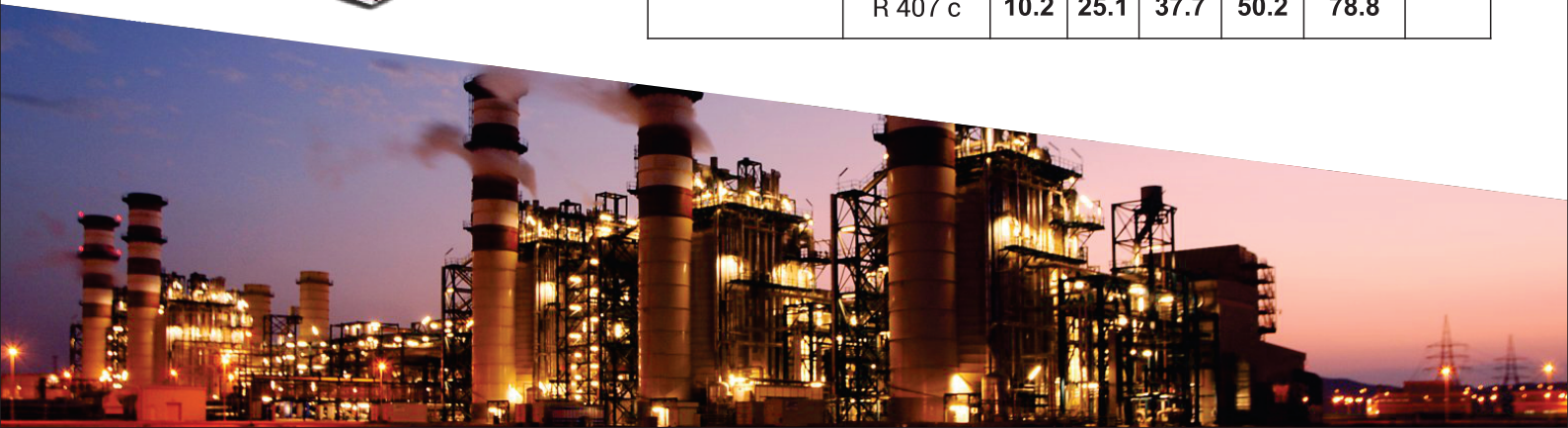


AIR / WATER COOLED SCROLL CHILLER

Contec Airflow presents Blue Star make wide range of air cooled and water cooled pre-wired, fully charged and factory run tested scroll chillers with R-22 & R 407c. These chillers are available in a wide range of capacities from 10 TR to 85 TR and are very easy to install and commission. What's more these machines can handle varying cooling requirements, thanks to their multiple compressor configurations. Making them ideal for air conditioning office spaces, hotels, hospitals, shopping malls, multiplexes and process cooling requirements. Wide range of models in R22 and R407c refrigerant options.

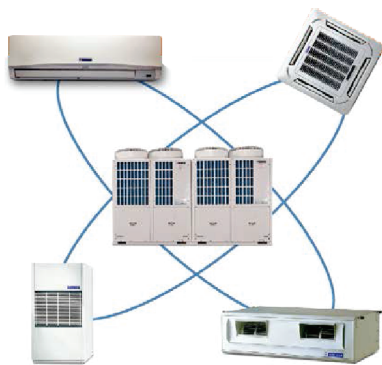


Product Line up - Scroll chiller							
			Capacity in TR				
Air cooled	R 22	10	24	36	48	60	80
	R 407 c	9.2	2.7	34	45.5	56	74.1
Water cooled	R 22	11	26	39	52	85	
	R 407 c	10.2	25.1	37.7	50.2	78.8	



INVERTER VRF

Contec Airflow present Blue Star's latest offering, the Inverter Variable Refrigeration Flow (IVRF) system, it combines the advantages of both Room AC's and Central Plants to offer you a third, more energy-efficient alternative. The IVRF brings together cutting edge technology, superior cooling and designs that are compatible with the latest building management systems, to offer you world-class, state-of-the-art cooling technology and higher energy efficiency. Based on proven Inverter Compressor Technology, the Inverter VRF system is ideal for multi-zoned spaces such as luxury apartment complexes, condominiums, villas, multi-cabin office spaces and commercial complexes.

