



Cosmetics Industry





Welcome to Esco Lifesciences

Esco Lifesciences' vision is to provide enabling technologies for scientific discoveries to make human lives healthier and safer.

Esco Lifesciences is committed to delivering innovative solutions for the clinical, life sciences, research, industrial, laboratory, pharmaceutical, and IVF communities. With the most extensive product line in the industry, Esco has passed a number of international standards and certifications. Esco Lifesciences represents innovation and forward-thinking designs, that are of the highest standard quality since 1978.

Availability and Accessibility. Esco Lifesciences has headquarters in Singapore, Indonesia, and Philippines, with manufacturing facilities located in Asia and Europe. Research and Development (R&D) is conducted worldwide spanning the US, Europe and Asia. Sales, services, and marketing subsidiaries are located in 42 major markets including US, UK, Japan, China and India. Esco regional distribution centers are located in Singapore, Malaysia, Thailand, Vietnam, Myanmar, Indonesia, Philippines, Bangladesh, Hong Kong, Taiwan, South Korea, China, Japan, India, UAE, Central and South Africa, Denmark, Germany, Italy, Lithuania, Russia, United Kingdom, and USA. Because of our worldwide presence, you can be sure that Esco is within your reach.

High Quality, Reliable, and Dependable. Esco Lifesciences products are of high quality, reliable, and dependable. Cross-functional teams from Esco Production, R&D, Quality Assurance, and Senior Management, are regularly assembled to review and implement areas for improvement.

Esco Lifesciences Cares for Your Safety. Esco Lifesciences focuses on providing safety not just for your samples, but also for you and the environment.

Esco Lifesciences Cares for Your Comfort. Building ergonomic designs and reducing noise levels of the units ensure comfort for our users.

Esco Lifesciences Cares for the Environment. Esco Lifesciences incorporates the latest proven technologically advanced components available. One in every four of Esco's employees is involved in Research and Development and are evaluating new components or designs for better efficiency. Whenever a new technology is available, Esco Lifesciences redesigns technology into our new products that will use lesser energy.

Customer Service and Support. Our service does not stop once purchase has been done. Esco Lifesciences gives on-time customer service such as service training, preventive maintenance, and re-certification, to respond to your equipment needs. Esco Lifesciences also offers free end-user seminars and provides educational materials and informative videos.

As Esco Lifesciences takes the opportunity to respond to the world's needs, we aim not only to contribute to the advancement of scientific discoveries but also in making the world a safer, healthier, and better place to live in.



OVERVIEW

The increasing demand of cosmetic products has in turn led to the growth of cosmetic market across the world. Consumers are increasingly concerned about the component and the ethical background of their cosmetic products. It is crucial that each manufacturer should guarantee that the products are safe for use for the consumers.

To ensure the product's safety, quality assurance laboratory with a reliable equipment is vital for cosmetic industry. Esco is a world leading manufacturer of laboratory and biopharma equipment suitable for a Quality Assurance laboratory. We are proficient in providing cleanroom equipment and other controlled environment that fit the needs of your laboratories.

Applications

- Microbiological testing
- Handling of hazardous chemicals
- Chemical and sample storage
- Stability testing
- General laboratory functions

Equipment

- Biological Safety Cabinet
- Laminar Flow Cabinet
- Laboratory Fume Hood
- Ductless Fume Hood
- Filtered Storage Cabinet
- Laboratory Incubator
- Laboratory Oven
- Laboratory Refrigerator and Freezer
- Laboratory Shaker
- Laboratory Centrifuge





AC2-4S_NS

Airstream®

Class II Biological Safety Cabinets

Features

- Energy saving DC ECM blower
- Isocide™ antimicrobial powder coating
- H14 filter or ULPA filter with 99.999% efficiency at 0.1 – 0.3 µm selection.
- Large performance envelope
- Ergonomic design
- Low noise
- Easy to clean

Introduction

Esco's Biological Safety Cabinet is a primary engineering control which provides user protection against biohazards as the inflow air creates airflow barrier preventing accidental release of biohazards from the cabinet's working area and at the same time provides product protection with the airflow barrier inside the work zone which is on the other hand created by the downflow air.

Esco is a world leader in biological safety cabinets, offering the industry's widest product range, with thousands of installations in leading laboratories in more than 100 countries around the globe. Esco's biological safety cabinets have earned more independent certifications in more countries, in more languages, than any other product, demonstrating our commitment to the industry's best safety and quality.

Basic Principle

Ambient air is pulled through front grille to create inflow, without going through the work surface. Inflow is joined by half of the downflow, to create front air curtain that is fine-tuned to create a large performance envelope. The combined air stream travels through the back air column towards the blower. Approximately 1/3 of the air in the common plenum is exhausted through the ULPA filter to the room. The remaining 2/3 of the air is passed through the downflow ULPA filter and into the work area as a vertical laminar flow air to create ISO Class 3 work surface and prevents cross contamination.

Near the work surface, the downflow splits. About half goes to the front grille, and half goes to the rear grille. A small portion enters the side capture zones to prevent dead air corners (small blue arrows). The design was optimized to give large performance envelope, that provides operator and product protection at wide Inflow and Downflow variation from the Nominal point.



NSF / ANSI 49



UL 61010



国家食品药品监督管理局



TÜV NORD, Germany



JIS K3800



EN 12469



SANS 12469



STANDARDS Australia



Green Product

Airstream® Class II Type A2 Biological Safety Cabinets

The World's Most Energy-Efficient, Quiet, and Compact Biosafety Cabinet

Aside from providing protection for you and your environment, Airstream® Class II biological safety cabinet provides protection for your microbiological samples.

