





# OM SAI ENTERPRISES

**Authorized Dealer of Voltas & Daikin**  
"Providing Trusted and Certified HVAC Solutions"

+91 9813709087 /  
+91 9988884888

 [info@omsai.enterprises](mailto:info@omsai.enterprises)

 Ground Floor, shop no. 13, Shiva  
Market, Gaushala Road, Zirakpur,  
SAS Nagar, Punjab, 140603

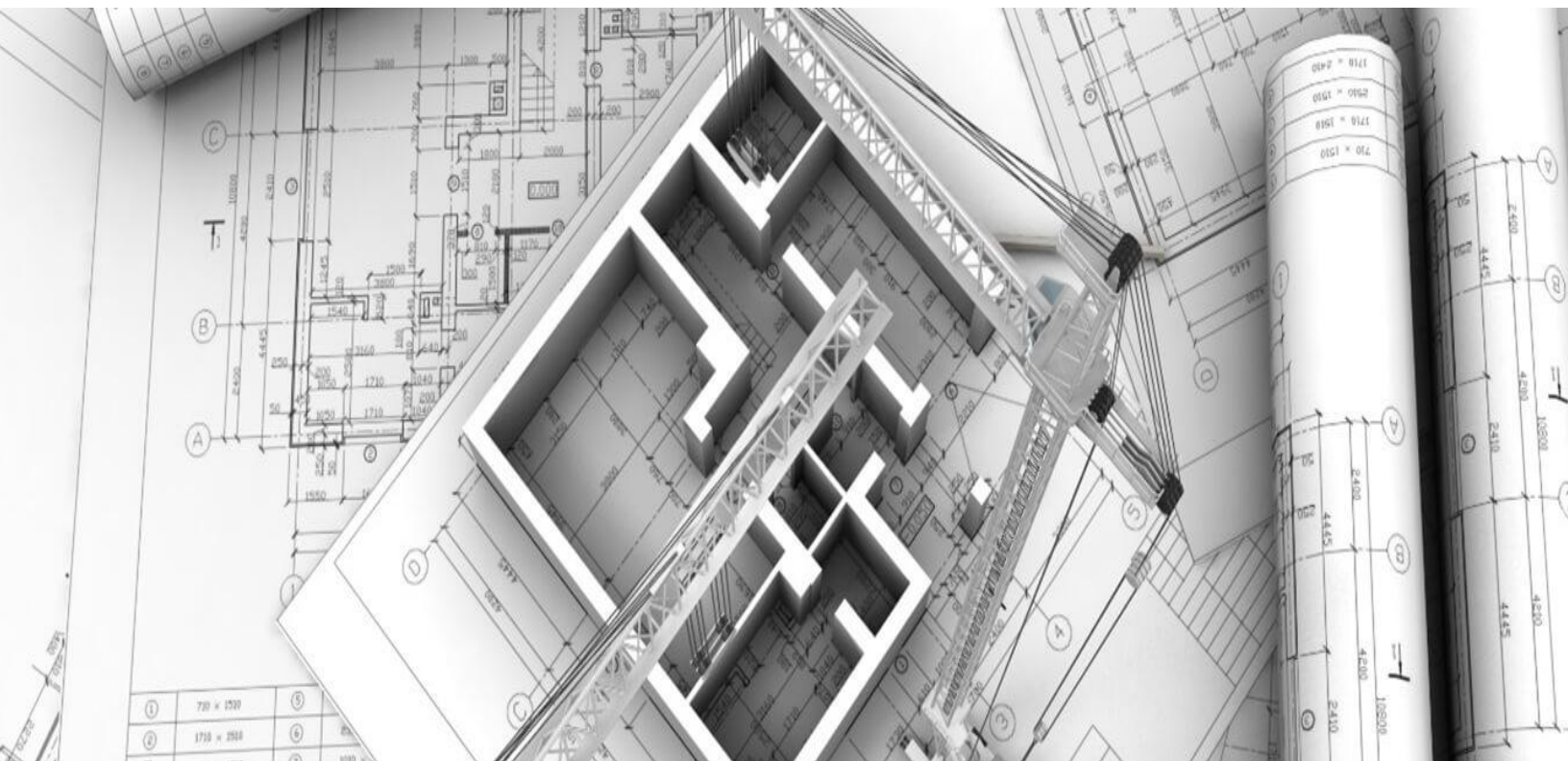
## About us

Om Sai Enterprises is a trusted name in providing high-quality HVAC and Cold Room solutions for residential, commercial, and industrial needs. With years of expertise, we have been delivering reliable, efficient, and cost-effective climate control and refrigeration services tailored to meet the unique requirements of every client. Our work covers the complete range of services from designing and installing advanced air conditioning systems to creating custom-built cold storage facilities for industries such as food processing, pharmaceuticals, and logistics.



