



Innovation. Design. Quality.



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MD-Hi
Decontamination
Hatch - Integrated

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PBSC provide installation, servicing, technical advice, product selection and demonstrations for clean controlled environments with **Innovation, Design** and **Quality** at the heart.

PBSC manufacture high quality clean room, high containment and material decontamination products. When you need areas and staff to be contamination free and protected from pathogens, you need dependable equipment which will maintain critical biosafety levels, achieve sterility and protect data reliability.

Complying with local and global regulations PBSC's products can be designed to meet your specific requirements. Over 30 years knowledge and competence within the specialist sectors, always going through extensive research and development and offering accurate assistance during project planning to consultants, architects and end users to deliver successful projects.



Innovation

Incorporating your requirements to create product ranges to exceed expectations



Design

Leading the way with pioneering design, ensuring customer requirements are achieved



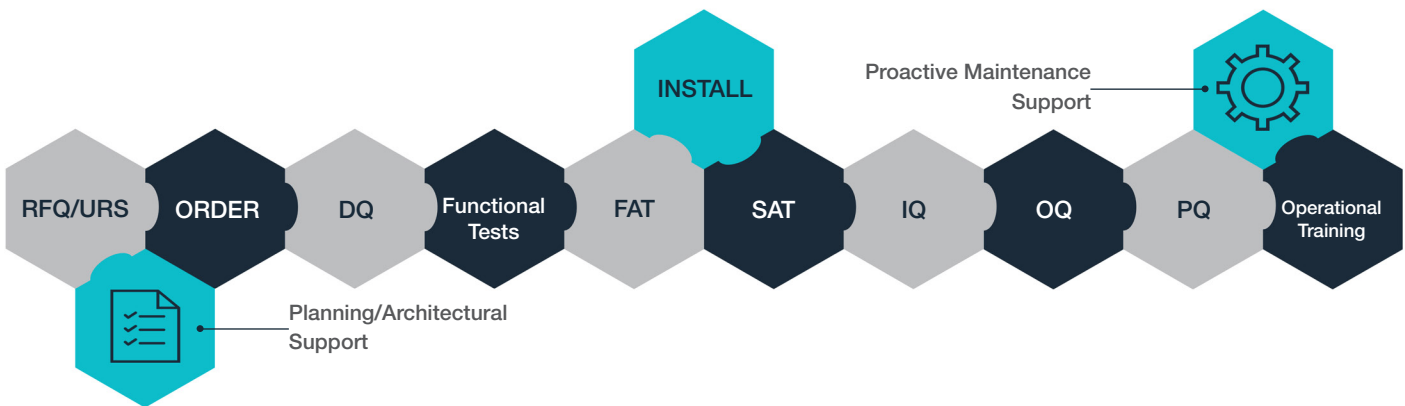
Quality

Delivering high quality products for over 30 years, with rigorous testing and inspection

PBSC is the accepted benchmark by which others are measured...

The search for innovative design, an eye for detail and advanced manufacturing techniques has seen PBSC gain a deserved reputation as the premier supplier within cleanroom environments.

Supporting the customer throughout the process continuing to meet the growing challenges and striving for continual improvement with our ISO 9001 QA processes independently audited and updated on a regular basis.





Description



PBSC's high level Log6 surface disinfection hatch is a freestanding modular unit, ideal for material production and equipment loads in cleanrooms and laboratory environments. PBSC can provide fully integrated decontamination solutions from market leading suppliers ensuring regulatory compliance and consumable traceability. The hatch operation is designed to be intuitive allowing ease of operation for facility operators.

The decontamination cycle is initiated via the colour touch screens on each side of the hatch, which provides operators with in cycle data from the hatch and H2O2 generator.

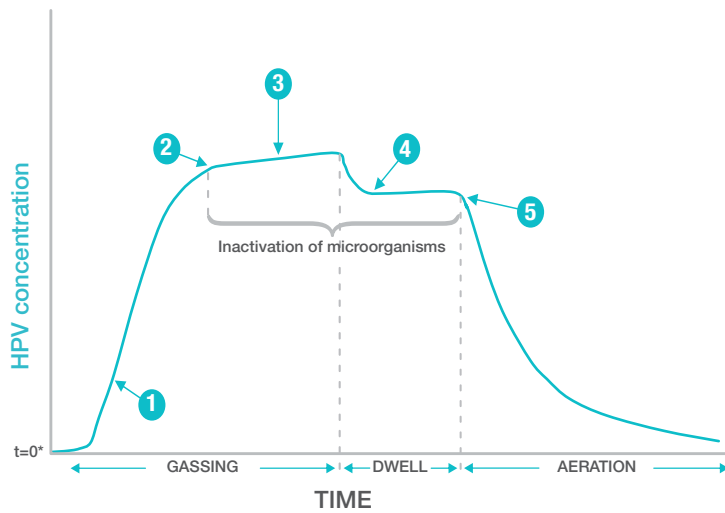
Effective against a wide range of micro-organisms and viruses, the MAL hatch provides a low heat decontamination solution for heat sensitive items such as electronics i.e. laptops, or biologic preparations. The decontamination hatch is a viable addition to a facilities process ethos for material transfer either into or out of the critical environment.

