APS™

APS Lab Instruments Pvt. Ltd.

Complete Lab &Hospital Solutions

LAB & HOSPITAL EQUIPMENTS

Specially designed for all your specialized needs

We have successfully catered the needs of over many of well renowned institutions in India, we serve more than 200 customers in government, corporate and private sectors. The dedicated and cumulative efforts of **APS™** members has produced and delivered the comprehensive range of scientific Equipments, Hospital Equipments and laboratory products.

Company's Outlook

Our commitment to quality is unflinching, our hunger for growth is deep-rooted and our capacity for details is amazing. Over the decade, we have demonstrated a rare resilience and fortitude. We are determined to improve productivity and focus continuously on innovation and up-gradation of our products and people.

We are determined to serve our fraternity and achieve "complete customer satisfaction through business ethics". Besides working very closely with our customers in research and development fields and providing end to end customized solutions we also providing high quality standard equipments from our comprehensive product range.

Quality Standards

At **APS Lab Instruments Pvt. Ltd.,** we design and develop a complete range of scientific and laboratory instruments with the highest quality standards. We constantly update technologies and methodologies to ensure reliability and consistency at each level of instruments/ Equipments production. Our transparent auditing system is supported by **FQS India & S.K. Associates** , as we want to deliver the world class quality instruments to all our valuable clients. We feel proud that our entire product range has brought satisfactory results for all the Government, Corporate and Public sector clients.

Range of Products

Our wide array of products are categorized into Test Chambers, Laboratory Equipments, Sterilizers, Clean Room Equipments, And ultimate heating & cooling equipments . All our products ensure accuracy and conformity for significant experiments.

As APS™ We are the specialized and well skilled and trained technical's for the manufacturing of Autoclave (all types), Mortuary Chamber, Mortuary Refrigerator, Clean Room Equipments, and Deep Freezer.

Infrastructure and Facilities

The company has built and is operating manufacturing facilities that matches the latest systems and techniques in the industry, having units in Bawaana Industrial area & Swaroop Nagar Delhi. Our team strictly follows the quality control standards of **ISO 9001:2008** series while designing, developing, manufacturing and delivering the scientific & Hospital Equipments/ instruments. The manufacturing unit of **APS** is made with complete state-of-the-art equipments and technologies for producing high quality instruments.

We also acquired Environmental Friendly process certifications **ISO 14001:2004** for our entire range of instruments to ensure reliability and durability in each product.

Our range of products are certified by '**CE**' to meet the best standard product satisfaction to our clients.

We have company office in New Delhi (India) and branch offices in Gorakhpur, Lucknow (Uttar Pradesh), Bilaspur (Chattisgarh), Kolkata, Darjeeling (West Bengal), Hyderabad, Bangalore and Maharashtra as well. We also have the post sales technical backup system in six places in India and are in the process of further developing them to assist the customers for post sales services.

Professional Team

The continuous cooperation and support of our professional team has helped us to understand and deliver state of the art scientific instruments right from basic lab equipment to most sophisticated instruments for research labs. We believe that our tremendous success belongs to our expert engineers, managers, co-workers and other significant team members who have put their best efforts in the growth of the organization. It is their dedication and commitment that makes us the most trusted scientific instruments brand among our all satisfied clients.

With the help of our APS™ team we are able to provide the best after sale service to our valuable customers in any part of the country which help us to meet the maximum customer satisfaction and give us a long term relationship with them.

Forte

We strive hard to cater to our clients with the best product range and services while meeting international standards. Our aim is to meet the overwhelming demand of the scientific community and provide them with world class quality scientific & Hospital Equipments along with the best after sale support.

Personnel Air Shower both sides Flow

We are manufacturers of Air Showers in India since 1995. Our air showers/Clean Room Air Showers have a wide usage in all the clean rooms and various microbiology, biochemistry, bio technology and genetic engineering laboratories.

Our Clean Room Air Showers help solve the problem of de-contamination from personnel entering into the clean rooms.

We specialize in Standard Air showers and Customized Clean Room Air Showers, specially designed to meet the challenging demands of various basic and applied science laboratories.

Over a short period of time we have been established as a reliable Air Shower Exporters in India, catering to the vast markets in South East Asia, Middle East, Africa and Europe.

Apart from that we are also supplying our Clean Room Air Shower to a variety of customers in India ranging from Defense installations, research laboratories, educational institutes and various R & D laboratories of leading national and multi national companies.

Weiber offers energy efficient Material Handling Air Shower, Air Shower Personnel, Air Shower Tunnel To protect the clean room environment from unwanted contamination.

Application:

* Clean Room
* Pharma Production
* Micro-Electronic Fabrications and Production Units
* Semi-Conductor Production Lines

Filter Assembly:

All our air shower are fitted with fully washable synthetic pre-filter units and secondary high efficiency perfect air filters made of mini pleated non woven fabric. The efficiency of our filters has a rating better than 99.99% at DOP (cold) and 99.97% at DOP (Hot). Our units have the capacity to hold all suspended particles of size greater Than 0.3 micron.

Motor And Blower Assembly:

All our air shower are provided with perfectly balanced (Static as well as dynamic) motor and blower motors bearing ISI mark. The rating of the assembly is 1/5 HP. Our high efficiency pumps which have life long lubricated bearings ensure a trouble free operation for a long time.

Noise Level:

* Our air shower are designed to ensure that the work enclosure have minimum possible vibration levels and noise Level is also contained below 60 db.
* Ergonomic Design
* Versatile Usage
* Low Noise And Vibration Levels
* Conforms to US Federal Standards
* Calibration And Protocol Documentation
* Programmable operation

Bio Safety Cabinet

Class - II	Protection From Particulates	From Vapors and Gases
Type B2	Personnel, Work Area (Product) and Environment	Offer protection to personnel (offer protection to environment if exhausted to treated system.

100 % air exhaust

Negative pressure air surrounding all biological contaminated parts

Class II, Type B2 cabinets are total exhaust cabinets, widely used in toxicology laboratories and similar applications where chemical effluent is present and clean air is essential.

There is no recirculation withing the work area.

Room air enters through a blower/motor in the top of the cabinet and passes through a HEPA supply filter into the work area as the vertical unidirectional airflow.

Descending air is pulled through the base of the cabinet through the perforated front and rear grilles.

Simultaneously, air entering through the perforated front opening is pulled through the grille and exhausted immediately,

100% of the air is pulled into the facility exhaust system for appropriate treatment.

Type B2 cabinet are hard-connected to an exhaust system.

Negative pressure surrounds the work area with double wall plenums for protection.

Air drawn through pre-filter is made to pass through highly effective HEPA (High Efficiency Particular Air) filters MAIN/SUPPLY FILTER having efficiency rating as high as 99.99% with cold DOP and 99.97% with hot DOP, thus retaining all air-borne particles of size 0.3 micron and larger. The highly efficient HEPA filter maintains the optimum cleanliness and purity. Being equipped with the prefilter, it can extend the life of HEPA filter.

Aerodynamic airflow grills maintain safety and prevents blockage.

U.V and fluorescent interlock available

Ergonomic and comfortable sloped front window for comfortable head and elbow rest position, thus reducing fatigue

Sash is counterbalanced for smooth and light weight operation with standard opening for easier access to work zone and enhanced user safety.

CLASS-II design ensures PERSONNEL, PRODUCT and ENVIRONMENT PROTECTION.

TECHNICAL SPECIFICATIONS & ORDERING INFORMATIONS

Class II Type B2 BIOLOGICAL SAFETY CABINET					
Model	**APS-BSC-2(B2)**	**APS- BSC-3(B2)**	**APS- BSC-4(B2)**	**APS- BSC-5(B2)**	**APS- BSC-6(B2)**
Internal Dimensions (WxDxH)mm	600x600x600	900x600x600	1200x600x600	1500x600x600	1780x600x600
MOC	Internal Working Chamber : Stainless steel (SS-304) Exterior Cabinet : Cold Rolled Steel Duly Powder Coated or Stainless Steel (SS-304)				
Pre-Filter	Mounted on aluminum frame, of rating 20 microns				
Supply / Main Filter	HEPA (Efficiency 99.97% @0.3 microns to meet air quality ISO Class 4 equivalent to US FED STD 209 E, Class 10				
Exhaust Filter	HEPA (Efficiency 99.97% @0.3 microns to meet air quality ISO Class 4 equivalent to US FED STD 209 E, Class 10				
Electrical Socket	Electrical Socket is provided for using small electrical devices				
Power Supply	220/230 Volts AC supply				
Heavy Duty Exhaust System	Standard fitted to the system for 100% exhaust				
Exhaust Tunnel/Duct (Option)	Available on per running feet basis				
Sash Lift	Can be lifted and adjusted manually				

Standard Blood Bank Refrigerator

The "APS" Low Cost Medical Refrigerator/ Blood Bank refrigerator is a specialized refrigerating equipment for cold storage of pharmaceuticals as well as biological products and so forth. It is suitable for hospitals, drugstore, pharmaceuticals factories, sanitation and antiepidemic stations and clinics.