We understand your BSC requirements.

Airstream® offers the most complete Class II cabinet range, with 9 models to choose from.



Model AC2-4E8



Model AC2-4D8



Model AC2-4G8



Model AC2-4S8



Model AC2-4S9-NS



Model AR2-4S9
(Available only for USA)



Model AC2-4E8-TU



Model AC2-4S8-TU



Model AC2-4K8
(Available only for Australia)

OPTIONS AND ACCESSORIES



Support Stands

- Fixed height, with levelling feet or casters
- Telescoping height, with levelling feet or casters
- Electronic adjustable height, with levelling feet or casters



Electrical Outlet

- European/ Worldwide Style, available in Type C, D, E, F, G, H, I
- North American style



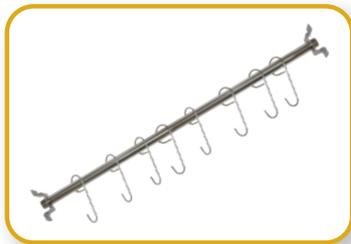
Germicidal UV Lamp

- Emission of 253.7 nanometers for most efficient decontamination
- Lamp is positioned away from operator's line-of-sight for safety and proper exposure to interior surfaces



Service Fixtures

- European/ Worldwide style
- North American style
- Electronic adjustable height, with levelling feet or casters



IV Bars with hooks

- Stainless steel construction, Max Load 6 Kg (13 lbs)
- Available for all standard Esco cabinets



Exhaus Accessories

- Air-tight damper and thimble exhaust collar
- SEAS (Sentinel Exhaust Alarm System)*
- Anti-blow back valve
- Tri-safe exhaust collar with alarm



Ergonomic Foot Rest

- Angled, helps maintain proper posture
- Easily adjustable from 3" to 11" in 1" increment, 20" wide
- Anti-skid coating, chemical-resistant finish



Ergonomic Lab Chair

- Laboratory-grade construction
- Alcohol-resistant PVC materials
- Adjustable height 395-490 mm (15.6"-19.3")



PVC Arm Rest

- Chemically treated, improves operator comfort, easy to clean



VHP Port

- VHP Out Top Box for Cabinet with or without exhaust collar installed



Pre-filter

- Pre-filter on paper catch



Formalin Vaporizer

- Dependable construction and innovative design
- Specifically designed for safety cabinet decontamination with automatic control

* Type A Biological Safety Cabinets with thimble exhaust collar NOT equipped with alarm system can no longer be certified by an NSF-Accredited certifier.

Other Accessories

Accessories	Description
Decontamination bag	<ul style="list-style-type: none"> • Plastic decontamination bag for formalin decontamination on all BSC
Port	<ul style="list-style-type: none"> • Airtight cable port, installed on right side wall • Holds 1 to 4 cables
Microscope Viewing Pouch	<ul style="list-style-type: none"> • Factory-installed • Mounting and viewing pouch integrated into sash
IQ/OQ	<ul style="list-style-type: none"> • Installation Qualification and Operational Qualification Protocol



LVG-4_G-__

Airstream® Gen 3 Laminar Flow Cabinets

Features

- Energy saving DC ECM Blower
- Isocide™ antimicrobial powder coating
- ULPA Filter with >99.999% efficiency at 0.1 – 0.3 µm
- Low noise
- Sentinel™ Gold Microprocessor Control System
- Recessed central work tray to contain spills
- Ergonomic design



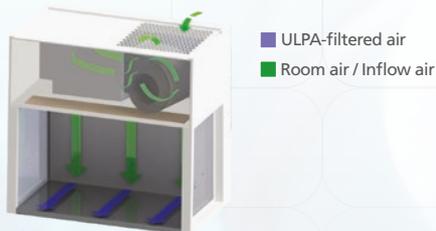
Introduction

Esco laminar flow cabinets are the premium selection for the discerning researcher, offering a combination of value, high quality construction, low operating noise levels, and a wide product range to suit all budgets from the industry leader. Laminar flow cabinets are used in applications where there is no generation of biohazardous materials, hence operator protection is not required.

Basic Principle

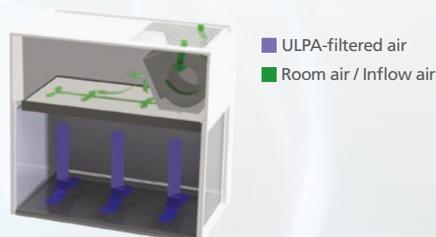
Airstream® Horizontal Laminar Flow Stainless Steel Side Wall Version

- Room air is taken in from the top of the cabinet through a disposable pre-filter with 85% arrestance; this serves to trap larger particles and increase the life of the main filter.
- Air is forced evenly across the ULPA/H14 filter(s); the result is a stream of clean laminar air within the workzone of the cabinet; this dilutes and flushes all airborne contaminants from the interior.
- A nominal filter face velocity of 0.45 m/s or 90 fpm ensures that there is a sufficient number of air changes within the enclosed area of the cabinet to maintain cleanliness.
- The purified air travels across the internal work zone of the cabinet in a horizontal, unidirectional stream and leaves the main work chamber across the entire open front of the cabinet.