## What We Do

At Om Sai Enterprises, our mission is simple — to provide superior cooling and refrigeration solutions that keep your environment comfortable, your operations smooth, and your products safe. Whether it's a complex industrial HVAC setup or a temperature-controlled cold room, we approach every project with the same dedication and professionalism, ensuring you can count on us every step of the way.





## Industries We Serve



Pharmaceuticals



Healthcare



FMCG



Chemical



Biotech



API (Active Pharma  
Ingredients)



Laboratories



Medical Devices



Electronics

**“When Things Get Hot, Claim Your Spot”**

# PRODUCT AND SERVICES

## HVAC System

In Pharmaceutical manufacturing, how space conditions impact the product being made is of primary importance. Worldwide the pharmaceutical facilities are closely supervised by the food and drug administration (FDA), this requires manufacturing companies to conform to cGMP (current Good Manufacturing Practices). These regulations, which have the force of law, require that manufacturers, processors, and packagers of drugs to take proactive steps to ensure that their products are safe. HVAC system plays a major role in this.



**Air Handling Unit**



**DX System**



**Chillers**



**HEPA Filters**

### HVAC system executes four important functions -

- Control airborne particles, dust and micro-organisms through air filtration using high efficiency particulate air (HEPA) filters.
- Maintain room pressure in areas that must remain "cleaner" than surrounding.
- Maintain space moisture (Relative Humidity).
- Maintain space temperature which can affect production directly or indirectly.

## Optimized Systems -

- Heating ventilation & air-conditioning system is the major energy consuming part in pharmaceutical manufacturing. More than 50% of input energy is consumed by HVAC system of the building. Our experienced engineers design the systems to achieve maximum power efficiencies without diluting on guidelines.
- Maintain room pressure in areas that must remain "cleaner" than surrounding.
- Maintain space moisture (Relative Humidity).
- Maintain space temperature which can affect production directly or indirectly.



**Air Distribution System**

**Pre insulated / GI Ducting**



**Dehumidifier**

# Cleanroom Partition Systems

Speed to market, flexibility and maintaining a dust free environment during construction phase and later, is critical for almost all manufacturing companies, and it's particularly important for the pharmaceutical and biopharmaceutical industries, that's where Modular Cleanroom Panels play an important role.

## Specification

- Thin & light weight construction
- Wide variety of filler PUF / PIR / ROCK WOOL / HONEYCOMB PAPER CRAFT
- Wide variety of Surface material PCGI / PPGI / AL / S.S. / Laminates
- Available in Thickness 30mm / 50mm / 80mm / 100mm
- Progressive and Non-Progressive
- Doors compatible with panel materials
- Excellent insulating property
- Less joints as compared to any other system of panel design
- Design engineering and installation support
- Easy cleaning & maintenance
- Panels can easily be re-locatable or dismantled
- Inbuilt return air riser
- Concealed electrical fittings
- Double flush glazing with 5mm toughened glass on both sides