Precise temprature control

* Interior of chamber is stainless steel (SS-304).
* Inner and outer chamber both made of Stainless Steel (SS-304). Door , panel, base plate and top cover made of C.R.C. duly powder coated.
* Fitted with specially designed deviation alarm from the preset temperature, door open alarm and power failure alarm.
* STAINLESS STEEL BASKETS are provided for storage inside.
* Foamed - in - place CFC Free PUF insulation ensure temperature stability and reduced energy temperature.
* Stainless steel heavy duty basket ensures even temperature distribution
* Micro - controller controls the internal temperature between +2°C to +6°C with an accuracy of ±1°C, for storing blood bottles or blood bags.
* The cooling is effected by a hermetically sealed CFC FREE ECO FRIENDLY COMPRESSOR.
* To work on 220/230 volts A.C

TECHNICAL SPECIFICATIONS & ORDERING INFORMATIONS

Model	APS - BBR-24	APS - BBR-60	APS - BBR-120	APS - BBR-180	APS - BBR-240	APS - BBR-300
Capacity	85 Ltrs.	195 Ltrs.	265 Ltrs.	350 Ltrs.	440 Ltrs.	530 Ltrs.
Inner Tank Size (WxDxH) Inches	18x18.5x17.6	24x28.5x17.6	24x28x24	24x28x32	24x28x40	24x28x48
External Body Size (WxDxH) Inches	23.5x22x34.6	29.4x33x34.6	29x37.4x46	29x37.4x54	29x37.4x64	29x37.4x72
Tray Size (WxDxH)	14.8x17.5x4	20.7x28x4	20x27x4	20x27x4	20x27x4	20x27x4
Blood Bag Accommodation (of 350ml Cap.)	24 Bags	60 Bags	120 Bags	180 Bags	240 Bags	300 Bags
No. Of Drawers	1	1	2	3	4	5
Drawer Capacity	Maximum 60 Bags in each drawer					
Drawer Movement	Adjustable and Extendable Pull Out Modular Drawers.					
Temperature	Preset at 4OC +0.5OC.					

B.O.D Incubator

APPLICATIONS

"APS" BOD Incubators are designed to meet incubation criteria required in bod analysis of water and wastewater samples, fermentation studies, plant and insect studies and bacterial culturing etc. Equipping with superior quality instruments, they deliver the performance, quality and reliability required by researchers and clinicians worldwide.

Construction features

* Most suitable for experiments requiring **low temperature** conditions like micro-organism or activation, cell culture process of animals and plants, good storage and desalting process of enzyme extracts etc.

* With a solid double walled door, a full view inner plexi-glass door enables inspection and monitoring of inner chamber specimens without disturbing the process temperature.

* Excellent quality magnetic gum packing door gasket for external door.

* User- oriented design of shelves makes you adjust each space of shelves without difficulty.

* Forced air circulation at triple walled back by durable coaxial blower, maintains optimum temperature uniformity and homogenity.

* High grade HIGH PRESSURE FOAMED IN-PLACE PUF INSULATION between outer and inner chamber for minimal thermal losses.

* Caster wheel mounted for easy portability.

* Front double walled door is provided with lock and key arrangement.

* Door operated illumination lamp is fitted inside the chamber for easy visibility.

* FINNED TUBE EVAPORATOR facilitates uniform and faster cooling effects.

TECHNICAL SPECIFICATIONS & ORDERING INFORMATIONS

Type	:	Forced Convection Type
Freezer Compressor	:	Hermetically sealed air cooling compressor system
Temperature Range	:	5°C to 50°C (Resolution 0.1°C)
Accuracy	:	±0.5°c
MOC Outer	:	Powder coated CRC Steel Sheet
MOC Inner	:	Chamber and trays made of Stainless Steel (SS-304)
SAFETY	:	Over temperature limiter switch prevents over heating
Temperature Controller	:	Microprocessor Based Digital Temperature Indicator cum Controller with LED display. for Set Value. (SV) & Process Value (PV). OR Microprocessor based alphanumeric LCD Display Controller
Voltage Indicator	:	Through a highly accurate digital voltmeter Optional.
High Voltage Protection	:	Through automatic voltage stabilizer supplied with the unit Optional.
Electric Supply	:	220/230V AC, 50/60H.

With Microcontroller Digital Controller With LED Display

Model	APS - BOD-3	APS - BOD-4	APS - BOD-6	APS - BOD-10	APS - BOD-12	APS - BOD-15	APS - BOD-16
Dimension Inner (WxDxH) (in mm)	400X450X450	455x410x610	505x415x830	570x550x875	650x580x900	700x640x900	700x640x970
Capacity	85 Ltrs	112 Ltrs	171 Ltrs	280 Ltrs	340 Ltrs	420 Ltrs	450 Ltrs
Volume	3 Cuft	4 Cuft	6 Cuft	10 Cuft	12 Cuft	15 Cuft	16 Cuft
No. of Shelves	2	2	2	3	3	4	4
Controller	Fitted with Microprocessor Digital Controller with LED display						
Display	LED Display for Set Value(SV) and Process Value (PV)						

Carbon Dioxide Incubator (CO_2 Incubator)

APPLICATIONS

We APS are manufacturers of CO2 incubators (Carbon Dioxide Incubators) in India since 1990. Our CO2 incubators are widely used in various applications that require ideal conditions for tissue culture and maximum security from contaminations. Beside that they are also used for day to day photosynthesis tests and other general laboratory applications.

We specialize in both standard and customized models, specifically designed to meet the challenging demands of various scientists for individual and specialized research applications. Over a short period of time Weiber brand have been established as reliable exporters of CO2 incubators (Carbon Di Oxide Incubators) in India, catering to the vast markets in South East Asia, Middle East, Africa and Europe.

Apart from that we are supplying our CO2 incubators (Carbon Di Oxide Incubators) in India , catering to a variety of customers ranging from Defence Installations, Research Laboratories, Educational Institutes and various R and D laboratories of leading national and multinational companies.

Construction:-

APS CO2 incubators (Carbon Di Oxide Incubators) are Triple walled convection heated units. Outer body of our incubators are constructed out of thick PCRC sheet duly pre-treated with primers and rust proofing and painted with long lasting stove enamel or elegantly powder coated.. The inner chamber is made of heavy gauge stainless steel sheet of SS-304 grade. The gap between the walls is filled high grade mineral glass wool, which ensures maximum thermal efficiency in our CO2 incubators (Carbon Di Oxide Incubators) The unit is provided with two doors, the inner door is made of thick plexi glass/float glass, to view the specimens without disturbing the temperature of the chamber. This door is provided with magnetic door closer. The outer door is made of mild steel sheet lined with stainless steel from inside. This door is provided with lock and key arrangement. The unit is mounted on a sturdy steel frame and provided with cator wheels for easy movement inside the laboratory. The unit is provided with two stainless steel shelves. The triple walled back of our CO2 incubators are provided with two air circulation fans for uniform maintenance of the temperature throughout the chamber.

TECHNICAL SPECIFICATIONS & ORDERING INFORMATIONS

Model	APS-CDI-120	APS-CDI-150
Capacity	120 ltrs	150 ltrs
Disinfection	UV LIGHT DISINFECTION	UV LIGHT DISINFECTION
MOC Inner Chamber	Stainless Steel with curved corners	
MOC Outer Chamber	Mild Steel duly powder coated	
Temperature Range	RT+5 ~70OC	
Temperature Control	0.1OC	
Temperature Stability	± 0.5OC	
CO2 Control Range	0~20% (Infrared Sensor)	
CO2 Recovery	Ø Calibration x 1.2min	
Humidifying Method	Natural Evaporization	
Ambient Temperature	+5 ~35OC	
Incubator Sterilizer	UV method	
Shelves Per Chamber	2 Pcs.	3 Pcs.
Input Power	450W	720W
Electrical Requirement	220V, 5Hz	

Deep Freezer -20°C to -40°C

APPLICATIONS :

The "APS" Ultra-low temperature Freezer offers a wide variety of research and storage applications, such as low temperature scientific experiments, preservation of red blood cell, white blood cell, skin, bone bacteria, semen, biomedical product, ocean product, electronic devices and low temperature testing of special materials. It is suitable for blood banks, hospitals, sanitation and antiepidemic stations, electronic industries, university laboratories, military industries, pelagic fishery companies.