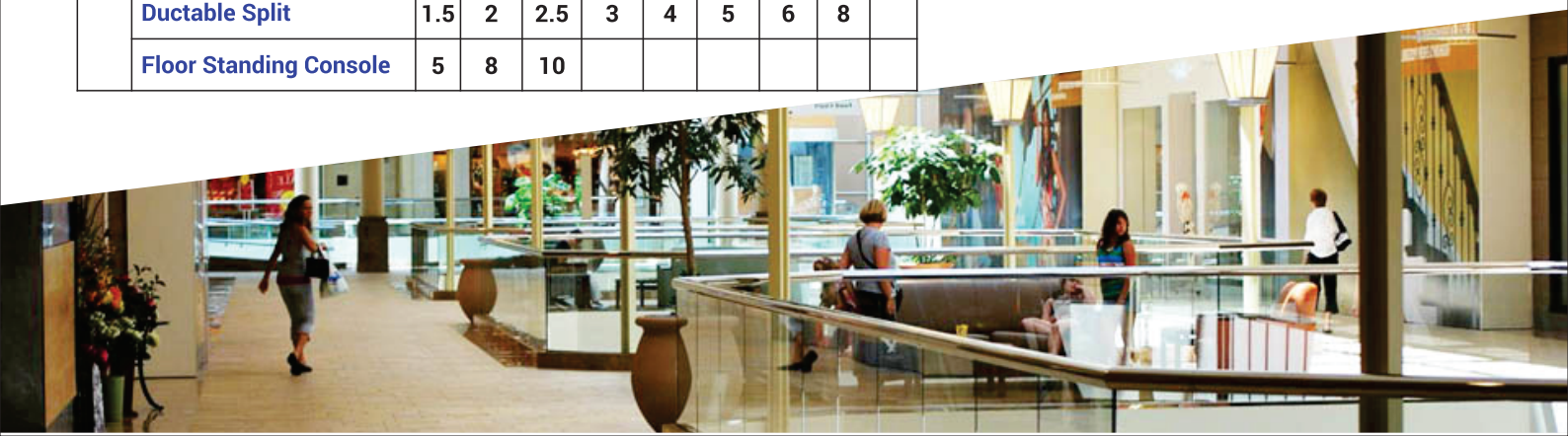


Product Line up - Inverter VRF						
		Capacity in HP				
		Range from 3.5-64 HP in multiple of following configuration				
ODU	Non Modular Unit	3.5	4	5	6	
	Modular Unit	8	10	12	14	16
		Capacity in TR				
IDU	Wall Mounted Split (EXV)	0.6 - 2.3	0.6 - 2	0.6 - 2	0.6 - 1.3	0.8 - 4
	One Way Cassette	0.6 - 1	0.8 - 3.6	0.6 - 8	2 - 4	0.8 - 1.5
	Floor / Ceiling Split					
	Concealed Split					

DIGITAL VRF SYSTEM

A **VRF** System combines the advantages of both the room AC's & the Central Plants to offer you a third, more energy efficient alternative. This System consist of an outdoor unit with multiple compressors, a mix of indoor units such as cassette & Hi wall splits & a sophisticated electronic control centre that ensures complete climate control in each zone. Piping Length has also increased in VRF system upto **1000m**, thus giving enormous flexibility to users. **DVRF** is designed to operate at ambient even **as high as 50°C**.

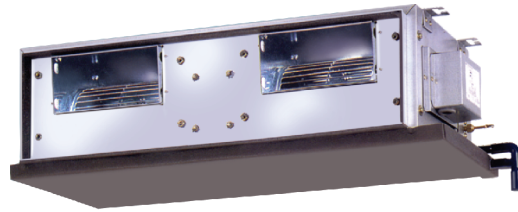
Product Line up - Digital VRF										
		Capacity In HP								
		Range From 6-63 HP In Multiple Of Following Configuration								
ODU		6	7.5	12	14	18	21			
		Capacity in TR								
IDU	Wall Mounted Split	0.8	1	1.3	1.5	1.7	2			
	Large Cassette	1	1.3	1.5	1.7	2	2.3	2.8	3.2	4
	Compact Cassette	0.6	0.8	1	1.3	1.5				
	Concealed Split	0.8	1	1.3	1.5	2				
	Ductable Split	1.5	2	2.5	3	4	5	6	8	
	Floor Standing Console	5	8	10						



PACKAGE AC'S & DUCTED SPLITS

Contec Airflow presents Bluestar make Packaged & Ductable Split.