**Emergency Door FLP Type**



**Double glazed window panel**



**Cleanroom panel work**



**Cleanroom panel work**



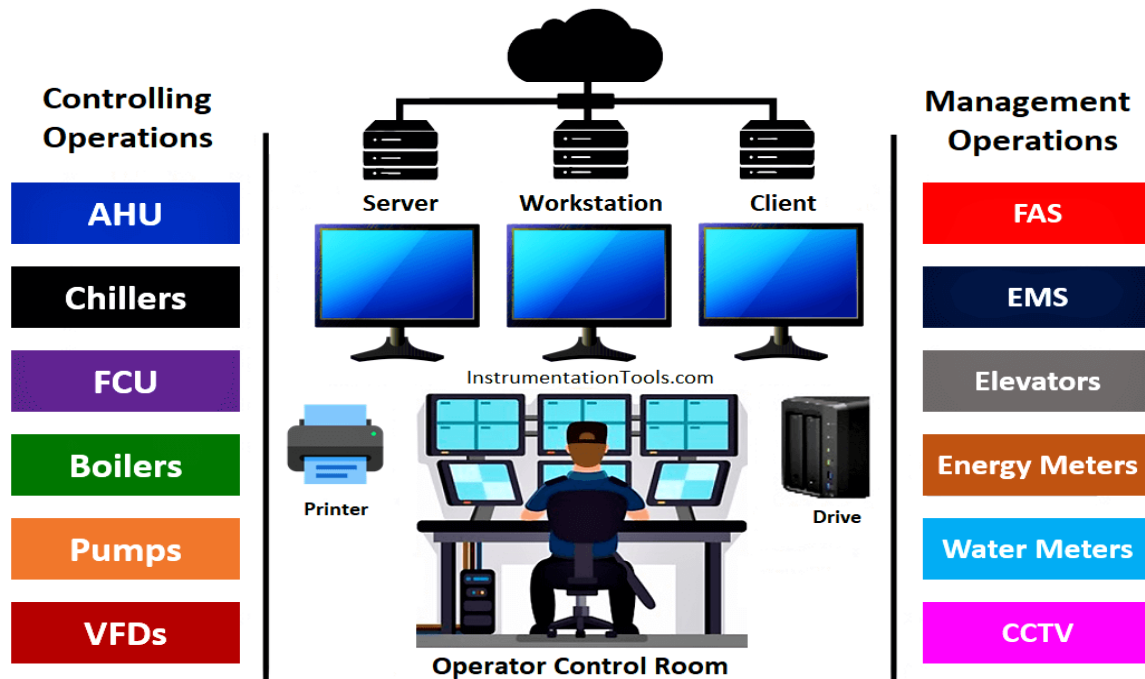
**HPL (high pressure laminated panel)**



**GMP double & single door**

## BMS & Electrical System

From Transformers, Generators To smallest voltages, we provide end to end electrical solutions. We design customized electrical system considering specific project requirements along with compliance to relevant international codes. We take into account fundamental principles of energy conservation and safety current, fault current over voltage.







**PLC**



**ACTUATER**



**SENSOR AND WALL**



**WALL WITH ACTUATER**



**TRH SENSOR**



**DAMPER ACTUATER**



**FLP TRH**



**HMI**



**DIGITAL MAGNEHALIC GAUGE**



**DIGITAL CLEANROOM MONITOR**

# Flooring

The pharmaceutical industry is on the cutting edge of scientific progress and research, working around the clock to develop, test, and produce medications and treatments that improve the health outcomes and quality of life for patients across the globe. As pharmaceuticals are such a sensitive and precise science, great care must be taken to ensure that every aspect of the facilities involved, at every step in the process, is designed to protect cleanliness and avoid the risk of contamination. The floor coatings of organizations manufacturing medicinal drugs should manage to oppose most oils, solvents, and acids. Also, the coating should be resistant to scrape and impact since the plant's floors can easily be exposed to heavy traffic from robust tools and machinery.



## Types of Flooring:

- Epoxy Flooring

In a nutshell, epoxy flooring is a type of synthetic resin floor system that is laid on top of concrete substrates as **a form of protection and decoration**. The systems can comprise of several layers of thermosetting resin that are coated, trowelled or poured, and generally applied onto a concrete substrate.



