



Dealer: Glassware, Equipments & Chemicals

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Email: bioconscienttific@gmail.com | shyamzade@gmail.com Address: A/2 Pragati Housing Society, S B Road, Pune 411016 "BS" make Deep Freezer are designed to provide an ideal freezing environment for advanced medical and industrial applications and also suitable for Research Laboratories, Blood Bank, Biological Use includes preservation of Plasma, blood components, vaccines, etc.

#### Standard Model

Inner Chamber made of Stainless Steel (S.S.304) mirror finish & Outer G.I. duly powder coated.

#### GMP Model

Inner Chamber made of Stainless Steel (S.S.316) mirror finish & Outer S. S. 304 matt finish.

### • Construction

"BS" Deep Freezer is made of double walled construction with thick high grade PUF insulation. Full view inner acrylic door & front door with gasket & locking arrangement. The unit is provided with user friendly adjustable specially designed S. S. rod trays, ensures uniform temperature distribution. The equipment is mounted on castor wheels for easy movement.

### • Technical Specification

#### **Controlling System**

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

#### **Refrigeration System**

CFC Free hermetically sealed Emerson Copeland make compressor for better cooling with R134 A (Eco Friendly) refrigerant with time delay to safe guard compressor system.

TEMPERATURE RANGE : -20°C
TEMPERATURE ACCURACY : ± 3°C

SUPPLY : 230V Ac, 50 Hz Single Phases

### 5°C to -80°C DEGREE COOLING BATH



### Standard Model

CAT. NO.	CAPACITY (LITRES)	INNER DIMENSION (H X W X D CMS)	TRAYS
BS-CB 01	100 Lit	50 x 50 x 40	2
BS-CB 02	170 Lit	70 x 60 x 40	2
BS-CB 03	200 Lit	60 x 60 x 60	2
BS-CB 04	285 Lit	80 x 60 x 60	3
BS-CB 05	325 Lit	90 x 60 x 60	4

### **Optional Features**

- PLC for auto change over for standby refrigeration with HMI.
   CFR 21
- Part 11 compliance so ware.
- Stand by refrigeration system.
- Data Logger.
- Safety digital temperature controller.
- Data Scanner
- Complete with sensor.
- SMS Mobile alert system.
- Timer

# We design, fabricate and install air shower for clean room personnel. These clean room air showers are especially used in different kinds of laboratories, pharmaceutical industries and animal facilities; where they act as entry systems that decontaminate personnel before entering into clean environment. Our engineering team carefully designs and configures an air shower that meets your specific working conditions. Tunnel and conveyor type units are also constructed for carts, equipment and cargo etc.

We in-house construct air shower; therefore, we offer our customers facility to order according to their specific requirements. Our air shower units are available in different design configurations and material of construction. Our air shower prices are competitive, quality is unmatched and each unit is covered with excellent warranty terms.

#### • Air Shower Tunnel

Where 5 or more person occupancy per cycle is required air shower tunnel comes into effect. Air shower tunnels are designed with standard widths 48" and 60". Customized units are also available with maximum length of 30 G.

### Applications

Air showers are one of most demanding arrangements in most of the industries; where, removing fine particles attached to persons and products is mandatory. Such industries are: animal facilities, pharmaceutical, chemical research lab, electronics and semi-conductor, optical and aerospace etc.

### • Design and Construction

Air showers are designed in various configurations such as Entry exit type, L type entry exit, one way entry and two way exit type and tunnel and conveyor type etc. If you are unsure which air shower design is workable, our technical team will visits your premise and suggests you appropriate design structure.

### **AIR SHOWER**



**Air Shower Tunnel Diagram** 

#### 100% Satisfaction

Prior delivery, we carefully inspect each air shower unit by set up in factory test area. Necessary arrangements are made to check sound level, vibration, cleanliness, design structure and operating procedure etc. Dimensions, controls and other specifications are closely matched with the provided sheet of quotation. If required, we also provide floor plant, electrical diagram and quality certifications (DQ / OQ / IQ / PQ) are provided by us.

#### **After Sales Service**

We sell our air Showers with excellent one year warranty terms; in addition, we also provide aGer sales service aGer warranty. Our technical assistance is just a phone call away. Our Air Shower AMC program is also cost effective and beneficial for all the users.

#### **Features**

- Designed for 4 or more persons
- Ideal for personal, cart and equipment
- Can be designed in various
- Washable pre-filters
- Equipped with safety features
- Rust free construction for longer life
- Manual and automatic control systems Full range of
- accessories available
- Easy to install and operate
- Follow ISO and FS209E standards

Model	BS/AS-1	BS/AS-2	BS/AS-3	BS/AS-4	Air Shower Bos	w/o Bottom
External Dimension(mm)	1300 x 800 x 2050	1540×1000× 2050	1540×1200× 2050	1540×1600× 2050	2000x2000x 2050	2300 x 5000 x 2050
Internal Dimension W x H x D (mm)	800 x 750 x 1920	800 x 950 x 1920	800 x 1150 x 1920	500 x 1550 x 1920	800 x 1950 x 1920	800 x 4950 x 1920
Nozzles	6-One Side	12-Two Sides	16-Two Sides	18-Two Sides	24-Two Sides	60-Two sides
Blow Power	550W	100W	1500W	2000W	2200W	7500W
HEPA Filter Dimension	550x610x120 -One Piece	610x610x120 -Two Pieces	915x610x120 -Two Pieces	1220 x 610 x 120 -Two Pieces	610x610x120 -Four Pieces	610x610x120 -Ten Pieces
Suitable Person	1 Person w/ one side blowing	1 Person w/ two sides blowing	1 - 2 Persons w/ two sides blowing	1 Person w/ one side blowing	2 - 3 Persons w/ two sides blowing	Cart
Nozzle Diameter	38MM					
Air Shower Time	0 ~ 120 seco	nds Adjustable				
Spurt Wind Speed	18~25 m/s					
Power	440V AC, 3 F	Phase, 50 Hz				
Eilter Efficiency	99.99 %					
Cleanliness	Class 100					
Noise level	Less than 60	dB				
Shower jet velocity	More than 20	±2 meter/seco	nd			
Door	Aluminum fat	oricated with sa	afety glass and	electromagne	tic locks	
Construction	Aluminum / P	owder coated	MS / 304 - 316	Stainless stee	el	
Standard fittings	·		- Ar - Do - Do	ower motor ass nti slip floor oor bell oor closers oor handles	sembly	
Optional	- Infrared sen - PLC control - ULPA filter - DQ / OQ / IG - AMC	sor auto sliding ler w/ touchsci Q /PQ	gdoor reen			
Design Options	<ul> <li>Entry exit typ</li> <li>L type entry e</li> <li>One way en</li> <li>Two way exi</li> </ul>	exit try				

"BS" make Bacteriological Incubator are specially designed for Research laboratories, Engineering Lab, Pharmaceutical Lab, Cosmetic Industry, Chemical Lab, Clinical Lab, Microbiological Determination, Pharmaceutical Stability Assays, Food Processing, OC

#### Standard Model

Inner Chamber made of Stainless Steel (S.S.304) mirror finish & Outer G.I. duly powder coated.

