ESCO HEALTHCARE
"Discovery to Delivery"

Esco Glassware Hood (EGH)

The Premium Solution For Protection From Hazardous Vapors & Fumes

EGH with Manual Sliding Doors

Introduction

The Esco Glassware Hood is the premium solution for containing specialized equipment in a kilo lab, pilot plant or R&D environment. Coined after "glassware reactors" and "fume hoods", glassware hoods are customizable units made to serve their containment purpose for glassware set-ups for batch reactions, distillation set-ups, and chemical synthesis, providing operator protection against fumes and spillages/breakages and safety protection of fume/vapor explosive properties.

Key Features

- Stainless Steel option of 304 or 316L internal material or Chemical Resistant Halar (ECTFE).
- Removable panels for utility piping access.
- Toughened glass sashes in sliding doors.
- Modular design allows future system adjustment without full booth alteration.
- Integrated controls to provide airflow alarming

Basic Principle

- Glassware Hood reduces the operator's exposure to hazardous fumes, vapours and gases
- Hazardous vapors are diluted using large amount of air, then drawn out through the duct of the facility's exhaust system
- Hoods accommodate oversized apparatus and are available in widths up to 16 feet such as bioreactors

Applications

The EGH is designed such that through the different configu-rations it can be applied; but not limited to, the following markets:

- Pharmaceutical
- Nutraceutical
- Food
- Kilo Lab
- Chemical Process
- Biological
- Animal
- Electronic

Options

- Carbon Filter
- Material handling (conveyors, turntables, etc.)
- Hazardous area configurations to meet ATEX rating requirements (NEC 505/NEC 500)
- Sump tray for containment of spills
- Sliding or hinged doors
- Vertical sliding sashes
- Airflow monitoring with alarms
- Full customization available

GENERAL SPECIFICATIONS
Esco Glassware Hood

		EGH-2	EGH-3	EGH-4	EGH-5
Nominal Hood Size (Internal Width)		2000 mm	3000 mm	4000 mm	5000 mm
External Width		2300 mm	3300 mm	4300 mm	5300 mm
Internal Depth Dimension Options		900 mm			
		1200 mm			
		1800 mm			
		2100 mm			
External Depth		+ 500 mm from the Internal Depth			
External Width Dimension		2400 mm			
		2500 mm			
		2900 mm			
External Height Dimension Options		+ 300 mm from the Internal Height			
Sash Airflow Velocity		0.5 m/s (100 fpm) when one door opens*			
Material of Construction	**Hood**	Stainless Steel 316/304, Halar (ECTFE), electrogalvanized steel with IsocideTM white oven-baked epoxy powder-coating, Combination (Internal SS 301/316, External powder-coated electro-galvanized steel)			
	Sash	Phenolic glass, Polycarbonate, Tempered glass			
	Light	LED light			
Electrical Requirements		120 VAC 50/60 Hz for hood controls**			
		220 VAC 50/60 Hz for hood controls**			

Note:
Custom dimensions and specifications can be provided upon client request.
*To be discussed with the client for door specifications.
**Additional outlets require additional electrical supplies.
**for Open Loop External Blower

Airflow Regime

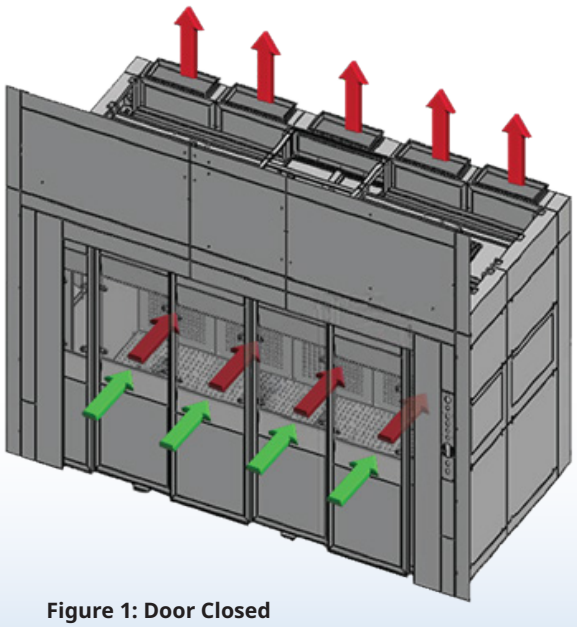


Figure 1: Door Closed

Ambient Air
Potentially Contaminated Air

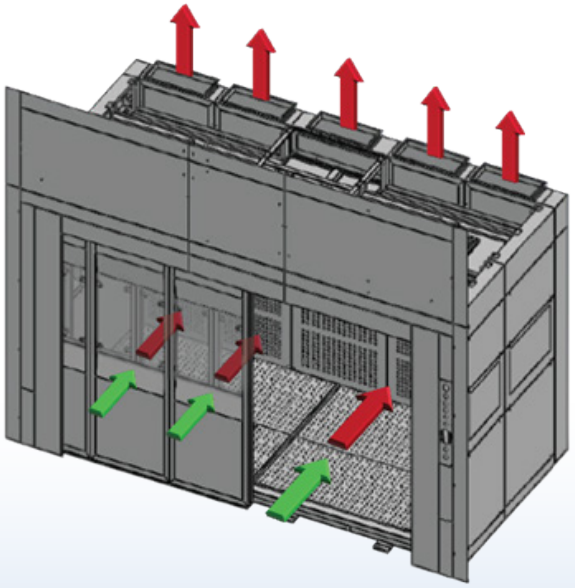


Figure 2: Door Opened

Ambient Air
Potentially Contaminated Air

Note: The EGH required airflow volume depends on its intended use and operation. It is critical that the hood be used as it was intended (door open/door closed) in line with the client-specific equipment load and process.