CONSTRUCTION AND SALIENT FEATURES :

The “APS” Ultra-low temperature Freezer offer a economical solution to wide variety of research and storage applications, such as low temperature scientific experiments, preservation of red blood cell, white blood cell, skin, bone bacteria, semen, biomedical product, ocean product, electronic devices and low temperature testing of special materials. It is suitable for blood banks, hospitals, sanitation and anti-epidemic stations, electronic industries, university laboratories, military industries, pelagic fishery companies.

ULTIMATE REFRIGERATION TECHNIQUE :

The two-time foaming technique is used and it can protect isolation layer form being damaged by low temperature, which is in the world's lead in the aspect of temperature conservation. The advanced refrigeration system of two compressors work, Own the independent knowledge property. 155mm extra thick insulation effectively reduces loss of cold air. Hi- performance compressor with high efficiency condenser fan electro motor.

ADVANCE CONTROLLING TECHNOLOGY :

* Microprocessor-based temperature control system platinum resistance sensors.
*Inside temperature ranging from -200C to -400C can be set freely.
*Digital temperature display.
*Keyboard locks and password protect configuration page.
*Perfect audible and visual alarm systems (high or low temperature alarm, no battery alarm, door open alarm, filter blocking alarm, system failure alarm) ensure the safety of stored articles.

DESIGNED FOR USER CONVENIENCE :

* The safety lock can prevent random opening.
* Rotatable assistant door handle, easy opening.
* Adjustable shelves are convenient to place articles.
* Separated inner and outer doors prevent cold air leakage and promote excellent heat insulation.
* Casters wheel mounted for easy handling.

With Microcontroller Digital Controller With LED Display:-

Model	APS - DF-50	APS - DF-100	APS - DF-150	APS - DF-200	APS - DF-250	APS - DF-300	APS - DF-400	APS - DF-500
Capacity	50 Ltrs.	100 Ltrs.	150 Ltrs.	200 Ltrs.	250 Ltrs.	300 Ltrs.	400 Ltrs.	500 Ltrs.
No. of Shaveles	21	2	2	3	3	3	4	4
Controller	Fitted with Microprocessor Digital Controller with LED display							
Display	LED Display for Set Value(SV) and Process Value (PV)							

Deep freezer -40° to -86° ultra low temperature/plasma sterilizer

APPLICATIONS

1The "APS" Ultra-low temperature Freezer offers a wide variety of research and storage applications, such as low temperature scientific experiments, preservation of red blood cell, white blood cell, skin, bone bacteria, semen, biomedical product, ocean product, electronic devices and low temperature testing of special materials. It is suitable for blood banks, hospitals, sanitation and antiepidemic stations, electronic industries, university laboratories, military industries, pelagic fishery companies.

Ultimate refrigeration technique

The two-time foaming technique is used and it can protect isolation layer from being damaged by low temperature, which is in the world's lead in the aspect of temperature conservation. The advanced refrigeration system of two compressors work, Own the independent knowledge property.

155mm extra thick insulation effectively reduces loss of cold air. Imported famous brand compressor with high efficiency. Germany fan electro motor with internationally famous brand of EBM is used.

Advance controlling technology

* Microprocessor-based temperature control system platinum resistance sensors. Inside temperature ranging from -10° C to -86° C can be set freely.
* Digital temperature display. Keyboard lock and password protect configuration page. Perfect audible and visual alarm systems (high or low temperature alarm, no battery alarm, door open alarm, filter blocking alarm, system failure alarm) ensure the safety of stored articles.
* High-tech construction combines vacuum panel insulation with environmentally-friendly, water-blown foam insulation for maximum sample-to-vial footprint storage.
* Environmentally-friendly, CFC/HCFC free refrigerants

Power management system protects against a wide range of voltage variation and is easily accessible through the touch-screen display.

* Microprocessor based control system.(HMI+PLC optional)
* Defrost cycle can be initiated to shut down the compressor and keep the cabinet defrost free.
* Ergonomic and easy to use.
* USB ports for PC connectivity.
* RS 232/485 connectivity
* CFC/HCFC-free refrigerants maximize cooling and minimize environmental impact chart recorder for better temperature monitoring (optional)
* Corrosion resistant interior and exterior
* Incident monitor provides visual and audible warnings of system abnormalities for increased sample protection.
* Digital display and direct settings for maintaining desired operations.
* Castors for ease of movement

MODEL	CAPACITY	VOLUME
APS-4 (ULT)	100 Ltrs	4 Cuft
APS-6(ULT)	150 ltrs	6 Cuft
APS-10(ULT)	250 ltrs	10 Cuft
APS-12(ULT)	300 ltrs	12 Cuft
APS-15(ULT)	400 ltrs	15 Cuft
APS-18(ULT)	500 ltrs	18 Cuft

Fume Hood

APS Lab Instruments Pvt. Ltd. offers Fume Hood in number of sizes and range depending on your needs.

Fume Hoods are recommended for exhaust from the hood working area, of gases, vapor, toxic particles, odor to improve working environment of people who regularly handle toxic substances. These reduce personal exposures and odor level in the laboratory. These are designed to exhaust toxic, or otherwise harmful vapors etc., for protecting laboratory personnel & equipments. A motor-blower exhaust system (Optional) generates negative pressure within the hood, extracting the contaminated air from the work area and expelling it into the atmosphere and preventing the fumes from escaping into the room. These are recommended for various laboratories like Bio-Chemistry, Pharmaceutical units, printed circuit etching/cleaning etc. These are capable or handling corrosive fumes of sulphuric and hydrochloric acids etc. If work-area walls are lead-lined (Optional), it can be effectively used for Radio-Isotopic applications.

Construction

The main body of the fumes hood is made of M.S. Powder coated. The work surface (Worktable) is of stainless steel sheet. A small S.S. Sink, water tap and water outlet provided. A sliding door made of acrylic moves vertically up/down with counter balanced weight operated by steel rope. Hose is provided with fluorescent light for easy working in the chamber and a storage cabinet is also provided for storing of material. A metal clad socket and gas cock is also provided in the chamber. The control panel is fitted with on/off toggle switches for mains, motor-blower and tube light and mains indicator. 8 to 10" diameter polyethylene funnel shaped rectangular duct collar shall be located in the top Or back of the hood plenum chamber. Power Supply 220V, Single Phase, 50 Cycles, AC

MODEL	Size Ft.
APS -FH-010	2' x 2' x 2'
APS -FH-011	3' x 2' x 2'
APS -FH-012	4' x 2' x 2'
APS -FH-013	5' x 2' x 2'
APS -FH-014	6' x 2' x 2'

Hot Air Oven

APPLICATIONS

Forced convection system ensures good mixing, strong dispersion and maintains higher temperature uniformity inside the chamber.

Most ideal for various experiments in microbiology, cell cultivation of animals and plants and food for various laboratories, industries, R & D labs etc.

Synthetic door gasket made of neoprene on the double walled door. User oriented design of shelves makes you adjust each space of shelves without difficulty. Adjustable two ventilation slides control inner air/ vapour circulation. Beaded heating elements are placed in ribs, at bottom and sides for uniform heat distribution.

CONSTRUCTIONAL FEATURES

Outer body made of PCRC sheet duly powder coated. Inner chamber and perforated trays made of Stainless Steel (SS-304). Space between inner chamber and outer wall is filled with high grade mineral wool for minimal heat dissipation.

Bigger sized units mounted on caster wheels for easy portability. Door fitted with heavy duty hinges and door handle ensuring there are no leakages through the door gasket. To work on 220/230V AV, 50/60 Hz supply.