Airstream® Vertical Laminar Flow Stainless Steel Side Wall Version

- Room air is taken in from the top of the cabinet through a disposable pre-filter with 85% arrestance; this serves to trap larger particles and increase the life of the main filter.
- Air is forced evenly across the ULPA/H14 filter(s); the result is a stream of clean laminar air within the workzone of the cabinet; this dilutes and flushes all airborne contaminants from the interior.
- A nominal filter face velocity of 0.45 m/s or 90 fpm ensures that there is a sufficient number of air changes within the enclosed area of the cabinet to maintain cleanliness.
- The purified air travels across the working zone of the cabinet in a vertical, unidirectional stream and leaves the main work chamber across the entire open front of the cabinet and through Auto-Purge™ slots at the back wall of the work zone which are designed to eliminate air turbulence and the possibility of dead air corners in the work zone.



Airstream® Gen 3 Laminar Flow Cabinets

The Leading Solution for Research Laboratories

Esco Airstream® Laminar Flow Cabinets are designed to provide superior product protection for your samples in research laboratories by preventing the entry of room and airborne contaminants. They are built with the latest laminar flow technology and innovation, and offers a wide range of options for user preferences.

Horizontal Laminar Flow Cabinets



LHG-4_G-F_

LHS-4_G-F_

Vertical Laminar Flow Cabinets



LVS-4_G-S_
(Sliding Sash)

LVS-4_G-F_
(Fixed Sash)

LVG-4_G-F_
(Fixed Sash)

LVG-4_G-S_
(Sliding Sash)

OPTIONS AND ACCESSORIES



Germicidal UV Lamp

- Emission of 253.7 nanometers for most efficient decontamination
- Lamp is positioned away from operator's line-of-sight for safety and proper exposure to interior surfaces



Electrical Outlet

- European/ Worldwide Style, available in Type C, D, E, F, G, H, I
- North American style



IV Bars with Hooks

- Stainless steel construction, max load 6 Kg (13 lbs)
- Available for all standard Esco cabinets



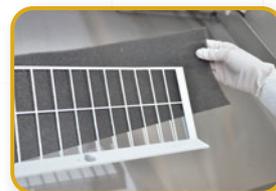
PVC Arm Rest

- Chemically treated, improves operator comfort, easy to clean



Support Stands

- Fixed height, with levelling feet or casters
- Telescoping height, with levelling feet or casters
- Electronic adjustable height, with levelling feet or casters



Pre-filter

- Pre-filter on paper catch



EFD-4A

Frontier® DUO™ Laboratory Fume Hoods

Features

- Dual wall design
- ASHRAE 110-2016 certified
- With black color phenolic resin worktop
- Has service fixtures added: 1 remote-controlled gas fixture and 1 swan-neck faucet
- Ergonomic 8° sloped front sash

Available sizes: 4, 5, 6, and 8 ft



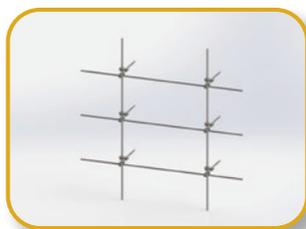
Introduction

The Esco Frontier® Duo™ Fume Hood is an upgraded version of its predecessors representing design and engineering innovations that are at the forefront of fume hood technology. It has a rugged dual wall construction offering a much robust design that allows service fixtures and electrical outlets to be mounted on both sides of the wall.

Optional Accessories:



Base Cabinet (EBD)



Distillation Grid



Service Fixtures



Sentinel™ Silver
Microprocessor
(for EFD-B models)



EFA-4UDRVW_-

Frontier® ACELA™ Laboratory Fume Hoods

Features

- Tri-wall design
- ASHRAE 110-2016 certified
- Low energy-consumption, high performance fume hood
- 5° sloped front sash design
- Superior containment at 0.3 m/s face velocity

Available sizes: 4, 5, 6, and 8 ft



Introduction

The Esco Frontier® Acela™ Fume Hood is a high performance, low flow fume hood engineered for safety, performance and energy efficiency, all combined in one multi-featured product. Its ability to operate at a reduced face velocity of 0.3 m/s allows for an exhaust volume reductions of up to 58% as compared to a conventional fume hood. This directly translates to more savings for your company.

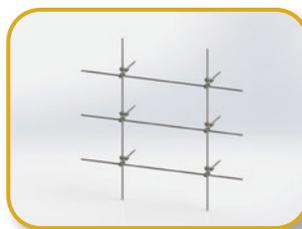
Optional Accessories:



Base Cabinet (EBA)



Circuit Board Protection



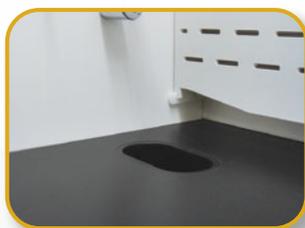
Distillation Grid



Service Fixtures



Scrubber



Worktop



Sentinel™ XL Airflow Alarm



Support Stand (ASL)



EFQ-4UDPVW-₋

Frontier[®] Acid Digestion[™] Laboratory Fume Hoods

Features

- Tri-wall construction
- ASHRAE 110 compliant
- Designed for acid-digestion applications (except perchloric acid)
- Built with u-PVC internal surface and polycarbonate sash to prevent etching from Hydrofluoric Acid

Available sizes: 4, 5, 6, and 8 ft



Introduction

Esco Frontier[®] Acid Digestion[™] Fume Hood is a high performance low flow fume hood designed to handle concentrated acids at high temperatures. This specialized fume hood can be built with unplasticized polyvinylchloride (u-PVC) or polypropylene (PP) internal surfaces which are known for their superior chemical resistance. Sash is made up of polycarbonate material to prevent etching caused by Hydrofluoric Acid.

