### **thermo**scientific



# Herasafe 2025 Biological Safety Cabinet

Smarter protection that never takes a day off





Thermo Scientific™ biological safety cabinets are designed to maximise sample protection and user safety, with an emphasis on containment, comfort and convenience, all day, every day. For more than five decades, we have been a pioneer and innovator of clean air technologies. Our global vision and experience have enabled us to continually provide improved application-based solutions ideally suited for your requirements and working environment, with compliance to all major worldwide safety standards.



### **Precise self-adjusting protection**

Autonomous safety features maintain proper air flow and monitor critical conditions in real time without user interaction. This supports valuable research by enabling our customers to focus where needed.



### Simplified operation and ergonomics

An intuitive, simple-to-use interface with clear icons provides the information you need, while the electronic sash with fully hinged opening enables easy access for supplies and equipment, and simplifies cleaning and disinfection.

# Smart technology offers optimal containment and energy efficiency

Autonomous safety features like the Thermo Scientific™ SmartFlow™ Plus and DAVe™ Plus technologies help ensure continuous accuracy that never takes a day off—providing optimal protection from contamination by compensating to match the way you work and your lab environment

# Sash opening: 200 mm | Efficient design SmartFlow Plus | DAVe Plus Technologies



### **Electronic front sash**

With one-touch simplicity, the front window automatically positions itself to help ensure proper working conditions. The sloped front window allows a fatigue-free working position and has an aerosol-tight seal when closed.

### 200 mm sash opening

Optimum balance of comfort and efficiency.

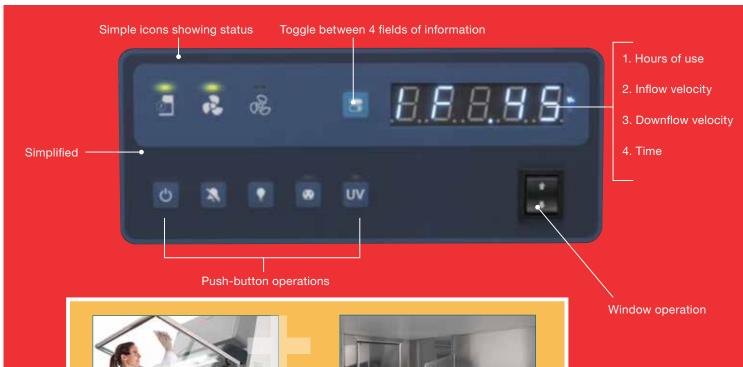
## Simplified operation and ergonomics



A readily understandable graphical display provides the information you need, while the electronic sash with fully hinged opening enables easy access for supplies and equipment, as well as effortless cleaning and disinfection.

Helping ensure that the Herasafe 2025BSC is managing safety conditions autonomously and is simple and intuitive to use allows our customers to fully focus on a broad range of demanding applications.

### Intuitive | Simple | Convenient



### Thermo Scientific™ Smart Clean Plus Technology

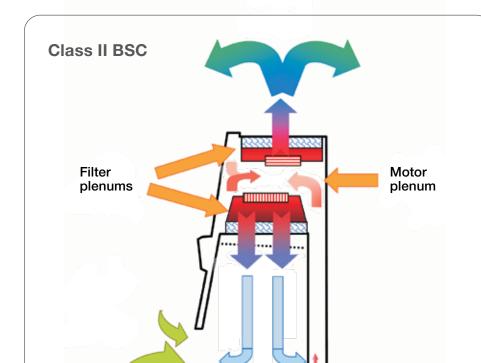
Fully opening front-hinged window design enables easy cleaning and disinfection with full access to the interior cabinet space.

Full opening also allows access to the biological safety cabinet for thorough cleaning and visible reach to all cabinet surfaces including rear wall.



### 304 stainless steel interior

The 304 stainless steel interior provides resistance to commonly used chemicals and regular cleaning protocols. The finish is "brushed and sanded," which both reduces glare and offers better scratch resistance.





### **SmartFlow Plus Technology**

The SmartFlow Plus Technology automatically balances the performance of dual DC blower motors in order to maintain appropriate air flow rates whilst compensating for the loading condition of the protective HEPA filters unlike typical biological safety cabinets, which rarely perform at the same levels day after day due to HEPA loading, and potential disruptions to airflow such as paper covering vent openings.

### How does this work?

Independent intelligent DC motors for downflow and inflow monitor and control fan speed in real time to maintain balanced airflow during filter loading or temporary obstruction.

Exclusive to our BSCs, independent supply and exhaust blowers automatically balance both the downflow and inflow velocities to maintain both operator and sample protection.