- ⊙ Highly efficient units using MCHX coils.
- ⊙ Designed to work effectively even in high ambient temperature of 50°C.
- ⊙ Compatible with eco-friendly R410a.
- ⊙ Robust and Reliable.
- ⊙ Aesthetically superior.
- ⊙ Service-friendly design.



Product Line - up								
	Capacity in TR							
	3	5.50	8.50	8.75	11	16.5	17	22
Air cooled Ducted Split Air Conditioner	●	●	●	●	●		●	●
Water cooled Ducted Split Air Conditioner		●		●	●	●		●
Air cooled Packaged Air Conditioner	●	●		●	●			
Water cooled Packaged Air Conditioner		●			●	●		

WINDOW / SPLIT / CASSETTE AC

Window AC's available in 0.75/1/1.5/2 ton and 3/2/1 star, brings together the benefits of superior cooling, energy-saving performance and aesthetic looks, all in one unit.

The 1/1.5/2 ton AC's offer you nothing but the best. With three fan speeds to choose from, an auto-restart with memory function, a filter check LED on the front panel and cordless LCD remote; these AC's are specially designed keeping all your needs in mind.



INVERTER



STAR RATED



Split AC are categorized as under

- ⊙ Inverter Split AC's
- ⊙ Star Rated Hi-wall Split AC's
- ⊙ Mega Split Airconditioners.
- ⊙ Cassette AC's
- ⊙ Capacity: 1.5 TR to 2 TR
- ⊙ Capacity: 1 TR to 2 TR
- ⊙ Capacity: 2.5 TR to 3 TR
- ⊙ Capacity: 1.5 TR to 4 TR



AIR HANDLING UNIT

An air handling unit is a device used to condition and circulate air as part of a heating, ventilating & air conditioning (HVAC) system. An air handler is usually a large metal box containing a blower, heating or cooling section with filter racks or chambers, sound attenuators, and dampers.

Air handlers usually connect to a ductwork that distributes the conditioned air through the building and returns it to the AHU. Sometimes AHUs discharge (supply) and admit (return) air directly to and from the space served without ductwork.

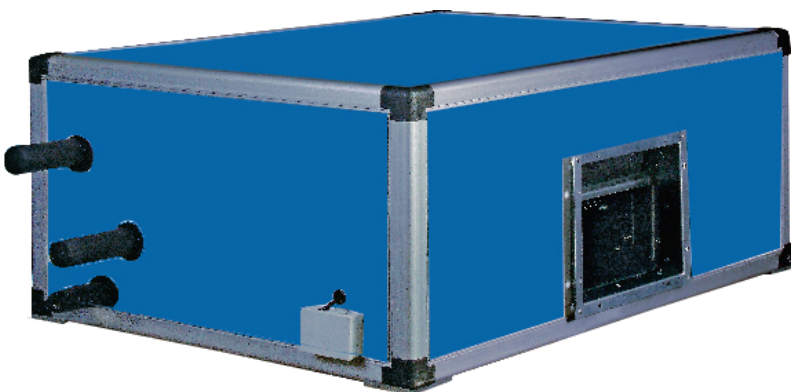
The Wide Range of AHUs are manufactured in the Production unit are with world class capabilities & special features like internal coving & thermal break external frames. Basically all are classified into 3 types as under.