The hatch is fitted with an onboard PLC which monitors and records all critical parameters of each cycle. Various hatch sizes with either solid core or stainless-steel pneumatic seal doors are available.

Air handling options

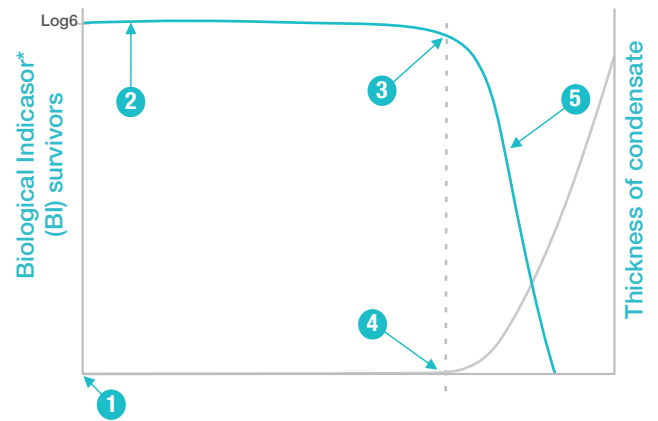
- The hatch can operate with connection to a HVAC system.
- PBSC supplied air handling units
- PBSC can provide a system which continually recirculates air from and to a clean environment through 100% scrub catalysts, providing quick reliable and safe cycles without any added strain to the HVAC system.





1. HPV introduced – initial rapid increase in HPV concentration
2. HPV saturation/'dew point' achieved – onset of rapid bio - decontamination
3. HPV gassing plateau – sustained micro-condensation effecting bio deactivation
4. Dwell period (contact time)
5. Aeration – removal of HPV from the atmosphere typically by catalytic conversion to water vapour and oxygen, leaving no residues

* Conditioning phase not shown Note: 'features' on graph change e.g. depending on size of chamber (& related temperature ect)



1. Injection of HPV into the enclosure starts (t=0)
2. Only slight decline in biological indicator population prior to dew point
3. Rapid micro-biological kill occurs immediately after saturation/'dew point' is achieved – process optimised to achieve reliable log6 sporidical reduction on all exposed surfaces
4. Onset of micro-condensation correlates with rapid bio-deactivation
5. Bio-deactivation achieved via micro- condensation (invisible layer) of hydrogen peroxide (2-6mm)

* Typical BI: Tyvek pouched log6 Geobacillus stearothermophilus spores

Applications

The decontamination hatch with the integrated generator is ideal for various facility applications. Used globally in facilities to eradicate problematic bacteria, viruses and fungi on material loads or equipment entering/exiting controlled areas throughout the Pharmaceutical/Bio-Pharmaceutical, Containment and Biomedical sectors.

Where you would like to be able to use the generator for other equipment, we have a different hatch to interface with a remote generator.