Optional Accessories:



Base Cabinet (EBA)



Circuit Board Protection



Service Fixtures



Sentinel[™] XL Airflow Alarm



Scrubber



Worktop



Support Stand (ASL)



PPH-4UDPVW-₋

Frontier® PPH™ Laboratory Fume Hoods

Features

- ASHRAE 110-2016 certified
- Full polypropylene construction
- Polycarbonate sash window
- Tapered exhaust collar

Available sizes: 4, 5, 6, and 8 ft



Introduction

The Frontier® PPH™ Fume Hood provides the highest level of protection and containment against highly corrosive chemicals. Full polypropylene (PP) interior makes the hood metal-free and ideal for sensitive work such as trace metal analysis. PP also has an excellent rating against corrosion and chemical staining.

Optional Accessories:



Base Cabinet (EBP)



Circuit Board Protection



Service Fixtures



Sentinel™ XL Airflow Alarm



ADC-B

Ascent™ Ductless Fume Hoods

Features

- **“GREEN” solution**
 - Environment-friendly
 - Does not discharge toxic gases to the environment
 - Saves energy, and reduces total carbon footprint
- **Safe carbon filtration**
 - Compliance to international standards
 - Optional VOC sensor system to detect filter saturation
 - FiltraCheck™ service to qualify your application’s suitability for a ductless solution
- **Low cost**
 - No ductwork required
 - No exhaust system required
- **Convenience**
 - No installation hassle and portable



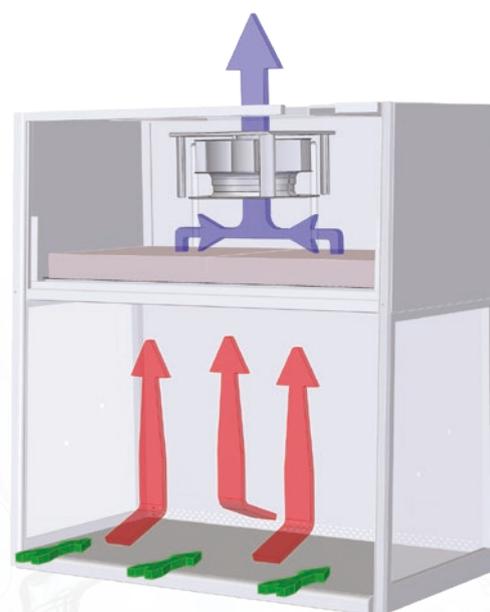
Introduction

Esco Ascent™ Ductless Fume Hoods provide protection to both laboratory personnel and the environment from toxic fumes and are quickly becoming a viable alternative to conventional fume hoods. Unlike conventional fume hoods, these hoods filter out chemical fumes and recycle air directly back to the laboratory, providing energy savings, personnel and environmental protection, convenience as you do not have to deal with complicated ducting systems, and mobility, since ductless hoods are independent systems which do not require connection to extraction systems.

Available sizes: 3 ft, 4 ft, 5 ft, and 6 ft

Cabinet Filtration System

- The inflow moves from the ambient environment into the work zone through the hood front opening with an average velocity of 0.4 m/s.
- Negative pressure is maintained within the main chamber of the hood to ensure that no chemical fumes or vapors escape the work zone.
- Air is taken through a pre-filter and activated carbon mounted in the interior of the hood. The carbon filter removes all fumes from the exhaust air stream and filtered clean air is exhausted directly back to the room.



Ascent™ Max Ductless Fume Hood, ADC Models

- Carbon-filtered air
- Unfiltered / potentially contaminated air
- Room air / Inflow air

OVERVIEW OF MODELS



Ascent™ Max Series

Model: ADC-B

(Standard model)

- Main Filter: Carbon Filter
- Has an option for motorized sash
- Optional VOC sensor
- Available sizes: 2,3,4,5,6 ft.



Ascent™ Max Series

Model: ADC-C

(with Secondary Carbon Filter)

- Main Filter : Carbon Filter
Secondary: Carbon Filter
- Optional VOC sensor
- Available sizes: 3,4,5,6 ft.



Ascent™ Max Series

Model: ADC-E

(with Secondary HEPA Filter)

- Main Filter : Carbon Filter
Secondary Filter: HEPA filter
- Optional VOC sensor
- Available sizes: 3,4,5 ft.

OPTIONS AND ACCESSORIES



Support Stand with
Caster Wheels



Electrical Outlet



European Style
Service Fixture



Support Stand with
Leveling Feet



Swan-neck Faucet



VOC Sensor



Base Cabinet



American Style
Service Fixture



Carbon Filter



SPD-A

Ascent™ Opti Series Ductless Fume Hoods

Features

- Safe carbon filtration
- Acrylic construction
- Double hinged mechanism sash
- Has ergonomic arm ports
- Portable and environment-friendly

Available sizes: 3 and 4 ft



Introduction

Esco Ascent™ Opti Ductless Fume Cabinet is a full-featured ductless fume hood at cost-effective pricing. This equipment offers protection from toxic chemicals fumes. It is designed with ergonomic features, providing user comfort without compromising safety.