#### GMP Model

Inner Chamber made of Stainless Steel (S.S.316) mirror finish & Outer S.S.304 matt finish.

#### Construction

"BS" make Bacteriological Incubator are made of double walled construction. Full view inner acrylic door & front door with gasket & lock. Motorized blower is fitted on the back side for uniform temperature (Only Forced Air re- circulation model) . Insulation is provided by means of suitable PUF insulation. The unit is provided with adjustable stainless steel rod tray

### • Technic Specification

#### **Controlling System**

Microprocessor based auto tune PID temp. controller with dual display of set value & process value for precise control of temperature with PT 100 sensor is used for temperature

### **Heating System**

Forced Air Circulation Model - High Quality S.S. Tubular heaters are used for better heating conditions. Natural Convection Model - Heating elements made from the best quality Kanthal / Nichrome wire are used on refractory supports.

Air Circulation (Only for Forced Air Circulation)
Motorized blower at back side of the chamber develops
unique air flow system which ensure maximum uniform
temperature distribution inside the chamber. Unique air flow
assures quick recovery aGer door opening.

- Temperature Range : 5°C above ambient to 60°C
- Temperature Accuracy : ± 0.2°C
- Supply : 230V Ac, 50 Hz, Single Phase.

## BACTORIYALOGICAL INCUBATOR



### **Models & Optional Features**

**TI-90 Series - Natural Convection Model** 

CAT. NO.	CAPACITY (LITRES)	INNER DIMENSION (H X W X D CMS)	TRAYS
BS – BO – 01	170 Lit	70 x 60 x 40	3
BS - BO - 02	200 Lit	60 x 60 x 60	3
BS - BO - 03	285 Lit	80 x 60 x 60	3
BS - BO - 04	325 Lit	90 x 60 x 60	4
BS – BO – 05	400 Lit	110 x 60 x 60	4
BS – BO – 06	600 Lit	125 x 60 x 60	4
BS – BO – 07	800 Lit	125 x 70 x 70	5
BS - BO - 08	1000 Lit	157 x 80 x 80	5
BS - BO - 09	43 Lit	35 x 35 x 35	2
BS - BO - 10	91 Lit	45 x 45 x 45	2

### **Optional Features**

- Data Logger
- Safety digital temperature controller
- Timer

#### **BIOSEAFTY CABINET**

Class 2 Biosafety Cabinets are designed to provide protection to operator, environment and materials inside the workspace. These Class I & II BSCs are utilized for containing low-to-moderate risk bio hazardous materials. These cabinets have downward airflow and HEPA filters that re-circulate air providing required level of protection from microorganisms and aerosols. As these cabinets are extensively used in drug preparation, chemotherapy preparation, clinical research, medical and pharmaceutical sectors, life science and industrial laboratories etc. it must follow relevant application specific standards.

### **Different Names Same Purpose**

A Biosafety cabinet is called by several names in research industry; microbiological safety cabinet, biological safety cabinet (Acronym: BSC) and Biosafety hood are such common names which are referred by microbiologists.

### **Types of Class 2 Biosafety Cabinet**

In order to meet varying research and clinical needs, Class II Biosafety Cabinets are designed mostly in 3 types i.e. Type A2, Type B1, and Type B2. Regardless of type, each cabinet provides the same level of protection. According to international sanitation standards, there are exactly same pass and fail criteria for all of them.

Now how do we differentiate each Class 2 Biosafety Cabinet? Each cabinet is differentiated by a number of factors some of them are amount of air re-circulation, air ventilation and negative and positive pressure. Before buying a cabinet a user must know the basic differences between these 3 types of Biosafety cabinets which are explains below:

### **Biosafety Cabinet Class 2 Type A2**

In this type of Class II BSC, approximately 70% of the HEPA filtered air is circulated through the cabinet, while 30% passes through an exhaust HEPA filter and is discharged.



### **Biosafety Cabinet Class 2 Types B1:**

This Class II BSC exhausts 60% - 70% of the HEPA filtered air, while 30% - 40% air is re-circulated inside workspace through HEPA filter.

### **Biosafety Cabinet Class 2 Type B2:**

It is total exhaust type BSC, no re-circulation inside workspace; blower exhausts 100% of the filtered air.

### **Biosafety Cabinet Maintenance**

In order to take optimum use of a Biosafety cabinet and maintain operational integrity, proper maintenance is essential. A Biosafety operator must follow routine cleaning and inspection schedule. As chemicals are extensively used in these cabinets, filter saturation should be checked regularly, if need replace it immediately. Other minor check-ups should be done on regular basis such as air flow, surface cleaning, motor, and lighting and electrical switches etc.

### **Customized Class I & II Biological Safety Cabinets**

Bionics Scientific is India's leading Biosafety cabinet company, which manufactures and supplies most reliable, durable and energy efficient Biosafety cabinets following European Standard EN12469 and NSF Standards. These cabinets provide higher level of protection to operator, environment and samples. Our Class 2 Biosafety Cabinets are available in 4 different sizes (3G, 4G, 5G and 6 G), designed as ducted or recirculating type and offer unique safety features. There are various design options and accessories available in order to make a cabinet adaptable to almost every application. Each cabinet is factory tested and delivers full value of your money, while remaining reasonable in price.

### **Optional Features**

Class 5 conditions (class 100) per ISO 14644-

1 and 2

Produces less heat and energy efficient lightening through fluorescent lamp Durable construction for long service life Easy to clean and maintain

Low noise operation

10° sloped front for comfortable working Highly efficient airflow management system Filters can be changed easily front side Durable wall plenum design Powder coated MS exterior

Audio / visual sash alarm

### **Standard Sizes (Dimensions)**

Startage a Sizes (2					
Nominal Size	2 G.				
Working Area (G.)	2 x 2 x 2	3 x 2 x 2	4 x 2 x 2	5 x 2 x 2	6 x 2 x 2
External Size	2 x 3	3 x 3	4 x 3	5 x 3	6 x 3 x
(G.)	x 7	x 7	x 7	x 7	7

### **Specifications**

lo <b>.f</b> lo\/oloo!t	405 form (50 m/s)
Inflow Velocity	105 fpm (.53 m/s)
Downtown Velocity	60 fpm (0.30 m/s)
Noise Level	<65 dB
Filter	HEPA filter 99.999% efficient (ULPA - Optional)
Particle retention	0.3 microns
Light	Fluorescent light
Light Intensity	90 - 120 foot-candles
Controller	Microprocessor controller w/ digital display
Body Construction	Wooden / PCRC Sheet / SS 304 / SS 316
Table Construction	Stainless Steel 304
Front Door	Frameless auto sliding glass door
Pressure Gauge	Magnehelic gauge
Blower assembly	1/3 HP, Single Phase, 1440 RPM motor, Capacity 1000 CFM, Pressure 30 mm WG
Exhaust assembly	300 CFM, ducting by PVC pipe with rain guard - Dia. 150mm
Certifications	NSF/ANSI 49 (Optional)
Optional	<ul> <li>Raised airflow grill</li> <li>Spare UV lamp</li> <li>Vacuum Tap</li> <li>Exhaust (LH / RH / Top)</li> <li>Canopy exhaust connection (CEC)</li> <li>Stand with rolling caster</li> <li>IQ / OQ certifications</li> </ul>

### Air Circulation

Motorized blower at back side of the chamber develops unique air flow system which ensures max. Uniform temperature & humidity condition inside the chamber.