MODEL	APS#HAO-28	APS#HAO-45	APS#HAO-95	APS#HAO-125	APS#HAO-224	APS#HAO-350

Digital Model

Model	APS-HAO-28	APS-HAO-45	APS-HAO-95	APS-HAO-125	APS-HAO-224	APS-HAO-350
Internal Dimension (WXDXH) (mm)	85 Ltrs.	195 Ltrs.	265 Ltrs.	350 Ltrs.	440 Ltrs.	530 Ltrs.
Capacity	300x300x300	350x350x350	450x450x450	450x450x600w	600x600x600	750x750x900
Heat Load	28 ltrs	45 ltrs	95 ltrs	125 ltrs	224 ltrs	350 ltrs
No. of Shelves	0.75 KW	0.75 KW	1.5 KW	1.5 KW	2.25 KW	3 KW
Temperature Range	2	2	2	2	2	2
Forced Convection	50oC to 200oC +1oC					
Temp.	Available with forced convection system (Standard Features)					
Controller	Microprocessor based PID Digital Temperature Indicator-Cum-Controller with LED Display					
Regulator	Solid state electronic relay with protective heat sink					

BENEFITS & ADVANTAGES

Forced convection system ensures good mixing, strong dispersion and maintains higher temperature uniformity inside the chamber. Most ideal for various experiments in microbiology, Institutes, industries, R & D labs etc. Synthetic door gasket made of neoprene on the double walled door. User oriented design of shelves makes you adjust each space of shelves without difficulty.

Adjustable two ventilation slides control inner air/ vapour circulation.

Beaded heating elements are placed in ribs, at bottom and sides for uniform heat distribution.

CONSTRUCTIONAL FEATURES

Outer body made up of mild steel sheet duly powder coated. Inner chamber and perforated trays made of stainless steel (SS-304).

Space between inner chamber and outer wall is filled with high grade mineral wool for minimal heat dissipation. Bigger sized units ounted on caster wheels for easy portability.

Door fitted with heavy duty hinges and door handle ensuringthere are no leakages through the door gasket.

Beaded heating elements are placed in ribs, at bottom and sides, for uniform heat distribution. Synthetic door gasket made of neoprene rubber is fitted to all "MAC" units instead of asbestos. Air ventilators are also provided on the sides of the unit. To work on 220/230V AV, 50/60 Hz supply

TECHNICAL SPECIFICATION & ORDERING INFORMATIONS
BACTERIOLOGICAL INCUBATOR DIGITAL MODEL

Model	APS-INC-28	APS-INC-45	APS-INC-95	APS-INC-125	APS-INC-224
Internal Dimensions (WxDxH)mm	300x300x300	355x355x355	455x455x455	455x455x605	600X600X600
Capacity	28 ltrs	45 ltrs	95 ltrs	125 ltrs	224 ltrs
Heat Load	0.50 KW	0.50 KW	1.00 KW	1.00 KW	2.00KW
No. of Shelves	1	1	2	2	2
Temperature Range	50OC to 70OC +1 OC				
Forced Convection	Available with forced convection system (Standard Features)				
Temp. Controller	Microprocessor based PID Digital Temperature Indicator cum Controller with LED Display				

Orbital Shaker

APPLICATIONS

* Useful for life sciences applications, Fermentation Studies, Ageing Tests, Growth Studies and biological cultures under various controlled temperature conditions.
* Advanced shaking mechanism provides quiet shaking and precise speed control with digital display.
* Minimum noise, no vibration and minimal footprint.
* Automatic stop of shaking system when door is opened.
* Stabilized orbital motion under uneven load distribution.
* Various configurations of stainless steel lotus clamps available for erlenmeyer flasks.
* Interior made of Stainless Steel (304 grade) with a drain-off facility for spill overs.
* One set of lotus clamp holders with one shaking platform of stainless steel (SS-304) supplied with the unit as a standard accessory.
* Stationery shelves made of Stainless Steel (SS-304) for use of the unit as a standard B.O.D. Incubator, can be supplied at extra cost.
* Automatic restart at preset speed in case of power failure.

TECHNICAL SPECIFICATION & ORDERING INFORMATIONS

MODEL	APS-OSC-250	APS-OSC-250 (LCD)
MOC Outer	Powder Coated CRC Steel Sheet	
MOC Inner	Chamber and trays made of stainless steel (SS-304)	
Capacity	280Ltrs	
Volume	10Cuft	
Temperature Control	Microprocessor Based Digital Temperature Indicator-cum-Controller	
Display	LED with Set Value (SV) and Process VALUE (PV)LCD with Set Value (SV) and Process VALUE (PV)	
Inner Chamber Size (WxDxH) in mm	660x660x690mm	
Insulation	High Density PUF insulation for tighter temperature controls	
Shaking Trays Size	510 x 510mm	
Shaking Frequency	Upto 250rpm (adjustable)	
Shaking Amplitude	25mm	
Type	Forced Convection Type	
Temperature Range	5℃ to 60℃	
Temperature Accuracy	+0.50C	
Safety	Over temperature limiter switch prevents overheating	
Cyclic Timer	Fitted with cyclic programmable timer.	
Light Bank	Consisting of fluorescent lamps to provide illumination for photosynthetic applications	
Shaking Motion	Permanent Magnet DC Drive for continuous operations	
RPM Display	DIGITAL DISPLAY	

Refrigerator

To meet requirements of general cooling applications in various medical and other laboratories we design, manufacture and supply refrigerators from small to large capacities with temperature range 2°C to 8°C. These laboratory refrigerator equipment offer excellent temperature control and come with number of optional features that assist you in making your research comfortable.

A range of sizes are available from 50 litres to 1000 litres or more with either single or double outer doors, under counter or upright (vertical type) designs. All models are constructed with powder coated mild steel (stainless steel optional) and stainless steel interiors and each have high and low temperature audible alarms.

Features

Perfect for general lab applications	Temperature range 2°C to 8°C
Upright and under counter models	Capacity from 50 liters to 1000 liters or more
Microprocessor PID Controller	Alarm system with rechargeable battery backup
Single and Double door type	Temperature printer
High grade PUF insulation	Plexi glass inner door for easy view
Fluorescent lamp for increase visibility	Stainless steel adjustable trays

Model	APS-LR-50	APS-LR-100	APS-LR-200	APS-LR-300	APS-LR-400	APS-LR-500
Capacity	50 Liters	100 Liters	200 Liters	300 Liters	400 Liters	500 Liters
Temperature Range	2°C to 8°C					
Temperature	±0.5°C					
Accuracy	PID Controller					
Controller	Exterior: Powder Coated Mild Steel / SS (Optional)					
Construction	Interior: Stainless Steel					
Door	Standard hinged Single					
Insulation	PUF insulation					
Trays	Perforated trays made of stainless steel					
Refrigeration	CFC Free compressor					
Air Circulation	Forced air circulation					
Alarms	Audio / Visual alarm for High / low temperature, door opening & condenser fault					
Optional	1. Fluorescent lamp 2. Stainless Steel exterior 3. Extra shelves 4. Temperature chart recorder 5. Rechargeable battery for alarm 6. Caster wheels 7. Computer interface 8. Memory storage & printer 9. Voltage stabilizer					
Power	220 / 230 Volts 50 Hz					

Laminar Air Flow Horizontal

Laminar flow cabinet (horizontal / vertical) designed so as to meet the requirements of US federal standard 209 B (BS 5295) providing particle free air to meet class 100 conditions. The unit is fitted with pre-filter and HEPA filter. Air is drawn through pre-filter and is made to pass through highly effective HEPA filters having efficiency rating as high as 99.99% with cold DOP & 99.97% with hot DOP thus retaining all air-borne particles of size 0.3 micron and larger. Using a dynamic machine, the blower and motor assembly is statically and dynamically balanced ISI marked motor of 1/4 HP capacity operates with minimum noise level less than 60 dB on a Scale. The working area is illuminated by fluorescent lighting fitted to the unit. Height of the working table provides comfortable "SIT DOWN" working position for the operator.

Sailent features

* The cabinet are fabricated of thick mild steel / stainless steel laminated by cold rolled steel duly powder coated or SS as per requirement

* Work table is made of SS with mirror finish which makes it easy to clean, washable & chemical resistive, corrosive free, Leak proof construction.

* Side panels are made out of thick transparent plexus glass / acrylic sheet duly framed

* High efficiency pre filter

* HEPA filter efficiency- 99.99% with cold DOP & 99.97% with hot DOP thus retaining all air-borne particles of size 0.3 micron

* Pressure manometer to gauge the pressure drop in the unit

* Built in two number U.V. Germicidal Light for disinfection and fluorescent light for work space illumination (60 W, 800 Lumens)

* Utility- gas/air cock and multi point electric socket.

* Transparent UV protected front door glass.

* Air flow Rate: 0.35 to 0.75 m/sec.

* Velocity should be: Approx. 90-100* FPM higher velocity available on request

* Vibration level <2.5 micron

* Fitted with magnehelic differential pressure gauge

* Castor wheels for ease of movement.

