

# Engineered to optimize efficiency and safety

Heraguard ECO Clean Bench

## Designed for safety and functionality

## Sample protection from contamination

Thermo Scientific™ Heraguard™ ECO clean benches are ideal for laboratory applications where sample protection is required. Due to DC motors, the clean benches use less energy to operate than products with traditional AC motors, so there is less heat emitted into the lab.\* They are available in four sizes: 900mm, 1200mm, 1500mm, or 1800mm (1800mm size with optional extra height).

#### Heraguard ECO clean benches enable:

- ISO class 5 minimum conditions achieved in the work area
- EU GMP Grade A work environment achieved in the work area
- Sample protection
- Ease of use

#### Choose the configuration that meets your laboratory needs:

- Further enhance the convenience by adding hanging bars inside the work area. The
  included Thermo Scientific™ SmartPort™ convenience provides clean and safe routing
  for vacuum tubing and cables through the side of the clean bench to help improve
  organisation and work efficiency.
- An optional UV light can be fitted into the top of the work space to disinfect the worktop.
- Protect the user against the dry purified air with a wind screen that is folded under the light housing and flipped down for use.
- An optional stainless steel work surface can be added to improve durability for demanding applications.



<sup>\*</sup> Based on data from internal testing and The University of Michigan Field Study, published in American Biotechnology Laboratory.

## At a glance

## Features and options

#### UV disinfection (optional)

A UV light can be fitted into the top of the work space to disinfect the worktop.

#### Transparent hinged wind screen (optional)

Helps protect the user against the dry purified air flow. The wind screen is folded under the light housing and can be flipped down for use.

#### **SmartPort** convenience

Clean and safe routing for vacuum tubing and cables through the side of the clean bench improves organisation and work efficiency.

#### Modular side windows

The side windows are made of single pane safety glass with an access port for tubing or a media tap. Optionally, a lacquered sheet steel plate with three holes can be used.

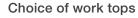
#### **Prefilter**

The prefilter on the intake side can be changed by hand, without the need for tools. Prefilter exchange is made economical and easy.

#### Intuitive control panel

Displays safety and performance data.

Standard melamine work tops or optional stainless steel tops are available for different applications and individual work space designs.



## Horizontal laminar flow technology

### How it works

Clean benches provide a clean (aseptic) space to work with a product or specimen without contaminating it with particles such as micro-organisms. They protect the product, they do not protect the user or the environment.

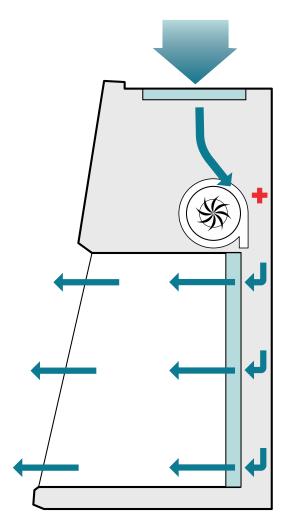
#### Horizontal laminar flow

When using smaller equipment and consumables within the cabinet, the horizontal laminar flow is ideal as it creates less turbulence at work space level compared to the vertical laminar flow system.

Air is pulled in from the top and passes through a pre-filter, before it is then pushed through the HEPA filter. A horizontal laminar flow is produced within the work area. The laminar flow (=uni-directional flow) helps protect the product from contamination, from the worker and also contamination from the environment. The work area becomes a (positive) particle free aseptic clean zone which is being continually bathed in clean air. The device is GMP compliant and the air cleanliness inside the work area equals at the very minimum ISO Class 5. This classification relates to the international cleanroom standard ISO 14644-1.

