



Biosafety cabinets

## Herasafe and Maxisafe 2030i Biological Safety Cabinet

Smarter protection that never takes a day off



# Smarter protection that never takes a day off

Thermo Scientific™ Herasafe™ and Maxisafe™ 2030i Biological Safety Cabinets leverage a legacy of global leadership in biological safety cabinet (BSC) design with breakthrough innovations to optimize contamination prevention, user convenience and information management, offering our most technologically advanced Class II cabinets available.

Equipped with smart self monitoring safety features, intuitive graphic touchscreen interface and built-in connectivity to preserve important performance data, the Herasafe and Maxisafe 2030i BSCs are designed to deliver performance with superior precision for demanding cell culture applications and other sensitive work requiring assured safety for product, personnel and environment, especially for bio pharma and advanced research initiatives.

Thermo Scientific™ biological safety cabinets are designed to maximize 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 the best 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 enabling our customers to focus where needed.



## Simplified operation and ergonomics

Readily understandable graphical display provides the information you need, while the electronic sash with fully hinged opening enables easy access for supplies and equipment, and simplifies easy cleaning and disinfection.



## Enhanced information management

Built-in connectivity readiness for remote monitoring capabilities and performance data collection. Designed to evaluate your processes and accelerate operations and your discoveries from anywhere.

# Smart technology offers optimal containment and energy efficiency



Autonomous safety features 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 200/250mm | SmartFlow Plus and DAVE Plus technology  
Auto compensating UV | efficient design**



## **Electronic front sash**

With push button simplicity the front window automatically opens to the correct aperture mandated by regional regulation to help ensure proper working conditions. The sloped front window allows a fatigue-free working position and has an aerosol-tight seal when closed.

## **200mm sash opening (standard)**

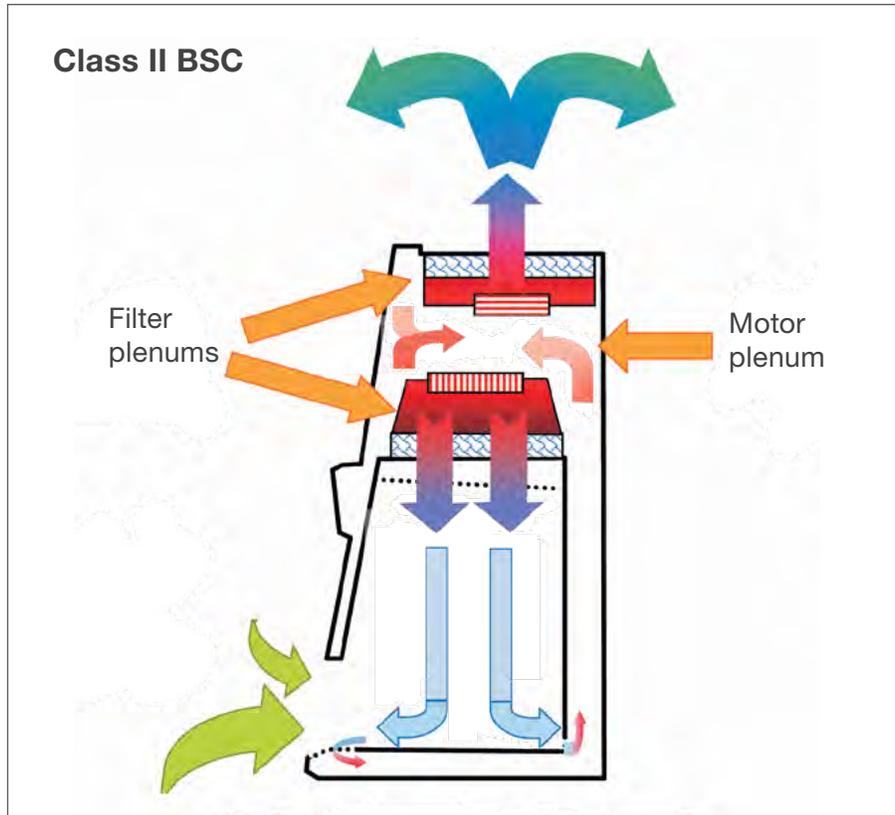
Provides optimum balance of comfort plus efficiency.

## **250mm sash opening (optional)**

Provides additional convenience for quick and safe movement of consumables.



# Smart protection technologies



## **Thermo Scientific™ SmartFlow™ Plus airflow compensation**

Proprietary design automatically compensates unique energy saving dual DC blower motors to help ensure the proper airflow rates no matter the loading condition of the protective HEPA filters. Unlike typical BSCs 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.

## **Thermo Scientific™ DAVE Plus technology**

Our unique digital airflow verification system validates protection by monitoring airflow velocities with independent pressure sensors which detect and alert to any changes across the exhaust and downflow plenums.

### **How does this work?**

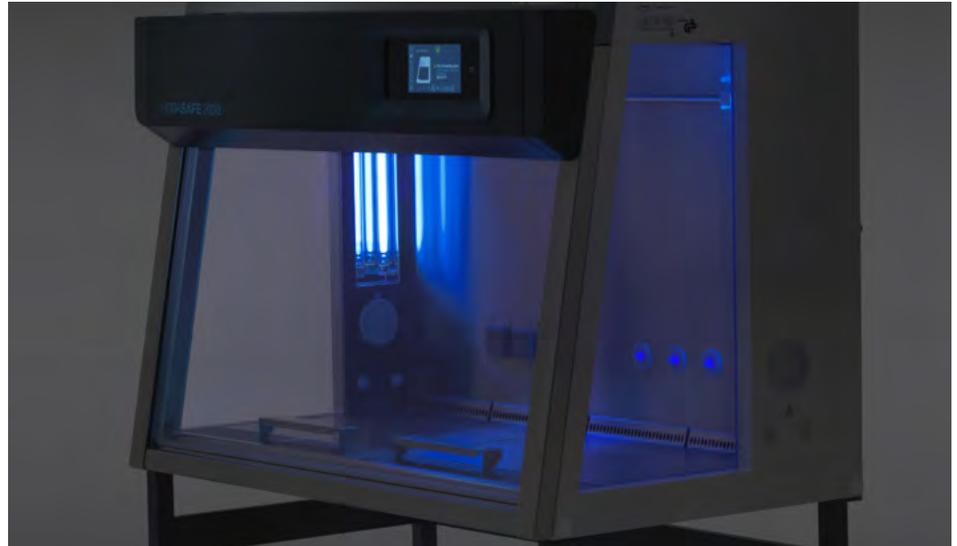
By sensing pressure in the exit of the blowers, DAVE Plus monitors airflow directly for the inflow and downflow in the Herasafe 2030i BSC to help ensure both personal and sample protection.