Esco Glassware Hood (EGH), as standard, is a passive cabinet that relies on the facility's HVAC system to suction vast amounts of air through the equipment.

The EGH reduces the operator's exposure to hazardous fumes, vapors, and gases by diluting the hazardous vapors using a large amount of air, then drawing it out through the duct of the facility's exhaust system.

The inflow of air is utilized to avoid untoward exposure to the operator outside of the hood while the hazardous process is taking place.

EGH works with basic principles as follows.

1. Inflow Air from environment is sucked either through the sash glass on the door or door grilles (according to the door design specifications) with door closed/open
2. The air then goes through the exhaust grilles on the rear wall
3. From the rear wall, the air goes up towards the building's HVAC system

Basic & Customized Units

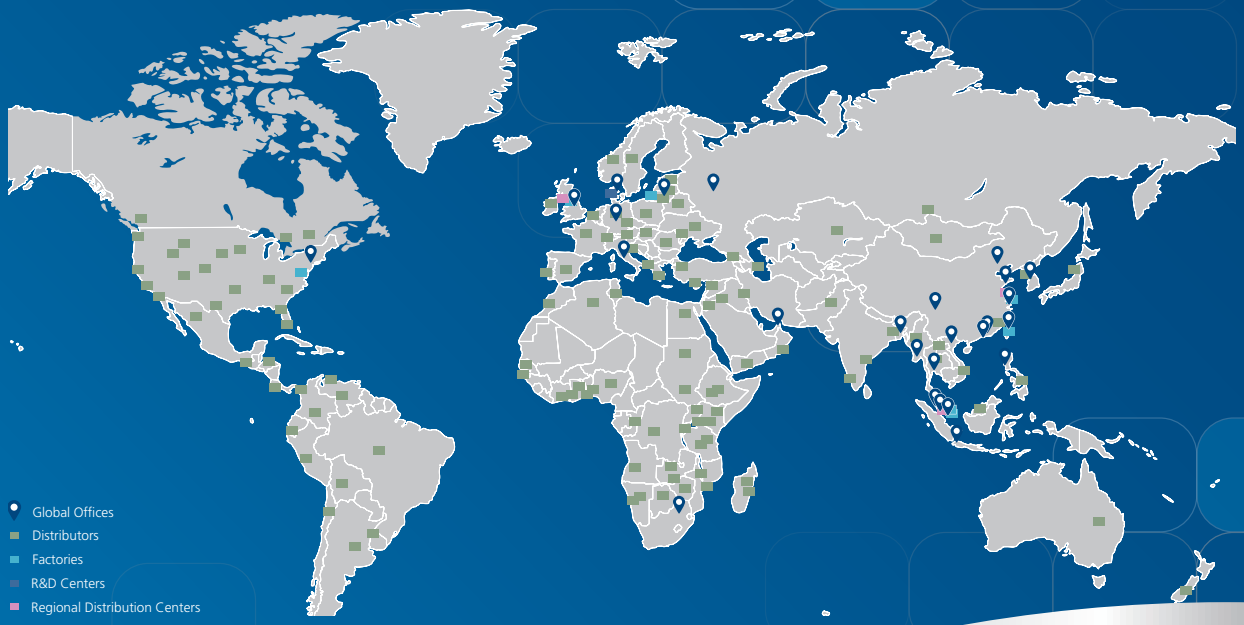
EGH with Manual Sliding Doors, Inlet Grilles on the Glass, ATEX rated

Basic EGH with Manual Sliding Doors

EGH with combined Material of Construction type; Left is stainless steel, Right is Halar (ECTFE)

ESCO LIFESCIENCES GROUP NETWORK

42 Locations in 21 Countries All Over the World



Air Shower
Aseptic Containment Isolator (ACTI)
Ceiling Laminar Airflow Units
Cleanroom Transfer Hatch
Containment Barrier Isolator (CBI)
Downflow Booth (DFB)
Dynamic Floor Laminar Hatch
Dynamic Pass Box
Evidence Drying Cabinet
Garment Storage Cabinet
General Processing Platform Isolator (GPPI)
Laminar Flow Horizontal Trolley
Laminar Flow Straddle Units, Single and Double
Laminar Flow Vertical Trolley
Pass Box
Soft Wall Cleanroom
Sputum Booth
Ventilated Balance Enclosure (VBE)
Weighing and Dispensing Containment Isolator (WDCI)

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.

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