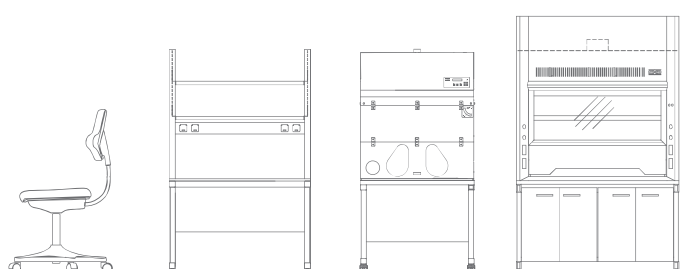CHALLENGE

HONESTY

COMMU
NICATION

CHC

ENGLISH

COMFORT

The ergonomic and flexible design of CHC Lab products allows the researchers to
work in a safer and more comfortable way in any laboratory environment.
The modularity of our system permits a fast and cost-effective re-arrangement of the
lab design and furniture allocation when required.

CONTENTS

Lab Furniture
Products

LEVEL PRO

LEVEL PRO furniture system allows maximum flexibility, coupled with an elegant and modern design. The system features fit perfectly in any dynamic and fast-changing laboratory environment.

• System Description

In order to respond to the needs of a well-designed laboratory, such as a functional and flexible services distribution system, CHC LAB developed LEVEL PRO.

Our services spine, based on easy dismantable, interchangeable and combinable panels, allows for any type of changes in the distribution of taps and electrical components.

The system allows for any services access point, whether from the ceiling, using a drop in the column, or from the floor. The spine can adapt easily to any new requirement arising after the installation without involving any costly and time-consuming change in the facility services distribution and connections. The Modularity of the system allows for a fast and easy re-allocation of the furniture in any space of the building.

Design Breakdown

[Components]

1. Worktop
2. Top support frame
3. Heigh–adjustable table frame
4. Height adjustable foot Levelling feet
5. Skirt pannel
6. Additional Services module
7. Main Services Module
8. Shelf
9. Shelf bracket
10. Fall prevention bar & cap
11. Bottom enclosure panel
12. Pillar structure & cover
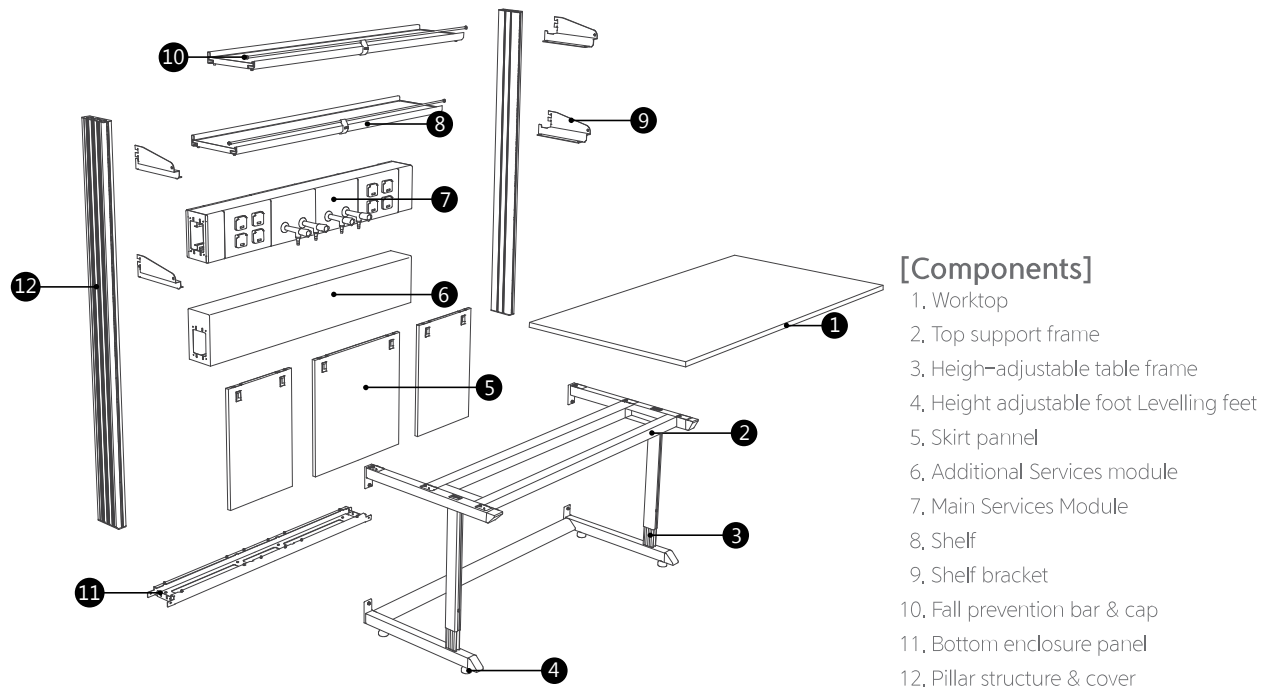
• Spine Option

Service panels can be combined in different configurations in order to ensure a versatile workspace.

1st **ONE ROW OF PANELS :** Combination of service panels with shelves (max. 3 levels of adjustable shelves).
2nd **SERVICES WALL :** Ideal for heavy serviced areas allowing for multiple equipments connected simliltaneously.
3rd **LOW SERVICE SPINE :** Allows for services at worktop level and useful to enclose services runing along the walls.

<200mm SERVICE PANELS>   <SERVICE WALL>   <LOWER SERVICE SPINE>
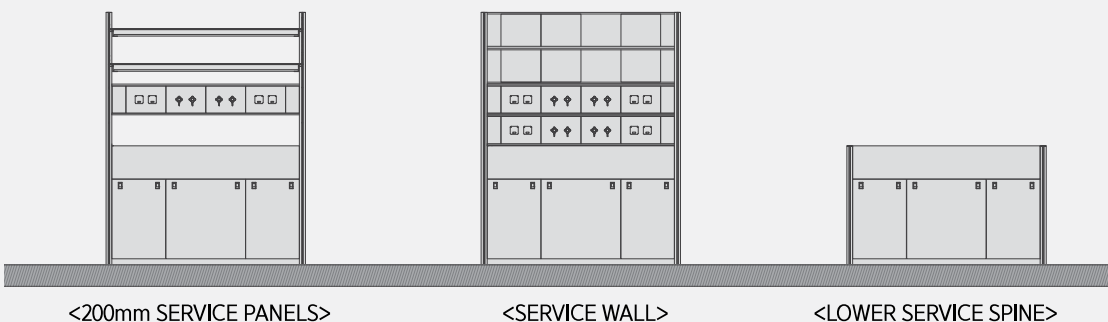
Ergonomics

• 4 Levels height-adjustable lab table

Level 1	Level 2
750mm	800mm
Level 3	Level 4
850mm	900mm
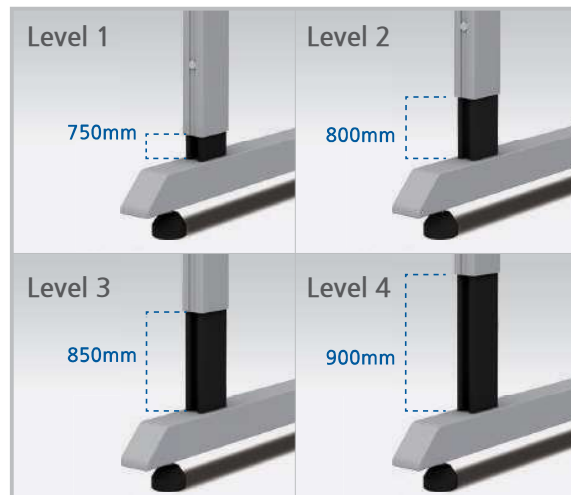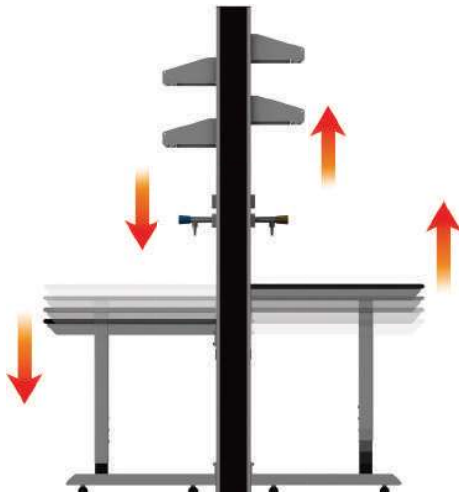
※The distance between floor and work surfaces is 750mm, 800mm, 850mm and 900mm
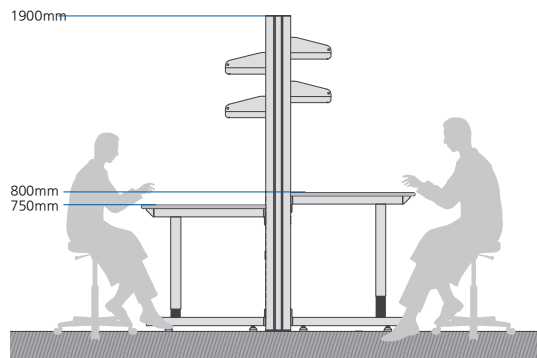
1900mm

800mm
750mm

Sitting position. Distance from floor 750–800 mm

1900mm
1750mm
1600mm
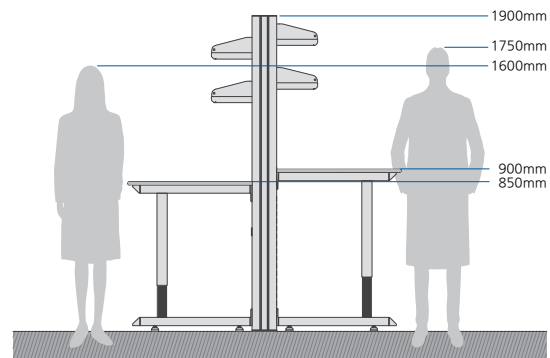
900mm
850mm

Standing up position. Distance from floor 850–900 mm

Easily Adjustable independent height shelves.

Flexibility

• LEVEL PRO Services module
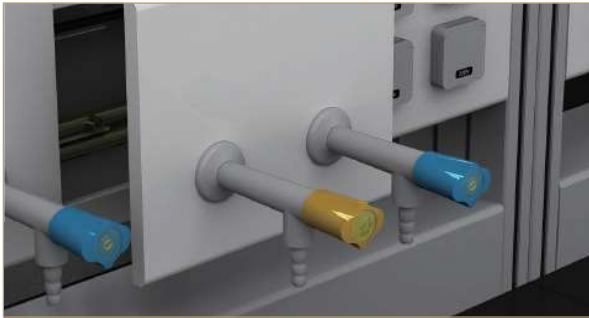
Easily interchangeable service panels. Allows for multiple combinations of taps and sockets depending on needs and requirements.

• LEVEL PRO Skirt panel

LEVEL PRO skirt panel has a safe and clean design. Can be easily removed, allowing for fast maintenance operations.