### **DAVe Plus Technology**

Our unique **D**igital **A**irflow **V**erification system validates protection by monitoring airflow velocities with independent pressure sensors that detect and alert to any changes across the exhaust and downflow plenums.

### How does this work?

By sensing pressure in the exit of the blowers, DAVe Plus Technology monitors airflow directly for the inflow and downflow in the Herasafe 2025 BSC to help ensure both personnel and sample protection.



### **Programmable crossbeam UV function**

The Herasafe 2025 BSC is available with the option of an integrated powerful crossbeam UV disinfection system. The UV lights are installed on both side walls to illuminate the entire work surface without leaving shadows. This ensures thorough disinfection of the complete chamber for maximum sample protection.



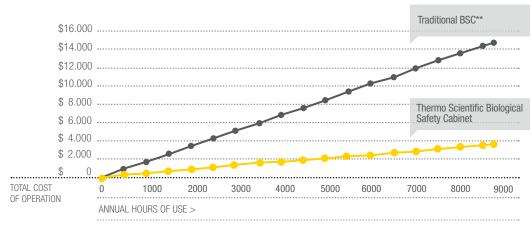
### **Energy efficient design**

- Energy conserving dual DC motor design, generates less heat than older AC designs with double the usage lifetime and is digitally controllable for precision performance
- Stand-by mode automatically reduces blower speed to protect samples with reduced energy usage until being ready to resume work

### Optimising total cost of operation

SmartFlow Plus airflow compensation and balanced filters have led to safer BSCs that are easier to use and significantly less costly to operate.\*

### The more you use it, the more you save!



Costs, published in American Biotechnology Laboratory.

<sup>\*</sup>Compared to previous models.

<sup>\*\*</sup>Comparison based on 15 year life of 1.2 m wide biological safety cabinets.

<sup>&</sup>quot;Traditional BSC" estimates based on published product specifications for readily available BSCs using AC motor technology.

# Innovative productivity enhancements simplify use, comfort and cleaning





Smart Clean Plus hinged

front window

### Customisation

The Herasafe 2025 BSC can be modified using our full customisation program. We have vast experience in designing custom adaptations to our safety cabinets. We can design from scratch or provide frequently requested solutions.

### Large interior work space/premium 304 non-corrosive stainless steel

Conveniently large interior workspace provides ample room for incorporation of instruments and process optimisation devices including robotic arms. We utilize a "brushed and sanded" finish to provide maximum scratch resistance and non-reflective properties.

### **Interior LED lights**

Visibility within the cabinet is enhanced with the use of bright, energy efficient lighting, reducing the potential for fatigue often experienced with use of standard fluorescent lighting.

### **One-touch master button**

Conveniently positioned master button opens and activates the Herasafe 2025 BSC simultaneously, correctly positioning the window and initiating blowers and lights.

### **Smart Clean Plus hinged front window**

Our exclusive fully opening front hinged window design enables easy cleaning and full access to the cabinet interior work space for thorough cleaning/disinfection and incorporation of ancillary work tools and equipment as may be desired.

### **Padded armrests**

Adjustable ergonomic armrests are provided with each unit to assure proper arm support to reduce strain during prolonged work periods while extending reach within the cabinet.

Removable gel filled comfort pads are available as an option to enhance the user experience.

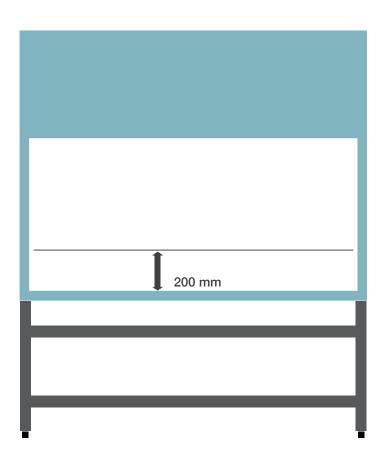
Removable gel-filled comfort pads

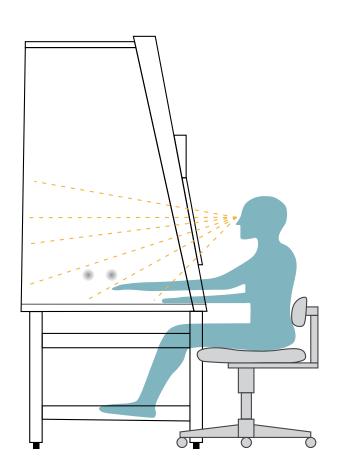




Featuring advanced designs for easy operation and maximum safety, the Herasafe 2025 Biological Safety Cabinet is recommended wherever sample and user protection is paramount.