### **Heating System**

High quality U shapes S.S. tubular heaters are used for better heating.

### Refrigeration System

CFC Free hermetically sealed Emerson Copeland make compressor for better cooling with R134 A (Eco Friendly) refrigerant with time delay to safe guard compressor system.

**Temperature Range** 5°C to 60°C Temperature Accuracy

± 0.5°C

230V Ac, 50 Hz, Single Phase. Supply

### **Optional Features**

PLC for auto change over for standby refrigeration with HMI. CFR 21 part 11 Compliance so ware. Stand by refrigeration system

system. Data Logger

Safety digital controller temperature

Data Scanner complete with sensor.
SMS Mobile alert system.
Door access security

system. Timer

### Models & Ontional Features

Models & Optional I	reatures		
CAT.NO.	CAPACITY (LITRES)	INNER DIMENSION (H X W X D CMS)	TRAYS
BS - BOD - 1	100 Lit	50 x 50 x 40	2
BS - BOD - 2	170 Lit	70 x 60 x 40	2
BS - BOD - 3	200 Lit	60 x 60 x 60	2
BS - BOD - 4	285 Lit	80 x 60 x 60	3
BS - BOD - 5	325 Lit	90 x 60 x 60	4
BS - BOD - 6	400 Lit	110 x 60 x 60	4
BS - BOD - 7	600 Lit	125 x 70 x 70	4
BS - BOD - 8	800 Lit	157 x 70 x 70	5
BS - BOD - 9	1000 Lit	157 x 80 x 80	5

"BS" make BOD incubators are manufactured to comply requirement of Industries. Specially designed for long term and stable continuous operation ideal for Pharmaceuticals, Bio technology and Research institutions for storage and incubation studies. Incubators to provide condition for optimal growth of Microbiology cultures, Biological labs for preservation of vaccines, Serological and compliment xation tests, General low temperature uses in physical /chemical labs, R&D Center, Quality Control Laboratory, General laboratories of industries, Pharmaceuticals, Chemicals, Petrochemicals, Oil & Gas, Cement, Pulp and Paper, Fertilizers, Defense, Railways, Paint etc...

#### **Standard Model**

Inner Chamber made of Stainless Steel (S.S.304) mirror finish & Outer G.I. duly powder coated.

#### **GMP Model**

Inner Chamber made of Stainless Steel (S.S.316) mirror finish & Outer S.S.304 matt finish.

#### Construction

"BS" BOD Incubator is made of double walled construction with thick high grade PUF insulation. Full view inner acrylic door & front door with gasket & locking arrangement. Motorized Blower at back side of the chamber develops unique arrow system to maintain uniform temperature condition inside the chamber. Unique arrow assures quick recovery age door openings. The unit is provided with user friendly adjustable specially designed S.S rod trays, ensures uniform temperature distribution. The equipment is mounted on castor wheels for easy movement.

50 mm validation port hole with silicone rubber seal to insert sensors for validation. Full view observation Acrylic door with gasket to observe sample inside the chamber.

### **Technical Specification**

### **Controlling System**

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

#### BOD INCUBATOR



"BS" Constant Temperature Water Baths are equipped with circulating pumps for uniform temperature & also for circulating fluids through external devices.

#### Standard Model

Inner Chamber made of Stainless Steel (S.S.304) mirror finish & Outer G.I. duly powder coated.

### **GMP Model**

Inner Chamber made of Stainless Steel (S.S.316) mirror finish & Outer S.S.304 matt finish.

#### Construction

Double walled construction

### **Technical Specification**

### **Controlling System**

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

#### Heater

Heating elements made from the best quality Kanthal DSD wire are used on refractory supports.

**Temperature Range:** 5°C above

ambient to 90°C

Temperature Accuracy: ± 0.5°C Supply: 230V Ac, 50 Hz, Single Phase.

### **Optional Features**

- Data Logger
- Safety digital temperature controller
- Timer

# CONSTAT TEMPRAURE WATER BATH



### **Models & Optional Feature**

CAT.NO.	CAPACITY (LITRES)	INNER DIMENSION (H X W X D CMS)
BS - CTW - 01	14 Lit	30 x 30 x 15
BS – CTW – 02	20 Lit	45 x 30 x 15
BS - CTW - 03	30 Lit	44 x 38 x 18
BS - CTW - 04	40 Lit	45 x 30 x 30
BS - CTW - 05	50 Lit	45 x 35 x 30

"BS" Cry baths are designed for research work at desired temperature with high accuracy. The temperature is controlled by microcontroller base PID Controller with an accuracy of 1 °C. The unit is provided with a circulating pump to ensure uniform temperature.

BS Cry Bath offer a combination of conBSrary cabinet design, advanced micro— controller and a range of accessories to suit your specific laboratory or process application. High — strength cabinet construction with stainless steel interior tanks withstand the most critical applications in demanding laboratory environments. The unit is mounted on castor wheels for ease of mobility.

### Standard Model

Inner Chamber made of Stainless Steel (S.S.304) mirror finish & Outer G.I. duly powder coated.

### **GMP Model**

Inner Chamber made of Stainless Steel (S.S.316) mirror finish & Outer S.S.304 matt finish.

### Construction

Double walled construction with inner S.S. argon welded one piece pot to avoid leakages. 2" Thick Insulation ensures stable temperature with reduced energy consumption. CFC Free hermitically sealed Emerson Copeland make compressor for better cooling with R 134 A (Eco friendly) refrigerant with time delay to safe guard compressor. Circulation pump is provided for better uniformity of Temperature instead of stirrer. Side mounted circulating pump 15 lit. /min capacity, single phase, 230 Volts. Top mounted removable lid.

### **Technical Specification**

Controlling System

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

Heater

Heating elements made from the best quality Kanthal DSD wire are used on refractory supports.

Temperature Range : 5°C to 90°C Temperature Accuracy :

±1°C

Supply: 230V Ac, 50 Hz, Single Phase.

### **CRYO BATH**



### **Models & Optional Features**

CAT.NO.	CAPACITY (LITRES)	INNER DIMENSION (H X W X D CMS)
BS - CB - 01	14 Lit	30 x 30 x 15
BS - CB - 02	20 Lit	45 x 30 x 15
BS - CB - 03	30 Lit	44 x 38 x 18
BS - CB - 04	40 Lit	45 x 30 x 30
BS - CB - 05	50 Lit	45 x 35 x 30

### **Optional Features**

- Data Logger
- Safety digital temperature controller
- Timer

### CURRING TANK

"BS" make Cement Curing tank is made of sturdy construction with Stainless Steel Inner Chamber & Galvanized Iron sheet exterior duly powder coated with epoxy paint. The chamber is suitably insulated. The Sample holder baskets / trays are designed keeping in mind the difficulties the user faces with sample handling.