• LEVEL PRO Choice of colors

Standard

Phantom black
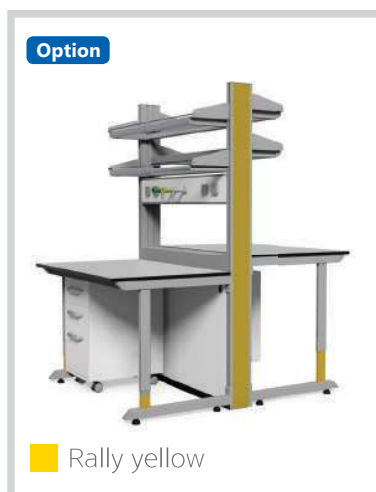
Option

Rally yellow

Option

Silver gray

• Dimensional Drawing
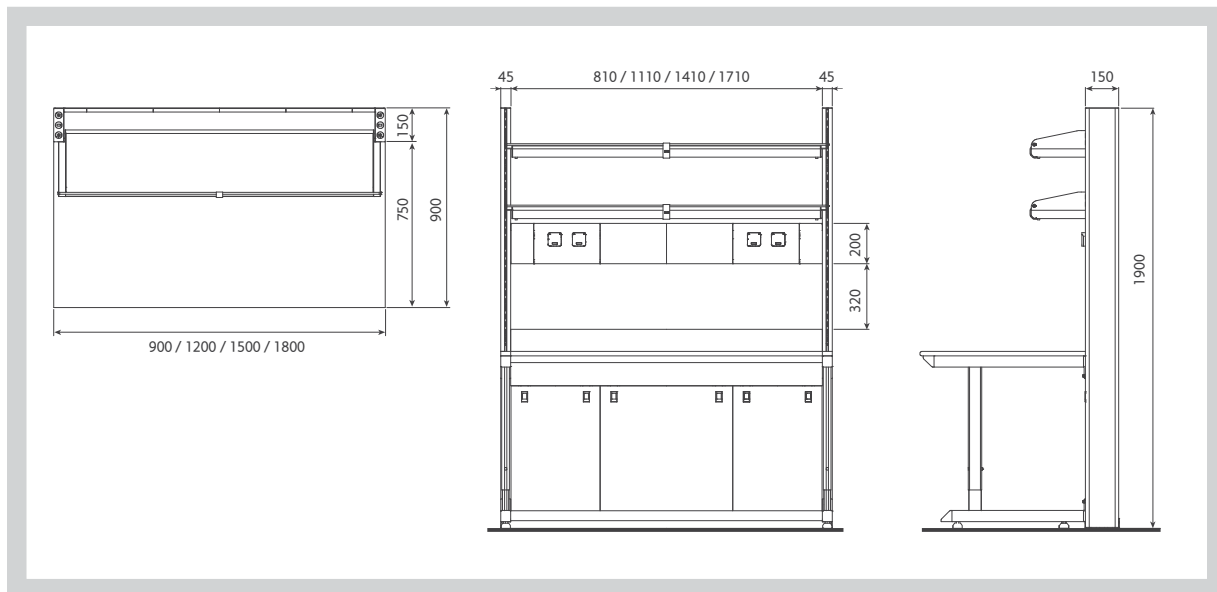
PRODUCT LIST

Unit : mm

Island Bench
Shelf Type

Width	Depth	Height
900 / 1200 / 1500 / 1800	1650	900/1900

‒ Height adjustment : 750 / 800 / 850 / 900mm
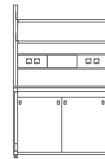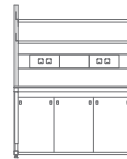
H-LCS-900	H-LCS-1200	H-LCS-1500	H-LCS-1800
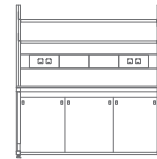
Island Bench

Width	Depth	Height
900 / 1200 / 1500 / 1800	1650	900

‒ Height adjustment : 750 / 800 / 850 / 900mm
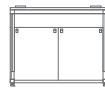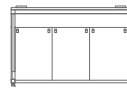
H-LCP-900	H-LCP-1200	H-LCP-1500	H-LCP-1800
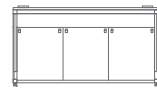
Wall bench
Shelf Type

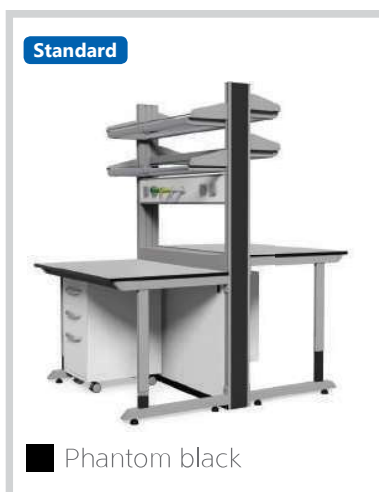| Width	Depth	Height
900 / 1200 / 1500 / 1800	900	900/1900

‒ Height adjustment : 750 / 800 / 850 / 900mm
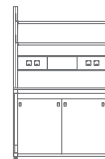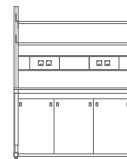
H-LSS-900	H-LSS-1200	H-LSS-1500	H-LSS-1800
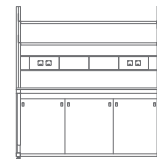
Wall bench

Width	Depth	Height
900 / 1200 / 1500 / 1800	900	900

‒ Height adjustment : 750 / 800 / 850 / 900mm
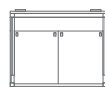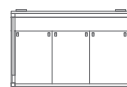
H-LSP-900	H-LSP-1200	H-LSP-1500	H-LSP-1800

HARD PRO

HARD PRO bench type system is the right solution for heavy duty, less serviced and less changing laboratory environments. Ideally for lab environments with well established procedures.

• System Description

To respond to the requirements of a strong and heavy duty laboratory environment, CHCLAB created HARD PRO system.
With a simplified and still ergonomic design, this system ensures durability and sturdiness in all those laboratory spaces where heavy equipment and more consistent and standard processes are required.
Safety is increased through a separation of services lines, one for electrical devices and another for taps, while the ergonomics are maintained by the dual adjustment independent shelves system.

Durability

• Utility box

STEEL epoxy coated utility box.Ample internal space for installation and connection of several services.
Easily removable PVC strip for easy access for maintenance and control purpose.
Sturdily attached to spine pillars to avoid bending and twisting.

• HARD PRO frame type

STEEL or ALUMINUM ≪H≫ frame type
Tubular 50 x 50 structure, epoxy coated
Horizontal and vertical structure welded together to ensure high load capacity.

• Skirt panel

HARD PRO skirt panel, Easily detachable, steel epoxy painted, ensures safety, protects services connections from exposure and allows for easy maintenance and cleaning.

• Levelling feet
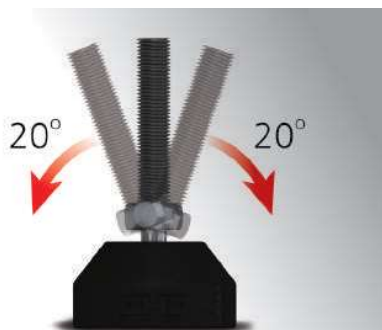
Levelling feet allow perfect vertical and horizontal level of the table structure.

• Multipurpose drop-in pillar structure
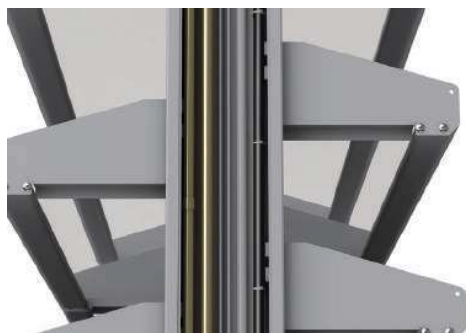
The CHC service system counts with a structure of multipurpose epoxy coated steel posts that work both as a structural element, providing unbeatable sturdiness and stability as well as a services drop. Internal width allows the installation of both electricity, data or gases. Easily removable PVC strip for easy access for maintenance and control purposes. Sturdily attached to the table frame to ensure the stability of the bench structure.

• Safety independent shelves

Independent shelves table / Safety
Integrated shelves table / Hazard

Each shelf can be adjusted independently. Easy to create appropriate and safe space on the table for large equipment.

Ergonomics

• Ergonomic dual height adjustment system
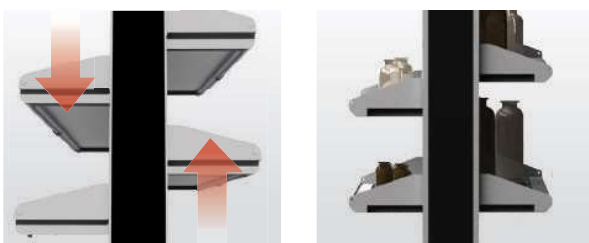
The dual height adjustable system enables not only to arrange large equipment but also to store the reagent bottles of various sizes with convenience and safety by adjusting the height of the shelves.

Type		Tempered glass	PB	Phenolic laminate
HARD PRO	Steel	Option	Standard	Option
	Aluminum	Standard	Option	

• Shelf surface options

Tempered glass

The tensile strength of tempered glass is 3 times stronger than normal glass.
It has excellent chemical resistance, allows natural light penetration for better desk illumination and permits immediate detection of contamination and leaks of reagents.

Particle board

With an excellent chemical, temperature and physical resistance, it is a very versatile solution.

Phenolic laminate

With increased chemical resistance through L.P.M treatment is a very cost effective sollution

• Safety prevention through design(Ptd)

Detachable anti-drop bar :
Can be easily attached and detached by the user.
Prevents accidents that can occur when a reagent bottle hits the bump.

Back lip :
Prevents reagent bottles to fall down from the back side.
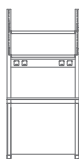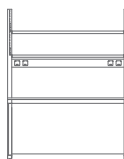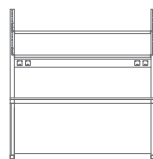
PRODUCT LIST

Unit : mm

Island Bench
Shelf Type

Width	Depth	Height
900 / 1200 / 1500 / 1800	1500	900 / 1900

Steel ·	HR-HCS-900S	HR-HCS-1200S	HR-HCS-1500S	HR-HCS-1800S
Aluminum ·	HR-HCS-900A	HR-HCS-1200A	HR-HCS-1500A	HR-HCS-1800A

Island Bench
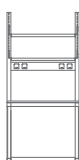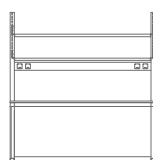
Width	Depth	Height
900 / 1200 / 1500 / 1800	1500	900

Steel ·	HR-HCP-900S	HR-HCP-1200S	HR-HCP-1500S	HR-HCP-1800S
Aluminum ·	HR-HCP-900A	HR-HCP-1200A	HR-HCP-1500A	HR-HCP-1800A

Wall Bench
Shelf Type

Width	Depth	Height
900 / 1200 / 1500 / 1800	750	900 / 1900

Steel ·	HR-HSS-900S	HR-HSS-1200S	HR-HSS-1500S	HR-HSS-1800S
Aluminum ·	HR-HSS-900A	HR-HSS-1200A	HR-HSS-1500A	HR-HSS-1800A

Wall Bench

Width	Depth	Height
900 / 1200 / 1500 / 1800	750	900

Steel ·	HR-HSP-900S	HR-HSP-1200S	HR-HSP-1500S	HR-HSP-1800S
Aluminum ·	HR-HSP-900A	HR-HSP-1200A	HR-HSP-1500A	HR-HSP-1800A

Unit : mm

Wall Bench
Overhead Storage Cabinets

Width	Depth	Height
900 / 1200 / 1500 / 1800	750	900 / 1900
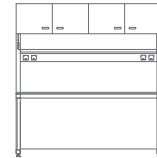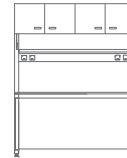
Steel ·	HR-HSC-900S	HR-HSC-1200S	HR-HSC-1500S	HR-HSC-1800S
Aluminum ·	HR-HSC-900A	HR-HSC-1200A	HR-HSC-1500A	HR-HSC-1800A

Corner Module

Width	Depth	Height
1000	1000	900
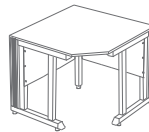
Steel ·	HR-HCN-1000S
Aluminum ·	HR-HCN-1000A

Balance Table

Width	Depth	Height
900 / 1200	750	900

· Work top 1 : Marble stone
· Work top 2 : Phenolic laminate
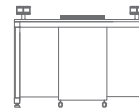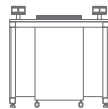
Steel ·	HR-HBL-900S	HR-HBL-1200S
Aluminum ·	HR-HBL-900A	HR-HBL-1200A

SINK MODULE

Sink units are essential pieces of furniture in laboratory operations. Sinks can be manufactured in several materials. Pegboard, anti-splash screen and emergency eyewash tap can be installed.