⦿ **Double Skin Horizontal Floor Mounted AHU.**
Capacity : 3250 CMH to 60500 CMH



⦿ **Double Skin Vertical Air Handling Units.**
Capacity : 3500 CMH to 30000 CMH



⦿ **Double Skin Ceiling Suspended Air Handling Units.**
Capacity : 3365 CMH to 6729 CMH

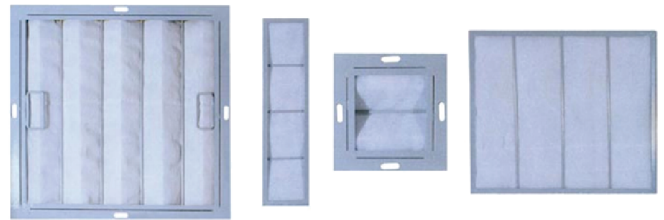


PRE / MICROVEE FILTER

Pre filter's are made with progressively structured non-woven synthetic polyester media made from needled punch fibers in the air passage direction. We supply wide range of paint arrestor and high temperature pads. It comes in the range of **EU 1 to EU 4**.



Superior quality non woven synthetic filter media with regular labyrinthine structure being built or synthetic fibers, which are bonded together by a special resin. This media is bonded between two layers of HDPE mesh, which act as a retainer. We manufacture & supply various types of **Microvee filter** in a range of **EU 5 & EU 7**.



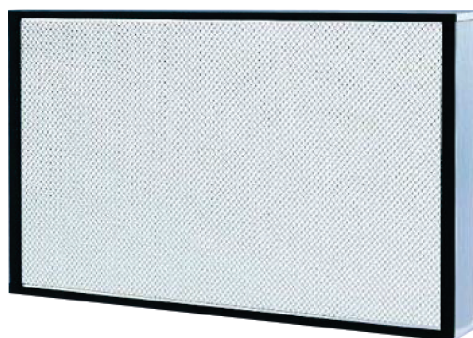
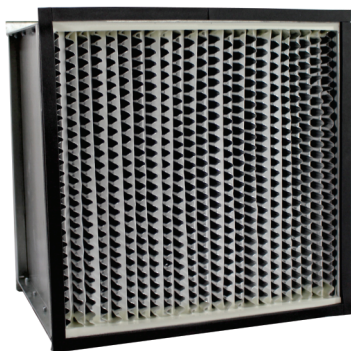
HEPA FILTER

High Efficiency Particulate Air Filters are also known as Absolute filters, which are the ultimate means of removal of sub micron air borne particles and are widely used for **EU-13** applications. All HEPA filters assure a filter that is **99.97 %** efficient on particles of 0.3 micron in size or larger . Efficiencies of **50 % , 65 % , 95 %** and are also available depending on the requirement .

These filters find wide usage in all clean room and pharmaceutical applications where class of cleanliness and particle count is a must.

It has continuous sheet of non –combustible ,water repellant , sub-micronic boro silicate glass fiber media. The radii edge configuration promotes maximum exposure of media surface to airflow.

It comes in the range of EU 10 to EU 14.



AIR DISTRIBUTION PRODUCT

More precisely known as **return air risers**, which are used to collect the return air in a specific manner to maintain a perfect laminar flow. Return air are manufactured in the factory as per the design requirement. They are constructed in G.I. / S.S. or anodized aluminum and then powder coated for better aesthetic looks.

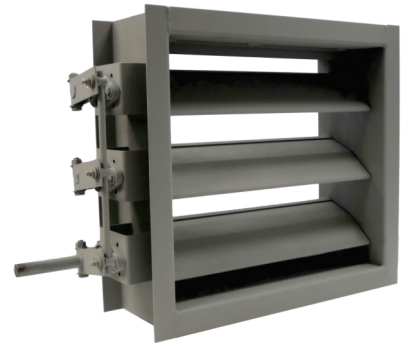
Dampers are devices incorporated into the system to have a proper control on airflow for better maintenance of conditions & better uniformity.

Basically classified into 3 types,

- ⊙ **Volume Control Dampers**
- ⊙ **Fire Dampers**
- ⊙ **Gear Dampers**



Riser



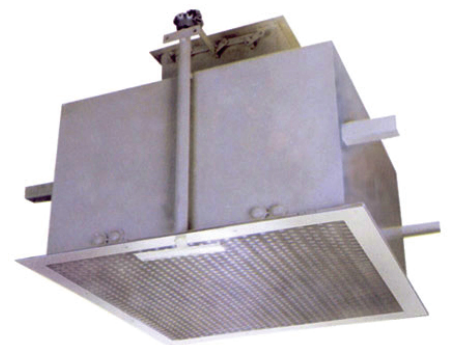
Damper



Diffuser

HEPA HOUSING

16G M.S. Powder coated sheets complete with pressure plates, cleats etc.. meant for housing of the HEPA filters to prevent any leakage / damage. DOP port provided depending on the requirement for more exhaustive HEPA BOXES.