The construction is complete with provision for water inlet & drain valve.

### Standard Model

Inner Chamber made of Stainless Steel (S.S.304) mirror finish & Outer G.I. duly powder coated.

### **Technical Specification**

**Controlling System** 

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

### Circulation

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

**Heating System** 

Best quality Stainless Steel corrosion resistant heaters are used.

**Refrigeration System** 

CFC Free hermetically sealed Emerson Copeland make compressor for better cooling with R134 A (Eco Friendly) refrigerant with time delay to safe guard compressor system.

Temperature Range : 20°C to

35°C Temperature Accuracy:
± 1°C

Supply: 230V Ac, 50 Hz,
Single Phase.



### **Models & Optional Features**

CAT.NO.	NO OF CUBES	INNER DIMENSION (H X W X D CMS)	NO OF BASKET
BS - CT - 01	108	105 x 50 x 55	6
BS - CT - 02	162	105 x 75 x 55	9
BS - CT - 03	216	140 x 75 x 55	12
BS - CT - 04	270	170 x 75 x 55	15
BS - CT - 05	360	170 x 100 x 55	20

### **FUME HOOD**

Laboratory Fume Hood Stations by BS are available in various sizes and dimensions to meet specific requirements of your research. These fume hoods have a choice of vertical or horizontal sliding sash and MS or stainless steel construction. The standard sizes of our fume hoods are available in most demanded requirements (4G, 5 G, 6 G & 8 G).

OGen known as chemical fume hood, these systems also dilute effect on flammable gases and vapors. Our product range includes general purpose fume hoods, ductless fume hoods, and mobile units; designed with number of optional features and specifications required to meet critical challenges in laboratory research areas worldwide.

### **Detailed Description**

### Construction

Our fume hood cabinets come with double wall construction made of Epoxy Coated Mild Steel or Stainless Steel as required by customer. It is ensured that the exterior is matched with the base unit. The inner walls and baffles are made of molded reinforced thermoset epoxy resins that meet or exceed NFPA 45 standard on Fire protection for laboratories using chemicals. The jambs are radiuses and aerodynamically designed to reduce the turbulence as the air enters the hood. The construction materials are used as mild steel, type 304 or 316 stainless steel (Epoxy Coated).

#### Sashes

Our standard models are generally equipped with vertical sashes but as required horizontal sashes can be fixed. The sliding sash rides in 18 gage type 316 stainless steel stainless steel sash guides. Tempered safety glass is used as standard.

#### Controls

Equipped with easy to use controls which are fixed outside the working area in order to provide convenient working environment. These units have start / stop switches for whole the unit and a light on / off switch.

### Lighting

Supplied with fluorescent bulb shielded from the hood interior by laminated safety glass or tempered glass panel. The bulb is operated by an on / off switch and bulb changing process is done from the hood exterior without major disassembly of the unit.

### Alarm

The hood exterior without major disassembly of the unit. Alarm: Equipped with highly reliable audio / visual alarm device capable enough of detecting a drop or rise in airflow (no static pressure) through the hood unit. If the hood



exhausts volume falls below a preset exhaust level, the alarm will alert the operator by sound and visual sign. The monitor also uses dual thermistor or dual diode sensing system to measure the velocity. The sensor is mounted in a flow tube placed on either side wall or front face of the fume hood. Local Audible and visual alarms have capabilities for remote monitoring hook up. These systems are designed in both ducted and ductless Pattern.

### **Features**

- Durable and chemical-resistant construction
- Powder Coated Mild Steel / Stainless Steel MOC
- Double wall construction
- Vertical or horizontal sliding sash
- Energy saving blowers
- High performance centrifugal blower
- Ductless design
- Easy to clean surfaces
- Efficient fluorescent lighting
- CE & ISO certified

### **Types of Fume Hoods**

- Air Foil Fume Hood
- Flat Front Fume Hood
- Thin Wall Fume Hood
- Walk-In Fume Hood
- Demonstration
  - Fume Hood
    Double-Sided Fume

Hood

- Per chloric Fume Hood
- Radio Isotope Fume Hood
- Bench top Fume Hood

### **Specifications**

Model No	BS/FH-	BS/FH-	BS/FH-	BS/FH-	BS/FH-
Wasting Cine	422	522	622	733	833
Working Size (G.)	4' x 2' x 2'	5' x 2' x 2'	6' x 2' x 2'	7' x 3' x 3'	8' x 3' x 3'
MOC	CRCA 180	Epoxy Po	wder Coat	ed	
Stand	M.S Pipe (	18G) Powo	der coated		
Working Table Top	M.S Powder Coated Sheet Covered with P.P Sheet			.P Sheet	
	aust Motor Blower Assembly Covered with G.I Sheet			Sheet	
Door / Sash	Door vertic	al Folding	Type.		
Air Velocity	"0.5m/s				
Noise Level	65dBA				
Glass	Two layer	toughen gla	ass, 5mm t	hickness, I	Motor
	Control, he				
	Air needed room by the devices.	e fume hoo	od and othe	er ventilatio	on
	The velocitopening of the sash Liters per r	the fume f n. Measure	nood meas	ured in the	plane
<b>Electrical</b>	Electrical S	Sockets & N	MCB Switch	า	
Fittings					
	Fluorescer				
<b>Optional</b>	HEPA Filte Caster who Horizontal SS 314 / S MOC	eels sash S 316	Temperatu indicator Face Veloc Airflow Indi Audio / Vis	city Meter icator	
Power source	220 / 230 \				

### **DOOR AIR CURTAIN std model**



Dimension ( mm):	900 x 230 x 212
Max. Air velocity at Nozzle:	21 m/s
Noise Level dB:	50 - 70 db
No. of Blowers:	3
No. of Motors:	2
No. of Shafts:	1 Single + 1 Double
Power (W):	350 W
Phase:	Single
RPM ( Max/ Min ):	2700/2100
Blower Type:	ABS
CFM:	825
% Insect/ Dust Rejection:	75%
Weight Kgs:	19

"BS" High Temperature Ovens (300 Deg.C.) are ideal for sterilization, drying, and thermal storage tasks which do not require high drying rates or special time parameters. These ovens are made of double walled construction with triple wall on back. The unit is insulated with 3" thick high grade glass wool insulation. Single door is fitted on heavy duty hinges. The unit is provided user friendly adjustable stainless steel rod trays.

### Standard Model

Inner Chamber made of Stainless Steel (S.S.304) mirror finish & Outer G.I. duly powder coated.

### **GMP Model**

Inner Chamber made of Stainless Steel (S.S.316) mirror finish & Outer S.S.304 matt finish.

#### Construction

"BS" Laboratory Oven is made of double walled construction (Back side triple wall) with 3" thick Glass wool insulation. The unit is provided with user friendly adjustable specially designed S.S rod trays, ensures uniform temperature distribution.

### **Technical Specification**

**Controlling System** 

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

S.S. "U" shape tubular heating Elements placed on back wall.

#### Motor

Motorized blower provided at back side of the chamber.