Also available in transparent back wall:



SPD-B



Optional Accessories:



Mobile Cart



Carbon Filter



ASC_

Ascent™ Filtered Storage Cabinet

Features

- Isocide™ antimicrobial powder coating
- Sentinel™ microprocessor controller
- Door safety lock restricts access
- Multiple filter configurations

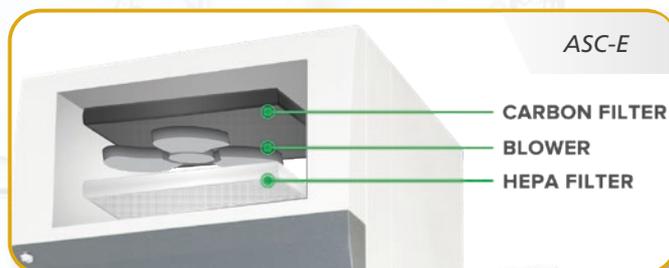
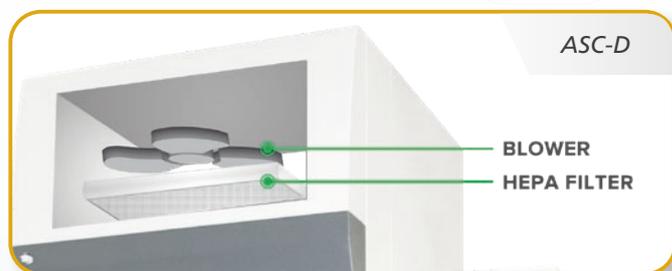
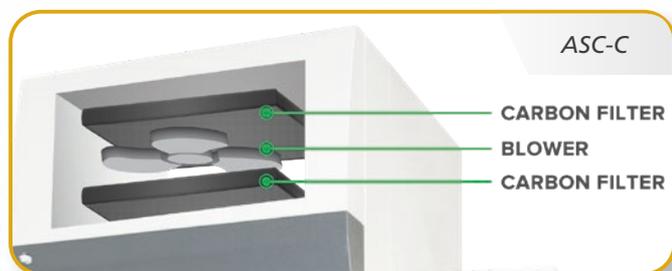
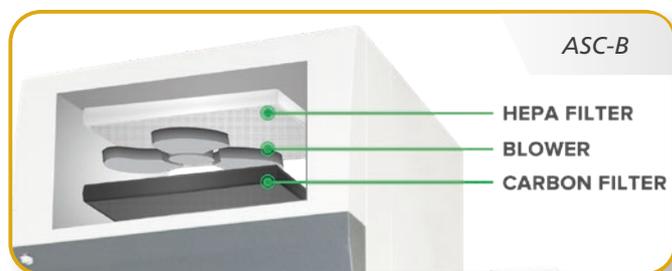
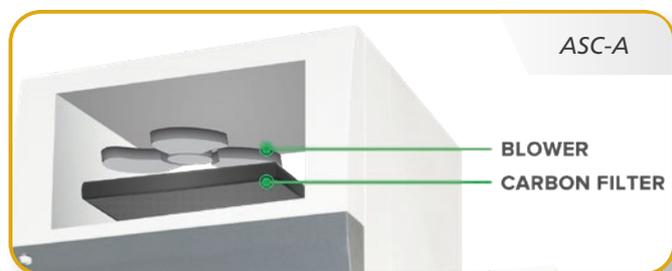
Available sizes: 2, 4, and 6 ft



Introduction

Fumes from chemical containers often result to the storage cabinet's corrosion and contaminated air in the laboratory. Ascent™ storage cabinet is ideal in providing a safe and convenient storage solution. This cabinet is equipped with Nanocarb™ filters that effectively adsorb chemical fumes to provide operator and environment protection.

Overview of Models:





IFA-110

Isotherm®

Forced Convection Laboratory Incubators

Features

- Ventiflow™ Ventilation System – forced air convection design
- Pre-heat Chamber Technology – 4-zone heated air jacket
- SmartSense™ Microprocessor PID Control Technology
- Isocide™ antimicrobial powder coating
- Door keylock
- Multiple redundant over-temperature protection system
- Superior insulation

Available sizes: 32, 54, 110, 170, and 240 L

ISOCIDE™



CE

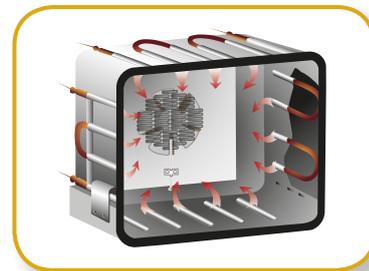
Introduction

Esco Isotherm® world class laboratory incubators are used for thermal convection applications such as bacteria culture and Coliform determination among many others. With ergonomic design, microprocessor PID controls, 4-zone heated air jacket and precisely tuned and tested ventilation and insulation package, Esco Isotherm® is your reliable incubator for universal application.



Ventiflow™ Ventilation System

- Forced convection design produces faster temperature response rates, improves uniformity and reduces fluctuation
- Low energy consumption and low noise level



Pre-Heat Chamber Technology

- 4-zone heated air jacket ensures stable heating and maximum temperature uniformity in the chamber
- 2-point door seal and eccentric hinge ensures maximum gasket



Multiple redundant over-temperature protection system

- Over-all temperature protection meets DIN 12880 Class 3.1 standards
- All electrical components are UL recognized



SmartSense™ Microprocessor PID Control Technology

- Connected to an instrument-grade precision platinum temperature probe
- Ensures fast ramp time. Prevents overshoot and ensures stable temperature once set point is achieved

Cosmetics Industry



IFC-110

Isotherm[®]

Refrigerated Incubators

Features

- Ventiflow™ Ventilation System – forced air convection design
- Pre-heat Chamber Technology – 4-zone heated air jacket
- SmartSense™ Microprocessor PID Control Technology
- Isocide™ antimicrobial powder coating
- Auto-defrost system
- German-made EBM papst fan

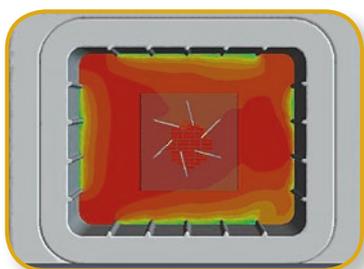
Available sizes: 110, 170, and 240 L

ISOCIDE™



Introduction

The Esco Isotherm[®] world class laboratory incubators are used for applications such as BOD determination and environmental research among many others. With ergonomic design, microprocessor PID controls, 4-zone heated air jacket and precisely tuned and tested ventilation and insulation package, Esco Isotherm[®] is your reliable refrigerated incubator for universal application.