The horizontal laminar flow clean bench provides:

- Product protection
- Particle free work area (EU GMP Grade 'A')
- Positive air pressure
- Air velocity 0.45m/s (models with standard height) and 0.40m/s (model with extra height) uni-directional flow
- GMP compliant
- Air cleanliness –ISO class 5 minimum (ISO 14644-1 cleanroom standard)



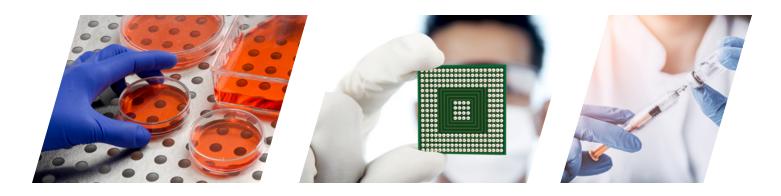
## **Application**

## Where our clean benches are typically used

- Hospitals (Pharmacy) drug dispensing, IV mixture prep, media prep, drug compounding
- Cleanrooms
- Hospitals (microbiology dept.) Tissue Culture (nonbiological)
- IVF departments
- · Pharmaceutical research
- Cleanrooms GMP suites

- Pharmaceutical microbiology
- · Sterile packaging and filling
- Micro-electronics assembly and semi-conductor production
- Plant cell culture/agriculture
- · Food and drink industry
- Aerospace industry









Control panel

Left hand glass with metal sheet and two service valves









UV night cover

Windscreen protection kit

Hanging bar with hooks

Ergolign saddle stool

#### **Specifications**

Size/Internal Width	0.9m	1.2m	1.5m	1.8m	1.8m/95			
Exterior dimensions WxHxD (mm)	1000 x 1170 x 810	1300 x 1170 x 810	1600 x 1170 x 810	1900 x 1170 x 810	1900 x 1475 x 1010			
Interior dimensions WxHxD (mm)	920 x 645 x 585	1220 x 645 x 585	1520 x 645 x 585	1820 x 645 x 585	1820 x 950 x 785			
Shipping dimensions WxHxD (mm)	1130 x 1320 x 980	1140 x 1320 x 980	1730 x 1320 x 980	2030 x 1320 x 980	2030 x 1620 x 1180			
Net weight (Kg)	110	125	140	160	170			
Shipping weight (Kg)	135	150	180	200	220			
Light power (Lx)	>1000							
Receptacles	3							
Noise level (dBA)	<55		<60					
Energy consumption, operating set point (W)	270		550					
Normal heat output in operation (BTU/hr)	920		1840					

#### Ordering information

Description			Cat. No.			
	0.9m	1.2m	1.5m	1.8m	1.8m/95	
230 V, 50/60 Hz models						
Heraguard ECO Clean Bench with melamine surface	51029701	51029702	51029703	51029704	51029705	
Optional stainless steel surface (order in addition to unit)	51901074	51901075	51901076	51901077	51901078	
Solenoid valve for combustible G3/8 (yellow) connection			50109978			
120 V, 50/60 Hz models						
Heraguard ECO Clean Bench with melamine surface	51029696	51029697	51029698	51029699	51029700	
Heraguard ECO Clean Bench with stainless steel surface	51029691	51029692	51029693	51029694	51029695	
Solenoid valve for combustible G3/8 (yellow) connection			1911308			
Other options						
Windscreen protection kit	50052208	50052460	50052461	50052462	50053522	
Fixed floor stand (height of 680mm)	50155665	50155666	50155667	5015	5668	
Castor set - Fixed stands only	50109977				-	
Manual adjustable floor stand (height of 680-880mm)	50155688	50155688 50155689 50155690 5015569		5691		
Foot rest bars	50051982	50051982 50051983 50051984 50051985		1985		
Factory installed UV light option including night cover			51901073			
Vacuum tap G3/8 connection (grey) with long neck	50044678					
Water tap G3/8 connection (black) with long neck	50044679					
Non-combustible G3/8 connection (green) with long neck	50045959					
Combustible G3/8 connection (yellow) with long neck	50046015					
Lead through for hose connections 10-13mm inner diameter hose	50059017					
Lead through for hose connections 3mm inner diameter hose	50076408					
Left hand glass with metal sheet, 2 media valve holes & 1 SmartPort	51901071			Included		
Right hand glass with metal sheet, 2 media valve holes & 1 SmartPort	51901072				Included	
Hanging bar with hooks	50073943		5007	3944		
Ergolign cleanroom saddle stool		E	ERG-CR-233	0		
Switzerland country configuration	51900300					
UK country configuration	51900303					
Italy country configuration	51900306					
France country configuration	51900448					
Denmark country configuration	51900481					
Australia country configuration	51900449					
China country configuration			51900900			





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