- 10° sloped cabinet front-for exceptional comfort and ergonomics
- Bright workspace (side windows)-maximises light and visibility
- Unique internal armrest-positions hands in the centre of the work area for optimum protection
- Adjustable base stands-enables height to be set to suit environment and users
- Footrest accessory available for fitting to base stand
- Spacious work area-enables uncluttered work area for increased safety
- Motorised sash opening height of 200 mm for optimised usability and efficiency
- Standard battery backup to enable closure during power failure scenario





### Ordering information

Herasafe 2025 BSC				EN 1	2469		
Dimensions							
Size/internal width in m (ft)			0.9 (3)	1.2 (4)	1.5 (5)	1.8 (6)	
External dimension (cabinet only)	depth	mm (in.)	800 (31.5)	800 (31.5)	800 (31.5)	800 (31.5)	
,,	width	mm (in.)	1000 (39.4)	1300 (51.2)	1600 (63.0)	1900 (74.8)	
	height	mm (in.)	1536 (60.5)	1536 (60.5)	1536 (60.5)	1536 (60.5)	
Usable work surface	depth	mm (in.)	465 (18.3)	465 (18.3)	465 (18.3)	465 (18.3)	
(net, without air intake grill)	width	mm (in.)	900 (35.4)	1200 (47.2)	1500 (59.1)	1800 (70.9)	
Total internal height of work area		mm (in.)	780 (30.7)	780 (30.7)	780 (30.7)	780 (30.7)	
Shipping dimensions	depth	mm (in.)	925 (36.4)	925 (36.4)	925 (36.4)	925 (36.4)	
	width	mm (in.)	1110 (43.7)	1410 (55.5)	1710 (67.3)	2010 (79.1)	
	height	mm (in.)	1710 (67.3)	1710 (67.3)	1710 (67.3)	1710 (67.3)	
Working height of front window		mm (in.)		200	O (8)		
Maximum window opening (for cleaning, loading/unloading)		mm (in.)	773 (30.4)	773 (30.4)	773 (30.4)	773 (30.4)	
Work surface height		mm (in.)		750-950	(29.5-37.4)		
Weight							
Net weight		kg (lbs)	170 (375)	200 (441)	230 (507)	280 (617)	
Shipping weight		kg (lbs)	190 (419)	225 (496)	260 (573)	315 694)	
Maximum load capacity of one-piece wor		kg (lbs)	50 (110)	50 (110)	50 (110)	50 (110)	
Maximum load capacity of single segmen surfaces (per 30 cm segment)	ted work	kg (lbs)	25 (55)	25 (55)	25 (55)	25 (55)	
Electrical data							
Voltage		V		2	30		
Hertz		Hz	50/60				
Protection class			1/IP20				
Filter specification							
Specification			H14 HEPA EN1822, 99.995% MPPS				
Certifications							
Standard					12469	I	
Agency certified			TÜV	TÜV	TÜV	TÜV	
Ergonomics and utilities			1000 (5.5)	000 (7-7)	1505 (155)		
Lighting intensity		lux (fc)	1000 (93)	929 (86)	1500 (139)	1418 (132)	
Interior outlets		pcs.	2 rea	ır wall		ar wall	
Service valve ports Slope of front window		pcs.			ach side		
Slope of front window Herasafe 2025 noise, power, and heat s	anaoifiaati -	degree			10		
Noise level (measured according to EN 12	•			7		7	
200 mm opening Power consumption (in normal operation,	fans on,	dB (A)	57 57				
lights on) 200 mm opening		Wh	133	153	217	251	
Power consumption (in stand-by mode)		Wh	55	55	80	80	
Normal heat output in operation mode (non-vented) 200 mm opening		W	133	153	217	251	
Stand-by heat output (lights off, non-vente	ed) 	W	55	55	80	80	
Exhaust volumes							
Exhaust volume of cabinet 200 mm openi		m³/h (cf/m)	288 (169)	386 (227)	483 (284)	580 (341)	
Exhaust volume, thimble ducting 200 mm	opening	m³/h (cf/m)	385 (226)	513 (302)	641 (377)	770 (453)	

### Ordering information

	EN 12469			
0.9 (3)	1.2 (4)	1.5 (5)	1.8 (6)	
51033315	51033316	51033317	51033318	
51033311	51033312	51033313	51033314	
	51033315	51033315 51033316	51033315 51033316 51033317	

### Receptacle options

Country-specific configurations are available to ensure correct line cord and internal receptacles are shipped with the cabinet. Standard version for EN12469 cabinets is Schuko, and for NSF cabinets is type B.