COLD STORAGE

Contec Airflow presents Blue Star's make Cold Storage which offers you a wide range of cooling **-40°C to 18°C** and preservation solutions. Solutions are tailor made to suit any industry that requires storage of perishable produce over extended periods of time without suffering any loss of quality – be it in look, feel, touch, taste or chemical composition.

Industries that find cold storage solutions enormously useful include the **agriculture sector** including horticulture and floriculture units, manufacturers of fresh produce of any kind, **food processing units**, **pharmaceutical industries**, **seafood** and other similar industries, as well as the **dairy and hospitality sectors**, including hotels, restaurants, and eateries.

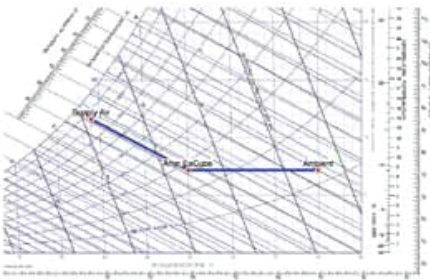


AMBIATOR

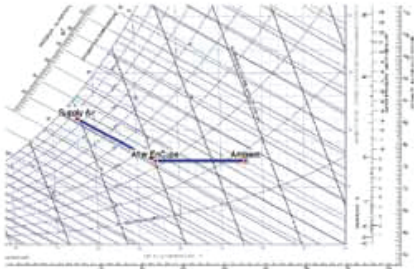
Indirect evaporative cooling modules for industrial direct evaporative coolers & air washer are a simple easy & efficient add on modules for improving supply air temperatures & reducing water & electrical usage for attaining a better environment. The evaporative modules offer an **effectiveness** that can exceed **60% in a stand alone mode**.

Psychrometric Performance Prediction

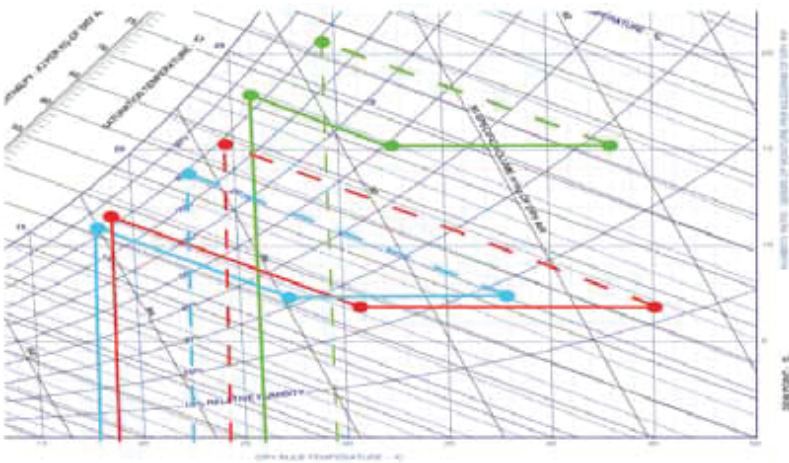
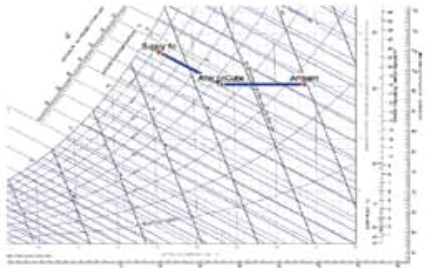
Hot & Dry Climate



