Steritent –
Portable Clean Room

Overview

The Portable Clean Room is designed for rapid setup of a clean space environment seperated from the outside surroundings.

It is therefore an ideal solution everywhere when dealing with immunodeficiency people, for highly sensitive workplaces or where temporary laboratory work in a clean environment is required.

Description

The airlock attached to the main chamber provides the capability to move easily in and out of the clean area without loosing the positive pressure or contaminating the inside chamber.

option to focus on treatment from outside avoiding contamination of the chamber inside by equipment or staff. Required equipment can be placed outside the chamber and probes, hoses and cables can be passed through utility sleeves into the clean area.

The integrated Filtration System FA 2000 combines a high efficient pre-filter and HEPA-filter which creates a clean environs inside the chamber. The system draws contaminated air from the outside environment through a prefilter followed by a HEPA-Filter and discharges the purified air into the chamber. A UV-radiation source contained within the filters kills the microorganisms and prevents their accumulation in the system trapped outside, which prevents the accumulation of living micro-organisms in the system.

Features

- **Developed together with the Kaplan Medical Center**

- **Well-tried and tested in successful hospital service**

- **Quick exit through high flushing airlock which enables shortest dwell times**

- **Very simple and fast assembly without the need of tools**

- **Cost effective and flexible**

AQAP 2110

STERITENT ®

Those features contribute to offer a cost effective and practical alternative to costly and permanent clean rooms which can provide the necessary clean protection within minutes.

Main Chamber

The main chamber is constructed from a lightweight aluminum "quick connect" structure, supporting the transparent chamber liner which is made from special resistant laminate.

Airlock

The airlock is a self supporting construction consisting of wide double swing doors for quick and easy access with equipment or beds. When entering the airlock an electro-optical eye switches automatically the filtration system to the high flush mode, increasing the airflow through the airlock substantially..

This reduces dramatically the wait time for a complete air change

Electro-optical eye in airlock

in the airlock and ensures that positive pressure is maintained even when entering or exiting the chamber.

Filtration System

The filtration system has three different airflow modes, allowing quick air flushing when needed while minimizing noise level and energy use when high flush rates are not required.

Additionally the system is equipped with a differential pressure gauge, indicating the condition of the HEPA-Filter. For Filter- or UV-unit replacement no tools are required.

Features

- **Auto activation sensor**
- **Extremely low noise level**
- **Filter condition indicator**
- **Simple filter exchange without the need of tools**

Filtration System FA 2000

Live Action in the SteriTent Type 90 x 120 (Hospital Kaplan, Tel Aviv)

Patient treatment inside
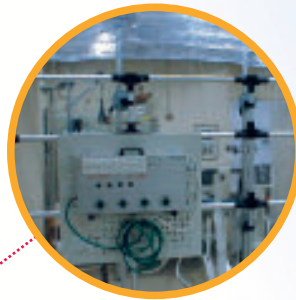
Safe waste disposal

Access with gloove box

Optional X-ray sleeve

Optional Steritent Items

● Positive Pressure Indicator

The positive pressure indicator controls the current over-pressure in the main chamber. If the positive pressure drops out of the acceptable range the red light starts to blink and an audible buzzer gives alarm. An integrated potential free contact enables tracking of the pressure status by connection to an computer or an alarm system. The pressure indicator is installed at the outside of the Steritent airlock and an air pipe connects the main chamber with its measure point

● Internal Utility Racks

The internal utility racks are holding equipment and connection facilities required inside the sterile chamber. The cables and hoses of the equipment can be routed into the chamber through utility sleeves which are incorporated into the chamber liner.

● Small Transport Container

The small transport container houses the filtration system FA 2000 HS.

● Large Transport Container with Trolley

The large transport container houses the trolley which is able to hold all the equipment required to build the Steritent system (excluding the filtration system). Therefore the equipment can be moved easily wherever it is required to assemble the Steritent system.

Applicable Standards ⁻

- Quality Control according to ISO 9001:2000

- Quality Assurance AQAP 2110

- HEPA-filter efficiency EN 1822 IEST-PR-CC-001.3

- Certified according UL 507 CSA 113 UL 60601

Technical Specification:

Main Chamber

Chamber Type	Length m (inch)	Width m (inch)	Height m (inch)	Weight kg (lbs)	Length with airlock and open doors m (inch)
60 x 90*	1.60 (63.0)	2.35 (92.5)	2.35 (92.5)	33.5 (73)	3.95 (155)
90 x 90	2.35 (92.5)	2.35 (92.5)	2.35 (92.5)	50 (111)	3.95 (155)
90 x 120	3.10 (122)	2.35 (92.5)	2.35 (92.5)	67 (148)	4.70 (185)
120 x 120	3.10 (122)	3.10 (122)	2.35 (92.5)	89 (196)	4.70 (185)
120 x 150*	3.85 (151.5)	3.10 (122)	2.35 (92.5)	111 (245)	5.45 (215)

Airlock

	Length m (inch)	Width m (inch)	Height m (inch)	Weight kg (lbs)
	0.90 (35.5)	160 (63)	2.10 (83)	54 (119)

Filtration System

Technical data	FA 2000 HSZ	FA 2000 HSZA	FA 2000 HSZB
Nominal Voltage	230 VAC	115 VAC	100 VAC
Power Consumption	550 Watt	680 Watt	680 Watt
Nominal Frequency	50 Hz	60 Hz	60 Hz
Airflow Rate (3 Stages)	1000/1400/2200 m³/h (591/823/1180 cfm)		
Noise Level	52/56/65 dB		
Filtration efficiency @ particle size 0.3 µm	99.995 %		
Cleanroom class	Up to class 1000 by Fed. Std.209 E		

	Length m (inch)	Width m (inch)	Height m (inch)	Weight kg (lbs)
	0.744 (29.3)	0.703 (27.7)	1.076 (42.4)	86 (190)

Transport containers (optional)

	Length m (inch)	Width m (inch)	Height m (inch)	Weight empty kg (lbs)
Large transport container with trolley	2.31 (91)	0.735 (29)	1.135 (44.5)	168 (370)
Small transport container for FA 2000HS	0.77 (30.5)	0.735 (29)	1.15 (45.5)	65 (143)

* Dimensions available on request

The optional available transport containers provide a compact and safe packaging for the Steritent components. The containers are stackable and transportable with a forklift which allows storing of 24 complete Steritent systems in one 40 ft container.

Specifications are subject to change without prior notice

Length with Airlock door opened

Length

Airlock

Width

Main Chamber

Filtration System