Temperature Range 50°C to 400°C Temperature Accuracy
1°C

Supply Phase. 230V Ac, 50 Hz, Single

### HIGH TEMPRATURE OVEN



### Models & Optional Features

CAT.NO.	CAPACITY(LITRES)
BS - HTO 01	43 Lit
BS - HTO 02	91 Lit
BS - HTO 03	122 Lit
BS - HTO 04	216 Lit
BS - HTO 05	324 Lit

Features Data Logger Safety digital temperature controller Timer

# "BS" make Lab Precision Oven are with forced air circulation provided by means of motorized blower fitted on the oven for re-circulation of air ensures a homogenous hot air mixture and an exact temperature profile.

### Standard Model

Inner Chamber made of Stainless Steel (S.S.304) mirror finish & Outer G.I. duly powder coated.

#### **GMP Model**

Inner Chamber made of Stainless Steel (S.S.316) mirror finish & Outer S.S.304 matt finish.

#### Construction

"BS" Laboratory Precision Oven is made of triple walled construction with 3" thick Glass wool insulation. Single door fitted on heavy hinges. The unit is provided with user friendly adjustable specially designed S.S rod trays, ensures uniform temperature distribution.

### **Technical Specification**

### **Controlling System**

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

#### Heater

S. S. tubular heating elements used on side walls to maintain uniform condition inside the chamber.

### Air Recirculation

Motorized blower on top side of the chamber develops unique air flow system which ensures maximum uniform temperature distribution inside the chamber. Unique air flow assures quick recovery aGer door openings.

- Temperature Range : 5°Caboveambient to 250°C
- Temperature Accuracy :
- Temperature uniformity :
- Supply : 230V Ac, 50 Hz, Single Phase

### LAB OVEN



CAT.NO.	CAPACITY (LITRES)	INNER DIMENSION (H X W X D CMS)	TRAYS
BS-LO-01	43 Lit	35 x 35 x 35	2
BS-LO-02	91 Lit	45 x 45 x 45	2
BS-LO-03	122 Lit	60 x 45 x 45	3
BS-LO-04	216 Lit	60 x 60 x 60	3
BS-LO-05	325 Lit	90 x 60 x 60	4

### **Features**

- Data Logger
- Data Scanner Complete with Sensor
- CFR 21 Part 11 compliance so ware for data
- logger/scanner
- Safety digital temperature controller
- Timer

"BS" make Lab Precision Oven are with forced air circulation provided by means of motorized blower fitted on the oven for re-circulation of air ensures a homogenous hot air mixture and an exact temperature profile. "BS" make Lab Refrigerators are stable and reliable with refrigerated environment for exact laboratory requirements. Lab. refrigerators are for maintaining storage conditions of a product, exposure to low temperature applications, where the temperature requirements are on the lower side. Ideal temperature environment for clinical research. pharmaceutical and industrial use. Adjustable shelves and wide range set point for varying laboratory applications including chromatography and pharmaceutical storage. Application includes refrigerated storage of Vaccines, Reagents, Cultures, Medicines and Blood Samples.

#### **Standard Model**

Inner Chamber made of Stainless Steel (S.S.304) mirror finish & Outer G.I. duly powder coated.

### **GMP Model**

Inner Chamber made of Stainless Steel (S.S.316) mirror finish & Outer S.S.304 matt finish.

#### Construction

"BS" Lab Refrigerator is made of double walled construction with thick high grade PUF insulation. Full view inner acrylic door & front door with gasket & locking arrangement. Motorized Blower at back side of the chamber develops unique air flow system to maintain uniform temperature condition inside the chamber. Unique air flow assures quick recovery aGer door openings. The unit is provided with user friendly adjustable specially designed S.S rod trays, ensures uniform temperature distribution. The equipment is mounted on castor wheels for easy movement.

50 mm validation port hole with silicone rubber seal to insert sensors for validation. Full view observation Acrylic door with gasket to observe sample inside the chamber.

### LAB REFRIGERATOR DEEP FREEZER



### **Technical Specification**

### Controlling **System**

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

### Air Recirculation

Motorized blower at back side of the chamber develops unique air flow system which ensures max. uniform temperature & humidity condition inside the chamber.

### Heating System

High quality U shape S.S. tubular heaters are used for better heating.

### Refrigeration System

CFC Free hermetically sealed Emerson Copeland make compressor for better cooling with R134 A (Eco Friendly) refrigerant with time delay to safe guard compressor system.

**Temperature Range** 2°C to 8°C

**Temperature Accuracy** ± 0.5°C

230V Ac, 50 Hz, Single Phase. Supply

### **Features**

PLC for auto change over for standby refrigeration & humidity system with HMI CFR 21 part 11 compliance so

Stand by refrigeration system

Data Logger

- Safety digital controller temperature
- Data Scanner complete with sensor
- SMS Mobile alert system
  - Door access security

CAT.NO.	CAPACITY (LITRES)	INNER DIMENSION (H X W X D CMS)	TRAYS
BS-DF-01	100 Lit	50 x 50 x 40	2
BS-DF-02	170 Lit	70 x 60 x 40	2
BS-DF-03	200 Lit	60 x 60 x 60	2
BS-DF-04	285 Lit	80 x 60 x 60	3
BS-DF-05	325 Lit	90 x 60 x 60	4
BS-DF-06	400 Lit	110 x 60 x 60	4
BS-DF-07	600 Lit	125 x 70 x 70	4
BS-DF-08	800 Lit	157 x 70 x 70	5
BS-DF-09	1000 Lit	157 x 80 x 80	5

# LAMINAR AIR FLOW

Many microbiological and cell culture laboratories require highly sterile working environment for performing research activities and laminar air flow cabinets are the best solution for them. Organ called laminar air flow chambers or laminar air flow workstations, these cabinets are designed to keep contents of the work zone safe from particulates that are sensitive to such contamination.

A laminar air flow cabinet maintains a unidirectional flow of HEPA-filtered air over the work area and protects the working environment from dust and other air-born particulates. The flow can be horizontal (parallel to the work surface) or vertical (from top to the work surface). Both the air flow types have their own significance in research. The question, where to use horizontal air flow cabinet or vertical air flow cabinet, this choice solely depends upon the requirements of applications.

#### Vertical Vs Horizontal Laminar Flow

As mentioned above, in a horizontal air flow cabinet, filtered air blows across the work zone in horizontal direction; this constant flow of air provides material and product protection. Whereas, in a vertical laminar air flow cabinet, filtered air blows on the work zone and leaves through the holes in the base. As compared to horizontal type, vertical flow cabinet can provide greater operator protection. Furthermore, it is user preference that decides which type of laminar air flow cabinet should use.

### **Laminar Air Flow Cabinets by BS**

Laminar Flow Cabinets by Bionics Scientific are a series of high efficiency clean room work benches designed to protect equipment and other contents of the work zone from particulates. These LAF cabinets are available in 5 standard sizes that can be further customized to meet unique requirements of our customers. These cabinets are well suited for cell culture and microbiological applications that require class 100 air quality.