Switzerland	Option	51900300
UK	Option	51900303
Italy	Option	51900306
FR/B/CZ/SK/PL	Option	51900921
Australia	Option	51900449
Denmark	Option	51900481
Israel	Option	51901255

### Stand options

We recommend ordering a base stand to ensure a robust and stable installation of the BSC. All of our base stands have been tested with our units for stability and functionality. Choose between a fixed height, manually adjustable working height or electrically adjustable working height. Please consider the total height of the room when choosing the right working height. Footrest and castor options are available for added convenience.

Fixed height stand, charcoal grey Provides work height of 750 mm	Accessory	50155665	50155666	50155667	50155668
Adjustable height stand, charcoal grey Provides work height of 750-950 mm	Acc.	50155688	50155689	50155690	50155691
Electric adjustable stand, grey-white (RAL 9002)	Acc.	50117449	50109314	50117450	50109325
Footrest bar (for non-electric floorstand)	Acc.	50051982	50051983	50051984	50051985
Castor-set for stand, grey-white (4 pcs.) (RAL9002) Provides work height of 850 mm (for fixed stands only)	Acc.		5010	9977	

### Provides work height of 850 mm (for fixed stands only) Acc.

### Work surface options

You have the option to fully customise your new BSC to accommodate any work task. The standard EN cabinet includes our stainless steel segmented worktray for easy removal, autoclaving, and cleaning under the work surface. The standard NSF cabinet includes our stainless steel single piece indented worktray. To customise your work area, order the part number to remove the standard worktray and configure the cabinet as desired.

				,	0	
Without table tops (negative price)		Option	51900651	51900652	51900653	51900654
Flat work surface module (150 mm)	KAM15	Acc.	50073666			
Flat work surface module (300 mm)	KAM30	Acc.	50072685			
Flat work surface module (600 mm)	KAM60	Acc.	50073667			
Flat work surface module (900 mm)	KAM90	Acc.	50076398			
Flat work surface module (1200 mm)	KAM120	Acc.	50082970 50082970			
Flat work surface module (1500 mm)	KAM150	Acc.	No 50122210		22210	
Flat work surface module (1800 mm)	KAM180	Acc.	No 5008			50085281
Lowered work surface module (600 mm)	KAML60	Acc.	50073668			
Lowered work surface module (900 mm)	KAML90	Acc.	50073669			
Lowered work surface module (1200 mm)	KAML120	Acc.	No 50073670			
Lowered work surface module (1500 mm)	KAML150	Acc.	No 50073671		73671	
Lowered work surface module (1800 mm)	KAML180	Acc.	No 50078			50078750
Vibration dampened surface module with granite plate (300 mm)	KAMW30	Acc.	50073757			
Vibration dampened surface module with granite plate (600 mm)	KAMW60	Acc.	50076162			

Ordering information					
Herasafe 2025 BSC			EN 12	2469	
Size/internal width in m (ft)		0.9 (3)	1.2 (4)	1.5 (5)	1.8 (6)
Replacement armrests KAS 30 KAS (Set of 2 armrests 316 SS)	30 Accessory	50073663			
Padded armrest 316 SS (Set of 2 including gel ins	serts) Acc.		50156	 6438	
Replacement gel pads for padded armrest (2 pcs	.) Acc.		50156	6437	
Additional filter options		·			
Additional exhaust HEPA filters (AEFs) can be fitte are not a requirement for recirculating BSCs, ever filters can be fitted on top of the BSC, but should	n in the UK, where I	BS5726 has been sup	erceded by EN12469	, since 2000. Additio	nal exhaust carbon
Additional exhaust HEPA filter, retro-fit KAE	F Acc.	50078857	5007	3772	50078856
Additional exhaust carbon filter, retro-fit KAE	FC Acc.	50078783	5007	3773	50078784
Grid filter set, G1 acc. to EN 779 (5 pcs)	Accessory	5007	6846	5007	6921
UV options					
Cross beam UV-C light option in side walls includes protective cover					
Included in models: 51033315, 51033316, 510333 51033318	317, Standard		Standard (Cross Be	eam - in side walls)	
Available for models: 51033311, 51033312, 51033 51033314	313, Option		51900642 (Cross B	eam - in side walls)	
Media valves					
Our standard BSCs feature a dual side-wall negatialso offer factory-installed piping options on our p					
Rear wall media connections					
3 utility connectors prep (rear wall) Select rear wall service taps additionally					
Available for models: 51033311, 51033312, 51033 51033314	313, Option		5190125 <sup>-</sup>	1 (G3/8")	
Rear wall service taps/media valves (supplies	are connected at	ove BSC)			
Combustible gas tap for rear wall	Acc.		5006	8235	
Non-combustible gas tap for rear wall	Acc.		5006	8234	
Water tap for rear wall	Acc.		5006	8233	
Vacuum tap for rear wall	Acc.		5006	8232	
Side wall service taps/media valves/lead thro	ughs	,			
Combustible gas tap for side wall	Acc.		5004	6015	
Non-combustible gas tap for side wall	Acc.		5004	5959	
Water tap for side wall	Acc.		5004	4679	
Vacuum tap for side wall	Acc.		5004	4678	
Hose connection for side wall, hose dia. 10-13mm	n Acc.		5005	9017	
Hose connection for side wall, hose dia. 3mm	Acc.		50076	6408	
Hose connection for side wall, hose dia. 6/3mm	Acc.		5006	6668	
Solenoid valve (should be quoted with combu	stible gas G3/8 co	nnection			
Solenoid valve for combustible gas tap	Acc.		5007	4905	
Exhaust duct connection kits					
HEPA filters do a great job of trapping particles ar microbiological studies. In these applications, it is environment. We offer two different connections t	important to selec	t an exhaust duct trar	nsition to route exhaus	st air out of the labora	
Thimble duct exhaust transition (Connection diameter 200 mm/8")	TD Acc.	50078796	5007	3770	50078795