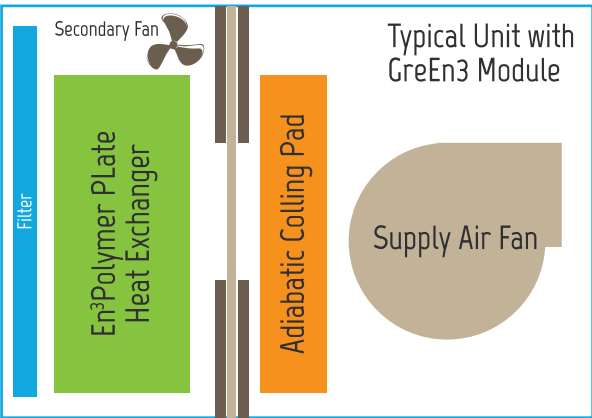
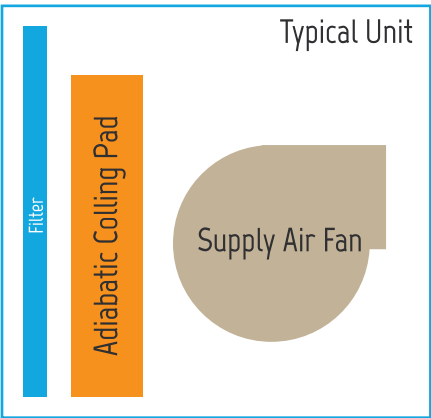
Moderate Climate



Composite Climate



- Indirect Evaporative Cooling**
- Hot & Dry Climate
 - Moderate Climate
 - Composite Climate
- Direct Evaporative Cooling**
- Hot & Dry Climate
 - Moderate Climate
 - Composite Climate



MODULAR PANELS

Modular clean rooms are engineered and built to meet exact size and environmental requirements and specifications. It is required to control the contaminated particle in the room. It avoids the cross contamination. All components come with a performance guarantee. The modular clean room components are impact resistant, chemical & water resistant & non-shedding, have excellent fire rating, can be sanitized & are essential maintenance free.

Product Line up		
Sr No	Components	MOC / Specification
1	Skin	PPGI / PPGI, PPGI / SS, SS / SS
2	Insulation	Puf / Rockwool
3	Panel Thickness	50 / 80 / 100 / 150
4	Coating Thickness for PPGI	80 Micron
5	Finish	
a	SS	Matt Finish
b	PPGI / PPGI	As per sample



CLEAN ROOM DOORS



Cleanroom doors can be configured as single/double swing-out. The door panels are assembled with the same panels of the wall system. Swing out doors are designed to fit flush with both sides of the wall panel system and are supplied in several dimensions.

The internal framework is constructed of welded extruded aluminum profiles. The external frames are manufactured with rounded anodized or epoxy coated aluminum profiles with air tight dual gaskets.

All fasteners for the hinges and latches can be recessed into the door frame. Standard hinges allow doors to swing 180° degrees from full open to full closed position.

Product Line up		
Sr No	Components	MOC / Specification
1	Skin	PPGI / PPGI, PPGI / SS, SS / SS
2	Insulation	Puf / Rockwool
3	Panel Thickness	50 / 80 / 100
4	Coating Thickness for PPGI	80 Micron
5	Finish	Single / Double door with equal or unequal shutter



DYNAMIC PASS BOX

Dynamic Pass box is designed to minimize traffic and cross contamination between two areas and at the same time transfer parts, tools, products etc.. from one area to another area. These unit acts as an air lock device preventing ambient air from entering or clean air from exiting the clean room.

Product Line up		
Sr No	Components	MOC / Specification
1	Skin	MS / SS 304 / SS 316 / SS 316 L



LAMINAR AIRFLOW



Laminar Air Flow Cabinets provides a **class 100** air flow in the work area for operations where products are of utmost importance. It creates areas supplied with a continuous flow of clean air to maintain a work environment that is free from dirt, particles, and toxic or noxious fumes. Laminar work stations are designed to foster worker comfort, convenience and productivities.

They provide a **Class A** working environment (according to GMP guidelines). The main focus of application is product or process protection against contamination introduced by many sources, such as personnel, general work area, manufacturing, performance, process, machinery, or the product itself.