Pre-Heat Chamber Technology

- Connected to an instrument-grade precision platinum temperature probe
- Ensures fast ramp time. Prevents overshoot and ensures stable temperature once set point is achieved



UV Disinfection

- Can be manually or automatically operated



Auto-Defrost System

- Auto-heating activates and continues for a predetermined time during operation
- Auto-defrosting during operation and activates regularly



German-made EBM Papst Fan

- Permanently lubricated and maintenance-free for uniform air circulation



OFA-110

Isotherm®

Forced Convection Laboratory Oven

Features

- Ventiflow™ Ventilation System – forced air convection design
- Pre-heat Chamber Technology – 4-zone heated air jacket
- SmartSense™ Microprocessor PID Control Technology
- Isocide™ antimicrobial powder coating
- Door Keylock
- Multiple redundant over-temperature protection system
- Superior insulation

Available sizes: 32, 54, 110, 170, and 240 L

ISOCIDE™



CE

Introduction

The Esco Isotherm® world class laboratory ovens are used for high-forced volume thermal convection applications such as drying and curing among many others. With ergonomic design, microprocessor PID controls, 4-zone heated air jacket and precisely tuned and tested ventilation and insulation package, Esco Isotherm® is your reliable oven for universal application.



Ventiflow™ Ventilation System

- Forced convection design produces faster temperature response rates, improves uniformity and reduces fluctuation
- Low energy consumption and low noise level



Pre-Heat Chamber Technology

- 4-zone heated air jacket ensures stable heating and maximum temperature uniformity in the chamber
- 2-point door seal and eccentric hinge ensures maximum gasket



Multiple redundant over-temperature protection system

- Over-all temperature protection meets DIN 12880 Class 3.1 standards
- All electrical components are UL recognized



SmartSense™ Microprocessor PID Control Technology

- Connected to an instrument-grade precision platinum temperature probe
- Ensures fast ramp time. Prevents overshoot and ensures stable temperature once set point is achieved

Cosmetics Industry

OPTIONS AND ACCESSORIES (for Isotherm® products)



Wall Bracket (only for 32 L and 54 L chambers)

- Accommodates desired operating heights



Reversed Door Swing (Factory-installed)



Voyager Software Kit

- Esco Voyager is a PC-based software package developed for remote monitoring, datalogging and programming/device configuration of Esco controlled environment laboratory equipment



Support stands fixed height at 720 mm (28.3")



Additional Shelf

- Two shelves are included for 32 L, 54 L, 110 L, 170 L and 240 L models as standard. Additional shelves may be ordered.



Optional Stainless Steel Exterior

- Robust construction and corrosion-resistant surface that meets pharmaceutical and clinical laboratory requirements



HP Series

Laboratory Refrigerators and Freezers

Features

- Forced-air design
- Intelligent automatic defrost
- Excellent temperature uniformity
- Door lock
- Triple-pane glass doors for refrigerators
- Isocide™ antimicrobial powder coating
- High-quality stainless-steel interior for sample protection
- Internal LED lighting that saves up 70% power with less heat exposure
- Standard wheels for easy location or movement
- Audible and visual alarms

ISOCIDE™



CE



Introduction

Laboratory professionals invest time, money and hard work on irreplaceable samples. A cold storage equipment can store thousands to millions of dollars' worth of valuable products. Once proper storage requirements are not met, these precious samples may be put at risk and eventually lead to sample spoilage and wastage. That is why, it is important to carefully choose the cold storage that can assure optimal product protection.

Esco HP Series is designed for laboratory use offering superior product protection with long term reliability and exceptional product quality. When superior levels of cold storage performance, reliability, and flexibility are needed, the Esco HP series of Laboratory Refrigerators and Freezers is the best choice—it provides a high-performance protection for your precious samples! Laboratory Refrigerators are generally used for storing non-volatile reagents and non-volatile biological specimens.



HR1-140S-_ HR1-400T-_

+2°C to +15°C

Laboratory Refrigerators



HF2-400T-_ HF2-1500S-_

(HF2): -10°C to -25°C
(HF3): -20°C to -40°C

Laboratory Freezers



HC6-400S-_ HC6-700S-_

Refrigerator: +2°C to +15°C
Freezer: -10°C to -24°C

Laboratory Combination Refrigerators and Freezers

OPTIONS AND ACCESSORIES



Shelf Kits (SK_)

Atoxic, plastic-coated steel, supported by anti-tilt clips. It is for additional space inside your chamber where you can place your samples. It also provides a good support for your samples to prevent damage and maintain organization of samples.



Drawer Kits (DK_)

A drawer extractible on telescopic slides, adjustable in height, bottom made of painted steel, beehive structure type, supplied with adjustable dividers made of polypropylene, front is fitted with an ergonomic aluminum handle, for the storage of samples in a more convenient and organized way.



Digital Monitor (DM_)

An independent visual/acoustic alarm and recording system, with an accuracy of 0.1°C due to the PT100 probe used for temperature detection. It will take over alarm failures, together with standard rechargeable batteries that record event such as unauthorized personnel.



Access Port (AP_)

A 15 mm or 35 mm diameter hole that will be placed at the back of the unit, closed with a white plastic cap, used for the access of additional probes inside the chamber.