# Protection and energy efficiency



## Self-adjusting germicidal UV light intensity

For those who routinely employ UV germicidal light to their work surface at the end of the work day, we provide a time adjustable functionality to auto shut off the light at the desired interval to preserve bulb life. Our exclusive self-adjusting exposure capability enables reproducible germicidal effectiveness with every use, by helping to ensure performance at consistent levels to protect your important work.



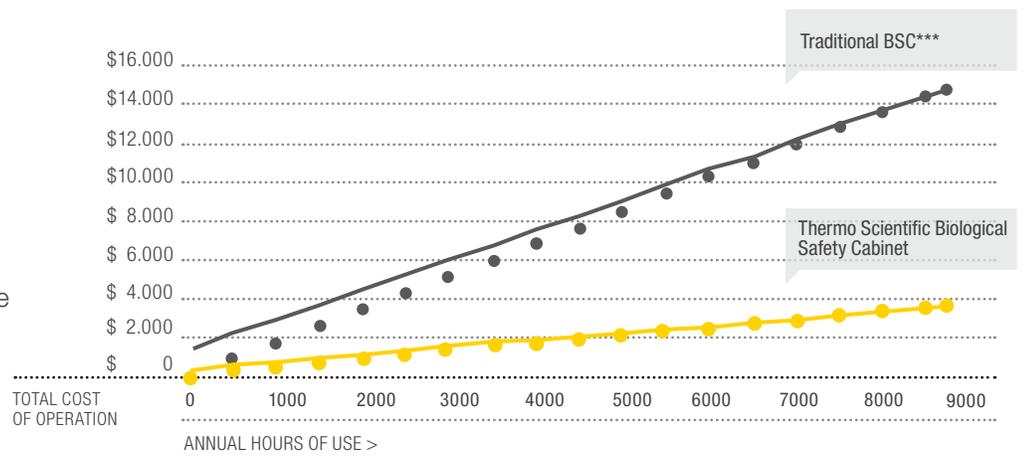
## Optimizing total cost of operation

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

## 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 you are ready to resume work.

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



Costs, published in American Biotechnology Laboratory, September 2008.

\*\* Compared to previous models.

\*\*\* Comparison based on 15 year life of 1.2 m wide biological safety cabinets and 2011 average costs of energy and cooling in the EuroZone. "Traditional BSC" estimates based on published product specifications for readily available BSCs using AC motor technology.



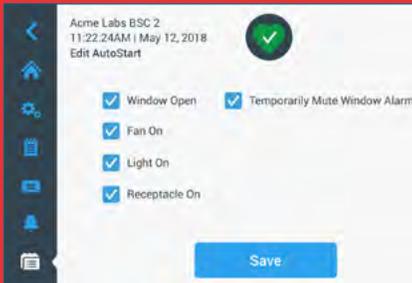
# Simplified operation and ergonomics

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

Helping ensure that the BSC is managing safety conditions autonomously, and is simple and intuitive to use allows our customers to fully focus on demanding applications and precision science.

Intuitive | simple | convenient

Programmable functions:  
Edit auto start




## Thermo Scientific™ SmartClean™ Plus design

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.



## 316L Stainless steel interior (standard)

Most resistant to scratches and chemical attack in the user zone. All surfaces inside the Herasafe 2030i BSC are manufactured using 316L stainless steel. The finish is “brushed and sanded” which both reduces glare and offers better scratch resistance.

# Innovative productivity enhancements for more comfort



## Full color touch screen user interface – safety you can see

Our advanced yet simple to operate, graphic user interface is customer tested to provide easy navigation and convenient illustration of airflow safety and usage data to address any lingering user concerns about the cabinet functioning properly to protect them and their valuable samples. Performance details such as user interaction logs, errors and event logs are easily identified to drive continuous process improvement and reproducibility of results.



## Large interior work space/premium 316L non-corrosive stainless steel

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

## 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.

## 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.

## Exclusive one touch start/stop function

Exclusive one touch auto start and stop function activates or deactivate all cabinet components efficiently, and is ready to use without lengthy wait times.

## SmartClean Plus hinged front window

Our exclusive Thermo Scientific™ SmartClean™ Plus 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.

## Standard SmartPort

Provided as standard with every cabinet, Thermo Scientific™ SmartPort™ design provides a clean and safe approach to incorporating vacuum tubing and cables through the side wall of the biological safety cabinet, for improved organization and work efficiency. The side wall plenum is under negative pressure preventing possibility of leakage in or out of the BSC during operation.

## Customization

Options are available for the Herasafe and Maxisafe 2030i BSCs. We have vast experience in designing custom adaptations to our BSCs. We can design from scratch or provide frequently requested solutions.



# Enhanced information management with the convenience of connectivity

Most of the enhanced information provided by the touch screen interface can be remotely monitored and captured by web based or mobile app for subsequent analysis, minimizing the need for paper notebooks.

## **Standard USB data outputs**

Enable export of data to external data systems if desired. A powered connection is included in the front panel to enable convenient accessory charging and accommodate future software update uploads.

## **Convenient event and alert messaging logs**

Accessible in the user interface, the event and alert messaging logs provide useful and important usage data and alert information for process optimization and maintenance.

## **Embedded connectivity**

Enables simplified information sharing with colleagues and enhances productivity through performance monitoring from anywhere, anytime improving process control, reporting and asset management, with use of the exclusive free Thermo Scientific mobile app.

## **Future proof**

The Herasafe and Maxisafe 2030i BSC have embedded capability to be connected to the Thermo Fisher Scientific cloud by Wi-Fi. In regions where service is available, you can connect remotely via our app, to check the equipment status, and for alerts, alarms and the user log.