Product Line up		
Sr No	Components	MOC / Specification
1	Skin	MS / SS 304 / SS 316 / SS 316 L



REVERSE LAMINAR AIRFLOW

Reverse laminar airflow workstations, Clean Room Equipment, are suitable for dispensing of powder and chemicals and to minimize the risk of contaminating the work zone and ensure health safety for person working with chemicals/powder. This equipment is based on the recirculation of air and ensures that the cloud formed by the material dispensed, is sucked in a natural pattern of movement and arrested through pre-filters. The air is then supplied back at the work zone through HEPA. After initial cycles, we achieve **class 100** hazard proof laminar movement of air and handling of material.



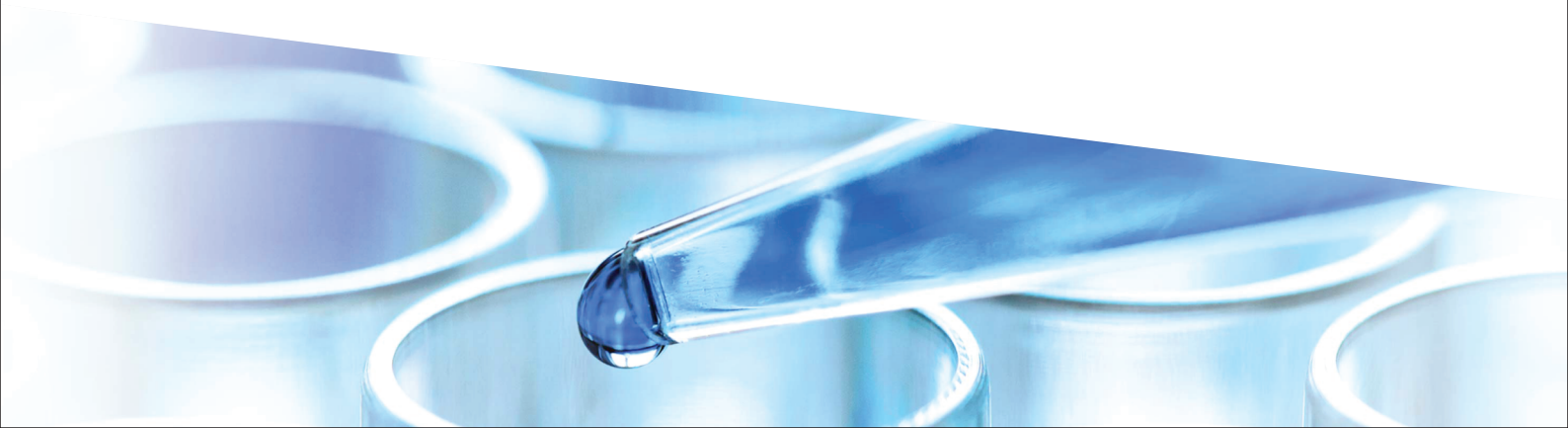
Product Line up		
Sr No	Components	MOC / Specification
1	Skin	MS / SS 304 / SS 316 / SS 316 L

BIOSAFETY CABINET

Biological safety cabinet is designed to provide both a clean work environment protection to the operator who work with biological hazards. It has vertical laminar airflow to create the barrier to airborne particles & microorganism. HEPA filters are used to provide the clean air in the work area as well as to the environment through exhaust with the HEPA Filter.



Product Line up		
Sr No	Components	MOC / Specification
1	Skin	MS / SS 304 / SS 316 / SS 316 L



AIR SHOWER

Air Shower acts as a barrier between two areas of a facility therefore helping to prevent personnel spreading contaminants. Protection is provided both upon entering and leaving sensitive or contaminated areas without need for clothing changes. It is used for cleaning and cooling the warm and moist air that enters into these systems to a level where it meets dew point when come in contact with refrigerated water. These units help in minimizing the moisture content of air and making them fresh from its actual content.



Product Line up		
Sr No	Components	MOC / Specification
1	Skin	MS / SS 304 / SS 316 / SS 316 L
2	Occupancy	01 / 02 / 03



GARMENT STORAGE CABINET

Garment Storage Cabinet is designed to provide **ISO Class 5 (Class 100)** particle free work for storage sterile packed garments to meet garment storage needs while making a positive contribution to maintaining the cleanliness of controlled clean room environment.