* Works on 230V AC supply

Model	APS-LAF-H -010	APS-LAF-H-011	APS-LAF-H -012	APS-LAF-H-013	APS-LAF-H-014
Size (feet)	2' x 2' x 2'	3' x 2' x 2'	4' x 2' x 2'	6' x 2' x 2'	8' x 2' x 2'
Size of HEPA filter	2' x 2' x 6"	3' x 2' x 6"	4' x 2' x 6"	3' x 2' x 6"	4' x 2' x 6"
No of HEPA filters	1	1	1	2	2
No of pre filters	1	1	1	2	2
Illumination	1 x 20 W	1 x 20 W	2 x 20 W	2 x 40 W	4 x 40 W
UV Germicidal light	1' x 1½'	1' x 1½'	1' x 3'	2' x 3'	2' x 3'

Freeze Dryer (Lyophilizer)

APS Freeze Dryer or Lyophilizer is a such a dehydration process in which is water is removed for the frozen sample using purified vacuum condition. This process is followed by first stage Sublimation (primary drying) and last stage Desorption (secondary drying). In lyophilization process, where water in ice form on the frozen goods can be directly lyophilized into steam without melting in advance, thus the goods are dried. The substances frozen can be well-preserved for a long time and returned to their former state once being watered without losing their biochemical properties. The freeze drying technology is especially ideal for those bio-products sensitive to antibiotic, vaccines, blood products, enzymes and hormones.

Features

3 to 15 Liters ice capacities	-40°C or -80°C temperature
CFC refrigeration system	Precise vacuum control
Corrosion resistant construction	Audio visual alarm optional
Digital PID controller	Simple to install and operate
Wide range of accessories are available	Single or two stages cooling system
Front Loading (Tray Type)	Top Loading (Vacuum prove)

Specifications:

Model	APS-LY-103	APS-LY-105	APS-LY-108	APS-LY-110	APS-LY-115
Max. ice capacity	3L	5L	8L	10L	15L
Ice condenser performance	2L / 24Hr	3.5L / 24Hr	5.5L / 24Hr	7.5L / 24Hr	10L / 24Hr
Tray	2	2	3	4	5
Cold trap temperature	-40°C or below (-80°C Optional)				
Temperature Sensor	PT-100				
Controls	Refrigeration ON/OFF Vacuum ON/OFF				
Controller	PID controller/PLC+HMI Optional				
Refrigeration System	HCFC / CFC Free, -40°C (-86°C optional)				
Compressor	(hermetically sealed)				
Defrost	Defrost Hot Gas				
Pressure Control	Automatic or Manual				
Drain connection	Side mounted				
MOC	Exterior - Powder coated, MS Exterior top - SS 304, Drying chamber - SS 304 OR SS 316, Cold Trap Chamber - SS 304 OR SS 316, Lids - Acrylic				

*High ice capacity lyophilizers are also constructed on demand
*Tray type lyophilizer is constructed on demand
*PLC+HMI Optional

Mourtuary Refrigerator

SAFETY SYSTEM

* Hi-Low temperature deviation alarm.
* Sensor Failure Indication protection.
* Start-up delay protection for compressor.

REFRIGERATION SYSTEM

* Hi-performance hermetically sealed compressor .
* CFC-free ECO-FRIENDLY refrigerants.
* High density HCFC free polyurethane insulation foam.
* Uniformly spread evaporator imparts faster freezing and better performance on conformity of temperature.

APPLICATIONS

*Cooling coils for mortuary freezer are placed between foamed-in-place PUF insulation and brazed to Stainless Steel chamber eliminating any chances of FROST FORMATION and choking of evaporator.

*Finned tube evaporator with forced air convention for mortuary refrigerator.

CONSTRUCTION

*Outer body of Stainless Steel. Inner Chamber of Stainless Steel. High density machine filled HCFC free polyurethane insulation foam (PUF). Specially designed latch eliminates cooling loss. Side by side chambers for bigger capacities.

Technical Specifications & Ordering Informations

Model (Mortuary Chamber)	APS-MC-2	APS-MC-3	APS-MC-4	APS-MC-6	APS-MC-12
Capacity	2 Body	3 Body	4 Body	6 Body	12 Body
Temperature	2oC to 6oC				
Controller	Microprocessor / Micro-controller based temperature controller				
Temperature Display	Digital LED with SV and PV				
MOC Outer	GI Powder Coated/Stainless steel Optional				
MOC Inner	Stainless steel				
Door	Standard hinged door with double gasket seal between the doors.				
Insulation	High grade PUF INSULATED between outer and inner chamber for minimal thermal losses				
Body Trays	Telescopic/Pull out trays made up of SS sheet				
Interior Lighting	Interior fluorescent lighting				
Castors	Castors for minimal effort mobility				
Refrigeration system	Superior and heavy duty air cooled refrigeration system.				
Compressor	CFC FREE ECO FRIENDLY				
Condenser	Highly efficient condenser with automatic condensate evaporating system.				
Evaporator	Internal evaporator system Forced draught				
Refrigerant	Non-CFC/HCFC environmental friendly based on compressor capacity.				
Air Circulation	Forced air circulation to maintain chamber uniformity.				
Door Lock	Provided for safety and security of specimen.				
Power Supply	220 / 230 Volts, Single Phase Supply				

Options : a.De-odorizing filter for foul Odour treatment: This comprises of a specially designed filter of activated carbon arranged in a honey comb design for maximum absorption of foul smell. @15,000/-

Pass Box

We are the most trusted **Dynamic Pass Box** Manufacturer, Supplier and Exporter from India. Our precision-engineered Dynamic Pass Box assists in transfer of materials driven through a controlled environment but without much personnel movement. Furthermore, this box helps in prevention of contaminants entrance either in the clean room or between various classified areas. Dynamic Pass Box that we deliver in the market is accessible at most economical prices.

Specifications :-

Used for transfer of material from and into the clean room without contaminating the clean room air and

without opening the clean room door. Equipment under this schedule conform BIS certification standards, approve of which shall have to be submitted along with the bid.

* MOC : SS 202/304
* Velocity 90-110 FPM at filter face
* Final supply filter :-HEPA air filter, efficiency 99.97% down to 0.3 micron. Casing :- Factory extruded AL section.
* Fresh Air Filter:- Per filter efficiency 99.9 % down to 20 micron. Grade; CASING:- Aluminium Anodised.
* Blower Motor Assembly :- Electric motor -0.1HP, I phase
* Doors:- Double walled sand witched door with glass view window with support SS frame, handles, hinges and gasket on both sides. Electromagnetic door interlocking with indicating lamp on both side.
* Fluorescent light and the motor blower unit or automatically put on at the time of opening any one of the door.
* Clean air through HEPA filter is put ON immediately automatically opening any door
* Inter locking arrangement to put OFF UV light if either door opens and ensures that door will remains lock if blower fail.
* Provision of UV light to switched ON and OFF from the outside switch UV light should be permanently OFF unless switched ON.
* Magnetic latch for both door even after power failure door will be lock.

Model	Work Area Dimension (L x W x H)
APS-PB-125	18” x 18” x 18”
APS-PB-250	24” x 24”x 24”
APS-PB-350	24” x 24” x 36”
APS-PB-500	24” x 36”x 36”

Plant Growth Chamber

APPLICATIONS

APS Many area of plant research require the use of a controller environment. In this way, a plant's response to different conditions can be monitored, or a particular habitat imitated. Standard propagation techniques can be greatly speeded up using a growth cabinet as well as achieving a higher success rate. Where micro propagation is being used a growth cabinet is essential for rooting the plantlets and adapting them to normal conditions. This plant growth cabinet is ideal for all routine propagation and research applications.

CONSTRUCTIONS

With a solid see thru double walled door and a full view inner plexi-glass door enables inspection and monitoring of inner chamber specimens without distributing the process temperature.