# Triple filter biological safety cabinet

In addition to meeting the EN 12469 Standard for Class II Biological Safety Cabinets, the Thermo Scientific™ Maxisafe™ 2030i Biological Safety Cabinet (BSC) with single piece worktops is independently tested and certified to the DIN 12980, the standard for “safety cabinets for handling cytotoxic substances”.

This requires the highest personnel, product and environmental protection when working with CMR (carcinogenic, mutagenic or toxic to reproduction) compounds, including preparation of hazardous drugs in healthcare compounding pharmacies and facilities complying with USP <800>.

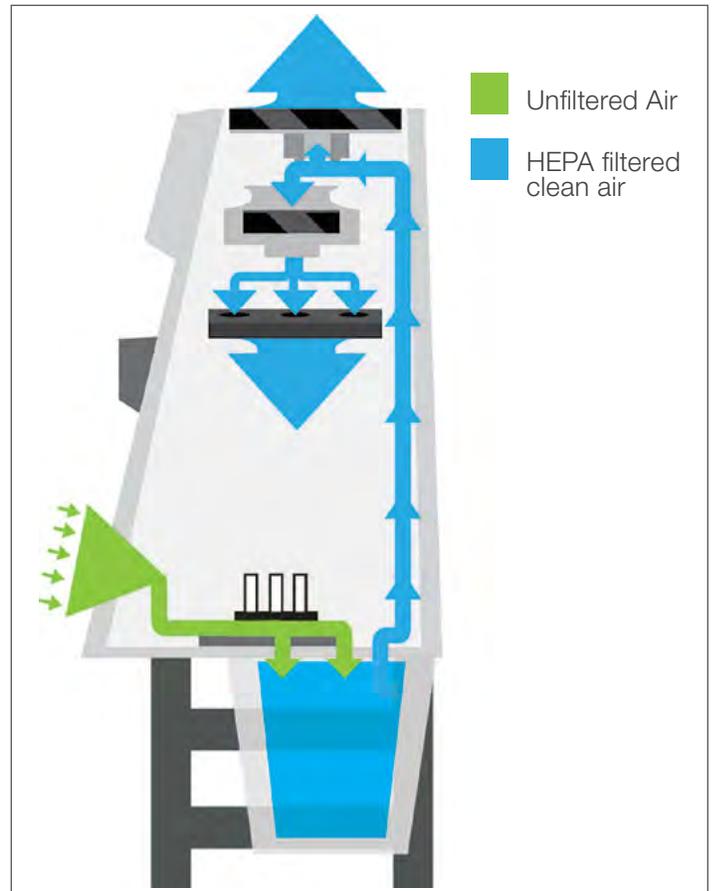
Outstanding protection | advanced comfort | superior performance



Note that the default configuration for our Triple Filter BSC provides a single piece indented worktop. Segmented worktops can be selected from the options table at configuration stage (but will not conform to DIN 12980).

### Triple Filter BSCs offer:

- A minimum ISO Class 5 air quality in the work area
- 100,000x better filtration efficiency than regular class II biological safety cabinets with the use of a unique triple filter design
- Safe (bag in-bag out) filter change in the cabinet work area under negative pressure
- A more ergonomic and comfortable work environment than traditional isolators
- The easy-to-clean system is ideal for cleanroom/GMP installations
- Tested and certified to both EN 12469 and DIN 12980.



### New bridged primary filter aperture system

Our primary filter plenum now uses a bridge system improving rigidity and security. The new H14 HEPA cartridge filters have a positive location system, and anti-spill design to prevent liquid damage.



### Easy and safe HEPA filter changes

The positive locating H14 HEPA filters under the work surface provide easy and safe HEPA filter changes under negative pressure.



New unique sealing system simplifies installation and testing.