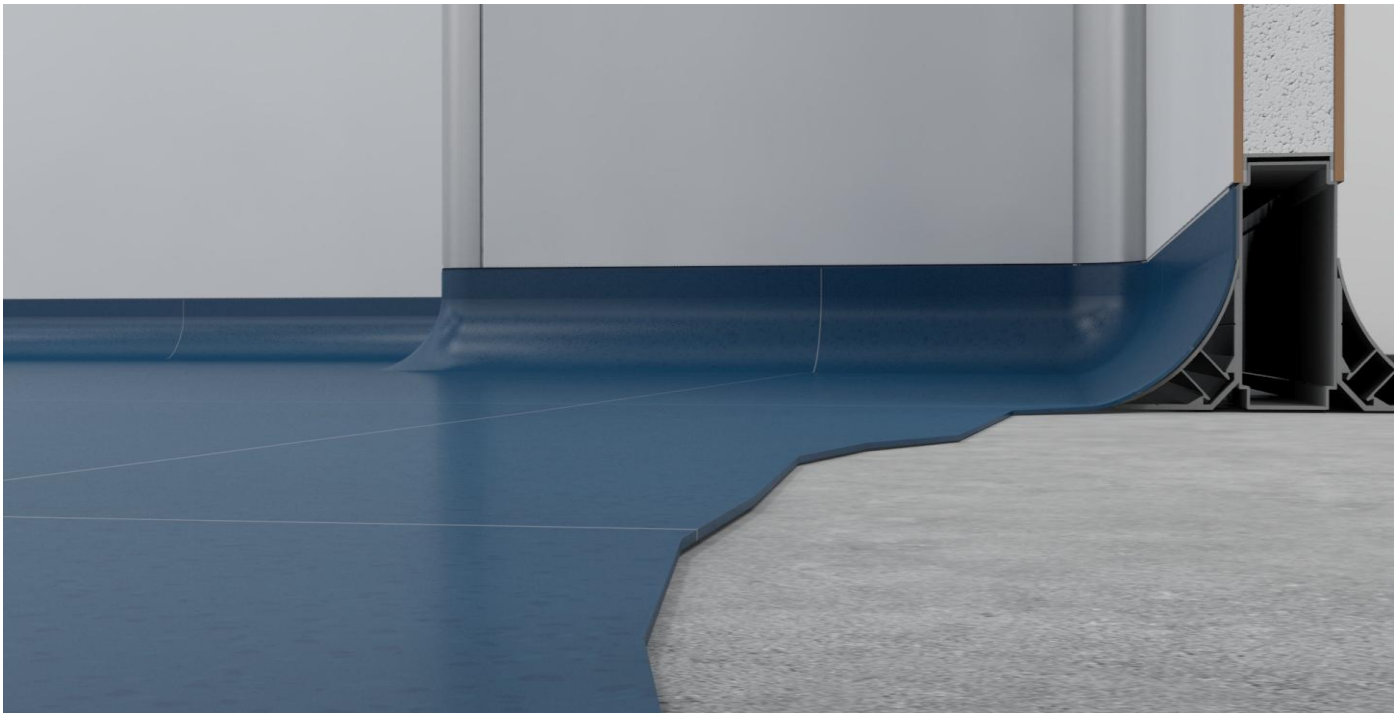
- PU Flooring

Polyurethane floors are practical and beautiful, therefore mainly used in private houses. In comparison to epoxy floors they are much better suited for under floor heating, a common technique in modern houses and kitchens. In addition, this floor can be applied over most existing floors.



- Vinyl Flooring

Vinyl has long-lasting, sturdy, safe, shock-absorbing materials. Wherein they reduce noise and are comfortable to walk and run on. Even with hectic 24 hours busy days, vinyl flooring will still perform well. Hospitals too need regular cleaning, but other floorings are unsuitable for thorough maintenance.





## Validation Services

Validation is the process of establishing documentary evidence demonstrating that a procedure, process, or activity carried out in testing and then production maintains the desired level of compliance at all stages thereby ensuring product quality at all times. In the pharmaceutical industry, it is very important that in addition to final testing and compliance of products, it is also assured that the process will consistently produce the expected results.



We have well documented systems & SOPs for various stages of the projects – design, engineering, Installation, FQPs etc. to take care of stringent documentation needs also – Design Qualification (DQ), Installation Qualification (IQ), Operation Qualification (OQ), Performance Qualification (PQ), systematically & logically. Our in-house dedicated well-equipped teams take care of validation services as per ISO 14644 or other relevant standards to meet the regulatory needs of USFDA or UKMHRA or MCC or as the case may be.