Product Line up		
Sr No	Components	MOC / Specification
1	Skin	MS / SS 304 / SS 316 / SS 316 L



PRESERVA

Rinac's Preserva range of products comprises quick, efficient, adjustable, and compact walk-in cooling spaces of varying temperature ranges.

PreServa-P is a compact cooling and storage unit with adjustable racks. It stores items of immediate use or those with a short shelf-life, such as **food items, vegetables, medicines, flowers, milk, and dairy products** with a temperature range of **+2°C to +8°C**.

PreServa-N is a compact walk-in freezer with adjustable racks for freeze storing items such as **vegetables, medicines, seafood and meat**, as well as **milk and dairy products** for prolonged periods, at a temperature range of **15°C to -18°C**.



SAPPHIRE

Rinac's popular range of **display cum storage cold rooms** re-designed making them more versatile & user friendly than ever before. It provides optimal options for storing food in **hotels, restaurants, catering services, supermarkets and industrial kitchens**. Well conceived design for small restaurants, fast-food outlets, food shops turned our product highly functional product supported by the best service available.

With emphasis on low energy consumption, we designed & produced our own refrigeration units for quiet operations. The unit is complete with all controls, defrosting systems etc.. & are subject to rigorous testing before shipment.



COMBI NEST

Combination of Chiller & Freezer

- ⊙ Combination of **Chiller & Freezer** room.
- ⊙ Freezer chamber with thermal storage features, can hold room temperature **[-23 Deg C] 4 to 5 hours** even there is no power.
- ⊙ Fully equipped with storage racking system, adjustable shelving conforms to **NSF or NF standards**.
- ⊙ Refrigeration unit with electrical controller panel, micro processor based digital temperature controller.
- ⊙ Designed for use up to **42°C ambient**.

Application:

- ⊙ **Hotels & Restaurants**
- ⊙ **Dairy Products**
- ⊙ **Canteens**
- ⊙ **Food Courts**
- ⊙ **Bakeries**
- ⊙ **Pharma Products**



BANA BARN

Rinac's pioneered the indigenous, pressurized type ripening chambers of global standard which is running exceptionally well all over India. With expertise across the full spectrum of fruit ripening chambers, pre-cooling chambers, cold storage construction & refrigeration system, **Rinac** provides focused solutions namely conceptualizing, designing, manufacturing and implementation of cold infrastructure requirements to cater to the needs of diverse industries. **Rinac** offers Banana ripening chambers available with pressurized / reverse airflow evaporators and humidity controlled rooms.



SITE PHOTOS

Lupin, Jammu



Lupin, Jammu



Intas, Matoda



Intas, Sanand



Sterile, Kundli



Intas, Dehradun



Sterile, Kundli



Fine Chem, Nigeria



SITE PHOTOS

Arkray, Surat



Chi Pharma, Nigeria



Intas, Ankleshwar



Sterile, Kundli



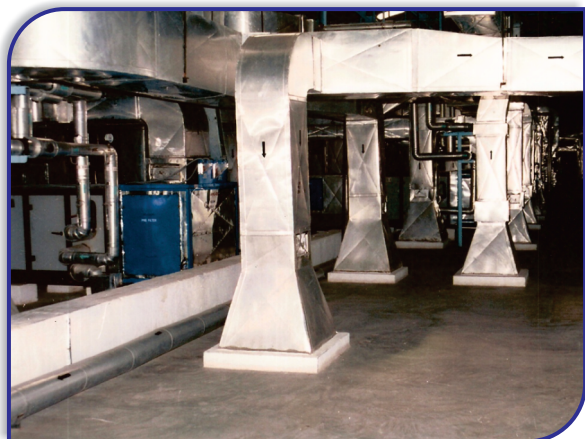
ITC, Munger



ITC, Munger



RPG, Ankleshwar



Welex, Boisar



FEW OF OUR PRESTIGIOUS CLIENTS

DOMESTIC CLIENTS



INTERNATIONAL CLIENTS



CONTEC AIRFLOW PROJECTS PVT. LTD.

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