* Excellent quality magnetic gum packing door gasket for external door.
* User-oriented design of shelves makes you adjust each space of shelves without difficulty.
* Forced air circulation at triple walled back by durable coaxial blower, maintains optimum temperature uniformity and homogeneity.
* Foamed-in-place PUF insulation ensures thermal stability and reduces electrical energy consumption.
* Caster wheel mounted for easy portability.
* Front double walled door is provided with lock and key arrangement.
* Door operated illumination lamp is fitted inside the chamber for easy visibility.
* Finned tube evaporator facilitates uniform and faster cooling effects.
* Safety Thermostate to prevent overheating.
* Fitted with exterior illumination with fluorescent tubes/lamps.
* Works on 220/230 Volts AC (50/60 Hz frequency)

Technical Specifications & Ordering Informations

MODEL	APS-PGC-11	APS-PGC-17	APS-PGC-28	APS-PGC-34
Dimension Inner (WxDxH) (in mm)	455x410x610	505x415x830	570x550x875	650x580x900
Capacity	112 ltrs	171 ltrs	280 ltrs	350 ltrs
Volume	4Cuft	6Cuft	10 Cuft	12 Cuft
MOC Outer	Powder coated CRC Steel Sheet			
MOC Inner	Chamber and trays made of Stainless Steel (SS-304)			
No. of Shelves	2	2	3	3
Type	Forced Convection Type			
Freezer Compressor	Hermetically sealed air cooling compressor system			
Temperature Range	10OC to 60OC			
Temperature Accuracy	+1OC TO +0.1OC			
Humidity Creation	Through sophisticated steam injection process.			
Humidity range	5% above ambient from 40% to 95%RH at cool temperatures			
Humidity Accuracy	+5%RH To +1%RH			
Evaporator	Finned tube evaporator for faster cooling effects			
Safety	Over temperature limiter switch prevents overheating			
Insulation	Foamed-in-Place PUF insulation ensures thermal stability and reduces electrical energy consumption			
Illumination	Exterior illumination with fluorescent tubes/lamps.			
Temperature Controller	Microprocessor Based Digital Temperature Indicator cum Controller with LED/LCD display. for Set Value. (SV) & Process Value (PV). OR Microprocessor based alphanumeric LCD/LED Display Controller			
Humidity Controller	Microprocessor based Digital P.I.D Digital Humidity Indicator-Cum-Controller			
Caster Wheel	Caster wheel mounted for easy portability.			
Electrical Supply	220/230V AC, 50/60Hz			

Options :- Communication port with interface and data cable to download data to your PC.

Seed Germinators

APPLICATIONS

* Germinators are useful for seed testing, biological studies, forestry research works etc.
* With a solid see thru double walled door and a full view inner plexi-glass door enables inspection and monitoring of inner chamber specimens without distributing the process temperature.
* Excellent quality magnetic gum packing door gasket for external door.
* User oriented design of shelves makes you adjust each space of shelves without difficulty.
* Forced air circulation at triple walled back by durable coaxial blower, maintains optimum temperature uniformity and homogeneity.
* High grade PUF Insulation between outer and inner chamber for minimal thermal losses.
  Caster wheel mounted for easy portability.
* Front double walled door is provided with lock and key arrangement.
* Door operated illumination lamp is fitted inside the chamber for easy visibility.
* Finned tube evaporator facilitates uniform and faster cooling effects.

Technical Specifications & Ordering Informations

MODEL	APS-SG-4	APS-SG-6	APS-SG-10	APS-SG-12
Capacity	112 trs	171 ltrs	280 ltrs	340 ltrs
Volume	4 Cuft	6. Cuft	10 Cuft	12 Cuft
No. of shelves	2	4	8	14
MOC Outer	Powder coated CRC Steel Sheet			
MOC Inner	Chamber and trays made of Stainless Steel (SS-304)			
Type	Forced Convection Type			
Freezer Compressor	Hermetically sealed air cooling compressor system			
Temperature Range	5OC to 60 OC			
Accuracy	+1OsC			
Controller (OPTION)	Fitted with Microprocessor based Digital Temperature Indicator- cum-controller with LED Display for Set Value (SV) & Process Value(PV). OR Microprocessor Based alphanumeric LCD Display Controller			
Humidity (Not Adjustable)	Created in a S.S. water reservoir fitted at the bottom to provide 90% to 95% +3%RH			
Electric Supply	220/230V AC, 50/60 Hz			

Steam Sterilizer Horizontal Cylindrical

DELUXE MODEL

Our horizontal Steam Sterilizer are widely used in various bulk laboratories/Hospital for their day to day studies on scale sterilization procedures where they give dryness of the sterilized medium a paramount importance and for that our sterilized media is prone to various micro-bacterial and viral infections. Having a specialization in customers' requirements we have an expert team of making both standard and customized models.

Sailent features

* Cylindrical design triple walled horizontal autoclave mounted on a sturdy, heavy M.S. duly painted tubular stand
* Inner chamber, door lid, jacket, boiler & outer jacket cover made of SS 304
* Steam is generated in a separate boiler which is placed below the main body.
* Lid is provided with Pressure locking system which prevents opening of the door while Steam is inside the chamber.
* Single hinged door and manual radial locking system made of mild steel nickel coated
* Industrial grade energy efficient heaters reduce power bills drastically
* Gap between Jacket and outer cover wall is filled with high grade fiber/mineral glass wool insulation
* Fitted with pressure gauge for jacket, compound gauge for chamber, spring loaded safety valve and steam release valve.
* Automatic Vacuum Breaker is provided to break the vacuum in case of formation of vacuum due to steam condensation.
* Automatic Pressure Control Switch for additional safety. When steam pressure inside jacket reaches 18 to 20 psi it automatically cuts off electric supply to heater.
* Automatic Low Water Level cut-off device fitted for general safety of the element.
* Digital PID temperature indicator cum controller - Controller has LED display which displays set value and process value. It has inbuilt automatic digital minute timer which starts automatically when set/desired value of temperature is achieved. When the set time period is over heaters get switched off automatically with alarm for cycle end.
* Manually operated multiport valve having 4 positions is provided for Steam injection inside the chamber, dry sterilization & steam exhaust.
* For ensuring proper sealing of the door with the chamber and zero leakage a high tensile joint less Silicon gasket is used which is seated in an integrated groove
* SS Baffle plate for effective steam distribution and avoid direct hitting of steam on sample load
* Validation port provided
* Chamber Condensate Line is incorporated with steam trap for perfect condensation to get optimum temperature
* Fitted with plug screen to prevent line choking due to sediment discharge
* SS bottom plate in chamber to avoid the load from coming in contact with condensate
* Autoclave is fitted with water level indicator glass gauge and easily replaceable heaters
* Chamber and jacket is made of 14 SWG
* Hydraulically tested at 40psi 2.5 times the operating pressure of autoclave.
* Small sized autoclave works on 230V single phase power supply and big size works efficiently on 440V three phase power supply

Specification

Model	Inner dimension (inch)	Capacity (Ltrs.)	Heater Load	Sterilization Temp. & Pressure	Operating Pressure
APS – SSHC – 75	16"x 24"	75	6 kW	1.2 Kg/cm2 (15-18psi) at 121°C	From 10 psi to 20 psi
APS – SSHC – 100	18" x 24"	100	6 kW		
APS – SSHC – 125	16" x 36"	125	9 kW		
APS – SSHC – 150	18" x 36"	150	12 kW		
APS – SSHC – 200	20" x 36"	200	12 kW		
APS – SSHC – 250	20" x 48"	250	12 kW		
APS – SSHC – 350	24" x 48"	350	18 kW		

Optional (Additional Features) : Fully Automatic Autoclave PID controller based- It consists of advance controller which operates the electronic solenoid valve (in lieu of multiport valve) for steam injection inside the chamber, dry sterilization & steam exhaust. Fully Automatic Autoclave PLC controller based- It consists of PLC controller with touch screen color display HMI. Controller automatically operates the electronic solenoid valve (in lieu of multiport valve) for steam injection inside the chamber, dry sterilization & steam exhaust. Factory set sterilization program, Data logging feature, Validation test program available. Digital pressure gauge with electronic transducer for digital display of chamber pressure. Automatic water feed system for filling of water into the steam generator (Available with Fully Automatic Autoclave PLC controlled)

Steam Sterilizer Horizontal Rectengular

Optional (Additional Features) :

* Fully Automatic Autoclave PID controller based- It consists of advance controller which operates the electronic solenoid valve (in lieu of multiport valve) for steam injection inside the chamber, dry sterilization & steam exhaust.

* Fully Automatic Autoclave PLC controller based- It consists of PLC controller with touch screen color display HMI. Controller automatically operates the electronic solenoid valve (in lieu of multiport valve) for steam injection inside the chamber, dry sterilization & steam exhaust. Factory set sterilization program, Data logging feature, Validation test program available.

* Digital pressure gauge with electronic transducer for digital display of chamber pressure.