Installation and Service

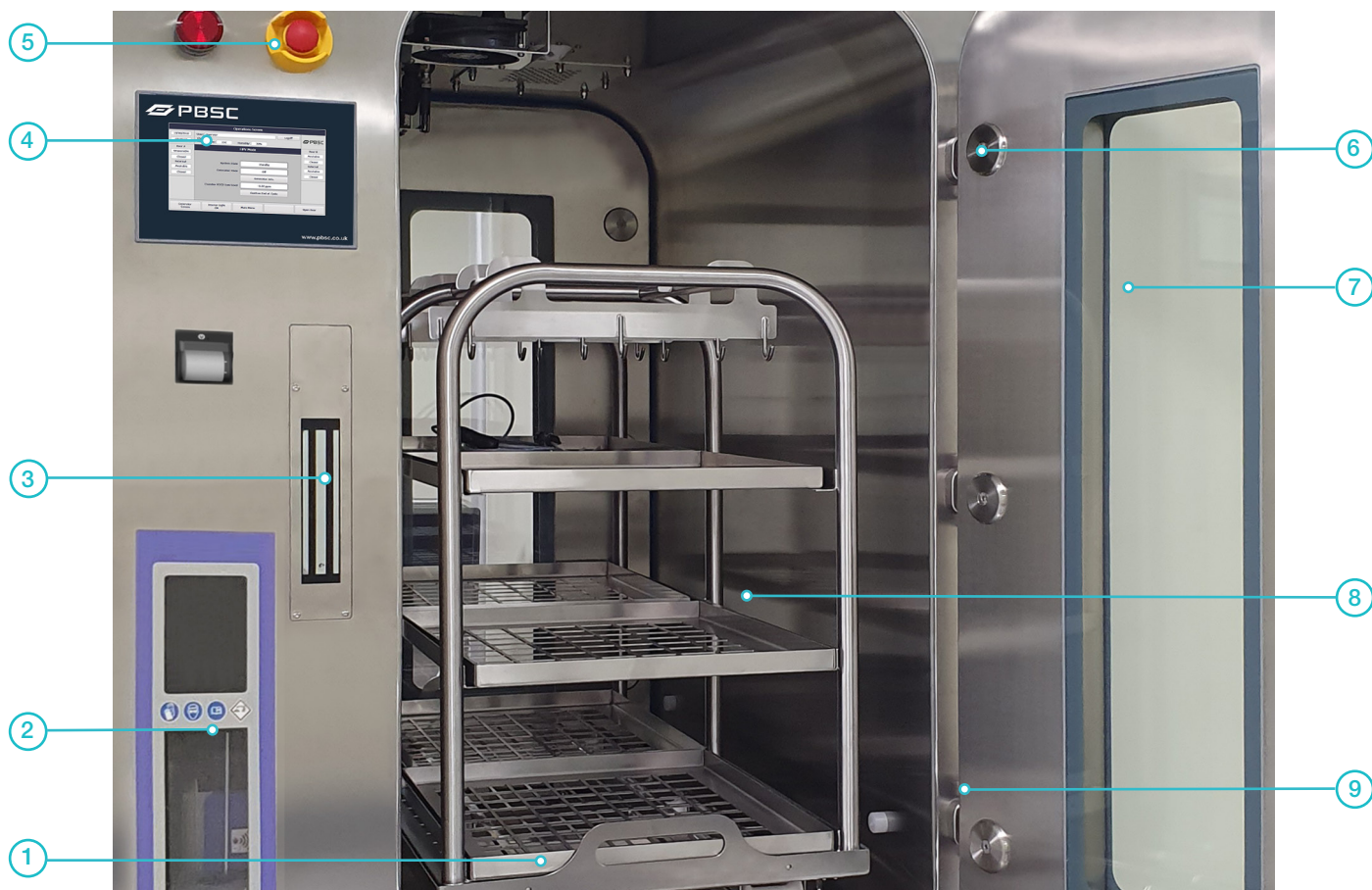
The hatch has no need for free space to the side of the hatch for servicing as this is via a service door at the front of the hatch, within the hatch or from the technical area above the hatch depending on design and facility restrictions. Installation into existing facilities where space is limited is not a problem as the hatch is delivered in panels which will fit through a single door way and assemble on site.



Commissioning Options

Include:

- Project Specific Approval Drawing
- DQ package including FDS, P&ID, HDS etc
- Installation Services
- Commissioning of Hatch
- IQ-OQ
- Operator Training
- Gas Cycle Development
- Performance Qualification
- 6-12 months-servicing/calibration



Key Features



- No pit in the floor or side access for service required
- H2O2 loaded on the hatch with printer above to take cycle records
- Large Vision Panel, with True Flush Glazing both sides
- Internal power sockets, to allow electrical items to be run during the fumigation cycle
- All critical parameters controlled via the hatch PLC
- Bespoke trolley and racking designs allowing easy loading/unloading
- Decontamination cycle times as short as 30 minutes
- Range of aeration and air handling options to suit customers requirements
- Full-service support contracts available to suit GMP and Life Science facilities
- Data integrity compliance
- Log6 bio-deactivation

- ① Point Contact Roller System
- ② H2O2 Bottle Housing
- ③ Flush Maglock with Hidden Proximity
- ④ 7", 12" or 15" Siemens Comfort Touch Screens
- ⑤ Override Buttons
- ⑥ Stainless-Steel Hinges without Visible Fixings
- ⑦ Flush Glazed Vision Panels
- ⑧ Customized Racking
- ⑨ Stainless-Steel Hinges without Visible Fixings



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NOTES:



PBSC Staying in Control of Controlled Environments

Established in 1987 PBSC has become one of the leading manufacturers of clean room, high containment and material decontamination products throughout the world and having the extensive product range and bespoke designs and assembly capabilities can meet customers needs.

Providing high quality products and services to the pharmaceutical, medical research, high containment and hospital sectors, offering quick and accurate assistance during project planning to consultants, architects and end users.

PBSC have agents and representatives in most countries to provide excellent local support and logistical services to make sure your products arrive on time.

Products include;

- Clean Room Doors
- Pneumatic Inflatable Seal /Airtight Door Sets
- Mechanical Seal / Airtight Doors
- Material Decontamination Chambers
- Transfer Hatches / Cleanroom Pass Through
- Fogging Showers / Mist Showers
- Air Showers

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PBSC reserve the right to introduce changes in performance, configuration and technology, dimension, weights and materials in the course of technical progress. Images may not be accurate