Our LAF cabinets are modern in design and features certified quality construction; with options and accessories these prove to be most efficient laminar air flow cabinets available on the Indian market today. Our In-house manufacturing and fabrication facilities provide benefit of any kind of customization that our customers may need. In addition to cover all Indian market, these systems are also exported worldwide. To know price list and other important details, please email us your query and our sales team will coordinate with you till you get 100%



### **Features**

- HEPA filtration unit provides Class 100 air quality
- Optional UV lamp to sterilize work zone
- Low noise level
- High airflow capacity
- Meet US Federal Standard 209 B (BS 5295)
- Stainless steel work table
- Made from branded parts (blower etc.)
- Easy to change filters

### **Standard Sizes (Dimensions)**

Model	BS/VLAF-		BS/VLAF-	BS/VLAF-	BS/VLAF-
	22	32	42	62	82
Working Area	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' x6"
Size of HEPA Filter	1	1	1	2	2

Model	BS/HLAF- 22	BS/HLAF- 32	BS/HLAF- 42	BS/HLAF- 62	BS/HLAF- 82
Working Area	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' x6"
Size of HEPA Filter	1	1	1	2	2

### **Specifications**

Cleanliness	Class 100
Velocity	90 FPM ±20%
Hepa Filter	99.999 % efficiency for particles >0.3 μm
Pre-Filter	85 %efficiency for particles >0.5 μm (Washable)
Particle Count	Better than US Fed Std 209B Class10 and VDI 2083 Class 3
Cabinet	Laminated High Quality Wooden Board /PCRC Sheet Powder Coated/ Stainless Steel SS 304 (optional 316 grade)
Work Table	304 Stainless Steel (optional 316 grade)
Airflow Speed	Control Speed Controller (Three Step Speed Controller)
Blower	High efficient centrifugal type with lifetime lubricated bearings
Light	High intensity, low wattage >800 lux
Noise Level	<55 Dba
Standard Accessories	s Air/gas cock and mains power socket (16A)
Power Supply	220-230 V,50 Hz.
Optional	Microprocessor LCD Controller Digital display for air flow rate Transparent Front Door Gauges Pressure (Statics Pressure Mano-Mater) Magnahelic Gauge (for filter pressure) U. V. Germicidal Tube in work area Electronic Filter choke alarm Spare HEPA Filters Auto switch on/off for U.V. Germicidal tube & fluorescent light Hour Meter for UV light

"BS" make Muffe Furnace are designed & manufactured to comply requirements for Laboratory & Industrial applications. It is used for engineering tests of soils and aggregates, cement testing, aching organic and inorganic samples, gravimetric analysis, ignition tests, etc. "BS" make Muffle Furnace are constructed in Horizontal / Rectangular model. Insulation is with high grade insulation material.

### Standard Model

Outer made of Mild Steel, duly painted with Hammer tone Paint.

### GMP Model

Outer made of S.S.304 mirror finish.

#### Construction

Outer Body made of GI / SS Sheet. Duly insulated with care wool / High temperature insulating material.

Single door made of brick work and cementing fitted in with single hole at Center

### • Technical Specification

### Controlling System

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

### Heater

Heating is effected by means of element made of best quality Nichrome wire for 930°C & Kanthal A1 wire for 1200 Deg.C. wounded on the muffle. Insulation: Heating element wounded with high grade care wool blanket & gaps are filled with suitable insulating material.

### Temperature Range: 1000°C /

### **MUFFLE FURNACE**



### • Models & Optional Features

CAT.NO.	INNER DIMENSION (H X W X D CMS)	RATING	Max Continuous Temperature
BS-MF-01	23 x 10 x 10	1.6 kw	930°C
BS-MF-02	30 x 15 x 15	3.3 kw	930°C
BS-MF-03	23 x 10 x 10	1.8 kw	1200°C
BS-MF-04	30 X 15 x 15	3.5 kw	1200°C
BS-MF-05	30 x 20 x 20	4 kw	1200°C
BS-MF-06	45 x 22.5 x 22.5	7 kw	1200°C

### **Features**

- Data Logger
- Safety digital temperature controller
- Timer

"BS" make Monticello Ageing Oven suitable for Ageing test of PVC & Rubber as per BS 903 part A 19 method A for rubber. BS 6746 (1976) method E for PVC. It confirms to IS 3400 (Part IV) 1978.

#### Construction

Solid cast aluminum main body.

### **Technical Specification**

#### **Controlling System**

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

Heating elements made from the best quality Kanthal DSD wire.

✓ Diaphragm pump at bottom of the chamber develops unique preheated air flow system which ensures maximum uniform temperature condition inside each cell changes per hour through all the cells. Rota meter with needle value to control the rate of flow of air. A small brush less diaphragm pump, no chance of generating ozone. Air flow is regulated through a Rota meter of suitable range. The unit is supplied with castor wheels for ease of movement. Each cell is provided with double lid.

Temperature Range: 5°C above ambient to

150°C

Temperature Accuracy Temperature Range Supply

± 1°C ±1°C cell to cell. 230V Ac, 50 Hz, Single Phase.

MODELS & Optional Features No. of Cell : 7/19 cell

Wattage :3/6 Kw

Cell Dimension: 75mm Dia x 305mm Height

### **Optional Features**

**Data Logger** 

Safety digital temperature controller Timer

### MULTICELL **AGING OVEN**



### PASS BOX

Maximize your production efficiency with clean room equipment! We are a pass box manufacturer company based in India and have a long successful experience in designing, manufacturing and installing such equipment all over India. Here at Bionics Scientific, we are presenting static pass box and dynamic pass box equipment at factory price. These cleanroom pass box chambers are custom designed, rugged, made of high grade stainless steel and can be installed in a number of ways, depending on the wall or door that will support them. These equipment are supplied in a pharmaceutical, semiconductor and food industries to meet the most demanding controlled environment conditions.

#### **Features**

Precision designing and finish Choice of mechanical or electrical interlocked Floor and wall mounted design

#### CE and ISO certified

Buzzer indication to know the material is kept inside

- Magnehellic gauge for measuring pressure drop High grade stainless steel construction
- Static and Dynamic Pass Box models
- Maximum chemical resistance construction UV
  - light along with hour meter
- Indicating lamp to know the door lock-unlock condition Low
- Vibration and Noise

#### Static Pass Box

- Bionics Scientific presents its static pass box equipment, fabricated with powder coated 304/316 grades stainless steel and high quality components and are capable of eradicating pollutants completely from the air. These static pass boxes are installed in manufacturing areas and filter the incoming air in order to keep the air free from dust and other contaminants. With UV light along with hour meter, Fluorescent light, buzzer indicator to know the material is kept inside and indicating lamp, these static pass boxes provide excellent working performance in the clean room unit.



