

## Introduction

Esco Sputum Collection Booth controls exposure risk to harmful aerosols / airborne diseases by providing containment using air flow to capture and exhaust out aerosols from sputum during expectoration, handling, or processing. We provide both operator / patient and environmental protection.

# **Key Features**

- ISO Class 5 air cleanliness (Class 100 as per US Fed Std 209 E.)
- Negative pressure keeps aerosol contained in booth: Supplies 100% HEPA filtered / fresh air to the downflow plenum.
  Typical airflow is 85% total volume as downflow, 15% inflow and 100% exhausted.
- Fluorescent light fittings: T5 Lighting, 30W with diffuser for uniform lighting throughout the chamber.
- UV lamp operates on programmable timer embeded in the SentinelTM Microprocessor System.

#### Construction

- Esco Sputum Collection Booth is made of either stainless steel 316 L grade or Electrogalvanized steel coated with ISOCIDE\*\* antimicrobial coating finish sheetmetal.
- Stainless steel 316 L or Electrogalvanized steel coated with ISOCIDE\* antimicrobial coating finish sheetmetal perforated grilles.
- Heavy-duty, durable stainless steel 316 L or Electrogalvanized steel coated with ISOCIDE<sup>®</sup> antimicrobial coating finish sheetmetal framed doors assembly with transparent glass windows.
- Reinforced stainless steel 316 L or SS304 finish sheetmetal floor
- Wall mounted stainless steel perporated work bench.
- Stainless steel leveling feet

### **Filtration System**

- Room air is taken from the top of the booth through a washable pre-filter, air is forced evenly across the HEPA filter resulting in a clean downward airflow.
- Purified air travels downward within the interior in a vertical, downward stream with a velocity of 0.16 m/s and leaves the exhaust filter @ 0.60m/sec into the room close to front side wall.
- Supply and exhaust fan / filter systems will be individually designed for each location.

### **Control System Package**

• Programmable UV timer.

## **Filtration Package**

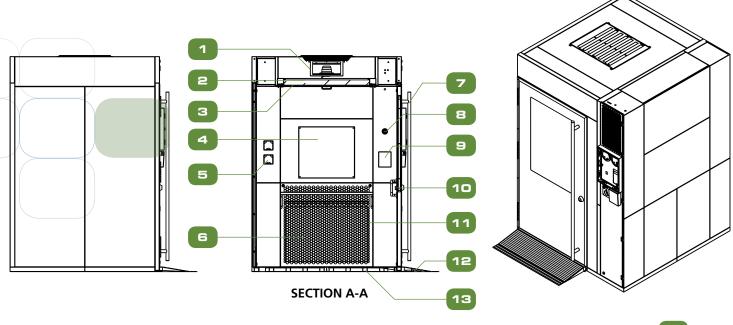
- Pre-Filter: A disposable G4 pre-filter with 85% arrestance and efficiency of 20% extends the life of the main filter.
- Downflow Filter: HEPA (H10)
- Main Supply Filter: HEPA (H10)
- Pre-exhaust Filter: HEPA (H14) filter on Esco Fan Filter Unit provides 99.995% at 0.3 microns at MPPS (Most Penetrating Particle Size).

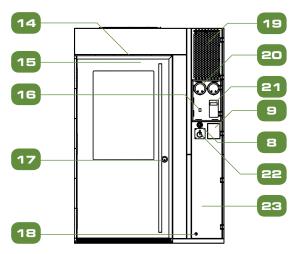
#### Warranty

1 year warranty (excluding consumables). Consumables are ballast, fluorescent, and filters. The warranty will cover all other parts including the blower, speed controller, electrical main board, and microprocessor.

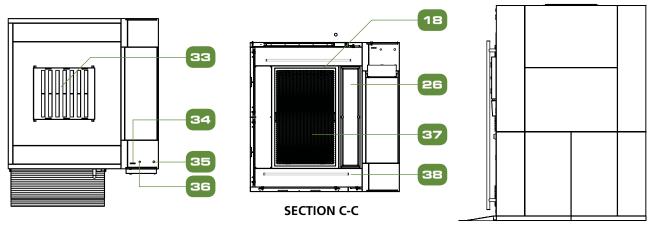
During the period of warranty, any repair, modification, testing and commissioning performed by any unathorized party other than Esco Service Team shall void the warranty of the unit.