| Herasafe 2030i BSC Ordering Information   |        |                          | EN 12469                      |             |             |             | NSF/ANSI 49                 |             |
|---|--------|--------------------------|-------------------------------|-------------|-------------|-------------|-----------------------------|-------------|
| <b>Dimensions</b>   |        |                          |                               |             |             |             |                             |             |
| Size/Internal width   |        | m (ft)                   | 0.9 (3)                       | 1.2 (4)     | 1.5 (5)     | 1.8 (6)     | 1.2 (4)                     | 1.8 (6)     |
| External Dimension (Cabinet only)   | depth  | mm (in.)                 | 800 (31.5)                    | 800 (31.5)  | 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) | 1300 (51.2)                 | 1900 (74.8) |
|   | height | mm (in.)                 | 1536 (60.5)                   | 1536 (60.5) | 1536 (60.5) | 1536 (60.5) | 1536 (60.5)                 | 1536 (60.5) |
| Usable Work Surface<br>(net, without air intake grill)  | depth  | mm (in.)                 | 465 (18.3)                    | 465 (18.3)  | 465 (18.3)  | 465 (18.3)  | 465 (18.3)                  | 465 (18.3)  |
|   | width  | mm (in.)                 | 900 (35.4)                    | 1200 (47.2) | 1500 (59.1) | 1800 (70.9) | 1200 (47.2)                 | 1800 (70.9) |
| Shipping Dimension  | depth  | mm (in.)                 | 925 (36.4)                    | 925 (36.4)  | 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) | 1410 (55.5)                 | 2010 (79.1) |
|   | height | mm (in.)                 | 1710 (67.3)                   | 1710 (67.3) | 1710 (67.3) | 1710 (67.3) | 1710 (67.3)                 | 1710 (67.3) |
| Working height of front window  |        | mm (in.)                 | 200 (8)                       |             |             |             | 250 (10)                    |             |
| Maximum window opening<br>(for cleaning, loading/unloading)   |        | mm (in.)                 | 773 (30.4)                    | 773 (30.4)  | 773 (30.4)  | 773 (30.4)  | 773 (30.4)                  | 773 (30.4)  |
| Work surface height   |        | mm (in.)                 | 750-950 (29.5-37.4)           |             |             |             | 750-950 (29.5-37.4)         |             |
| <b>Weight</b>   |        |                          |                               |             |             |             |                             |             |
| Net weight  |        | kg (lbs)                 | 170 (375)                     | 200 (441)   | 230 (507)   | 280 (617)   | 200 (441)                   | 280 (617)   |
| Shipping weight   |        | kg (lbs)                 | 190 (419)                     | 225 (496)   | 260 (573)   | 315 (694)   | 225 (496)                   | 315 (694)   |
| Max load capacity of one-piece work surface   |        | kg (lbs)                 | 50 (110)                      | 50 (110)    | 50 (110)    | 50 (110)    | 50 (110)                    | 50 (110)    |
| Max load capacity of single segmented work surfaces (per 30cm segment)  |        | kg (lbs)                 | 25 (55)                       | 25 (55)     | 25 (55)     | 25 (55)     | 25 (55)                     | 25 (55)     |
| <b>Electrical Data</b>  |        |                          |                               |             |             |             |                             |             |
| Voltage   |        | V                        | 230                           |             |             |             | 120                         |             |
| Hertz   |        | Hz                       | 50/60                         |             |             |             | 60                          |             |
| Protection class  |        |                          | 1/IP20                        |             |             |             |                             |             |
| <b>Filter Specification</b>   |        |                          |                               |             |             |             |                             |             |
| Specification   |        |                          | H14 HEPA EN1822, 99.995% MPPS |             |             |             |                             |             |
| <b>Certifications</b>   |        |                          |                               |             |             |             |                             |             |
| Standard  |        |                          | EN 12469                      |             |             |             | NSF/ANSI 49                 |             |
| Agency certified  |        |                          | TÜV *                         | TÜV         | TÜV *       | TÜV         | NSF                         |             |
| NF Certification by LNE (France only)   |        |                          |                               | 51901254    |             |             |                             |             |
| <b>Ergonomics and Utilities</b>   |        |                          |                               |             |             |             |                             |             |
| Lighting intensity  |        | lux (fc)                 | 1000 (93)                     | 929 (86)    | 1500 (139)  | 1418 (132)  | 850 (79)                    | 1300 (121)  |
| Interior outlets  |        | pcs.                     | 2 rear wall                   |             | 4 rear wall |             | 2 rear wall                 | 4 rear wall |
| Service valve ports   |        | pcs.                     | 2 on each side + Smart Port   |             |             |             | 2 on each side + Smart Port |             |
| Slope of front window   |        | degree °                 | 10                            |             |             |             | 10                          |             |
| <b>Herasafe 2030i Specifications</b>  |        |                          |                               |             |             |             |                             |             |
| Noise level (measured according to EN 12469)<br>200mm opening   |        | dB (A)                   | 57                            |             | 57          |             |                             |             |
| Noise level (EN units measured according to EN 12469, NSF units measured according to NSF/ANSI 49)<br>250mm opening |        |                          | 57                            |             | 58          |             | 62                          | 62          |
| Power consumption (in normal operation, fans on, lights on) 200mm opening   |        | W/h                      | 133                           | 153         | 217         | 251         |                             |             |
| Power consumption (in normal operation, Fans on, lights on) 250mm opening   |        |                          | 155                           | 175         | 240         | 300         | 180                         | 316         |
| Power consumption (in stand-by mode)  |        | W/h                      | 55                            | 55          | 80          | 80          | 55                          | 80          |
| Normal heat output in operation mode (non-vented) 200mm opening   |        | W/h                      | 133                           | 153         | 217         | 251         |                             |             |
| Normal heat output in operation mode (non-vented) 250mm opening   |        |                          | 155                           | 175         | 240         | 300         | 180                         | 316         |
| Stand-by heat output (lights off, non-vented)   |        | W/h                      | 55                            | 55          | 80          | 80          | 55                          | 80          |
| Size/Internal width   |        | m (ft)                   | 0.9 (3)                       | 1.2 (4)     | 1.5 (5)     | 1.8 (6)     | 1.2 (4)                     | 1.8 (6)     |
| <b>Exhaust Volumes</b>  |        |                          |                               |             |             |             |                             |             |
| Exhaust volume of cabinet 200mm opening   |        | m <sup>3</sup> /h (cf/m) | 288 (169)                     | 386 (227)   | 483 (284)   | 580 (341)   |                             |             |
| Exhaust volume of cabinet 250mm opening   |        | m <sup>3</sup> /h (cf/m) | 370 (215)                     | 365 (291)   | 486 (286)   | 729 (429)   | 582 (342)                   | 872 (513)   |
| Exhaust volume, thimble ducting 200mm opening   |        | m <sup>3</sup> /h (cf/m) | 385 (226)                     | 513 (302)   | 608 (358)   | 770 (453)   |                             |             |
| Exhaust volume, thimble ducting 250mm opening   |        | m <sup>3</sup> /h (cf/m) | 481 (283)                     | 642 (378)   | 802 (472)   | 963 (567)   | 756 (445)                   | 1134 (667)  |

\* TÜV available for models with 200mm access opening

| Herasafe 2030i Ordering Information   |        | EN 12469   |          |          |          | NSF/ANSI 49 |          |
|---|--------|------------|----------|----------|----------|-------------|----------|
| Size/Internal width   | m (ft) | 0.9 (3)    | 1.2 (4)  | 1.5 (5)  | 1.8 (6)  | 1.2 (4)     | 1.8 (6)  |
| 200mm Sash with Cross Beam UV-C in side walls   |        | 51032328   | 51032329 | 51032330 | 51032331 |             |          |
| 200mm Sash – no options included**<br>(250mm/10" sash can be optioned)  |        | 51032324   | 51032325 | 51032326 | 51032327 |             |          |
| 250mm (10") Sash with Cross Beam UV-C in side walls, indented single piece work tray and prep for 3x rear wall mount service taps |        |            |          |          |          | 51032334    | 51032335 |
| 250mm (10") Sash, indented single piece work tray   |        |            |          |          |          | 51032332    | 51032333 |
| Window operating aperture 10" (250mm)   | Option | 51901247** |          |          |          | Standard    |          |