### **SpecificaTIO**

Product	Static Pass Box
Construction	Stainless Steel 304 / 316 / 316L
Door	Solid door w/ mechanical or electrical interlocked
Window	Tempered Glass
Accessories	Hour meter
Electricals	Hour Meter, Fluorescent light, UV light, Electromagnet for door interlocking, Buzzer and Indicator lamps
Window	Tempered Glass
UV Lamp	Optional
HEPA Filter	Optional
Filtration efficiency	"99.99% @ "0.3μm
Power Supply	220 / 230 Volts
Certifications	CE and ISO

### Dynamic Pass Box

Dynamic Pass Box equipment are made of powder coated high grades stainless steel (304/316/316 L) with international quality standard components including mechanically or electrically interlocked doors and UV light. These dynamic pass box equipment are equipped with suction filter made of stainless steel with 95% down to 5 $\mu$  efficiency (EU-4rating) and supply filter made of aluminum with 99.999% down to 0.001  $\mu$  (EU-14 Rating.) An interlock guard system controls the inlet and the outlet of PASS BOX not be opened at the same time, in order to prevent the cross contamination, with single hole at Center

### **SpecificaTIONS**

Product	Dynamic Pass Through Box
Construction	Stainless Steel 304 / 316 / 316L
Door	Solid door w/ mechanical or electrical interlocked
Window	Tempered Glass
UV Lamp	Optional
HEPA Filter	Optional
Suction Filter	Stainless Steel w/ 95% down to 5 µ Efficiency (EU-4 Rating.)
Supply Filter	Aluminum w/ 99.999% down to 0.001 μ (EU-14 Rating.)
Blower	Branded Heavy duty
Noise	<78
Power Supply	220 / 230 Volts
Accessories	Hour meter, Magnehelic / Minihelic Pressure Gauge
Electricals	Hour Meter, Fluorescent light, UV light, Electromagnet for door interlocking, Buzzer and Indicator lamps
Air Shower Facility	Optional
Cleanliness	Class 100
Certifications	CE and ISO

### **SpecificaTIONS**

Pharmaceutical industries Chemical research laboratories Electronic industry Semiconductor production Food processing industry

# "BS" make Multicell Ageing Oven suitable for Ageing test of PVC & Rubber as per BS 903 part A 19 method A for rubber. BS 6746 (1976) method E for PVC. It confirms to IS 3400 (Part IV) 1978.

### Construction

Solid cast aluminum main body.

### **Technical Specification**

### Controlling System

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

Heating elements made from the best quality Kanthal DSD wire.

Diaphragm pump at bottom of the chamber develops unique preheated air flow system which ensures maximum uniform temperature condition inside each cell changes per hour through all the cells. Rota meter with needle value to control the rate of flow of air. A small brush less diaphragm pump, no chance of generating ozone. Air flow is regulated through a Rota meter of suitable range. The unit is supplied with castor wheels for ease of movement. Each cell is provided with double lid.

Temperature Range: 5°C above ambient to

150°C

Temperature Accuracy Temperature Range Supply

± 1°C ±1°C cell to cell. 230V Ac, 50 Hz, Single Phase.

### **Models & Optional Features**

No. of Cell :7/19 cell :3/6Kw Wattage

Cell Dimension: 75mm Dia x 305mm Height

### **Optional Features**

Data Logger

Safety digital temperature controller Timer

### STABILITY CHAMBER, **HUMDITY CHAMBER**



### Heating System

High quality U shape S.S. tubular heater are used for better heating.

### Humidity System

Steam injection system (Non condensing type) & reservoir tank with water level arrangement with indicator.

### Refrigeration System

CFC Free hermetically sealed Emerson Copeland make compressor for better cooling with R134 A (Eco Friendly) refrigerant with time delay to safe guard compressor system.

Humidity Accuracy Humidity Uniformity Supply

±2% RH ±3% RH 230V Ac, 50 Hz, Single Phase.

Temperature Range : 20°C to 60°C Temperature Accuracy : ± 0.2°C Temperature Uniformity : ± 1°C

**Humidity Range** : 40% RH to 90% RH

### **Models & Optional Features**

CAT.NO.	Capacity (LiteRS)	INNER DIMENSION (H X W X D CMS)	Trays
BS - SC - 01	90 Ltrs	45 x 45 x 45	2
BS - SC - 02	170 Ltrs	70 x 60 x 40	2
BS - SC - 03	200 Ltrs	60 x 60 x 60	2
BS - SC - 04	285 Ltrs	80 x 60 x 60	3
BS - SC - 05	325 Ltrs	90 x 60 x 60	4
BS - SC - 6	400 Ltrs	110 x 60 x 60	4
BS - SC - 6	600 Ltrs	125 x 70 x 70	4
BS - SC - 6	800 Ltrs	157 x 70 x 70	5
BS - SC - 6	1000 Ltrs	157 x 80 x 80	5

### **Optional Features**

Imported RH sensor make, Moronic Switzerland for higher accuracy & RH 95% PLC for auto change over for standby refrigeration & humidity system with HMI CFR 21 part 11 compliance so ware

- Stand by refrigeration system
- Stand by humidity system

#### Data Logger

Safety digital temperature controller Data Scanner complete with sensor SMS Mobile alert system Door access security system Timer

### VACUUM OVEN

"BS" make Vacuum Oven are designed & manufactured to comply requirements of industry. It is widely applicable for drying & sterilization in fields of biochemistry, pharmacy, medicine, health, agriculture & scientific research and environment protection. It is designed especially for drying of material which is thermos sensitive or DE compounded and oxidative easily

### Standard Model

Inner Chamber made of Stainless Steel (S.S.304) mirror finish & Outer G.I. duly powder coated.

#### **GMP Model**

Inner Chamber made of Stainless Steel (S.S.316) mirror finish & Outer S.S.304 matt finish.

#### Construction

"BS" make Vacuum Oven is made of Stainless still (S.S. 304) inner and thick gauge Mild steel (CRCA) sheet duly epoxy powder coated outer body. 4" high grade glass wool insulation for Rectangular Model & 3" high grade glass wool insulation for Circular Model to minimized heat loss. Shelf system stainless steel trays improve heat conduction to samples.

Toughened glass window in door to allow viewing of samples inside the chamber

### **Technical Specification**

#### **Controlling System**

Imported microprocessor based auto tune PID controller with CE mark & dual display of set value & process value.

Heating elements made from the best quality Kanthal DSD wire are used on refractory supports.

Temperature Range : 50°C to 200°C
Temperature Accuracy : ±0.2°C
: 230VAc,50Hz,Single
Supply Phase



### **Models & Optional Features**

### **TI-135 SERIES Vacuum Oven (Circular Model)**

CAT.NO.	CAPACITY (LITRES)	INNER DIMENSION (DIA X DEPTH CMS)	TRAY S
BS – VO – 01	15 Ltrs	25 Dia x 30 Depth	2
BS - VO - 02	25 Ltrs	30 Dia x 40 Depth	2

### **TI-136 SERIES Vacuum Oven (Rectangular Model)**

CAT.NO.	CAPACITY (LITRES)	INNER DIMENSION (H X W X D CMS)	TRAY S
BS – VO – 01A	43 Ltrs	35 x 35 x 35	2
BS -VO - 02A	91 Ltrs	45 x 45 x 45	2

### **Optional Features**

Data Logger Safety digital temperature controller Timer

### VERTICAL AUTOCLAVE

"BS" make Laboratory Autoclave are suitable for Parma & Biotech industries, Food research & Quality assurance labs, Agriculture research, Health care & Diagnostic labs, University, etc.