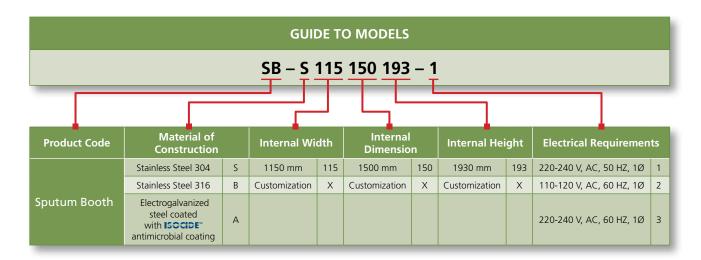


- 1. Blower
- 2. H10 Gel Seal Downflow Filter
- 3. Blower & Filter Access
- 4. Blower Access
- 5. 13A-Gang Outlet IP Rated
- 6. Return Grill
- SS Door Outside Longer Handle
- 8. Emergency Stop
- 9. Intercom
- 10. SS Door Inside Handle
- 11. Hepa Filter Access Change
- 12. SS Ramp
- 13. Hollow Section Base
- 14. Concealed Door Closer
- 15. View Panel w/ Tempered Clear Glass
- 16. Unit On/Off Switch
- 17. SS Door Lock & Key
- 18. SS Cam Latch 19. Exhaust Grill

- 20. Photohelic Gauge
- 21. Sentinel Control
- 22. Handicap Symbol
- 23. Electrical Panel
- 24. SS Chair
- 25. SS Flooring
- 26. Led Lamp
- 27. H14 Exhaust Filter
- 28. Blower
- 29. Perporated Table

- 30. H10 Gel Seal Return Grill Filter
- 31. Filter Clamp
- 32. Perforated Grill
- 33. Pre-filter
- 34. BMS Relay Signal
- 35. Power Chord
- 36. PMP Port Atmosphere.
- 37. Downflow Diffuser
- 38. UV Lamp (Optional)

## SPUTUM BOOTH



| GENERAL SPECIFICATION                    |           |   |
|--|-----------|---|
| Model                                    |           | Sputum Collection Booth   |
| Nominal Size                             |           | 1600 mm   |
| External Dimension (W x D x H)           |           | 1600 x 2000 x 2300 mm   |
| Internal Work Area Dimension (W x D x H) |           | 1150 x 1500 x 1930 mm   |
| Cabinet Construction                     | Main Body | Stainless Steel Grade 316 L / Electrogalvanized steel coated with ISOCIDE" antimicrobial coating Sheetmetal |
|  | Floor     | Stainless Steel Grade 316 L / SS304   |
|  | Door      | Stainless Steel Grade 316 L / Electrogalvanized steel coated with ISOCIDE" antimicrobial coating Sheetmetal |
| Power Consumption                        |           | 350 W, FLA 7A   |
| Cabinet Full Load Amps (FLA)             |           | 10 Amp  |
| Fluorescent Lamp Intensity               |           | 500 lux   |
| Net Weight                               |           | 725 kilogram  |
| Shipping Weight                          |           | 1000 kg   |
| Shipping Dimension, Maximum (W x D x H)  |           | 2500 x 1250 x 2000 mm   |

| ADDITIONAL SPECIFICATION   |   |  |
|----------------------------|---|--|
| Filter                     | G4 Pre-Filter, H10 Downflow Hepa Filter,<br>H10 Return Grill Hepa Filter, H14 Exhaust Hepa Filter |  |
| Lights                     | UV & T5 Lighting  |  |
| Work Bench                 | Detachable Stainless Steel  |  |
| Leveling Feet              | Concealed   |  |
| Air Flow                   | 100% Exhausted  |  |
| ACH (AIR CHANGE PER HOUR): | 105   |  |
| СМН                        | 350 m³/hr   |  |

Wheelchair can go inside together with the patient Chamber is negative pressure



# **ESCO GLOBAL NETWORK**



Since 1978, Esco has emerged as a leader in the development of controlled environment, laboratory and pharmaceutical equipment solutions. Products sold in more than 100 countries include biological safety cabinets, fume hoods, ductless fume hoods, laminar flow clean benches, animal containment workstations, cytotoxic cabinets, hospital pharmacy isolators, and PCR cabinets and instrumentation. With the most extensive product line in the industry, Esco has passed more tests, in more languages, for more certifications, throughout more countries than any biosafety cabinet manufacturer in the world. Esco remains dedicated to delivering innovative solutions for the clinical, life science, research and industrial laboratory community. www.escoglobal.com

Pass Box

Soft Wall Cleanroom Sputum Booth

Ventilated Balance Enclosure (VBE)

Weighing and Dispensing Containment Isolator (WDCI)





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