#### Receptacle Options

Country 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

|                                 |        |          |  |  |  |                 |  |
|---------------------------------|--------|----------|--|--|--|-----------------|--|
| Country version Switzerland     | Option | 51900300 |  |  |  |                 |  |
| Country version UK              | Option | 51900303 |  |  |  |                 |  |
| Country version Italy           | Option | 51900306 |  |  |  |                 |  |
| Country version FR/B/CZ/SK/PL   | Option | 51900921 |  |  |  |                 |  |
| Country version Australia       | Option | 51900449 |  |  |  |                 |  |
| Country version Denmark         | Option | 51900481 |  |  |  |                 |  |
| Country version China           | Option | 51900900 |  |  |  | 51900900 (230V) |  |
| Country version Israel          | Option | 51901255 |  |  |  |                 |  |
| Country version India           | Option | 51901261 |  |  |  | 51901261 (230V) |  |
| Country version Argentina       | Option |          |  |  |  | 51900308 (230V) |  |
| Country version Chile           | Option |          |  |  |  | 51901259 (230V) |  |
| Country version Brazil          | Option |          |  |  |  | 51901260 (230V) |  |
| Country version Korea           | Option |          |  |  |  | 51901324 (230V) |  |
| Country version Hong Kong & SEA | Option |          |  |  |  | 51901327 (230V) |  |

#### 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<br>Provides work height of 750mm  | Acc. | 50155665 | 50155666 | 50155667 | 50155668 | 50155666 | 50155668 |
| Adjustable height stand charcoal grey<br>Provides work height of 750-950mm                                   | Acc. | 50155688 | 50155689 | 50155690 | 50155691 | 50155689 | 50155691 |
| Electric Adjustable Stand grey-white (RAL 9002)  | Acc. | 50117449 | 50109314 | 50117450 | 50109325 | 50109314 | 50109325 |
| Footrest bar (for non-electric floorstand)   | Acc. | 50051982 | 50051983 | 50051984 | 50051985 | 50051983 | 50051985 |
| Castor-Set for Stand grey-white (4 pcs.) (RAL9002)<br>Provides work height of 850 mm (for fixed stands only) | Acc. | 50109977 |          |          |          | 50109977 |          |

#### Work Surface Options

You have the option to fully customize 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 customize your work area, order the part number to remove the standard worktray and configure the cabinet as desired. All internal surfaces and worktrays are 316 SS.

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

| Herasafe 2030i Ordering Information                    |        | EN 12469 |         |          |         | NSF/ANSI 49 |          |         |
|--|--------|----------|---------|----------|---------|-------------|----------|---------|
| Size/Internal width                                    |        | m (ft)   | 0.9 (3) | 1.2 (4)  | 1.5 (5) | 1.8 (6)     | 1.2 (4)  | 1.8 (6) |
| 3 liter mini-sink table top module                     | KAMS30 | Acc.     |         | NSF only |         |             | 50078875 |         |
| Replacement armrests KAS 30 (Set of 2 armrests 316 SS) | KAS 30 |          |         | 50073663 |         |             | 50073663 |         |
| Padded armrest 316 SS (Set of 2 including gel inserts) |        | Acc.     |         | 50156438 |         |             | 50156438 |         |
| Replacement gel pads for padded armrest (2 pcs.)       |        | Acc.     |         | 50156437 |         |             | 50156437 |         |

#### Additional Filter Options

Additional exhaust HEPA filters (AEF) can be fitted to the top of the BSC to provide 99.99999975% cumulative exhaust filtration. Please note that AEF filters are not a requirement for recirculating BSC's, even in the UK, where BS5726 has been superseded by EN12469, since 2000. Additional exhaust carbon filters can be fitted on top of the BSC, but should only be used for traces of solvents being used as an adjunct to microbiological study.

|   |       |      |          |          |          |  |          |          |
|---|-------|------|----------|----------|----------|--|----------|----------|
| Additional exhaust HEPA Filter, retro-fit   | KAEF  | Acc. | 50078857 | 50073772 | 50078856 |  |          |          |
| Additional exhaust Carbon Filter, retro-fit | KAEFC | Acc. | 50078783 | 50073773 | 50078784 |  |          |          |
| Grid filter set, G1 acc. To EN 779 (5 pcs)  |       |      | 50076846 |          | 50076921 |  | 50076846 | 50076921 |

#### UV Options

The UV control function is designed to preserve bulb life whilst monitoring constantly. The light is programmable via the user interface. This feature measures and tracks UV bulb use ensuring that the bulbs will not require excessive replacement due to premature and unnecessary degradation. Additionally by monitoring UV bulb age, the system auto-adjusts run time to ensure consistent sterilisation.

|  |          |                                       |  |  |  |  |  |
|--|----------|---------------------------------------|--|--|--|--|--|
| Cross beam UV-C light option in side walls includes protective cover |          |                                       |  |  |  |  |  |
| Included in models: 51032328, 51032329, 51032330, 51032331           | Standard | Standard (Cross Beam - in side walls) |  |  |  |  |  |
| Available for models: 51032324, 51032325, 51032326, 51032327         | Option   | 51900642 (Cross Beam - in side walls) |  |  |  |  |  |
| Included in models: 51032334, 51032335                               | Standard | Standard (cross beam - in side walls) |  |  |  |  |  |
| Available for models: 51032332, 51032333                             | Option   | 51900642 (cross beam - in side walls) |  |  |  |  |  |

#### Media Valves

Our standard BSCs feature a dual-side wall negative pressure design which allows the user to install service valves through the side access ports. We also offer factory-installed piping options on our premium units to connect utilities to the top of the BSC to conserve right to left exterior footprint.

#### Rear Wall Media Connections

3 utility connectors prep (rear wall)  
Select rear wall service taps additionally from table below:

|  |          |                    |  |  |  |  |  |
|--|----------|--------------------|--|--|--|--|--|
| Available for models: 51032324, 51032325, 51032326, 51032327, 51032328, 51032329, 51032330, 51032331 | Option   | 51901251 (G3/8")   |  |  |  |  |  |
| Included in models: 51032334, 51032335   | Standard | Included           |  |  |  |  |  |
| Available for models: 51032332, 51032333   | Option   | 51901252 (NPT3/8") |  |  |  |  |  |

#### Rear Wall Service Taps/Media Valves (supplies are connected above BSC)

|                                       |      |          |  |  |  |          |  |
|---------------------------------------|------|----------|--|--|--|----------|--|
| Combustible gas tap for rear wall     | Acc. | 50068235 |  |  |  | 50068235 |  |
| Non-combustible gas tap for rear wall | Acc. | 50068234 |  |  |  | 50068234 |  |
| Water tap for rear wall               | Acc. | 50068233 |  |  |  | 50068233 |  |
| Vacuum tap for rear wall              | Acc. | 50068232 |  |  |  | 50068232 |  |