Island Module

PB body PUR edging · H-STS-Width
Steel body · H-STS-Width-S

Width	Depth	Height
1500 / 1650	750	900

Unit : mm

SINK Type

Island & Wall

PB body PUR edging · H-STF-Width
Steel body · H-STF-Width-S

Width	Depth	Height
1500 / 1650	750	900

Unit : mm

Wall

PB body PUR edging · H-ST-Width
Steel body · H-ST-Width-S

Width	Depth	Height
750 / 900 1200 / 1500	750	900

Unit : mm
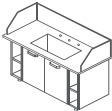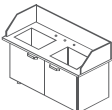
Wall (Right / Doule)

PB body PUR edging · H-STD-1500 / H-STR-1500
Steel body · H-STD-1500S / H-STR-1500S

Width	Depth	Height
1500	750	900

Unit : mm

General description		Model No.	Type	Basic		Option
Island type		H-STS H-STS-S	Body	P.B	Steel	/
			Worktop	Epoxy		Phenolic laminate
			Splashback	Polycarbonate 8mm / One side		Tempered safety glass 8mm / Three side
		H-STF H-STF-S	Sink bowl	Epoxy		/
			Water tap	One way water faucet & Mixing faucet		Eyewash
			Side door	Open		1 Door, 2 Door
Wall type		H-ST H-ST-S	Body	P.B	Steel	/
			Worktop	Epoxy		Phenolic laminate
			Splashback	Polycarbonate 8mm / One side		Tempered safety glass 8mm / Three side
			Sink bowl	Epoxy (Center)		Epoxy (left or right)
			Water tap	One way water faucet & Mixing faucet		Eyewash
			Side door	Open		1 Door, 2 Door
		H-STR-1500 H-STR-1500S	Body	P.B	Steel	/
			Worktop	Epoxy		Phenolic laminate
			Splashback	Polycarbonate 8mm / One side		Tempered safety glass 8mm / Three side
		H-STD-1500 H-STD-1500S	Sink bowl	H-STR : Right / H-STD : Double		H-STR : Left
			Water tap	One way water faucet & Mixing faucet		Eyewash
			Front or side door	H-STR : Open / H-STD : None		/

SINK BOWL

Polypropylene

Basic

Provides exceptional physical and chemical resistance. Required in medium to heavy –duty laboratory environments.

Epoxy resin

Option

Smooth and light material, excellent chemical resistance including hydrofluoric acid. Easy to maintain and clean.

Stainless steel

Option

Two quality options for stainless steel (304 and 316).
Excellent mechanical properties, corrosion resistance, heat and cold temperature resistance.

UNDERBENCH & CABINET

Cabinets W/ Drawers

Model No.			Dimensions (WxDxH mm)	Material		
				Exterior	Interior	Interior (Option)
PB body PVC edging	3 drawers	HR−MD3−450	450 x 490 x 800	PB body PUR edging	P.V.C	P.B
		HR−MD3−600	600 x 490 x 800			
	4 drawers	HR−MD4−450	450 x 490 x 800			
		HR−MD4−600	600 x 490 x 800			
Steel	3 drawers	HR−MDS3−450	450 x 490 x 800	STEEL	STEEL	P.V.C
		HR−MDS3−600	600 x 490 x 800			
	4 drawers	HR−MDS4−450	450 x 490 x 800			
		HR−MDS4−600	600 x 490 x 800			

Cabinets W/ Doors

Model No.		Dimensions (WxDxH mm)	Material	
			Exterior	Interior
PB	HR−MC−450	450 x 490 x 800	PB body PUR edging	PB body PUR edging
	HR−MC−600	600 x 490 x 800		
	HR−MC−750	750 x 490 x 800		
	HR−MC−900	900 x 490 x 800		
	HR−MC−1050	1050 x 490 x 800		
	HR−MC−1200	1200 x 490 x 800		
Steel	HR−MCS−450	450 x 490 x 800	STEEL	STEEL
	HR−MCS−600	600 x 490 x 800		
	HR−MCS−750	750 x 490 x 800		
	HR−MCS−900	900 x 490 x 800		
	HR−MCS−1050	1050 x 490 x 800		
	HR−MCS−1200	1200 x 490 x 800		

ACCESSORIES

BROEN-LAB DIN (UNI)

2 Way Mixing Water Faucet
Model No. **WB35-3552E**

1 Way Water Faucet
Model No. **WB34-0108**

3 Way Water Faucet
Model No. **WB33-0108**

DI Water Faucet
Model No. **WB33-0309**

1 Hole Faucet
Model No. **WKS-0205**

Cobra Faucet
Model No. **WWZ-3810**

EyeWash (Single spray head)
Model No. **EWB-106-003**

- **Capacity :** 7L / min
- **Pressure(Min) :** 1.5 Bar
- **Anti-corrosive epoxy coating**
- **Certified to DIN EN 246**

EyeWash (Double spray head)
Model No. **EWB-212-009**

- **Capacity :** 14L / min
- **Pressure(Min) :** 1.5 Bar
- **Anti-corrosive epoxy coating**
- **Certified to DIN EN 246**

Emergency Shower
Model No. **EST-1S30-380**

- Materials
  - Pipes in galvanised steel
  - Brass fittings
  - Aluminum base and pedals
  - Anti-corrosion epoxy paint

Peg Board
Model No. **PDKA-213**

- Materials
  - High impact polystyrene

(4mm HLPS, 72EA)

Width	Depth	Height
450	110	630

TOF

Overhead
Service Carrier

PIN UP
DESIGN AWARDS

Ceiling type · H−OC−Width
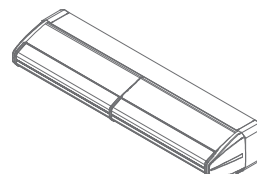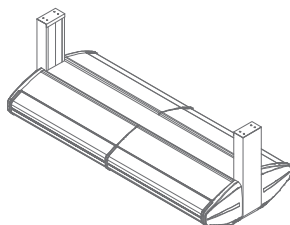
Unit : mm

Width	Depth	Height
900/1200/1500/1800	705	285

Wall type · H−OS−Width

Unit : mm

Width	Depth	Height
900/1200/1500/1800	425	285

Utility Combinations

Depending on the requirements, several units can be attached together allowing an extensive possibility of services combination. Extraction arm can be incorporated in this configuration.

Add and Remove Utilities

Thanks to the easy detachable and interchangeable service panel system, utilities can be added or removed at any time.

Maintenance Operations

Wing upper lid is designed to be easily opened and allow fast and cheap maintenance operations.
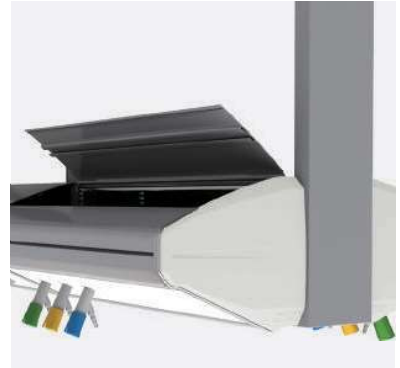
Ceiling type

Wall type
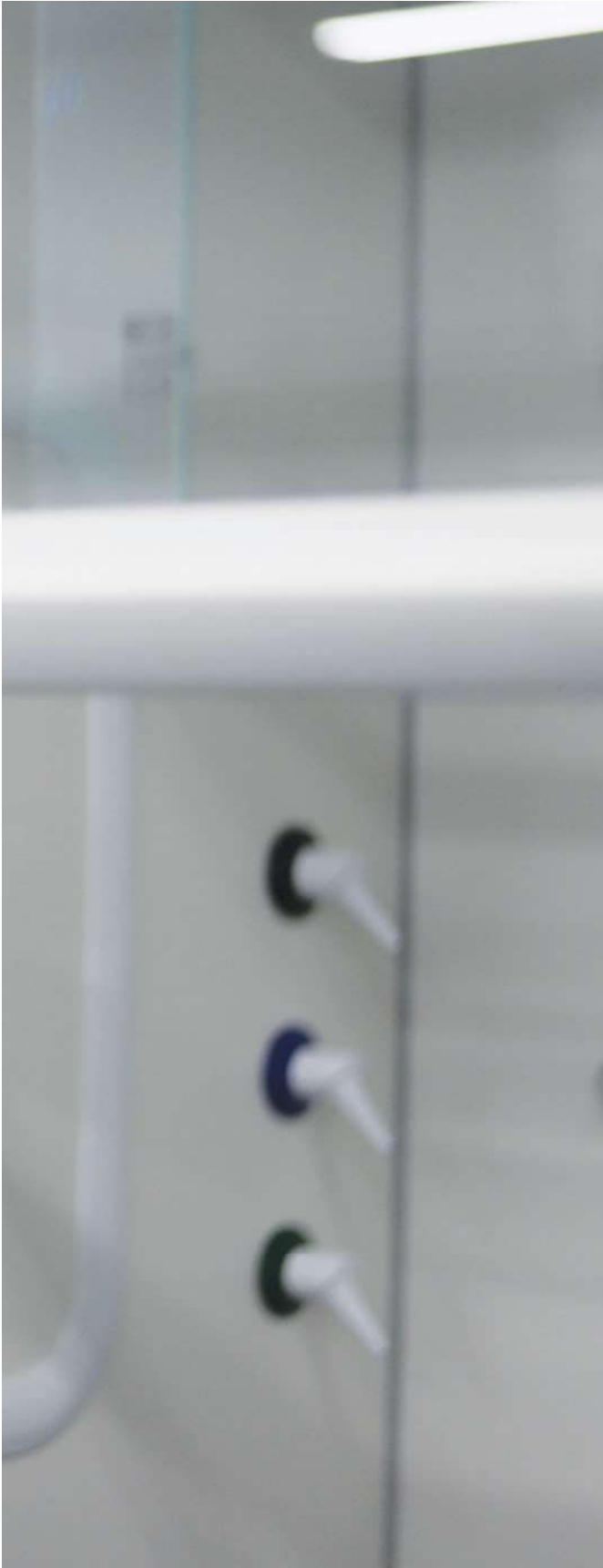
Exhaust System
Products

ASHRAE

EN 14175

ASHRAE 110–2016

Fume Hood

The Fume hood is an essential equipment to secure the safety of the researchers as well as the laboratory environment from the harmful substances and contaminated gases. CHC Fume Hoods have been gradually improved to comply with the strictest international standards, such as ASHRAE 110-2016 and EN-14175. The highly detailed technical construction and quality of the materials used ensure safety of the end user at any time.