### **Clean room Validation Tests include -**

- ACPH Test
- Pressure Difference Test
- HEPA or ULPA Filter Integrity Test / Efficiency Test ( Pao Test)
- Particle Counts ( Concentration of Airborne )
- Particles ( Non – Viable Particle Count ) Recovery Test
- Shoot off Test
- Air Flow Pattern Test
- Temperature and Humidity Measurements
- Measurement of Noise – Sound Pressure Level

# Cleanroom Equipment

Cleanroom Equipment restricts cross contamination, provide a safe and comfortable position for the operator and most importantly ensure that the Clean room system maintains its parameters.

## Dynamic Pass Box

In pharmaceuticals manufacturing facilities, it is essential to minimize man / material movement and avoid cross contamination between different classified areas to achieve desired classification and to maintain integrity of products and processes. Pass Box is designed to allow material transfer without much personnel movement. It also aids controlling ingress of particulate contaminants into clean room and between different classified areas.



## Static Pass Box

Static pass box is specifically designed for material transfer within same Cleanroom classification without much personnel movement.

Available in 48 stainless steel finish with SS 304 & SS 316 material.

Flush double walled construction with internal coving.

Flush doors with double walled flush glass view panels.

Electro-magnetic / mechanical interlocking

Feather touch door release switch on either side.

### Type of Static Pass Box

NON- Flameproof / Flameproof type

Straight entry & Exit type, L type & 3 way 'T' type

### Airtight pass hatch

Airtight Pass hatch is specifically designed that aids in the material transfer without personnel movement inside a Cleanroom. The airtight mechanism avoids air leakage during material transfer within same classified areas.

Available in 4B stainless steel finish with SS 304 & SS 316 material

Heavy duty radial hinges for glass doors  
High durability & high strength toggle lock  
Food grade D type gasket embedded in toughened glass doors

#### Type of Airtight Pass Box

NON- Flameproof / Flameproof type  
Straight entry & Exit type, L type & 3 way 'T' type



### Negative Sink Dynamic Pass Box

Negative Sink Dynamic Pass Box facilitates the seamless transfer of materials in potent areas. It is equipped with Independent Exhaust System connected to BIBO System, Airtight Glass Doors, and Push-to-talk Intercom ensuring safety of the controlled critical areas.

Available in 4B Stainless Steel Finish with SS 304 & SS 316 Material

Electro-Magnetic / Mechanical Interlocking  
Exhaust Air Flow through Circular / Rectangular duct.

Available with and without filtration system  
Integrated with intercom device for communication between two rooms



## Horizontal LAF Workstation

Horizontal LAF Workstations are designed to supply high precision worktables with a continuous horizontally directed flow of class 100 clean air to maintain a work table that is free from particles providing the product protection.

Available in powder coated & stainless steel

SS 304 / SS 316 / SS 316 L Material

Air cleanliness: ISO Class 5 with Air

Velocities: 100  $\pm$ 20 FPM

Digital control Panel with Inbuilt Hour  
Meter and LED Display

Air flow Direction: Horizontal – Re-  
circulatory

Supply Filter: HEPA Filter – H14- Efficiency-  
99.997% down to 0.3 micron

Application: Microbiology / Product Testing  
Laboratory

Available in Flameproof / ATEX Proof Type  
with all FLP Electrical



## Vertical LAF Workstation

Vertical LAF Workstations are designed to supply high precision worktables with a continuous vertical downward flow of class 100 clean air to maintain a work table that is free from particles providing the product protection.

Available in powder coated & stainless steel  
SS 304 / SS 316 / SS 316 L Material

Air cleanliness: ISO Class 5 with Air

Velocities: 100  $\pm$ 20 FPM

Digital control Panel with Inbuilt Hour  
Meter and LED Display

Air flow Direction: Vertically Downwards –  
Re-circulatory

Supply Filter: HEPA Filter – H14- Efficiency-  
99.997% down to 0.3 micron

Available in Flameproof / ATEX Proof Type  
with all FLP Electrical

## Vertical LAF Unit

Vertical LAF is designed to create an area supplied with a continuous flow of air to maintain a work environment that is free from particles.