* Automatic water feed system for filling of water into the steam generator (Available with Fully Automatic Autoclave PLC controlled)

* Upgradable up to 134°C and 30 – 32 psi sterilizing pressure

* Inner chamber, back plate, door lid made of SS 316 and frame, locking system made of SS 304

* Single or double drum made of SS 304

* Double Door machine for loading and unloading material

* SS 304 Trolley

* SS 304 or SS 316 carriage (As required)

* Vacuum pump and assembly for 90% to 95% dry sterilization result

Note: Customized Solution Available On Request

Sailent features

* Rectangular design triple walled horizontal autoclave mounted on a sturdy, heavy M.S. duly painted tubular stand
* Inner chamber, door lid, jacket, boiler & outer jacket cover made of SS 304 Chamber is rectangular in shape with crevice free smooth rounded corners
* Single hinged door and manual radial locking system
* Steam is generated in a separate boiler which is placed below the main body.
* Lid is made of S.S. plate provided with pressure locking system which prevents opening of the door while Steam is inside the chamber.
* Industrial grade energy efficient heaters reduce power bills drastically
* Gap between Jacket and outer cover wall is filled with high grade fiber/mineral glass wool insulation
* Fitted with pressure gauge for jacket, compound gauge for chamber, spring loaded safety valve and separate manual steam release ball valve for jacket and chamber.
* Automatic Vacuum Breaker is provided to break the vacuum in case of formation of vacuum due to steam condensation.
* Automatic Pressure Control Switch for over pressure safety. When steam pressure inside jacket reaches 18 to 20 psi it automatically cuts off electric supply to heater.
* Automatic Low Water Level Cut-off Device fitted for general safety of heating element.
* Digital PID temperature indicator cum controller - Controller has LCD display which displays set value and process value. It has inbuilt automatic digital minute Timer which starts automatically when set/desired value of temperature is achieved. When the set time period is over heaters get switched off automatically with alarm for cycle end.
* For ensuring proper sealing of the door with the chamber and zero leakage a high tensile joint less Silicon gasket is used which is seated in an integrated groove
* SS Baffle plate for effective steam distribution and avoid direct hitting of steam on sample load
* Validation port provided
* Chamber Condensate Line is incorporated with steam trap for perfect condensation to get optimum temperature
* Fitted with plug screen to prevent line choking due to sediment discharge
* Autoclave is fitted with water level indicator glass gauge and easily replaceable heaters
* Manually operated multiport valve having 4 positions is provided for Steam injection inside the chamber, dry sterilization & steam exhaust.
* Inner chamber & outer jacket is made of 14 SWG
* Hydraulically tested at 40psi 2.5 times the operating pressure of autoclave
* Small sized autoclave works on 230V single phase power supply and big size works efficiently on 440V three phase power supply

Our Rectangular horizontal autoclaves are widely used in various bulk laboratories for their day to day studies on scale sterilization procedures where they give dryness of the sterilized medium a paramount importance and for that our sterilized media is prone to various micro-bacterial and viral infections. Having a specialization in customers' requirements we have an expert team of making both standard and customized models.

Specification

Model	Inner dimension (inch)	Capacity (Ltrs.)	Heater Load	Sterilization Temp. & Pressure	Operating Pressure
APS – SSHR - 200	18” x 18” x 36”	200	12 kW	1.2 Kg/cm2 (15-18psi) at 121°C	From 10 psi to 22 psi
APS – SSHR - 250	18” x 24” x 36”	250	12 kW		
APS – SSHR - 350	24” x 24” x 36”	350	15 kW		
APS – SSHR - 450	24” x 24” x 48”	450	18 kW		
APS – SSHR - 550	24” x 24” x 60”	550	22 kW		
APS – SSHR - 650	24” x 24” x 72”	650	30 kW		
APS – SSHR - 800	30” x 30” x 60”	800	36 kW		

Steam Sterilizer Vertical

Sailent features

* Used for sterilization under saturated steam pressure at any selected point between15 to 22 psi (adjustable), however this can be used for higher pressure up to 22 psi.
* Working temperature of 121^{0}C.
* These double walled units have inner chamber (Boiler) made of stainless steel SS 304 / SS 316 grade (as per demand).
* Outer wall is covered with stainless steel sheet.
* Thick stainless steel lid is tightened by radial locking system and can be lifted through a pedal lifting device for user comfort
* Fitted with joint less neoprene rubber gasket.
* Systems are hydraulically tested up to 40 p.s.i. as a Safety Measure.
* All autoclaves are fitted with standard accessories such as water indicator / water level gauge, pressure gauge, steam release cock, spring loaded safety valve, Vacuum Breaker, pedal lifting device and heating element.
* Space between boiler and outer shell works as air insulation however we may incorporate mineral glass wool insulation if customer desires.
* Heating is done through specially designed water heaters of suitable wattage to ensure optimum sterilization time in every sterilization cycle.
* Supplied complete with S.S. basket, cord and plug.
* Supplied with cord and plug to work on 220/230 volts A.C. Supply.

Model	APS-SSV-20	APS-SSV-35	APS-SSV-50	APS-SSV-85	APS-SSV-100	APS-SSV-150
Volume (Ltrs.)	20	35	50	85	100	150
Heater Load (KW)	1.5	2	3	4	5	6
Internal Dimension	250x450	300x500	350x550	400x600	450x600	450x900

Steam Sterilizer Vertical (High Pressure)

Sailent Features

* Used for sterilization under saturated steam pressure at any selected point between15 to 22 psi (adjustable), however this can be used for higher pressure up to 22 psi.
* Working temperature of 121^{0}C.
* These Triple walled units have inner chamber and (Boiler) made of stainless steel SS 304 / SS 316 grade (as per demand).
* Outer wall is covered with stainless steel sheet.
* Thick stainless steel lid is tightened by radial locking system and can be lifted through a pedal lifting device for user comfort
* Fitted with joint less neoprene rubber gasket.
* Systems are hydraulically tested up to 40 p.s.i. as a Safety Measure.
* All autoclaves are fitted with standard accessories such as water indicator / water level gauge, pressure gauge, steam release cock, spring loaded safety valve, Vacuum Breaker, pedal lifting device and heating element.
* Space between boiler and outer shell works as air insulation however we may incorporate mineral glass wool insulation if customer desires.
* Heating is done through specially designed water heaters of suitable wattage to ensure optimum sterilization time in every sterilization cycle.
* Supplied complete with S.S. basket, cord and plug.
* Supplied with cord and plug to work on 220/230 volts A.C. Supply.

Model	APS-SSV-HP-20	APS-SSV-HP-35	APS-SSV-HP-50	APS-SSV-HP-85	APS-SSV-HP-100	APS-SSV-HP-150
Volume (Ltrs.)	20	35	50	85	100	150
Heater Load (KW)	1.5	2	3	4	5	6
Internal Dimension	250x450	300x500	350x550	400x600	450x600	450x900

Walk in Cold Room

Details:

The **2°C to 4°C walk-in cold rooms** from APS are designed to provide and sustain highly stable low temperature environments for the storage and preservation of blood cells, plasma, vaccines, microbial cells and other temperature sensitive materials. These equipments offer flexible cold room solutions for highly versatile applications and find widespread usage in scientific research organizations, medical centres, blood banks, pharmaceutical industries, food processing industries and various other industrial and research units. They are available as easy to assemble, fabricated units, designed to provide optimum and consistent working temperature throughout the cold storage chamber. The APS **2°C to 4°C walk-in cold rooms** are available in various standard sizes and can also be custom-designed to suit specific requirements.

Key features :

* Inner and Outer Pre-fabricated (Coated) panels made of PCGI sheet
* Sturdy design and long-lasting finish
* Dependable performance
* Easy to install, light weight units
* Low vibration, noise free operation
* Flexible, Energy saving design
* Microprocessor based controller
* Highly precise temperature control for accurate, uniform and stable working temperature
* Complete in specifications
* Non-toxic, anti-rusted, heat insulation
* Air-cooled compressor

Model	APS-WICR-5K	APS-WICR-6K	APS-WICR-8K	APS-WICR-10K	APS-WICR-12K	APS-WICR-15K	APS-WICR-45K
Room Size	6'x5'x6'	6'x6'x6'	6'x7'x7'	8'x6'x8'	8'x8'x7'	10'x8'x7'	10'x115'x10'
Temp. Range	2oC to 4oC						
Controller	Microprocessor Based Controller						
Temp. Display	Digital LED						
Construction	Pre-fabricated (Coated) panels made of PCGI sheet						
Walls & Ceiling Area	Room shall consist of Polyurethane Insulated thick panels of PUF. The individual panels will be firmly locked together by cam locks. The material shall be inner side and outer side PCGI sheet.						
Door	Made out of 62mm thick PUF insulated panels inner side and outer side PCGI sheet, complete with all accessories like locks and hinges (1 No. door with hinges and locks will be provided) as overlap Type.						
Floor	Tails for easy clinging						
Flashing	Flashing made of PCGI sheet base U channel, inner and outer flashing.						
Insulation	Polyurethane foam thick insulation with a thickness of 80-100 mm						
Racks/Shelves (Option)	Stainless Steel / Aluminium racks as per customer requirement.						
Lighting (Viewing)	Interior fluorescent lighting						
Refrigeration	Dependable refrigeration system with CFC free refrigerants						
Compressor	Heavy duty Air-cooled compressor. The compressor in distinguished by its excellent performance, low noise level and minimal vibration.						
Refrigerant	Non-CFC/HCFC environmental friendly based on compressor capacity						
Power Supply	220 volts, 50 Hz singal phase supply or 440 Volts 3 phase supply						