※ **Prime Fume hood**

SAFETY

Safety sash lock system

ELB (IP 54)

Socket & Valve

Raised edge worksurface

Airfoil

ECO

Combination sash

VAV system

Exhaust collar (DN 250)

Auto-close sash system

LED Lamp

CONVENIENCE

Various fittings & Valves

Built in under bench cabinet

Scaffold support (STS stand)

Touch pad monitor

Structural Features

Exhaust duct collar (DN250)

Baffle

Combination sash

ELB (IP54)

Utility valve

Scaffold support

Access panel

Safety sash lock

Airfoil

⚠ SAFETY

• AirFoil

Prime type	Basic type

6 inch (150mm)
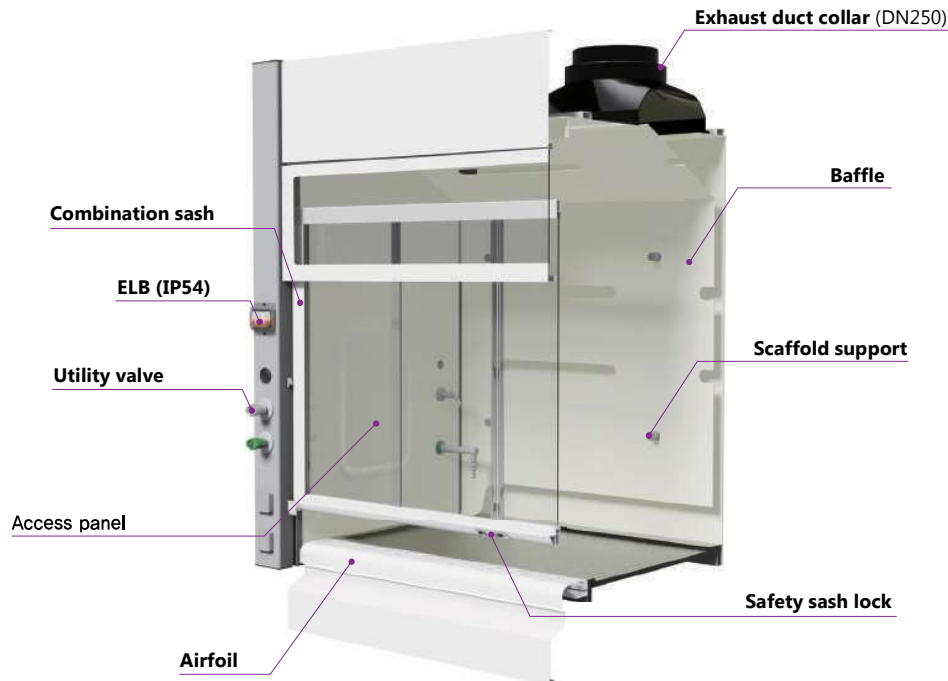
Enables smooth flow over the work surface to prevent turbulent top levels turbulences
Prime fume hood models include a 6 inch grid that improves safety and collects potential spillages.

• Sash Lock

The Fume Hood sash is mechanically stopped at 500mm height to prevent the exposure to harmful substances or unexpected explosions. The sash stop can be easily removed using just one hand.

① Sash Lock

Sash lock is conveniently positioned on the sash frame.

② Sash Stop

If sash needs to be opened more than 500mm, push the lock when opening.

• Dished work surface

Dished Worktop

SAFETY

(Protection of Pollutants)

Flat Worktop

DANGER

(Spillage of Pollutants)

Raised edge worktop molded with seamless joints prevents spillages and avoids exposure to harmful gases and vapours.

• ELB(IP54)

Easy and safe to handle due ti its frontal location, using the IP54 grade cover.

• Safety Gas Valve

Push-turn type valve prevents misuse and increases to ensure safety.

⟨ ⟩ ECO

• Combination Sash

⟨ SASH OPTION 1 ⟩
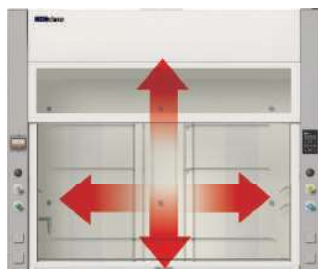
⟨ SASH OPTION 2 ⟩

[SASH OPTION 1]
One piece sash for full visibility.

[SASH OPTION 2]
Sliding windows to allow easy and safe internal operations without opening up the sash.

• PIR SENSOR(Option)

PIR SENSOR

FRESNEL LENS

DETECTING AREA
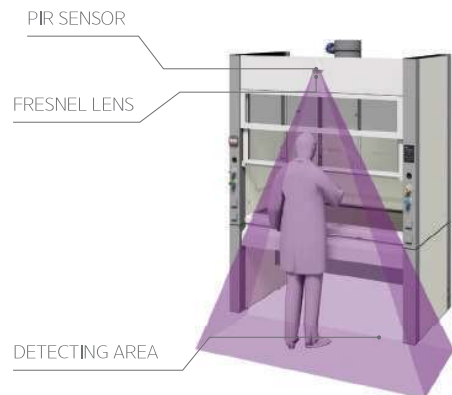
A PIR sensor, equipped with infrared detection rays, connected to the motorized sash, detects the movements of the users and automatically closes the sash when nobody is using the Fume Hood.
Setting time for automatic door closing can be customized. This function reduces energy consumption and improves safety.

CONVENIENCE

• Scaffold Holder
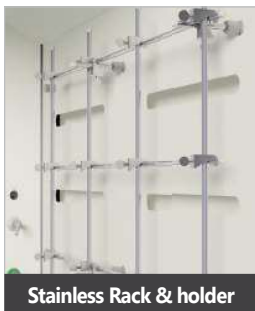
Stainless Rack & holder
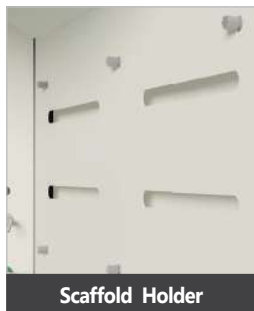
Scaffold Holder

PP scaffold support with strong chemical resistance. Holds the Stainless steel Rack firmly and prevents corrosion.
Easily dismantled for cleaning operations or to be replaced when needed.

• Built-In Cabinets

Depending on the laboratory environment, built-in safety cabinets or standard cabinets can be installed under the fume hoods, maximizing space utilization and improving safety.

• Fume Hood Montior
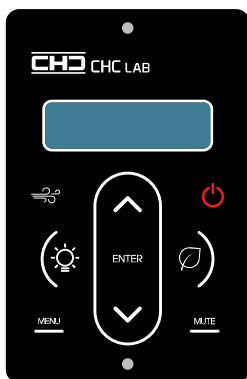
[CHC CONTROLLER KEY FEATURES]

- Adjust damper opening or fan speed (inverter option) depending on the position of the sash to keep constant exhaust volume.
- Face velocity display
- Emergency Exhaust System that opens the damper completely, independently of sash position, allowing maximum exhaust of harmful substances.
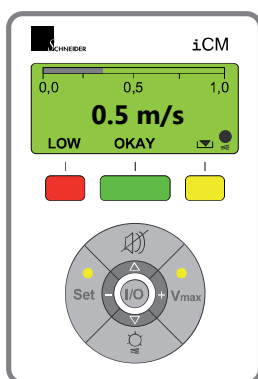
[SCHNEIDER CONTROLLER KEY FEATURES –OPTION]

- Extensive applications module.
- VAV sensor module can be installed to automatically control face velocity.
- Automatic sash control via PIR sensor module. Possibility to Set maximum sash opening.
- Sash closing automatically when nobody is using the fume hoods to save energy and ensure safety.
- EN 14175 complying

VAV SYSTEM

Lab Safety & Energy saving

Exhaust air

M

Supply air

iCM

0.5 m/s

Set I/O Vmax

Air flow Sensor

Input

VAV Controller

Control

Damper
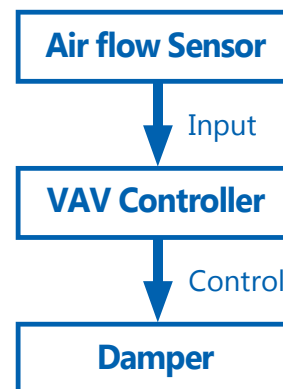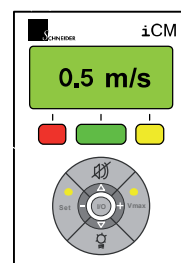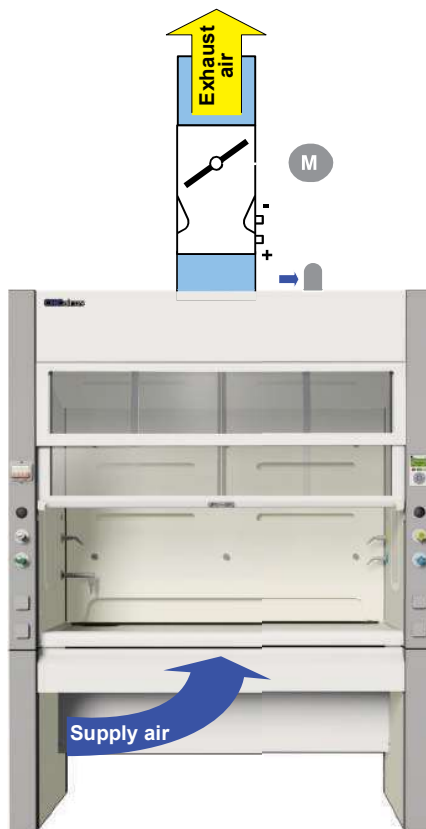
Variable air volume

The automatic face velocity control, maintains constant face velocity regardless of the sash position.
It ensures the optimal fume hood performance and energy efficiency by reducing the air flow rate when the sash is closed.

Constant air volume

Depending on the sash position, the face velocity of the fume hood will change. It exhausts the same air volume at all times providing lower performance as the face velocity varies.

ASHRAE 110-2016
EN 14175

EN 14175

Face velocity test

Inflow air velocity is measured in sash opening positions. 20%, 50% and 100% (Avg inflow velocity 0.45±0.05m/s)

Smoke visualization test

By generating smoke at the fume hood front section, it checks the presence of vortex and turbulence.

Trace gas containment test

Tests gas leakage by gas sensor. (less than 0.1ppm)

PRODUCT LIST

PRIME
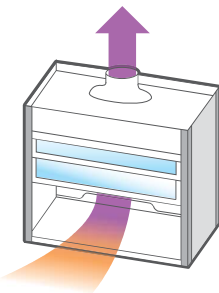
Airflow

● Room air
● Contaminanted air under negative pressure

Model No.		A-PR				
		1200	1500	1800	2100	2400
Dimensions (mm)	Width	1200	1500	1800	2100	2400
	Depth	950				
	Height	2360				
Color		White & Gray				
Sash type		Combination type				
Safety door stop		P.P				
Sash material		Tempered safety glass 5mm				
Cabinet		Option				
Cupsink		1 unit				
External material		Phenolic laminate 6mm				
Chamber material		Phenolic laminate 4mm				
Support stand		50 x 50 x 1.4mm sq pipe, epoxy powder coated				
Worktop		Epoxy resin 25mm (made in korea)				
Power receptacle		Euro type 4 units (International type available)				
Lamp		LED, 1 unit			LED, 2 units	
Controller		SCHNEIDER(IM50-monitering display)				
Earth leakage circuit breaker		20A, 2 units				
Electrical box		Option				
N₂ valve		1 unit				
Water valve		1 unit				
Air valve		Option				
Collar (∅)		P.P / 250				
Blower		Option				
Option		Worktop : Ceramite / Window safety film / Electrical box / STS Rack Controller : CHC LAB / Additional utility valves / Cabinet (Under bench) / Blower				

VAV type
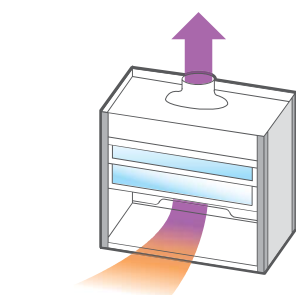
Airflow

- ● Room air
- ● Contaminanted air under negative pressure

Model No.		A-VA				
		1200	1500	1800	2100	2400
Dimensions (mm)	Width	1200	1500	1800	2100	2400
	Depth	817				
	Height	2360				
Color		White & Gray				
Sash type		Combination door type				
Safety door stop		P.P				
Sash material		Tempered safety glass 5mm				
Cabinet		Option				
Cupsink		1 unit				
External material		Phenolic laminate 6mm				
Chamber material		Phenolic laminate 4mm				
Support stand		50 x 50 x 1.4mm sq pipe, epoxy powder coated				
Worktop		Epoxy resin 25mm (made in korea)				
Power receptacle		Euro type 4 units (International type available)				
Lamp		LED, 1 units			LED, 2 units	
Controller		CHC LAB				
Earth leakage circuit breaker		20A, 2 units				
Electrical box		Option				
N₂ valve		1 unit				
Water valve		1 unit				
Air valve		Option				
Collar (∅)		P.P / 250				
Blower		Option				
Option		Worktop : Ceramite / Window safety film / Electrical box / STS Rack Controller : SCHNEIDER / Additional utility valves / Cabinet (Under bench) / Blower				