Direct duct exhaust transition with anti blowback valve (Connection diameter 200 mm/8")

KDD

Acc.

50078791

50078790

50073771

### Ordering information

Herasafe 2025 BSC	EN 12469					
Size/internal width in m (ft)			0.9 (3)	1.2 (4)	1.5 (5)	1.8 (6)
User convenience options						
We offer unique customer-installed accessor	ries to help or	ganize your	workspace and free	up valuable space in	side and around the I	Herasafe 2025 BSC.
Hanging bar with set of 6 hooks	IVB 6 6	Acc.	50073943 No			
Hanging bar with set of 12 hooks	IVB 10 12	Acc.	No 50073944			
Utility basket to be used with hanging bar	KB	Acc.	50078900			
2 utility baskets incl. additional hanging bar	KBB	Acc.	50078901			

### **Ordering Information**

erasafe 2025 BSC		
dditional topboxes for fumigation	Cat. No.	m (ft)
	KSF9	Acc.
KSF frame fixed to top of each recirculating cabinet to accept the relevant topbox for fumigation.  Brackets are fitted to side of frame to allow the use of speed clamps. Height = 50 mm.	KSF12/15	Acc.
	KSF18	Acc.
SNB topbox for use with hydrogen peroxide fumigation. Speed clamps allow for fixture	KSNB9	Acc.
to a KSF frame. The 35 mm hole will accept a Steris OR Bioquell outlet camlock fitting.  Height = 110 mm with gasket.	KSNB-12/15	Acc.
	KSNB-18	Acc.
S-EVBOX for use with formonia system and formaldehyde. Speed clamps allow it to be clamped to		Acc.
SF frame, while the 2 threaded holes accept the ABEKP3 charcol filters. This box can only be use the formaldehyde is being neutralised with ammonia after fumigation. Height = 110 mm	KS-EVBOX-12/15	Acc.
rith gasket.	KS-EVBOX-18	Acc.
SDB for use with formaldehyde fumigation only. Speed clamps allow for fixture to a KSP frame.	KS9DB160	Acc.
his top box is supplied with a 3 m flexi trunking that allows formaldehyde to vent out into another xhausted application to purge fumes from cabinet.	KS12DB160	Acc.
ide exit only. Height = 190 mm with gasket.	KS18DB160	Acc.
SP(FD) for use with formaldehyde fumigation. Fixes to a KSF frame. Supplied with a	KSP(FD)-9	Acc.
m flexi trunking that allows venting of fumes to an exhausted application. Top exit	KSP(FD)-12/15	Acc.
nly. Height = 50 mm (frame).	KSP(FD)-12/15	Acc.
BEKP3 charcoal filters screw into KS-EVBOX. Pack is 3 filters.	KSP(FD)-12/15	Acc.

Not all BSCs are manufactured to the same safety standards. Our design philosophy is grounded in compliance with the recognised worldwide safety standards, because your work cannot compromise on safety. Our biological safety cabinets are subjected to the following certifications:



### EN 12469

Thermo Scientific Class II biological safety cabinets are independently tested and certified to EN 12469 standard for Class II biological safety cabinets by TÜV Nord, the leading testing agency in Europe.

### Find out more at thermofisher.com/bsc