Basket Kit (BK1)

Made of stainless steel that provides an anti-corrosion environment for your samples. It is mounted on anti-tilt side slides and can be glided outside the chamber for the purpose of easy access to samples.



Chart Recorder

The chart recorder provides an easy-to-read graph of data vs time. It is a reliable, accurate, and stable instrument, for on-the-spot written documentation of chamber temperature.

Model	Item Code	Description
SK1	1330063	Shelf Kits for HR1-140, HF2-140 (Standard and Touchscreen models)
SK2	1330064	Shelf Kits for HR1-400, HF2-400 and HC6-400 (Standard and Touchscreen models)
SK3	1330065	Shelf Kits for HR1-700, HF2-700, HF3-700, HC6-700, HR1-1500 and HF2-1500 (Standard and Touchscreen models)
SK4	1330066	Shelf Kits for HF3-400 (Standard and Touchscreen models)
DK1	1330067	Drawer Kits for HR1-140, HF2-140 (Standard and Touchscreen models)
DK2	1330068	Drawer Kits for HF2-400, HR1-400 and HC6-400 (Standard and Touchscreen models)
DK3	1330069	Drawer Kits for HR1-1500, HF2-1500, HR1-700, HF2-700 and HC6 700 (Standard and Touchscreen models)
DK4	1330070	Drawer Kits for HF3-400 (Standard and Touchscreen models)
DK5	1330071	Drawer Kits for HF3-700 (Standard and Touchscreen models)
DM1	1330072	Backup battery + Digital Monitor + PT100 probe for temperature monitoring and recording during power failure. (Single Chamber, Touchscreen Models)
DM2	1330073	Backup battery + Digital Monitor + PT100 probe for monitoring and recording during power failure. (Dual Chamber, Touchscreen Models)
AP15	1330074	15 mm Access Port for all models (Standard and Touchscreen models)
AP35	1330075	35 mm Access Port for all models (Standard and Touchscreen models)
BK1	1330076	Stainless Steel Basket Kit for HR1-700, HR1-1500, HF2-700, HF2-1500, HF3-700 and HC6-700S (Standard and Touchscreen models)
Backup Battery	1330127	Standard backup battery for temperature monitoring during power failure (Standard Models)
4-20 mA	1330129	4-20 mA Output (Touchscreen models)
GSM	1330216	GSM Module (Touchscreen models)
Chart Recorder	1330185	Chart Recorder for all models (Standard and Touchscreen models)
IQQQ	9010179	Installation Qualification Operation Qualification for all models



OrbiCult™ Laboratory Shaker

Features

- Heavy-duty and high-speed application
- Reduce maintenance
- Versatile for microorganism cultivation
- Easy-to-use design
- Audible and visible alarms
- World class compressor with low energy consumption
- External surfaces are powder coated with Esco Isocide™

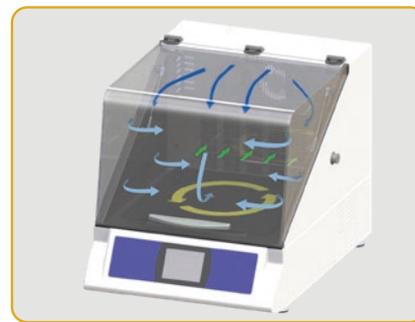


Introduction

OrbiCult™ Laboratory Shakers offer versatile models designed with outstanding features to provide reliable results for various applications in agricultural research such as shaking liquid cell cultures of insect, fish, or plant cells, incubation of microorganisms or for production of other cell products.

Airflow Circulation

- Two circulating fans located on top of the perforated panel, disperse and distribute the air inside the chamber
- Perforation located below the circulating fan absorbs the air to recirculate the air inside the chamber
- Platform performs counterclockwise rotation based on the motor drive motion
- Air temperature changes during suction process
 - For refrigerated unit, evaporator located behind the perforated panel will cool down the air
 - For non-refrigerated unit, heater located below the circulating fan will heat up the air



- Discharge Air
- Circulating Air
- Suction Air
- Motor Drive Rotation

Digital LED Controller (for AS1 model)



SmarTouch™ Controller (for IBS model)



OPTIONS AND ACCESSORIES



Universal Platform

Have standard holes pattern that can fit any flask clamps and test tube rack. All multiple flask clamps and labware holders are shipped separately and installed by the end user.



Dedicated Platform

Platforms have a customized pattern to optimize the number of a particular size of flask clamp on a platform. Dedicated platforms are pre-installed with the flask clamps.



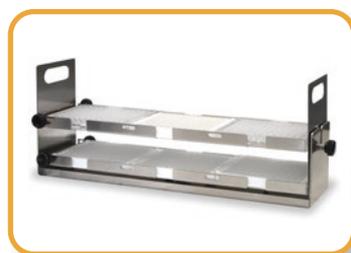
Flask Clamps

Single-piece stainless steel clamps that provide enough strength and security to hold flasks.



Test Tube Rack

Stainless steel rack that stabilizes and holds the test tubes.



Microplate Holder

Double layer racks that hold up to six standard deep well plates.



Utility Carrier

Made of stainless steel that holds different glassware in between of adjustable stainless steel bars.



Sticky Mats

Allows the user to place the flask directly on the mat without the use of a clamp. Sticky mats are very convenient if the user desires to rotate at less than 350 rpm. This can be ordered separately and attach on Universal Platform.



Gas Manifold

Contain 12 gas ports that add versatility for aerobic and anaerobic cell cultivation.

The IBS is available with a 12-port gas manifold option to allow operator to supply gas directly to the culture medium of 12 individual flasks.