Available in stainless steel SS 304 / SS 316 / SS 316 L Material

Air cleanliness: ISO Class 5 with Air Velocities:  $90 \pm 20\%$  FPM

Air flow Direction: Vertically Downwards – Re-circulatory

Supply Filter: HEPA Filter – H14- Efficiency- 99.997% down to 0.3 micron

Available in Flameproof / ATEX Proof Type with all FLP Electrical

### Type of Vertical LAF Unit

Ceiling hanged, Stand Mounted with wheels & Machine Mounted



## Mobile LAF Trolley

Mobile LAF is designed for transporting sterile products under ISO class 5 (Class 100) practical free work area. The work area is continuously supplied with positive pressure HEPA filtered air flow.

Available in stainless steel SS 304 / SS 316 / SS 316 L Material

Air cleanliness: ISO Class 5 with Air Velocities:  $90 \pm 20\%$  FPM

Air flow Direction: Vertically Downwards & Horizontally – Re-circulatory

Supply Filter: HEPA Filter – H14- Efficiency- 99.997% down to 0.3 micron

SS 304 Handles with Lockable Castor wheels for easy movement

UPS System with battery for power backup of 60 minutes

## Reverse LAF Booth

RALF is designed to provide high level of protection from airborne contaminants generated during powder handling operations such as sampling & dispensing. It provides Operator, Product & Environment Protection.

Available in Powder Coated Steel and Stainless-Steel Finish Air cleanliness: ISO Class 5 with Air Velocity:  $90 \pm 20$  % FPM Audio Visual Alarms using Digital Differential Pressure Gauge Supply HEPA Filter - H14 – Efficiency – 99.997% down to 0.3 micron Available in Flameproof / ATEX Proof Type with all FLP Electrical

Type 1: Booth for large batches & workstations for smaller batches

Type 2: Downflow Booth with 100 % Exhaust & RABS



## Bio Safety Cabinet

(BSC) is designed to provide personnel, environment and product protection during critical material handling process.

Type of bio safety cabinet

Class II: There are more difference like divided into four types A1, A2, B1 & B2

Class III: It's also known as glove box & offers maximum protection

Available in powder coated steel and stainless steel finish

Air cleanliness: ISO Class 5 with Air

Velocities:  $90 \pm 20$  % FPM

Air flow Type: Re-circulatory OR 100%

Exhaust with bag in / out arrangement

Supply Filter: HEPA Filter – H14- Efficiency- 99.997% down to 0.3 micron

Available in Flameproof / ATEX Proof Type with all FLP Electricals



## De-dusting Tunnel

De-dusting Tunnel is designed to effectively remove dust and particles from materials entering controlled environments making it ideal for use in pharmaceutical and other sensitive manufacturing facilities.

Available in stainless steel SS 304 / SS 316 / SS 316 L Material

Air Velocities:  $4000 \pm 20\%$  FPM

Motorized Conveyor with Brushing System & SS 304 Nozzles

Air Flow: Vertically Downward & Horizontally – Re-circulatory

PLC Controller & Sensor for Controlled operation of the unit

Accessories like Dust Controller Tray, Vinyl Curtains, and Emergency Switches



## Air Shower

Air shower is a self-contained air chamber installed at the entrance to Cleanroom in order to minimize the amount of particulate contaminants entering the Cleanroom. Personnel move through the air shower while particulate contaminants are washed off with high velocity HEPA-filtered air jets. The high air velocity of 6000 FPM ensures efficient scrubbing action necessary to remove particulate matter. Contaminated air is then taken in through the base of the unit, filtered, and re-circulated into the chamber.

## Mist Shower

Mist Shower is a chamber installed at exit of Cleanroom to showering Mist (Air + Water) over the gown of a person and thus providing protection during de-gowning process in potent drug manufacturing areas.

Available in powder coated steel and stainless steel finish

Vertically + horizontally misting through ultrasonic nozzles

PLC Controller with waterproof electronic & electrical

Inbuilt high pressurized water and air system with programmable logic

Pass chute for sterile Garment transfer after De-gowning.

Mist Shower + Air Shower as combined option available with BIBO Exhaust

Available in Flameproof / ATEX Type with all FLP Electricals



## Fume Hood

Fume Hood is a type of local ventilation device that is designed to limit environmental exposure to hazardous or toxic fumes, vapors or ducts.

The principal of Fume Hood is that the Air with fumes is drawn in from the front (open) side of the cabinets, and either expelled outside the building.