#### Side Wall Service Taps/Media Valves/Lead Throughs

|  |      |          |  |  |  |          |  |
|--|------|----------|--|--|--|----------|--|
| Combustible gas tap for side wall                | Acc. | 50046015 |  |  |  | 50046015 |  |
| Non-combustible gas tap for side wall            | Acc. | 50045959 |  |  |  | 50045959 |  |
| Water tap for side wall                          | Acc. | 50044679 |  |  |  | 50044679 |  |
| Vacuum tap for side wall                         | Acc. | 50044678 |  |  |  | 50044678 |  |
| Hose connection for side wall, hose dia. 10-13mm | Acc. | 50059017 |  |  |  | 50059017 |  |
| Hose connection for side wall, hose dia. 3mm     | Acc. | 50076408 |  |  |  | 50076408 |  |
| Hose connection for side wall, hose dia. 6/3mm   | Acc. | 50066668 |  |  |  | 50066668 |  |

#### Solenoid Valve (should be quoted with combustible gas G3/8 connection)

|  |      |          |  |  |  |          |  |
|--|------|----------|--|--|--|----------|--|
| Solenoid valve for combustible gas tap | Acc. | 50109978 |  |  |  | 50164922 |  |
|--|------|----------|--|--|--|----------|--|

#### Exhaust Duct Connection Kits

HEPA filters do a great job of trapping particles and biohazards, but they do not trap gases and toxic chemicals that may be used as an adjunct to microbiological studies. In these applications, it is important to select an exhaust duct transition to route exhaust air out of the laboratory to the external environment. We offer two different connections that can be installed in three different ways, depending upon facility requirements.

|  |     |      |          |          |          |          |          |
|--|-----|------|----------|----------|----------|----------|----------|
| Thimble Duct Exhaust Transition (Connection diameter 200mm/8") | KTD | Acc. | 50078796 | 50073770 | 50078795 | 50073770 | 50078795 |
|--|-----|------|----------|----------|----------|----------|----------|

| Herasafe 2030i BSC Ordering Information   |     | EN 12469 |          |          |         |          | NSF/ANSI 49 |         |
|---|-----|----------|----------|----------|---------|----------|-------------|---------|
| Size/Internal width   |     | m (ft)   | 0.9 (3)  | 1.2 (4)  | 1.5 (5) | 1.8 (6)  | 1.2 (4)     | 1.8 (6) |
| Direct Duct Exhaust Transition with anti blowback valve (Connection Ø 200mm/8") | KDD | Acc.     | 50078791 | 50073771 |         | 50078790 |             |         |

#### User Convenience Options

We offer unique customer installed accessories to help organize your workspace and free up valuable space inside and around the BSC.

|  |           |      |          |          |          |          |
|--|-----------|------|----------|----------|----------|----------|
| Hanging bar with set of 6 hooks                | IVB 6 6   | Acc. | 50073943 | No       |          | No       |
| Hanging bar with set of 12 hooks               | IVB 10 12 | Acc. | No       | 50073944 |          | 50073944 |
| Utility basket to be used with hanging bar     | KB        | Acc. | 50078900 |          | 50078900 |          |
| 2 utility baskets incl. additional hanging bar | KBB       | Acc. | 50078901 |          | 50078901 |          |

| Additional topboxes for fumigation   |  | Cat. No.       | m (ft) |
|--|--|----------------|--------|
| KSF frame fixed to top of each recirc cabinet to accept the relevant topbox for fumigation. Brackets are fitted to side of frame to allow the use of speed clamps. Height = 50mm   |  | KSF9           | Acc.   |
|  |  | KSF12/15       | Acc.   |
|  |  | KSF18          | Acc.   |
| KSNB topbox for use with Hydrogen Peroxide fumigation. Speed clamps allow for fixture to a KSF frame. The 35mm hole will accept a Steris OR Bioquell outlet camlock fitting. Height = 110mm with gasket.   |  | KSNB9          | Acc.   |
|  |  | KSNB-12/15     | Acc.   |
|  |  | KSNB-18        | Acc.   |
| KS-EVBOX for use with formonia system and formaldehyde. Speed clamps allow it to be clamped to KSF frame, while the 2 threaded holes accept the ABEKP3 charcoal filters. This box can only be used if the formaldehyde is being neutralized with ammonia after fumigation. Height = 110mm with gasket. |  | KS-EVBOX-9     | Acc.   |
|  |  | KS-EVBOX-12/15 | Acc.   |
|  |  | KS-EVBOX-18    | Acc.   |
| KSDB for use with formaldehyde fumigation only. Speed clamps allow for fixture to a KSP frame. This top box is supplied with a 3m flexi trunking which allows you to vent formaldehyde out into another exhausted application to purge fumes from cabinet. Side exit only. Height = 190mm with gasket. |  | KS9DB160       | Acc.   |
|  |  | KS12DB160      | Acc.   |
|  |  | KS18DB160      | Acc.   |
| KSP(FD) For use with formaldehyde fumigation. Fixes to a KSF frame. Supplied with a 3m flexi trunking which allows venting of fumes to an exhausted application. Top exit only. Height = 50mm (Frame).   |  | KSP(FD)-9      | Acc.   |
|  |  | KSP(FD)-12/15  | Acc.   |
|  |  | KSP(FD)-18     | Acc.   |
| ABEKP3 charcoal filters screw into KS-EVBOX. Pack comprises of 3 filters.  |  | ABEKP3         | Acc.   |