Basic type
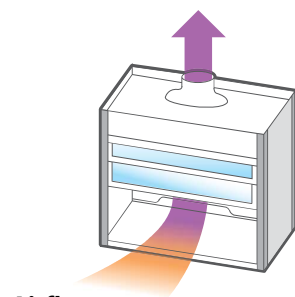
Airflow

● Room air
● Contaminanted air under negative pressure

Model No.		A-BY				
		1200	1500	1800	2100	2400
Dimensions (mm)	Width	1200	1500	1800	2100	2400
	Depth	950				
	Height	2360				
Color		White & Gray				
Sash type		Vertical type				
Safety door stop		P.P				
Sash material		Tempered safety glass 5mm				
Cabinet		Option				
Cupsink		1 unit				
External material		Phenolic laminate 6mm				
Chamber material		Phenolic laminate 4mm				
Support stand		50 x 50 x 1.4mm sq pipe, epoxy powder coated				
Worktop		Epoxy resin 25mm (made in korea)				
Power receptacle		Euro type 4 units (International type available)				
Lamp		LED, 1 units			LED, 2 units	
Controller		On / Off switch (Lamp & Blower)				
Earth leakage circuit breaker		20A, 2 units				
Electrical box		Option				
N₂ valve		1 unit				
Water valve		1 unit				
Air valve		Option				
Collar (∅)		P.P / 250				
Blower		Option				
Option		Worktop : Epoxy / Window safety film / Electrical box / STS Rack Controller : CHC LAB / Additional utility valves / Cabinet (Under bench) / Blower				

ACID type
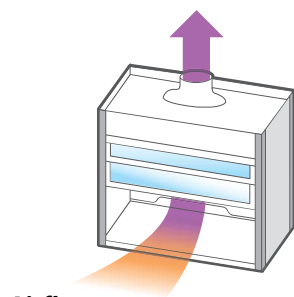
Airflow

- Room air
- Contaminanted air under negative pressure

Model No.		A‑MC				
		1200	1500	1800	2100	2400
Dimensions (mm)	Width	1200	1500	1800	2100	2400
	Depth	950				
	Height	2360				
Color		White & Gray				
Sash type		Vertical type				
Safety door stop		P.P				
Sash material		Tempered safety glass 5mm				
Cabinet		Option				
Cupsink		1 unit				
External material		Phenolic laminate 6mm				
Chamber material		One piece welded pp 4mm				
Support stand		50 x 50 x 1.4mm sq pipe, epoxy powder coated				
Worktop		PVC / P.P				
Power receptacle		Euro type 4 units (International type available)				
Lamp		LED, 1 units			LED, 2 units	
Controller		On / Off switch (Lamp & Blower)				
Earth leakage circuit breaker		20A, 2 units				
Electrical box		Option				
N₂ valve		1 unit				
Water valve		1 unit				
Air valve		Option				
Collar (∅)		P.P / 250				
Blower		Option				
Option		Worktop : Epoxy / Window safety film / Electrical box / TS Rack Controller : CHC LAB / Additional utility valves / Cabinet (Under bench) / Blower				

35

Table top type
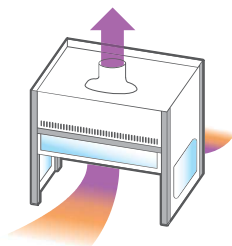
Airflow

- Room Air
- Contaminanted air under negative pressure
- Fresh Air

Model No.		A-MT			
		1800	2400	3600	4200
Dimensions (mm)	Width	1800	2400	3600	4200
	Depth	1500			
	Height	1600			
Color		White & Gray			
Sash type		Vertical type			
Sash material		Tempered safety glass 5mm			
Chamber		1 unit	1 or 2 units	2 units	2 units
External material		Steel 1.2t (Epoxy powder coated)			
Chamber material		Phenolic laminate 6mm			
Power receptacle		Euro type 2 units (International type available)			
Lamp		2 units	4 units	Downlight / 8 units	
Controller		On / Off switch (Lamp & Blower)			
Electrical box		220V single phase / 20A, 2 units			
Collar (∅)		P.P / 250			
Option		Window safety film			

EXTRACTION ARM

Ensures the safety of extraction arm laboratory environment, exhausting contaminated air in a specific local area.

Ø100

Ø75

630

1500

530

Features

360 Degree swing

The head of the arm hood can be rotated 360 degrees.

Arm holder

The "O ring" ensures stability and prevents gas leaking.

Damper

Manually adjustable damper depending on users needs.

Unit : mm / Ø

Extraction ARM & Bracket

PP

A-AD-PP

PET

A-AD-PE

Acrylic

A-AD-BOX

Steel

CLE-006 | Ceiling type
300 X 300 X 2.0

Steel

CLE-007-A/B/C | Roof type
200 X 220 X 250 / 500 / 700

Steel

CLE-008 | Wall type
200 X 220 X 330

PP

CLE-009-A/B/C | Extension type
300 X 300 X 300 / 400 / 500

Movable Extraction ARM

C-FB-500	A-AFB-PP	A-AFB-PE	A-AFB-BOX
Filter box 500 X 500 X 865mm	**Arm hood** Ø75 X 1300mm Dome : PP	**Arm hood** Ø75 X 1300mm Dome : PET	**Acrylic box** 500 X 450 X 400mm
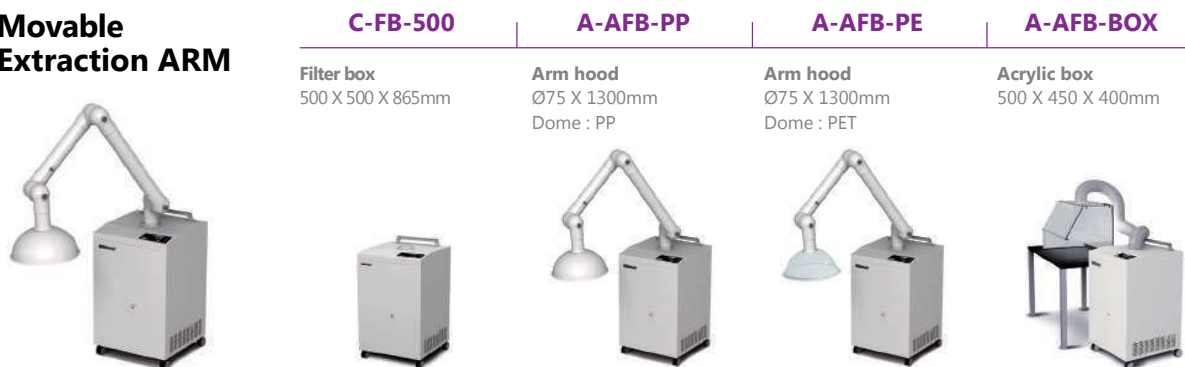
ERGONOMIC
LAB CHAIR

Bimos European laboratory chairs provide maximum comfort due to their ergonomic design and as well as long lasting use due to their heavy duty construction.

EMAS GMP DIN 68877 GS bimos

Functions

Seat height adjustment

Seat swivel range of 20° to the left and right
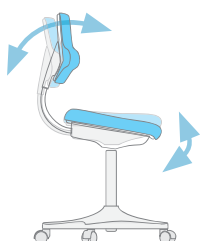
Auto-motion technology

Seat height adjustment
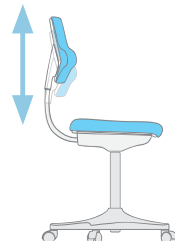
Backrest height adjustment

Labster

Gray White

bimos

Order No.
Black : 9103-2571
White : 9103-6907
Gray : 9103-6911

Fin

Black Gray

bimos

Order No.
Black : 9144-2000
Gray : 9144-2002

Cleanroom Plus

Black

bimos

Order No.
Black : 9181-2571

Lab Stool (Backrest)

Black

Model No.
Black : CLF-932

Lab Stool

Black

Model No.
Black : CLF-925

FRP (Clean Room Only)

White

Model No.
White : Decois-8170

STORAGE
CABINET

Easy maintenance and improved
resistance to acid attacks.

PIN UP
DESIGN AWARDS

CE

Chemical and Corrosion Resistance

Eco-friendly E0 grade PB internal shelves that
ensure better resistance thanks to the phenolic
laminate finish.

Triple Filtering System

CHC Hybrid Filter is economical because
it removes acid, basic and organic gas with
one filter.
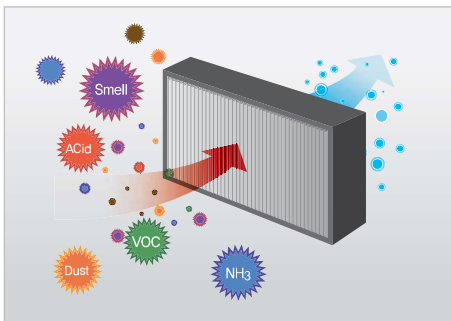
CLEAN STORAGE CABINET

Closed type

PIN UP DESIGN AWARDS

CE

Airflow
- Hybrid filtered air
- Contaminanted air

		C-CLO-800F	C-CLO-800I
Dimensions	WxDxH(mm)	800 x 500 x 2000	
Material	Inner / Outer	Inner : Phenolic laminate 4t / Outer : Phenolic laminate 6t	
	Door	Acrylic(Brown color), 5t	
Performance	Wind speed (m/s)	0.47	
	Noise (dB)	46 dB/A	
	Lamp	LED Lamp DC 24V / 18W / 0.75A	
	Fan	AXIAL Fan 33W	
	Filter	CHC Hybrid filter(HEPA+기본)	Ion Cluster
	Filter replacement cycle	Average 6 months	
Electric	Power supply	220V or 110V / 50Hz, 60Hz	
	Power consumption	50W	52W
Capacity	Capacity(ℓ)	Top : 40 / Bottom : 60 (Based on 3 shelves)	
	Option	· Additional shelf	
Design		**C-CLO-800F** 800 500 2000 <Front view> <Side view>	**C-CLO-800I** 800 500 2000 <Front view> <Side view>
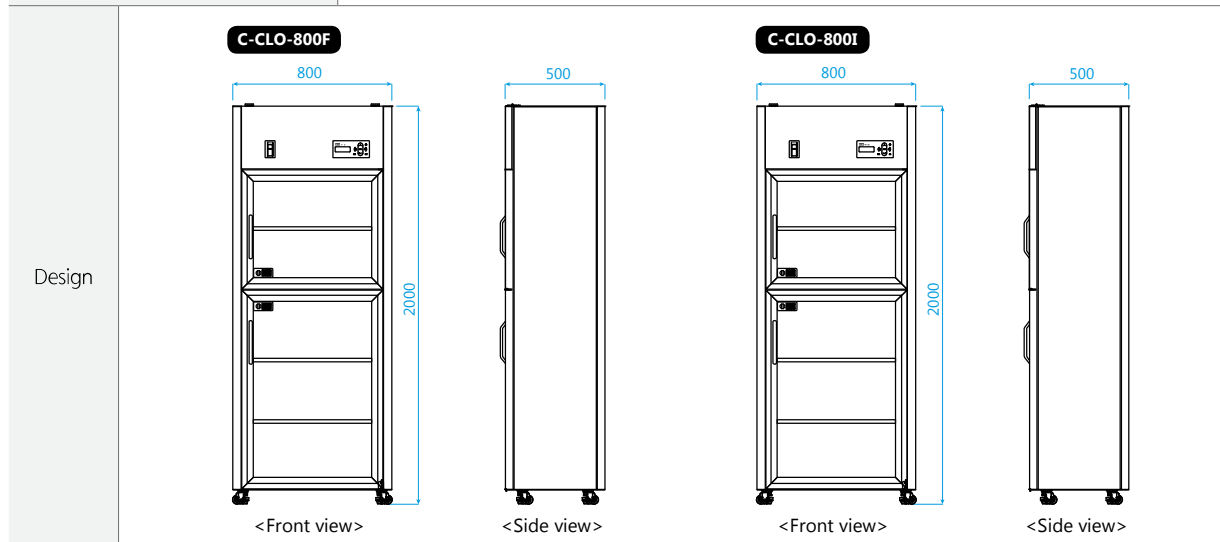
Exhaust type