Available in Powder Coated Steel and Stainless Steel Finish Durable and chemical-resistant construction with PP / FRP linings Digital Control Panel with LED Display & Electrical Raceway Exhaust Chimney with weather cowl, bends flanges, brackets etc.

Ducting : FRP duct pipe with suitable elbows & FRP Dampers High Flow Capacity Exhaust FRP Blowers for drawing out the fumes efficiently Available in Flameproof / ATEX Proof Type with all FLP Electricals.

## Laminar Air Flow Unit

LAF is designed for offering highest product protection for samples and processes by providing ISO class 5 particle free work station. LAF offers proven protection for samples and processes. The work station is continuously supplied with positive pressure HEPA filtered vertical air flow. The vertical unidirectional airflow speed prevents contamination from operator and environment to work station. The laminarity of the flow prevents cross contamination between the items handled in the working space. LAF is available in powder coated G.I steel, S.S.316, S.S.316 L or a combination of both.



## Cleanroom Clothing

People who work in Cleanroom undergo extensive training to maintain the cleaning standards. They enter and exit the Cleanroom through by wearing special clothes designed to trap contaminants which are shed by the bodies of people working in the clean rooms. Depending on the complexity & classification of clean room, clean room clothing could be as extensive as fully covered in multiple layered dresses with self-contained breathing apparatus. Cleanroom clothing is used to prevent microbes, particles from being released off the wearer's body and contaminating the environment. The Cleanroom clothing must not release any kind of particles or fibers to prevent contamination of the environment. So much so is the importance of clean room clothing, that in case if the same is not being maintain, it can certainly degrade the performance of semiconductors and can lead to cross infection between patients and healthy people in Pharmaceuticals or Medical Industries.



## Laboratory Modular Furniture

Modular Laboratory Furniture modules- the perfect solution for creating a functional and efficient laboratory space.

Our modular furniture modules are designed to meet the specific needs of pharmaceutical and biotechnology laboratories, providing a seamless integration of functionality, durability and aesthetics.

Whether you need a fume hood, workbench, storage cabinet, or a combination of these, our modular furniture modules can be configured to maximize your laboratory's productivity and organization.



## Sterile Garment Cabinet

Garment Storage Cabinet is designed to provide Class 100 particle free work area to meet storage needs for sterile garment which avoids any particulate accumulation. An integral HEPA filter and blower assembly provides a continuous wash of heated class 100 air over the garments.

Available in Powder Coated Steel and Stainless Steel Finish Air cleanliness: ISO Class 5 with Air Velocity:  $90 \pm 20$  % FPM H- 14 HEPA Filter with Efficiency- 99.995% down to 0.3 micron Inbuilt heater with thermostat for storing sterile garment at certain temperature PU Caster wheels for easy movement of the unit SS 304 Hanging Arrangement / ATEX Proof Type with

## Cold Room Equipment

Cold room equipment refers to temperature-controlled storage systems used to preserve perishable items like fruits, vegetables, meat, and medicines. It typically includes components like a refrigeration unit, insulated panels, an evaporator, and a condenser.

### A.C.U



An Air Conditioning Unit (A.C.U) is a device used to control indoor temperature, humidity, and air quality. It works by removing heat from the indoor air and releasing it outside through a refrigeration cycle. ACUs are commonly used in homes, offices, hospitals, cold rooms, and industrial areas. They help maintain a comfortable and healthy indoor environment.

Key components include a compressor, condenser, evaporator, and refrigerant. There are various types of ACUs like window ACs, split ACs, cassette units, and central systems. Advanced ACUs also offer features like air purification and energy efficiency.

Proper maintenance of an ACU ensures long life and effective cooling performance.

#### Air Cooling Unit: Product Features

- Can be used with refrigerants R404A, R134a, R507A and R410A
- DX evaporator coil with shredder valve soldered into suction line for ease of superheat measurement
- Casing with pre-coated paint
- IP44 Axial fan with moisture proof (IP44 rated), motor protected and built-in thermal overload
- Up to 3 heaters can be slotted for defrosting
- Pre-fixed wiring to fan motor

## Medium Temperature Condensing Unit

A Medium Temperature Condensing Unit by Voltas is a refrigeration system designed to maintain temperatures typically between 0°C to +10°C, making it suitable for cold rooms, dairy storage, beverages, and food preservation. It consists of a compressor, condenser coil, fan, and control components that work together to remove heat from the refrigerated space. Voltas units are known for energy efficiency, reliable performance, and durability, making them ideal for commercial refrigeration applications.