| Maxisafe 2030i BSC Ordering Information                                |        | EN 12469 & DIN12980 |                               |             |             |             |
|--|--------|---------------------|-------------------------------|-------------|-------------|-------------|
| <b>Dimensions</b>  |        |                     |                               |             |             |             |
| Size/Internal width  |        | m (ft)              | 0.9 (3)                       | 1.2 (4)     | 1.5 (5)     | 1.8 (6)     |
| 200mm Sash with Cross Beam UV-C in side walls                          |        |                     | 51032715                      | 51032716    | 51032717    | 51032718    |
| 200mm Sash – no options included**                                     |        |                     | 51032711                      | 51032712    | 51032713    | 51032714    |
| External Dimension (Cabinet only)                                      | depth  | mm (in.)            | 870 (34.3)                    | 870 (34.3)  | 870 (34.3)  | 870 (34.3)  |
|  | 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 (net, without air intake grill)                    | depth  | mm (in.)            | 465 (18.3)                    | 465 (18.3)  | 465 (18.3)  | 465 (18.3)  |
|  | width  | mm (in.)            | 900 (35.4)                    | 1200 (47.2) | 1500 (59.1) | 1800 (70.9) |
| Shipping Dimension   | depth  | mm (in.)            | 970 (38.2)                    | 970 (38.2)  | 970 (38.2)  | 970 (38.2)  |
|  | width  | mm (in.)            | 1305 (51.4)                   | 1605 (63.2) | 1905 (75.0) | 2205 (86.8) |
|  | height | mm (in.)            | 1750 (68.9)                   | 1750 (68.9) | 1750 (68.9) | 1750 (68.9) |
| Working height of front window   |        | mm (in.)            | 200 (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)           |             |             |             |
| <b>Weight</b>  |        |                     |                               |             |             |             |
| Net weight   |        | kg (lbs)            | 200 (440)                     | 240 (528)   | 280 (616)   | 330 (728)   |
| Shipping weight  |        | kg (lbs)            | 220 (484)                     | 265 (583)   | 310 (682)   | 365 (803)   |
| Max load capacity of one-piece work surface                            |        | kg (lbs)            | 50 (110)                      | 50 (110)    | 50 (110)    | 50 (110)    |
| Max load capacity of single segmented work surfaces (per 30cm segment) |        | kg (lbs)            | 25 (55)                       | 25 (55)     | 25 (55)     | 25 (55)     |
| <b>Electrical Data</b>   |        |                     |                               |             |             |             |
| Voltage  |        | V                   | 230 (except NA option*)       |             |             |             |
| Hertz  |        | Hz                  | 50/60                         |             |             |             |
| Protection class   |        |                     | 1/IP20                        |             |             |             |
| <b>Filter Specification</b>  |        |                     |                               |             |             |             |
| Specification  |        |                     | H14 HEPA EN1822, 99.995% MPPS |             |             |             |

| Maxisafe 2030i BSC Ordering Information   |                          | EN 12469 & DIN12980         |           |             |            |
|---|--------------------------|-----------------------------|-----------|-------------|------------|
| Size/Internal width   | m (ft)                   | 0.9 (3)                     | 1.2 (4)   | 1.5 (5)     | 1.8 (6)    |
| <b>Certifications</b>   |                          |                             |           |             |            |
| Standard  | EN 12469 & DIN 12980     |                             |           |             |            |
| Agency certified  |                          | TÜV                         | TÜV       | TÜV         | TÜV        |
| <b>Ergonomics and Utilities</b>   |                          |                             |           |             |            |
| Lighting intensity  | lux (fc)                 | 1000 (93)                   | 929 (86)  | 1500 (139)  | 1418 (132) |
| Interior outlets  | pcs.                     | 2 rear wall                 |           | 4 rear wall |            |
| Service valve ports   | pcs.                     | 2 on each side + Smart Port |           |             |            |
| Slope of front window   | degree °                 | 10                          |           |             |            |
| <b>Maxisafe 2030i Specifications</b>  |                          |                             |           |             |            |
| Noise level (measured according to EN 12469)  | dB (A)                   | 57                          | 59        | 59          |            |
| Power consumption (in normal operation, fans on, lights on)   | W/h                      | 230                         | 240       | 390         | 390        |
| Power consumption (in night set back mode if available, lights off)   | W/h                      | 55                          | 55        | 80          | 80         |
| Normal heat output in operation mode (non-vented)   | W/h                      | 230                         | 240       | 390         | 390        |
| Reduced Flow Heat Output (lights off, non-vented)   | W/h                      | 55                          |           | 80          |            |
| Exhaust volume of cabinet   | m <sup>3</sup> /h (cf/m) | 288 (169)                   | 386 (227) | 483 (284)   | 580 (341)  |
| Exhaust volume, thimble ducting   | m <sup>3</sup> /h (cf/m) | 385 (226)                   | 513 (302) | 641 (377)   | 770 (453)  |
| Size/Internal width   | m (ft)                   | 0.9 (3)                     | 1.2 (4)   | 1.5 (5)     | 1.8 (6)    |
| <b>Receptical Orders</b>  |                          |                             |           |             |            |
| Country configurations are available to ensure correct line cord and internal receptacles are shipped with the cabinet. Standard version is Schuko if no other country version is specified |                          |                             |           |             |            |
| Country Version Switzerland   | Option                   | 51900300                    |           |             |            |
| Country Version UK  | Option                   | 51900303                    |           |             |            |
| Country Version Italy   | Option                   | 51900306                    |           |             |            |
| Country Version FR/B/CZ/SK/PL   | Option                   | 51900921                    |           |             |            |
| Country Version Australia   | Option                   | 51900449                    |           |             |            |
| Country Version Denmark   | Option                   | 51900481                    |           |             |            |
| Country Version China   | Option                   | 51900900                    |           |             |            |
| Country Version Israel  | Option                   | 51901255                    |           |             |            |
| Country Version India   | Option                   | 51901261                    |           |             |            |
| Country Version USA (NA 120V*)  | Option                   | 51901281                    |           |             |            |
| Country Version Argentina   | Option                   | 51900308                    |           |             |            |
| Country Version Chile   | Option                   | 51901259                    |           |             |            |
| Country Version Brazil  | Option                   | 51901260                    |           |             |            |

A height adjustable stand is included with the Triple Filter BSC providing working height between 680mm-880mm

#### Work Surface Options

You have the option to fully customize your BSC to accommodate any work task. The standard EN/DIN cabinet includes a single piece indented 316 stainless steel work tray. Any of the options below or combinations are available for the Maxisafe 2030i, but note that the DIN12980 certification is negated on anything but the indented version we include as standard.