Airflow
- Hybrid filtered air
- Contaminanted air

Category		C-EXH-800B	C-EXH-800D
Dimensions	WxDxH(mm)	800 x 500 x 2000	
Material	Inner / Outer	Inner : Phenolic laminate 4t / Outer : Phenolic laminate 6t	
	Door	Acrylic(Brown color), 5t	
Performance	Wind speed (m/s)	0.45	
	Noise (dB)	46 dB/A	
	Lamp	LED Lamp DC 24V / 18W / 0.75A	
	Fan	Centrifugal fan 28W	X
	Filter	Pre Filter	
Exhaust	Exhaust pipe(∅)	75	
Electric	Power supply	220V or 110V / 50Hz, 60Hz	
	Power consumption	40W	23W
Capacity	Capacity(ℓ)	Top : 40 / Bottom : 60 (Based on 3 shelves)	
	Option	· Additional shelf	
Design			

C-EXH-800B
800 / 500 / 2000
<Front view> <Side view>

C-EXH-800D
800 / 500 / 2000
<Front view> <Side view>

41

STORAGE CABINET

Unit : mm

Storage Cabinet
Acrylic Door Type
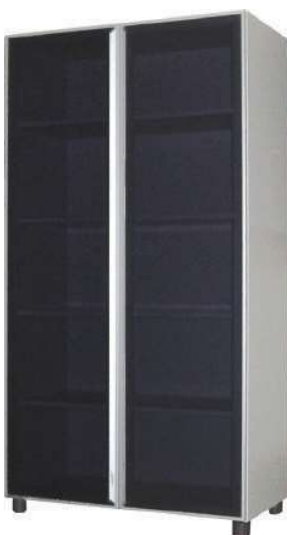
Width	Depth	Height
600 / 900	450	1800

H-ACAB-600　　　**H-ACAB-900**

Width	Depth	Height
600 / 900	450	1800 / 2400

H-ACAB-600C　　　**H-ACAB-900C**

Storage Cabinet
Glass Door Type

Width	Depth	Height
1200 / 1500 / 1800	450	1800
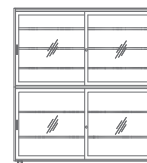
H-CAB-1200　　　**H-CAB-1500**　　　**H-CAB-1800**

Width	Depth	Height
1200 / 1500 / 1800	450	1800
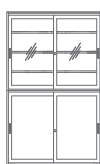
H-CAB-1200D　　　**H-CAB-1500D**　　　**H-CAB-1800D**
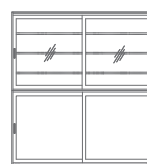
SAFETY CABINET

Unit : mm

Safety Storage Cabinet
Double Door

Width	Depth	Height
1194	615	1954

Q90-195-120-WDAC

· Safety Label

Safety Storage Cabinet
Single Door

Width	Depth	Height
600	615	1954

Q90-195-060-WDAC

· Safety Label

Combi Safety Storage Cabinet

Width	Depth	Height
1200	600	1968

K90-196-120-MF-FWAS

· Safety Label

Left   Right

bioall
Products

BIOSAFETY CABINET

Ensuring perfect containment provides protection for researchers, samples and environments. The high-quality materials used and the modern design make our product one of the best in the market.

High efficiency **HEPA Filter**

LCD Digital Display Panel
(Microprocessor control)
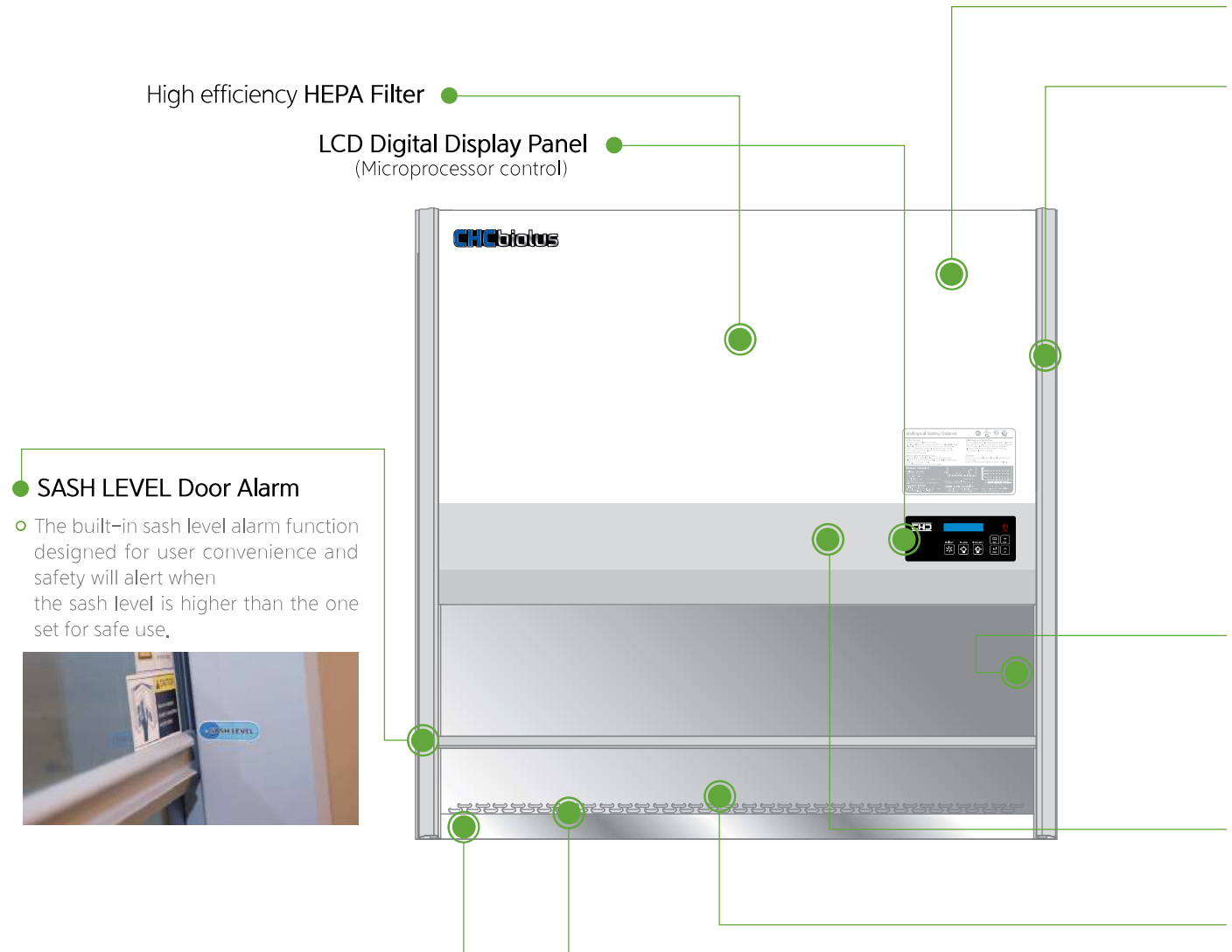
SASH LEVEL Door Alarm

o The built-in sash level alarm function designed for user convenience and safety will alert when
the sash level is higher than the one set for safe use.

Intake Grille & Armrest

o Wide Intake grille and air holes eliminate the risk of cross contamination, both inside and outside the workbench.

o Wide armrest ensures ergonomic work position.

Dished Work Surface

o The raised perimeter single-plate workbench prevents liquid spillage.

o The work surface is easily removeable for easy cleaning and maintenance.

● High Performance Blower

○ Stable airflow guarantees low noise and vibration-free operation performance with optimal balance and reduced energy consumption.
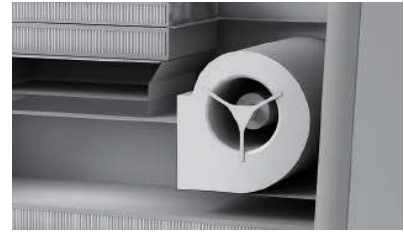
● Ergonomic Design And Double Junction Glass

○ The 10-degree tilted ergonomic design of the sash reduces glare allowing a full clear view of the internal chamber.

○ 6.38mm laminated double glazing glass(EN 12469 and NSF / ANSI 49 standards certified product)

● Utilities

○ The differential pressure gauge is checked in real-time inside the plenum.

○ Basically includes one utility valve as standard, and can be installed up to four.

○ The electric sockets provided as standard are 220V with safety covers, located on the left and right sides. They can be changed to 110V upon client's.

● Non-Filtered Air Protection Hole™

○ Prevents the inflow of contaminated room air into the internal chamber.

● Threshold structure & UV light Leak-free guard

○ Armrest and threshold structure ensures that the intake grille's airflow is not obstructed by the user, Completely blocking the UV leakage into the floor gap when the door is closed and the UV lamp is turned on.

Control System

A single control system enables all BSC operation control such as power ON-OFF, blower ON-OFF, lamp ON-OFF, administrator password setting, timer setting (including UV), warm-up and residual air removal time setting.

Menu / Input Cancel

Input Settings / Confirm

Change Setting Value

```
I : 0.53MS    20C
              60HZ
```

MENU   UP
ENTER   DOWN

BLOWER   LAMP   UV LAMP   SOCKET   POWER

● LCD Digital Control Panel

○ Initial screen displays the incoming wind speed, room temperature and electrical status.

○ Alarms functions : Filter to be replaced, indoor temperature too high, electrical failure, filter and UV lamp usage.
All alarms can be muted when pushing the MUTE button.

○ Warm up timer can be set before work, Post purge can be set after work, and password protection is available for important functions such as administrator mode and settings, to increase safety of operation.

○ Easy start sensor is installed to open and close the sash so that the blower and the fluorescent lamp turn on and off automatically

● Configurable Features On Screen

```
ADMIN Password
    0000
```
Password setting

```
1. Setting
2. Timer
```
Timer setting

```
1) Warm Up Timer
2) Post Purge
```
Warm up time and post purge

```
3) UV Timer
4) Alarm Timer
```
UV and alarm timer setting

```
4) Filter Expire
    08000 Hour
```
Filter usage time

Paper Trap

A paper Trap is installed to prevent external objects to fall on the work surface or being sucked by the blower into the HEPA filter.

HEPA filter eliminates the fine particles of 0.3㎛ by 99.997%

Filter sheet

Filter frame

Continuous sheet of filter medium

■ Polluted Air
■ Clean Air
● Particle

Inertial Impaction | **Interception** | **Diffusion**

AIR FLOW

(<100 nm) | (>1 micron) | (<0.1 μm)

Filtering efficiency rate is higher than 99.997% based on the minute particle of 0.3㎛, and this filtering efficiency is enhanced at the particles below and above 0.3㎛ by three principles, inertial impaction, interception and diffusion.