Environmental Chamber (Cooled Stability Chamber)

APPLICATIONS & KEY FEATURES

* Suitable for carrying out different quality control tests under controlled conditions of temperature and humidity.
* The excellent quality of magnetic gum packing for the external door.
* User oriented design of shelves makes you adjust each space of shelves without difficulty.
* Inner chamber is made of stainless steel (S.S.-304 Grade) and outer wall of mild steel sheet duly painted and mounted on caster wheel.
* High grade Polyurethane Foam (PUF) insulation between outer and inner chamber for minimal thermal loss.
* Front double walled door is provided with lock and key arrangement.
* A self-cooled air circulation fan is fitted to maintain uniform temperature and humidity condition throughout the chamber
* Humidity is created through steam generation tank at base/top.
* Provided with refrigeration system to control temperature range from 50C to 600C +10C and humidity 5% above ambient from 40% to 95% RH+ 3% RH at Cool Temperature.

CFC FREE ECO FRINDLY COMPRESSOR.

CONSTRUCTIONAL AND SILENT FEATURE

* Front double walled door is provided with lock and key arrangement.
* A self-cooled air circulation fan is fitted to maintain uniform temperature and humidity conditions throughout the chamber.
* Humidity is created through steam generation tank at base /top.
* Provided with refrigeration system to control temperature range from 10°C to 60°C ±1°C and humidity (5% above ambient) from 40% to 95% RH ±3% RH at Cool Temperature.
* CFC FREE ECO FRIENDLY COMPRESSOR.

TECHNICAL SPECIFICATIONS & ORDERING INFORMATIONS

Model	APS-EC-4	APS-EC-5	APS-EC-6	APS-EC-7	APS-EC-8	APS-EC-9
Capacity	112ltrs.	145ltrs.	17 ltrs.	224 ltrs.	280 ltrs.	340 ltrs.
Volume	4 cuft	5 cuft	6.1 cuft	8 cuft	10.0 cuft	12.0 cuft
No. of Perforated Trays	2	2	2	2	3	3
MOC Outer	Powder coated CRC Steel Sheet or Stainless Steel.					
MOC Inner	Chamber and trays made of Stainless Steel (SS-304)					
Type	Forced Convection Type					

Salt Spray Corrosion Test Chamber

APPLICATIONS & KEY FEATURESAPPLICATIONS & KEY FEATURES

Whether you are new to corrosion atmosphere testing or have been conducting testing for years, we present Salt spray chambers or Salt Fog Chambers that are not only easy to use and maintain but also provide the accuracy and flexibility necessary to meet today's demanding corrosion test procedures including Salt Spray Test, Condensation Water Test and Cyclic Corrosion Test. These machines create three types of manually adjusted environment; salt spray, high humidity and air drying at any given temperature within the chamber. Any combination of these environments can be programmed, in any order, to form a corrosion cycle. Such a corrosion cycle can be automatically repeated a predetermined number of times.

Our models meet the requirements of basic, continuous salt spray tests conducted at a single temperature only, such as ASTM B117 and similar international test standards, and may be used with pH neutral salt solutions (NSS) or those acidified by the addition of Acetic Acid (ASS), Seawater Acidified Test (SWAAT) or Cupric Acid (CASS). Models above 480 Liters of capacity are ideal for Cyclic Corrosion Cabinet (Cyclic Corrosion Chamber).

In Laboratories corrosion tests are used extensively for selection of materials and their surface protection. Our Corrosion box chambers are what you need to predict corrosion resistance of materials such as paints and coatings and are designed and developed to meet the widest possible range of industry standards:

TECHNICAL SPECIFICATIONS & ORDERING INFORMATIONS

Model	APS-SSC-100	APS-SSC-100	APS-SSC-450	APS-SSC-1000
Capacity	100 Liters	250 Liters	450 Liters	1000 Liters
Brine tank capacity	15 Liters	25 Liters	40 Liters	Liters
Test Types	NSS + CASS Test			
Temperature Range	35°C to 55°C			
Temperature Fluctuations	≤ ±0.5 ℃			
Temperature Uniformity	≤ ±2 ℃			
Temperature Precision	± 1°C			
Test Chamber Temperature	Salt Spray Method (NSS ACSS) 35°C ±1°C Corrosion-resistant Testing Method(CASS) 50°C ±1°C			
Saturated air Barrel Temperature	Salt Spray Method (NSS ACSS) 47°C ±1°C Corrosion-resistant Testing Method(CASS) 63°C ±1°C			
Brine Temperature	35°C ±1°C, 50°C ±1°C			
Spray Quantity	1.0 to 2.0 ml / 80cm2 / hr			
Air pressure	1.00 ± 0.01kgf/cm2			
pH Control Range	Salt Spray Method (NSS ACSS) 6.5 to 7.2 Corrosion-resistant Testing Method (CASS) 3.0 to 3.2			
Nozzle	Glass Nozzle (Made in Germany)			
Timer	0 to 9999 (H. M. S.)			
Construction	Double walled corrosion resistant FRP			
Internal Chamber	Corrosion Resistant FRP			
Insulation	High density ceramic wool			
Lid Cover	Acrylic Sheet / PVC w/ Pneumatic Operation			
Display	LCD Display w/ Backlit			
Control Panel	Basic PID Controller OR LCD Touch Screen Interface, PLC Based Control Panel			
Atomizer	Glass /Acrylic (non-reactive to salt solution)			
Air Regulator	Precise regulator w/ gauge ranging from 0 - 30 psi			
Drainage	Solution and water drain out tap			
Caster Wheel	Revolving Type (Optional)			
Power Supply	220 / 230 / 240 Volts			

APS™

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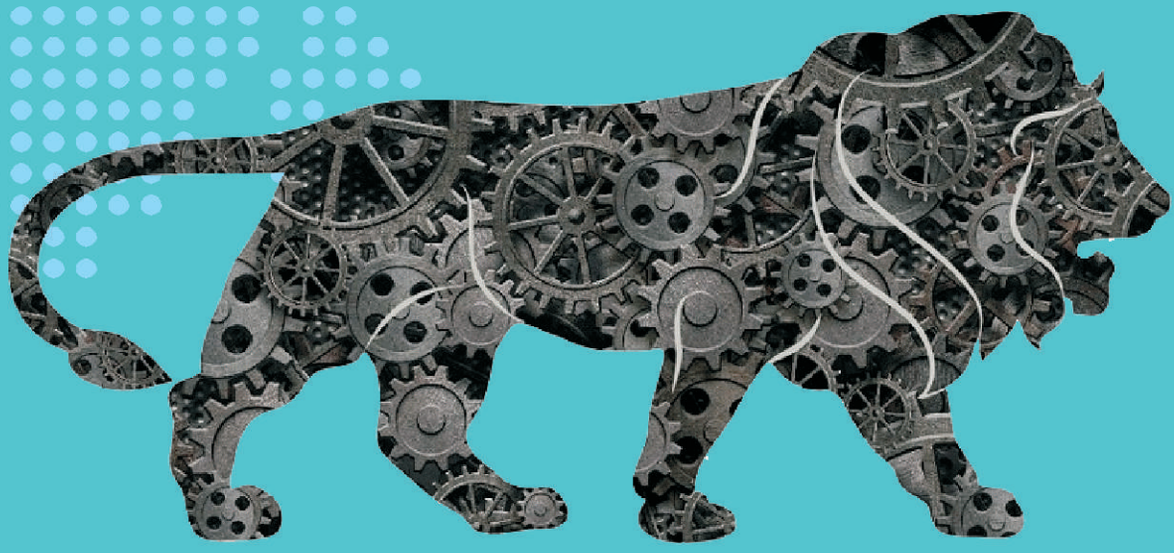

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