## Low Temperature Condensing Unit

A Low Temperature Condensing Unit by Voltas is designed for applications requiring sub-zero temperatures, typically ranging from -18°C to -40°C. It is commonly used in ice cream storage, frozen food preservation, and deep freezers. The unit includes a high-performance compressor, condenser coil, fan, and advanced controls to ensure efficient heat removal and consistent low-temperature operation. Voltas units are valued for their energy efficiency, reliability, and suitability for heavy-duty commercial refrigeration needs.





### Medium Temperature Indoor Unit

A Medium Temperature Indoor Unit by Voltas is specifically designed to maintain storage conditions between 0°C to +10°C, making it suitable for dairy products, fruits, vegetables, beverages, confectionery, and packaged food items. Installed inside the cold room, this unit mainly consists of an evaporator coil, expansion valve, and high-efficiency fans that ensure proper circulation of cool air. The even distribution of temperature prevents hot spots and keeps stored products fresh for a longer duration.



### Hermetic Condensing Unit

A Hermetic Condensing Unit by Voltas is a highly efficient refrigeration system in which the compressor and motor are completely sealed inside a single welded casing. This design prevents gas leakage, reduces noise, and enhances durability. These units are widely used in cold rooms, display counters, food storage, and commercial refrigeration applications where reliable cooling is essential. Voltas Hermetic Units are available for both medium temperature (0°C to +10°C) and low temperature (-18°C to -40°C) applications, ensuring precise temperature control. They are known for their compact design, low maintenance requirements, energy efficiency, and consistent performance, making them a dependable choice for long-term refrigeration needs.



## Semi Hermetic Condensing Unit

A Semi-Hermetic Condensing Unit by Voltas is a robust and high-performance refrigeration system where the compressor motor is housed within the same casing but can be serviced or repaired when required. This makes it more durable and easier to maintain compared to hermetic units. Designed for both medium temperature (0°C to +10°C) and low temperature (-18°C to -40°C) applications, these units are widely used in cold storages, food processing industries, ice cream plants, and large-scale refrigeration systems. They provide precise temperature control, high cooling capacity, and superior performance, making them ideal for industrial and commercial refrigeration needs where reliability and efficiency are critical.

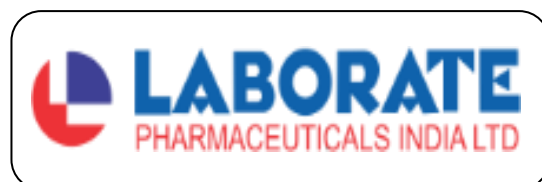
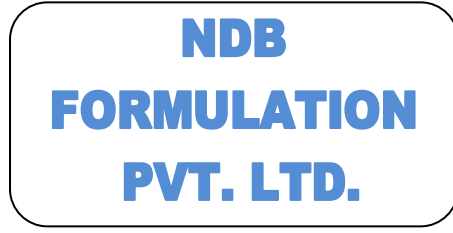


## Scroll Condensing Unit

The Voltas Scroll Condensing Unit is a high-performance outdoor refrigeration system designed for commercial and industrial cooling applications, such as cold rooms, walk-in freezers, dairy, and food processing units. It uses a scroll compressor, which is known for its high energy efficiency, low noise, and smooth operation. These units are built with robust galvanized or powder-coated casing to resist corrosion and withstand outdoor weather conditions. The units are also designed for easy installation and maintenance, with features such as pre-charged refrigerant lines, accessible service valves, and compact layout.



## Our Prestigious Clients







# OM SAI ENTERPRISES

"Your Comfort, Our Passion," "Don't Sweat It, We've Got You!", and "Cool Comfort, Hot Services"



Scan Me!

+91 9813709087 / +91 9988884888

info@omsai.enterprises

Ground Floor, Shop No. 13, Shiva Market,  
Gaushala Road, Zirakpur, SAS Nagar, Punjab,  
140603