|   |         |        |          |          |          |          |
|---|---------|--------|----------|----------|----------|----------|
| without table tops (negative price)                     |         | Option | 51900651 | 51900652 | 51900653 | 51900654 |
| Flat Worksurface module (150 mm)                        | KAM15   | Acc.   | 50073666 |          |          |          |
| Flat Worksurface module (300 mm)                        | KAM30   | Acc.   | 50072685 |          |          |          |
| Flat Worksurface module (600 mm)                        | KAM60   | Acc.   | 50073667 |          |          |          |
| Flat Worksurface module (900 mm)                        | KAM90   | Acc.   | 50076398 |          |          |          |
| Flat worksurface module (1200mm)                        | KAM120  | Acc.   | No       | 50082970 |          |          |
| Flat worksurface module (1500mm)                        | KAM150  | Acc.   | No       |          | 50122210 |          |
| Flat worksurface module (1800mm)                        | KAM180  | Acc.   | No       |          |          | 50085281 |
| Indented Worksurface module (600 mm)                    | KAML60  | Acc.   | 50073668 |          |          |          |
| Indented Worksurface module (900 mm)                    | KAML90  | Acc.   | 50073669 |          |          |          |
| Indented Worksurface module (1200 mm)                   | KAML120 | Acc.   | No       | 50073670 |          |          |
| Indented Worksurface module (1500 mm)                   | KAML150 | Acc.   | No       |          | 50073671 |          |
| Indented Worksurface module (1800 mm)                   | KAML180 | Acc.   | No       |          |          | 50078750 |
| Vibration dampening granite block section (300mm width) | WP3     | Acc.   | 50084339 |          |          |          |
| Vibration dampening granite block section (600mm width) | WP6     | Acc.   | 50084350 |          |          |          |
| 3 liter mini-sink table top module                      | KAMS30  | Acc.   | 50078875 |          |          |          |

**Maxisafe 2030i BSC Ordering Information**

EN 12469 & DIN12980

|                     |        |         |         |         |         |
|---------------------|--------|---------|---------|---------|---------|
| Size/Internal width | m (ft) | 0.9 (3) | 1.2 (4) | 1.5 (5) | 1.8 (6) |
|---------------------|--------|---------|---------|---------|---------|

**Alternative 300 mm segmented work trays**

If 300 mm segmented work trays are required instead of the one piece deep-drawn work tray in the Maxisafe 2030i series, then the following shortcut SKU's can be used and the individual work trays will be factory installed. Note that DIN12980 is negated by selecting this option.

|  |          |          |          |          |
|--|----------|----------|----------|----------|
| 300mm segmented work trays (factory installed) | 51901421 | 51901422 | 51901423 | 51901424 |
|--|----------|----------|----------|----------|

**Additional Work Surface Options**

|   |        |          |
|---|--------|----------|
| Replacement armrests KAS 30 (Set of 2 arm rests 316 SS) | KAS 30 | 50073663 |
| Padded armrest 316 SS (Set of 2 including gel inserts)  | Acc.   | 50156438 |
| Replacement gel pads for padded armrest (2 pcs.)        | Acc.   | 50156437 |

**Additional Filter Options**

If Activated Carbon Filters are required in addition to Hepa filters on the Maxisafe series, the pre-filter bank can be substituted using our selectable option. Activated Carbon Filters will be factory fitted in place of the Hepa pre-filter bank beneath the work surface area.

|   |        |          |          |          |          |
|---|--------|----------|----------|----------|----------|
| Activated Carbon Pre-Filter set. Factory installed. | Option | 51901411 | 51901412 | 51901413 | 51901414 |
|---|--------|----------|----------|----------|----------|

**UV Options**

The UV control function is designed to preserve bulb life whilst monitoring constantly. The light is programmable via the user interface. This feature measures and tracks UV bulb use ensuring that the bulbs will not require excessive replacement due to premature and unnecessary degradation. Additionally by monitoring UV bulb age, the system auto-adjusts run time to ensure consistent sterilization.

Cross beam UV-C light option is side walls includes protective cover

|  |          |                                       |
|--|----------|---------------------------------------|
| Included in models: 51032715, 51032716, 51032717, 51032718   | Standard | Standard (Cross Beam - in Side Walls) |
| Available for models: 51032711, 51032712, 51032713, 51032714 | Option   | 51900642 (Cross Beam - in Side Walls) |

**Media Valves**

Our standard BSCs feature a dual-side wall negative pressure design which allows the user to install service valves through the side access ports. We also offer factory-installed piping options on our premium units to connect utilities to the top of the BSC to conserve right to left exterior footprint.

**Rear Wall Media Connections**

|  |        |                   |
|--|--------|-------------------|
| 3 Utility Connectors prep (rear wall)-Select rear wall service taps additionally | Option |                   |
| Available for models: 51032711, 51032712, 51032713, 51032714                     | Option | 51901251 (G3/8")  |
| Available for USA country versions   | Option | 51901252 (NPT3/8) |

**Rear Wall Service Taps/Media Valves (supplies are connected above BSC)**

|                                       |      |          |
|---------------------------------------|------|----------|
| Combustible Gas Tap for rear wall     | Acc. | 50068235 |
| Non-combustible Gas Tap for rear wall | Acc. | 50068234 |
| Water Tap for rear wall               | Acc. | 50068233 |
| Vacuum Tap for rear wall              | Acc. | 50068232 |

**Side Wall Service Taps/Media Valves/Lead Throughs**

|  |      |          |
|--|------|----------|
| Combustible Gas Tap for side wall                | Acc. | 50046015 |
| Non-combustible Gas Tap for side wall            | Acc. | 50045959 |
| Water Tap for side wall                          | Acc. | 50044679 |
| Vacuum Tap for side wall                         | Acc. | 50044678 |
| Hose connection for side wall, hose dia 10-13 mm | Acc. | 50059017 |
| Hose connection for side wall, hose dia 3 mm     | Acc. | 50076408 |
| Hose connection for side wall, hose dia 6/3 mm   | Acc. | 50066668 |

**Solenoid Valve (Should be quoted with combustible gas G3/8 connection)**

|  |      |          |
|--|------|----------|
| Solenoid Valve for Combustible Gas Tap | Acc. | 50074905 |
|--|------|----------|

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



EN 12469  
Our Class II biological safety cabinets are independently GS certified according EN 12469 by TÜV Nord.



NF EN 12469  
Our Herasafe 2030i class II biological safety cabinet (1.2 m model) has been independently tested and certified to EN 12469 with the NF mark by LNE.



NSF  
Our Class II biological safety cabinets are independently tested and certified to NSF/ANSI 49, by NSF International.

Learn more at [thermofisher.com/bsc](http://thermofisher.com/bsc)

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