Collection Efficiency (%)

Overall Efficiency

(Theoretical Filter Efficiency vs Particle)

99.97

Interception

Diffusion

Impaction

0.01 | 0.1 | 1.0 | 10.0

Particle Diameter (microns)

※ Graph that shows particle interception efficiency of HEPA filter.

Filteration System

Filtering system consists of one Supply filter and one Exhaust filter.
Internationally recognized HEPA filter is applied to ensure performance.

Advantages

Low pressure drop
Higher flow rate
Longer operating life
Individually tested according to EN 1822

Description

Frame	Anodized extruded aluminium
Gasket	Polyurethane endless at inlet
Media	Glass fiber paper
Separator	Hot–melt beads
Sealant	Polyurethane
MPPS efficiency	H14≥ : 99.995%
EN 1822 filter class	H14

PRODUCT LIST

Class II Type A2 | CHC-111A2

Airflow
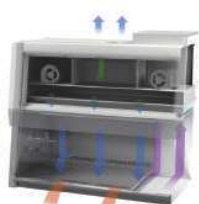
- Room air
- HEPA filtered air
- Contaminated air under negative pressure
- Contaminated air under positive pressure

Model No.		CHC-111A2
		04
Dimensions (mm)	Width	1340
	Depth	700
	Height	1360
Color		White & Gray
Sash		Tempered safety glass
Control panel		LCD panel
Sash level		203 mm (8inch)
External material		SPCC / AL with epoxy powder coated
Chamber material		SS 304
Certification		X
Avg. inflow velocity		0.25 ~ 0.3 m/s
Avg. Downflow velocity		0.35 m/s
Filter efficeincy		HEPA filter > 99.997% at 0.3μm
Noise level (dB A)		< 62
Nominal exhaust volume		312 CMH
Power supply		220V, 50/60Hz (110V, 50/60Hz available)
FL lamp		36W X 2 units
UV lamp		30W X 1 unit
Power receptacle		U.S type or Euro type (2EA)
Utility valve		Vacuum (1 unit)
Drain valve		Included
Differential pressure gauge		Included
Exhaust airflow sensor		Included
Option		Airtight damper, Hard exhaust connection, Valves(gas, air, water), IV bar

Support stand	Support frame (Leveling caster)	Height / mm	705
			805

Class II Type A2 | CHC-222A2

Airflow

- Room air
- HEPA filtered air
- Contaminated air under negative pressure
- Contaminated air under positive pressure

Model No.		CHC-222A2			
		03	04	05	06
Dimensions (mm)	Width	1060	1385	1690	1995
	Depth	810			
	Height	1590			
Color		White & Gray			
Sash		6.38mm Laminated glass			
Control panel		LCD panel			
Sash level		203 mm (8inch)			
External material		SPCC / AL with epoxy powder coated			
Chamber material		SS 304			
Certification		CE	EN, CE	CE	EN, CE
Avg. inflow velocity		0.53 m/s (105fpm)			
Avg. Downflow velocity		0.35 m/s (70fpm)			
Filter efficeincy		HEPA filter > 99.997% at 0.3μm			
Noise level (dB)		< 64			
Nominal exhaust volume		358 CMH	484 CMH	602 CMH	720 CMH
Power supply		220V, 50/60Hz (110V, 50/60Hz available)			
FL lamp		36W X 2 units			
UV lamp		30W X 1 unit			
Power receptacle		U.S type or Euro type (2EA)			
Utility valve		Vacuum (1 unit)			
Drain valve		Included			
Differential pressure gauge		Included			
Exhaust airflow sensor		Included			
Option		Airtight damper, Hard exhaust connection, Valves(gas, air, water), IV bar			

Support stand	Support frame (Urethane caster)	Height / mm	680
			730

※ SPCC : commercial quality cold rolled steel

Class II Type A2 | CHC-777A2

Airflow

NSF 49 · E 323747 · KS J 0012

- Room air
- HEPA filtered air
- Contaminated air under negative pressure
- Contaminated air under positive pressure

Model No.		CHC-777A2			
		03	04	05	06
Dimensions (mm)	Width	1060	1385	1690	1995
	Depth	810			
	Height	1590			
Color		White & Gray			
Sash		6.38mm Laminated glass			
Control panel		LCD panel			
Sash level		203 mm (8inch)			
External material		SPCC / AL with epoxy powder coated			
Chamber material		SS 304			
Certification		UL, KS	NSF, UL, KS	UL, KS	NSF, UL, KS
Avg. inflow velocity		0.53 m/s (105fpm)			
Avg. Downflow velocity		0.35 m/s (70fpm)			
Filter efficeincy		HEPA filter > 99.997% at 0.3μm			
Noise level (dB A)		< 64			
Nominal exhaust volume		358 CMH	484 CMH	602 CMH	720 CMH
Power supply		220V, 50/60Hz (110V, 50/60Hz available)			
FL lamp		36W X 2 units			
UV lamp		30W X 1 unit			
Power receptacle		U.S type or Euro type (2EA)			
Utility valve		Vacuum (1 unit)			
Drain valve		Included			
Differential pressure gauge		Included			
Exhaust airflow sensor		Included			
Option		Airtight damper, Hard exhaust connection, Valves(gas, air, water), IV bar			

Support stand	Support frame (Urethane caster)	Height / mm	738
			838

Class II Type B2 | CHC-888B2

Airflow

NSF 49 · E 323747

- Room air
- HEPA filtered air
- Contaminated air under negative pressure

Model No.		CHC-888B2	
		04	06
Dimensions (mm)	Width	1385	1995
	Depth	810	
	Height	1825	
Color		White & Gray	
Sash		6.38mm Laminated glass	
Control panel		LCD panel	
Sash level		203 mm (8inch)	
External material		SPCC / AL with epoxy powder coated	
Chamber material		SS 304	
Certification		NSF, UL	
Avg. inflow velocity		0.53 m/s (105fpm)	
Avg. Downflow velocity		0.32 m/s (65fpm)	0.30 m/s (60fpm)
Filter efficeincy		HEPA filter > 99.997% at 0.3μm	
Noise level (dB A)		< 64	
Nominal exhaust volume		1390 CMH	2092 CMH
Power supply		220V, 50/60Hz (110V, 50/60Hz available)	
FL lamp		36W X 2EA	
UV lamp		30W X 1EA	
Power receptacle		U.S type or Euro type (2 units)	
Utility valve		Vacuum (1 unit)	
Drain valve		Included	
Differential pressure gauge		Included	
Duct (∅)		250 / Option(200/300)	
Hard exhaust connection		Included	
Airtight damper		Included	
Exhaust airflow sensor		Included	
Option		Valves(gas, air, water), IV bar	

Support stand	Support frame (Urethane caster)	Height / mm	738
			838

※ SPCC : commercial quality cold rolled steel

Class II Type A2
NB-704/706

Bioall's Bio Safety Cabinet ensures perfect containment providing protection for researchers, samples and environment. The high-quality materials used and the modern design make our product one of the best in the market.

30% Exhaust

Air Flow
- Room Air
- ULPA filtered air
- Contaminated air under negative pressure
- Contaminated air under positive pressure

High efficiency ULPA Filter

High performance blower (ECM Motor)
Reduced noise / energy consumption with optimal balance of stable airflow (DC motor)

LED Lamp
Energy Saving / Extended Lifetime

LCD Touch control panel
Easy to operate with the constant voltage touch screen

One piece design
Anti-germ seamless stainless steel chamber with rounded corners

E 500630   KS J 0012

			NB-704	NB-706
Dimensions (mm)	External	W x D x H(mm)	1330 x 755 x 1600	1940 x 755 x1600
	Internal	'Wx'Dx'H(mm)	1220 x 620 x 700	1830 x 620 x 700
	Color		White & Gray	
	sash		6.38mm Laminated glass	
	Control Panel		Touch Screen panel	
	Sash level (mm)		203 (8inch)	
Material	External		SPCC / Epoxy powder coated	
	Chamber		SS 304	
Performance	Certification		UL, KS J 0012	
	Avg. Inflow/Downflow Velocity		0.53 m/s (105fpm) / 0.30 m/s (60fpm)	
	Filter Efficiency		ULPA filter > 99.9999% at 0.12μm	
	Noise Level (dB A)		< 64	
	Nominal Exhaust volume		484 ㎥/h	720 ㎥/h
	Safety Alarm System		Warm-up & Post-purge, UV Lamp interlock, UV timer, UV Safety Sensor, sash Sensor	
Electricity	Power Supply		220V, 50/60Hz(Option: 110V, 50/60Hz)	
	LED lamp		15W x 2 units	
	UV Lamp / Power Receptacle		30W x 1 unit / U.S type or Euro type (2 units)	
	Power Consumption (220V/110V)		3A, 660W / 3A, 330W	4A, 880W / 4A, 440W
Valve	Utility valve		Vacuum (1 unit)	
	Drain valve assembly		Included	
Exhaust	Exhaust Airflow Sensor		Included	
Others	Differential Pressure Gauge		Included	
Options	· SS Ⅳ bar · Additional service valves (gas, air, water) · SS 316 Internal materials · Hard Exhaust connection			

Support stand	Support frame (Urethane caster)	Height / mm	675
			775

LAMINAR FLOW CABINET

Provides product protection from airborne particulates and cross contamination. Available with horizontal or vertical laminar flow, provide a HEPA-filtered environment.

Design

CLB-201 & CLB-201S

Width	1040/ 1340/ 1650/ 1960mm
Depth	742mm
Height	1230mm
Frame height (Leveling caster)	705/805mm

<Top View>

1040 / 1340 / 1650 / 1960

<Front View>

1231
565
1935 / 2035
705 / 805

<Side View>

HEPA filter

- **Polluted air**
- **Clean air**
- **Particle**

High efficiency particulate air filter.
Particles of 0.3μm (dust, bacteria, virus etc.) are removed by more than 99.99%

Differential pressure gauge
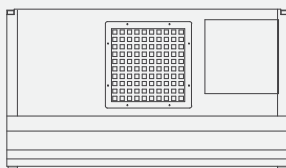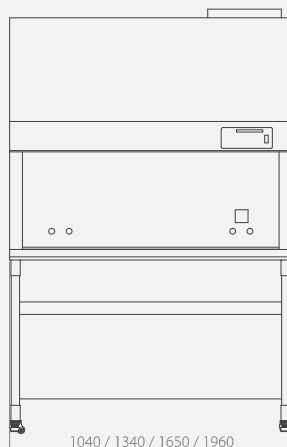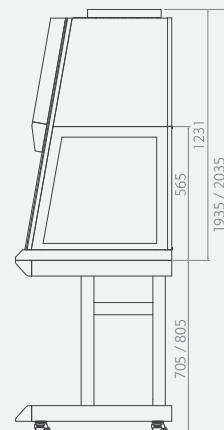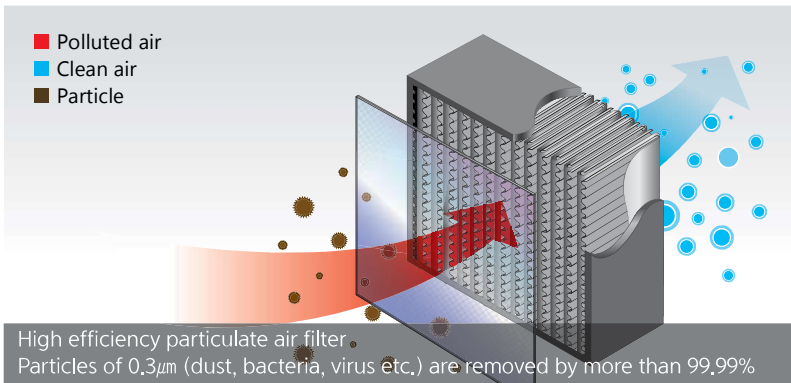
It is available to check filter replacement time.

Electrical receptacle & Utility valve

Conveniently allocated inside the work chamber. Electrical socket provided with protection cover for safety. Up to four valves can be installed.