Versati™ Centrifuge

Features

- Distinct control panel and intelligent Versati™ Microprocessor Control System
- Genuine-Protect™ safety lid lock
- V-balance™ weight imbalance protection
- Smartdrive™ rotor auto recognition
- Diverse choices of rotor (swing-out and fixed-angle Rotors)
- Temperature range from -20°C to 40°C with 1°C increments (Refrigerated models only)
- Maintenance-free, brushless motor
- CFC-free refrigeration system
- Emergency switch
- Storage of up to 99 programs



Introduction

Versati™ centrifuges are equipped with maintenance-free motors, robust mechanism, and intelligent Versati™ microprocessor control system that offers extreme reliability and safety. Versati™ has a strong versatility covering micro centrifuge and low-to-high speed general-purpose centrifuge with variety of rotors, adapters, and accessories to fit all your application needs and suit various consumable tubes, strips, and plates.

Versatile and Outstanding Features

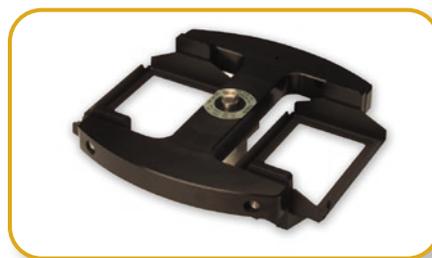
- **Compact Design** - Small footprint and curved design ensure comfortable loading and unloading of samples and cleaning of the unit.
- **Incredible Flexibility** - Wide choice of easy and interchangeable rotors meets all your application needs. Huge selection of adapters allows centrifugation of practically all commercially available tubes.
- **High Temperature Ramp Rate** - Compressor in Versati™ centrifuges has strong power which allows fast cooling rate. The time cost can be as low as 10 mins when temperature decreases from room temperature to 4°C.
- **Fast Pre-cooling** - Versati™ centrifuges provide fast pre-cooling function that is maintained even when centrifuge is not in use. This feature is useful if the samples are temperature-sensitive.
- **Overspeed Protection** - Equipped with speed detection system, Versati™ centrifuges show the actual speed on the screen. Once the speed exceeds the safety range, the alarm will sound off and rotation is halted.
- **Over Temperature Protection** - The unit will stop running once an over temperature is detected in the chamber, rotor, and frequency converter. This provides comprehensive protection which prolong the life span of Versati™ centrifuges.
- **Aerosol-tight and Autoclavable** - High-quality, extremely robust aluminum lid of rotor allows aerosol-tight centrifugation. Rotor, buckets, lids, and adapters are autoclavable (20 min, 121°C) to ensure sterility of the centrifuge environment.

General Accessories for Versati™ Tabletop Centrifuge



Swing-bucket Rotor

Aluminum swing-bucket rotor with circular flat-bottom buckets made of polypropylene can hold up to 4 x 250 ml tubes. It has flexible adapters ideal for medical and biotechnology laboratories.



Microtiter Plate Rotor

This microtiter plate rotor has a maximum capacity of up to 6 plates. This can also accommodate deep well plate, culture plate, microtest/ terasaki plate, microsonic system, and PCR well plate.



Fixed-angle Rotor

The maximum capacity of this fixed-angle rotor is 6 x 250 ml. It can also run tubes ranging from 1.5/2.0 ml to 50 ml using suitable adapters.



Aerosol-tight Fixed-angle Rotor

This TÜV Nord Certified Bioseal Rotor used for 1.5/2.0 ml tubes is also available in tabletop centrifuge models. Adapters are used to run 0.5 ml and 2.0 ml / 0.4 ml PCR tubes.



Fixed-angle Rotor

This aluminum fixed-angle rotor can hold twenty 10 ml dome tubes. This rotor has no available adapter.



Fixed-angle Rotor

Aluminum rotor for ten 50 ml conical tubes. It has available adapters for 15 ml conical and dome tubes.

Note: There are a total of 12 rotor options for TCV / TCR and 47 available adapters for both models.

ESCO LIFESCIENCES GROUP

42 LOCATIONS IN 21 COUNTRIES ALL OVER THE WORLD



- 📍 Global Offices
- 📍 Licensee
- 📍 Distributors
- 📍 Factories
- 📍 R&D Centers
- 📍 Regional Distribution Centers

Follow us on social media, download our apps,
and scan the QR code for more info.



@EscoSifesciences



@EscoSifesciences



@EscoSifesci



@EscoS



@EscoSifesciences



@EscoSifesciences



EscoS Lifesciences



EscoS Lifesciences

ESCO

LIFESCIENCES GROUP

EscoS Micro Pte. Ltd. • 19 Changi South Street 1 • Singapore 486 777

Tel +65 6542 0833 • mail@escoslifesciences.com

www.escoslifesciences.com

EscoS Technologies, Inc. • 903 Sheehy Drive, Suite F, Horsham, PA 19044, USA

Tel: +1 215-441-9661 • eti.admin@escoslifesciences.com

EscoS Lifesciences Group Offices: Bangladesh | China | Denmark | Germany | Hong Kong | India | Indonesia | Italy | Japan | Lithuania | Malaysia | Myanmar | Philippines | Russia | Singapore | South Africa | South Korea | Taiwan | Thailand | UAE | UK | USA | Vietnam

9010358_Cosmetics_Industry_A4_vA_060123

EscoS can accept no responsibility for possible errors in catalogues, brochures and other printed materials. EscoS reserves the right to alter its products and specifications without notice. All trademarks and logotypes in this material are the property of EscoS and the respective companies.