#### Standard Model

Inner & outer made of Stainless Steel (S.S.304) with mirror finish.

#### **GMP Model**

Inner made of Stainless Steel (S.S.316) & Outer S.S.304 mirror finish.

### Construction

Vertical double walled design, has single chamber for Steam & water. Lid, flange & bottom plate is also made of S.S., all joints are Argon welded. Joint less silicon Gasket. Heavy duty industrial range heater. Lid fitting Pressure gauge 0-30 PSI, safety spring loaded Pressure valve, steam Release valve. Safety high pressure release valve. Foot lagging arrangement is provided in 121C/D/E/F, Basket made of thick Stainless Steel (S.S.) rod wire mesh.

### **Options**

### **SEMI AUTOMATIC SYSTEM FOR AUTOCLAVE**

Supplied with Microprocessor Based Digital Temperature controller with inbuilt Timer Low water level cut off system with magnetic-oatswitchforheater's safety.

#### FULLY AUTOMATIC SYSTEM FOR AUTOCLAVE

Supplied with Microprocessor Based Digital Temperature controller with inbuilt Timer Automatic purging of steam with solenoid valve. Low water level cut off system with magnetic float switch for heater's safety

### FULLY AUTOMATIC SYSTEM FOR AUTOCLAVE WITH

PRINTER INTERFACE (To be order with fully automatic ) Supplied with Microprocessor Based Digital Temperature controller with inbuilt Timer & printer interface Automatic purging of steam with solenoid valve. Low water level cut off system with magnetic float switch for heater's safety.



### **Technical Specification**

#### **Controlling System**

 $Imported\ microprocessor\ based\ auto\ tune\ PID\ controller\ with CE\ mark\&dual display of set value\&process value.$ 

#### Heater

Heating elements made from the best quality Kanthal DSD wire are used on refractory supports.

TemperatureRange : 121°Cto125°C : 15 to 22 PSI Factoryset : 15 PSI at 121°C Supply : 230VAc,50Hz,Single Phase.

### **Models & Optional Features**

CAT.NO.	CAPACITY (LITRES)	INNER DIMENSION DIA X HEIGHT CMS	RATING
BS – VA – 01	22 Ltrs	25 x 45	1.5 Kw
BS – VA – 02	35 Ltrs	30 x 50	2.0 Kw
BS - VA - 03	53 Ltrs	35 x 55	3.0 Kw
BS - VA - 04	95 Ltrs	45 x 60	4.0 Kw
BS - VA - 05	119 Ltrs	45 x 75	4.5 Kw
BS - VA - 06	178 Ltrs	55 x 75	6.0 Kw

### **Optional Features**

Data Logger Safety digital temperature controller Timer

### **Optional Accessories**

Safety pressure control switch Vacuum breaker&self-purgingsystem 4 channel self-data logger with printer interface Water level indicator with glass tube

Foot pedal lagging arrangement for size no A & B

When your testing requires walk-in rooms, choose "BS", Control ed Temperanture Soluiton. Our test rooms feature automated process control, energy efciency, and a vast range of features and options. Every "BS" environmental room features equipment that reliably produces required conditions, structural integrity that keeps the room working properly through years of demanding test cycles, and measuring / monitoring equipment that precisely records all test data.

#### **Standard Model**

Inner Chamber made of Stainless Steel (S.S.304) mirror finish & Outer G.I. duly powder coated.

#### **GMP Model**

Inner Chamber made of Stainless Steel (S.S.304) mirror finish & Outer S.S.304 matt finish.

#### OR

Inner Chamber made of Stainless Steel (S.S.316) mirror finish & Outer S.S.304 matt finish.

#### **Construction**

Light weight Sandwich panel. Double walled construction with backside triple wall. 3" Thick PUF Insulation ensures stable temperature with humidity & reduced energy consumption. Motorized Blower at back side of the chamber for recirculation of air to develops unique air flow system which ensures maximum uniform temperature & humidity condition inside the chamber. Unique air flow assures quick recovery aGer door openings. Single Phase, TEFC, F-class insulation,1440 RPM, 230 Volts. High quality S.S. Tubular Heaters are used for better heating. Steam injection system & reservoir tank with water level arrangement with indicator.

#### **Technical Specification**

#### **Temperature Control**

By means of Imported Microprocessor based auto tuned PID controller with CE mark & dual display of set value & proces value with PT100 sensor Humidity Control. Humidity Control & Sensing: By means of Imported Microprocessor based auto tuned PID controller with CE mark & dual display of set value & process value with direct % RH. Direct RH electronic capacitor type humidity sensor, avoid wick cup & water.

### WALK IN STABILITY CHAMBER



Safety Features

Additional Safety Digital controller to cut of dry heater & wet heater supply in case temperature of overshoot. Float switch to cutoff the wet heater supply in case of low water level. Audio & Visual alarm. Compressor ON delay timer (2 min.) to safe guard the compressor. In built over load protector provided for hermetically sealed compressor. compressor.

**Refrigeration System** 

Refrigeration by means of CFC Free hermitically sealed Emerson Copland make compressor with R 134A for better cooling with ECO friendly refrigerant with time delay to safe guard compressor system. 50 mm validation port hole with silicon rubber seal to insert sensors for validation. Full view observation Acrylic door with gasket to observe sample inside the chamber. Interior illumination for Working area Specially designed stainless steel rod trays ensure uniform temperature distribution.

Temperature Range : 20°C to 60°C
Temperature Accuracy : ± 0.5°C
Temperature Uniformity : ± 2°C
Humidity Range : 40% RH to 90% RH
Humidity Accuracy : ± 2% RH
Humidity Uniformity : ± 5% RH
Supply : 230 V Ac, 50 Hz, Single Phase.

As per ICH Guidelines

CAT.NO.	CAPACITY (LITRES)	INNER DIMENSION (H X W X D CMS)	TRAYS
BS – WHC – 01	5400 Ltrs	200 x 136 x 200	24
BS – WHC – 02	6400 Ltrs	240 x 136 x 200	32
BS - WHC - 03	8000 Ltrs	200 x 200 x 200	24
BS – WHC – 04	9600 Ltrs	240 x 200 x 200	32
BS - WHC - 05	15000 Ltrs	240 x 250 x 250	48
BS - WHC - 06	18000 Ltrs	240 x 250 x 300	48

## Optional Features Ethernet Communication

Ethernet Communication Touchscreen HMI PLC based control. E-mail Alert.

Safety
Mobile Alert system.
Data Logger/Scanner
Door Access system.
Standby Refrigeration & Humidity system.
SoGware (21 CFR Part 11 Compliance)

### Remi catalogue

https://www.remilabworl d.com/laboratorycentrifuges-plus/

please find attached catalogue for more details and models to select accordingly we can offer further quotation

### Mili Q water system



Merck Milli Q Ultrapure Water Pur ification System

## Light Microscope



LED lights with 2/3 eyepiece with digital display to see enlarges images , can record and take photos storage USB drive , high end used for cell culture labs and Biotech labs

Thanking you, Best Regards,

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