Leveling caster

Allows easy movement of the cabinet and perfect leveling. Improves load capacity safe break function.

LCD control panel

Full controlling functions display.

Laminar flow cabinet and Biological safety cabinet differences

By usage purpose

Laminar flow cabinet provides only product protection for the researcher.
Biological safety cabinet provides personnel, product and environment protection

By airflow

Laminar flow cabinet
Clean air through HEPA filter flows inside the chamber and protects products from contaminated air.

Biological safety cabinet
70% of the airflow at workspace is re-circulated through the HEPA Filter and 30% of it is exhausted to the outside through HEPA filter, and the polluted airflow is not leaked as it is perfectly surrounded by the negative pressure.

By product

The product classified as BSL 1, harmless to human will be treated in laminar flow cabinet, and the product classified as BSL 2 or 3, high risk to human will be treated in biological safety cabinet.

Design

Ergonomic

PRODUCT LIST

Vertical Laminar Flow Cabinet

CE

Airflow

● Room air
● HEPA filtered air

Model No.		CLB-201			
		03	04	05	06
Dimensions (mm)	Width	1040	1340	1650	1960
	Depth	742			
	Height	1230			
Color		White & Gray			
Sash		Tempered safety glass (5mm)			
Control panel		LCD panel			
External material		SPCC / AL with epoxy powder coated			
Worktop		SS 304			
Certification		CE			
Avg. Downflow velocity		0.3~0.4 m/s (Variable set speed)			
Filter efficeincy		HEPA filter > 99.995% at 0.3μm			
Pre-filter		Nylon filter			
Noise level (dB A)		≤ 65			
Safety alarm		UV timer			
Power supply		220V, 50/60Hz (110V, 50/60Hz available)			
FL lamp		36W X 1EA		36W X 2EA	
UV lamp		20W X 1EA		30W X 1EA	
Power receptacle		U.S type or Euro type (1EA)		U.S type or Euro type (2EA)	
Utility valve		Vaccum(1 unit)			
Differential pressure gauge		Included			
Option		Utility hole, Valves(gas, air, water)			

Support stand	Support frame (Leveling caster)	Height / mm	705
			805

Vertical Laminar Flow Cabinet

CE

Airflow

● Room air
● HEPA filtered air

Model No.		CLB-201S			
		03	04	05	06
Dimensions (mm)	Width	1040	1340	1650	1960
	Depth	742			
	Height	1230			
Color		White & Gray			
Sash		Tempered safety glass (5mm)			
Control panel		LCD panel			
External material		SPCC / AL with epoxy powder coated			
Worktop		SS 304			
Certification		CE			
Avg. Downflow velocity		0.3~0.4 m/s (Variable set speed)			
Filter efficeincy		HEPA filter > 99.995% at 0.3μm			
Pre-filter		Nylon filter			
Noise level (dB A)		≤ 65			
Safety alarm		UV timer			
Power supply		220V, 50/60Hz (110V, 50/60Hz available)			
FL lamp		36W X 1EA		36W X 2EA	
UV lamp		20W X 1EA		30W X 1EA	
Power receptacle		U.S type or Euro type (1EA)		U.S type or Euro type (2EA)	
Utility valve		Vaccum(1 unit)			
Differential pressure gauge		Included			
Option		Utility hole, Valves(gas, air, water)			

Support stand	Support frame (Leveling caster)	Height / mm	705
			805

※ SPCC : steel plate cold commercial

Horizontal Laminar Flow Cabinet

CE

Airflow

● Room air
● HEPA filtered air

Model No.		CLB-202D			
		03	04	05	06
Dimensions (mm)	Width	1040	1340	1650	1960
	Depth	800			
	Height	1300			
Color		White & Gray			
Sash		Tempered safety glass (5mm)			
Control panel		LCD panel			
External material		SPCC / AL with epoxy powder coated			
Worktop		SS 304			
Certification		CE			
Avg. Downflow velocity		0.3~0.4 m/s (Variable set speed)			
Filter efficeincy		HEPA filter > 99.995% at 0.3μm			
Pre-filter		Nylon filter			
Noise level (dB A)		≤ 65			
Safety alarm		UV timer			
Power supply		220V, 50/60Hz (110V, 50/60Hz available)			
FL lamp		36W X 1EA		36W X 2EA	
UV lamp		20W X 1EA		30W X 1EA	
Power receptacle		U.S type or Euro type (2EA)			
Utility valve		Vaccum(1 unit)			
Differential pressure gauge		Included			
Option		Utility hole, Valves(gas, air, water)			

Support stand	Support frame (Leveling caster)	Height / mm	705
			805

PCR Workstation

CE

Airflow

● Room air
● HEPA filtered air

Model No.		CLB-060		CLB-060F	
		03	04	03	04
Dimensions (mm)	Width	900	1200	900	1200
	Depth	665			
	Height	975			
Color		White & Gray			
Sash		Polycarbonate 8mm(Front polding sash)			
Control panel		Touch screen panel			
External material		SPCC / AL with epoxy powder coated			
Worktop		Phenolic laminate 19mm			
Support stand		None		Included	
Certification		CE			
Avg. Downflow velocity		0.3~0.4 m/s (Variable set speed)			
Filter efficeincy		HEPA filter > 99.995% at 0.3μm			
Pre-filter		Nylon filter			
Noise level (dB A)		≤ 65			
Safety alarm		UV timer			
Power supply		220V, 50/60Hz (110V, 50/60Hz available)			
LED lamp		12W X 1EA			
UV lamp		15W X 1EA			
Power receptacle		U.S type or Euro type (1EA)			
Utility valve		None			
Utility hole		Included			
Differential pressure gauge		None			

| Support stand	Support frame (Leveling caster)	Height / mm	720
			820

※ SPCC : steel plate cold commercial

DUCTLESS FUME HOOD

Represents the optimal solution for old buildings where adjustments on services and exhaust connections are more difficult. The transparent acrylic material used on the 3 sides ensures increased visibility.
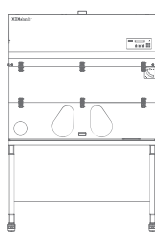
Airflow
- Room air
- Fume (gas, vapor)
- Clean air

<CLE-051F-03>   <CLE-051F-04>
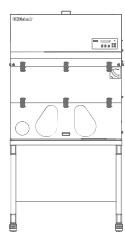
Model No.		CLE-051		CLE-051F	
		03	04	03	04
Dimensions (mm)	Width	900	1200	900	1200
	Depth	665			
	Height	1025			
Sash		Polycarbonate 8mm(Front polding sash)			
Control Panel		Touch screen panel			
External material		SPCC / AL with epoxy powder coated			
Support stand		None		Included	
Worktop		Phenolic laminate 19mm			
Power supply		220V, 50/60Hz (110V, 50/60Hz available)			
Noise level (dB A)		≤ 65			
Carbon filter	Organic	Fume(gas, vapor) from organic solvents			
	Acid gas	Fume(gas, vapor) from acids			
Support Stand (Leveling caster)		None		720 mm	
				820 mm	
Option		Water tap, Cupsink, HEPA Filter			

Maintains a Safe Refrigeration Temperature

LAB REFRIGERATOR

Equipment for precise temperature control and maintenance that fulfills a variety of storage requirements for industrial, clinical and scientific applications.

LCD Touch display controller

LED Lamp
Optimum visibility

Shelf
Simple installation and removal system to adjust shelves easily

Double tempered glass
glass temperature ensures stability and reduces heat loss

Leveling casters
Level adjustment with integrated lock

B-REF-120S

| Model No.		B-REF-060S	B-REF-120S
Dimensions (mm)	WxDxH(mm)	653 x 800 x 1914	1280 x 800 x 1914
Material	Capacity(L)	445	960
	Door	1EA	2EA
	Shelves	4EA	8EA
	Control Panel	Touch screen panel	
	External/Internal	Stainless steel	
	Door	Tempered glass door	
	Handle	AL handle(Black)	
	Insulator	HCFC-141b High-density urethane insulation	
	Refrigerant/ Dose	R-134a	
		120g	150g
	Shelf	Perforated Stainless steel 0.8mm (Load 35kg/ea)	
Performance	Temperature range / control unit(℃)	1~10 / ±0.1	
	Cooling system	Indirect cooling system	
	Cooling Fan	4W,Ø150 / 1 unit	4W,Ø150 / 2 units
	Defrost heater (Cross bar & Body)	36±5W	70±5W
	Noise	<60dB	
	LED Lamp	20W x 1 unit	20W x 2 units
Electricity	Power Supply	220V 50/60Hz, 110V 50/60Hz	
	Power Consumption	257W	405W
Others	Weight (Kg)	106	162

CO₂ INCUBATOR

Incubator ensures the optimal cell growth creating "IN VI TRO" conditions, and reducing experimental variability. Increased security helps to reduce the loss of time caused by contamination.

Main Feature

· Touch LCD control panel
· Accurate temperature maintenance
· Non-dispersion dual beam IR sensor
· Internal reinforced glass door
· Internal circulation system

Internal Circulation System
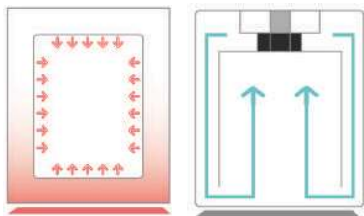
Model No.			bioall-180CA	bioall-180CS
Dimensions (mm)	Overall	WxDxH(mm)	633 x 634 x 965	
	Chamber	'Wx'Dx'H(mm)	540 x 500 x 680	
Certification			CE	
Capacity(L)			180	
Color			White	
Door	External		SPCC, Silicone magnet door	
	Internal		Tempered safety glass	
Control panel			Tonch screen panel	
Shelves			3 units (Adjustable)	
Fan			Internal convection fan	
Material	External		SPCC with epoxy powder coated	
	Internal		Stainless steel	
Shakey			None	Included
Humidification			Up to 95% RH at 37℃	
CO₂ accuracy			± 0.1% to 5%	
CO₂ range			0~20%	
CO₂ sensor			Dual-beam non dispersive infa-red sensor	
Temperature range			Ambient +5℃ to 50℃	
Temperature accuracy			± 0.1℃ to 37℃	
Temperature control			Digital PID controller	
Temperature sensor			Resistance temperature detector (R.T.D)	
Heating system			Air jacket heating system	
Safety device			Exclusive over temp. protector	
Power			AC 220V(110V), 50/60Hz, 1phase, 4A	
Weight			102 Kg	
Option			RS-485 Communication Port, Print Support, CO2 Gas Regulator, Comport Cable, Software	

Reference Projects

chalab showroom

CHC LAB Co.,Ltd.

Head office & Factory
139, Techno 2-ro, Yuseong-gu, Daejeon, Republic of Korea
Tel.+82-42-933-0036 Fax.+82-42-933-0039

2nd Factory
336-8, Biryong-ri, Nami-myeon, Seowon-gu, Cheongju-si, Chungbu, Republic of Korea
Tel.+82-43-277-8475 Fax.+82-43-277-8476

Seoul Branch Office
38, Magokjungang 8-ro 1-gil, Gangseo-gu, Seoul, Republic of Korea
Tel.+82-31-423-5530 Fax.+82-31-423-5542

CHC International
Calle manuel pombo angulo, 16 1 12 28050 Madrid, Spain
Tel.+34-917-95-75-26 E-mail. international@chc-lab.com

Middle East & Africa Branch Office
20F, Jafza View 18, P.O.Box 17588, Jebel Ali Freezone, Dubai, U.A.E
Tel.+966-552-095-716 Fax.+82-42-933-039

Web Site
http://www.chclab.com

Social Network
http://www.linkedin.com/company/chc-lab

E-mail
international@chc-lab.com

CHC LAB