

## **GENERAL**

An adequate ventilation system is vital for the health and safety for everyone on board. Each galley has a unique layout and the emissions vary. Vianen's engineers designs each project to meet these specific requirements paying consideration to the varying ocean climates.

The BEAUFORT® is designed to ventilate efficiently, providing adequate comfort, easy maintenance and simple operation.

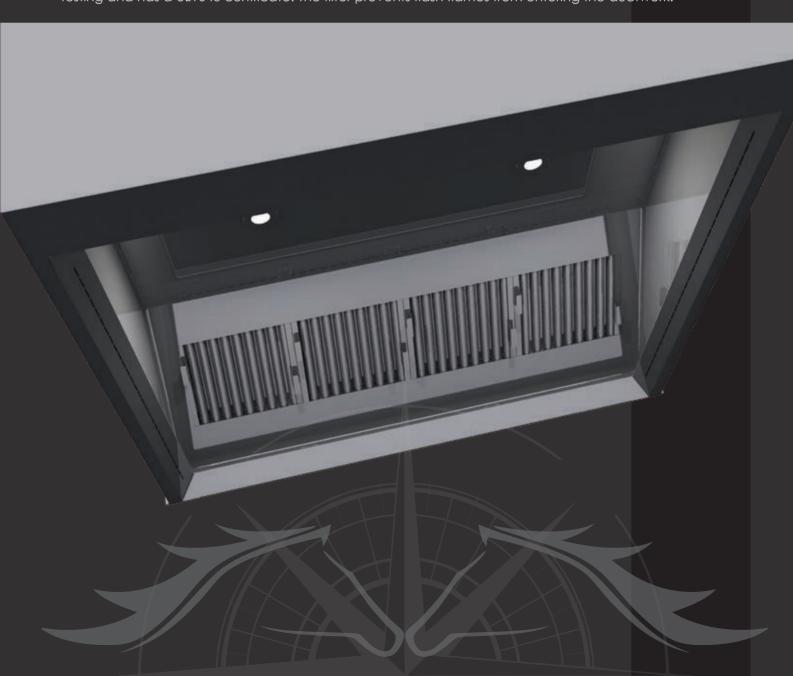
The BEAUFORT® has proven energy savings up to 28% resulting in significant reductions in duct sizing and air treatment units. These energy saving are based on 100% simultaneous use of the cooking equipment.

The hood is tested conform the ASTM F1704 method in our in-house laboratory. The curved structure of the internal side of the hood, combined with the Jet Stream feature, significantly increases the performance making it a perfect solution for galley applications. The BEAUFORT® hood is designed to have a constant exhaust pressure drop of 100 Pa.

The hood can be further optimized by adding one or more of our many options for example; UV-C filtration, MUAP make up air supply, VéTEC on demand control ventilation.

Due to the seamless and curved construction of the internal parts of the hood it is easy to clean and contributes to a reduction in bacterial growth in corners normally difficult to access.

The hoods are equipped with the Vianen FECON® filter which is flame retardant according to TNO third party testing and has a UL1046 certificate. The filter prevents flash flames from entering the ductwork.



## **DESCRIPTION**

Suitable for all types of cooking equipment over wall and island arrangements.

A significant improvement of the capture and containment performance of the BEAUFORT® hood is obtained due to the modification in the curved structure on the internal side of the front of the hood.

The curved structure ends with a specially designed (and patented) lip, angled upward to turn the deflected air back to the filter.

The hood is designed with slots for the air supply, capture air principle, on the inner bottom circumference – three sides (wall type) and 4 sides (island type).

This capture air is introduced into the hood with a maximum velocity of 2m1/s and it lifts the deflected airflow back to the filter bank, avoiding spillage of fumes and contaminants back into the galley.

A significant energy saving, up to 28%, is achieved due to this new, patented construction, tested conform ASTM F1704 method.

## CONSTRUCTION

The hoods are of a robust, seamless, stainless steel construction, 1.0 – 1.2mm thick type AISI 304 or optional AISI 316L stainless steel. All visible surfaces are ultra-fine grain polished (320 grit) and polythene protected.

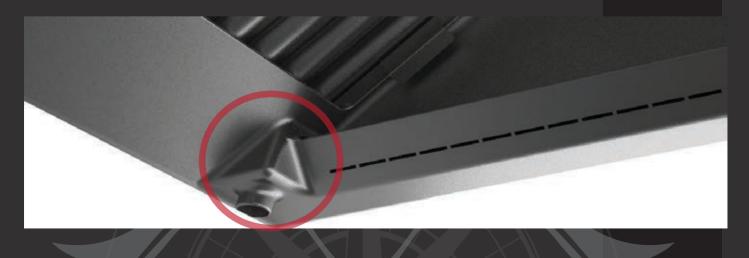
The hoods are cut, punched and folded into seamless sections (up to a maximum of 5950mm).

All internal and external edges are welded and have no mechanical fixings. The hoods are manufactured according to the USPHS construction guidelines. The standard height is 350mm at the operator side, designed for galleys where height can be an issue.

The hoods are fitted with stainless steel exhaust spigots of 70mm high, safety locks and an access hatch on the top of the hood.

Standard equipped with Vianen FECON® grease extraction filters, placed to allow the grease to run off the filters into an integral grease collecting channel and into easily removable grease trays or optional, drain.

To assist in streamlining the hoods to the wall during installation, a round profile according to USPHS construction guidelines is integrated during fabrication, reducing the time required to fit the hoods on board.



#### JET STREAM AIR TECHNOLOGY

Jet Stream Air is drawn via ducts to factory fitted spigots on top of the hood, optional by fan, taking the air from the false ceiling void.

The air passes into the insulated supply air plenum and passes out through a series of slots into the main hood envelope.

The air is delivered from these slots at a maximum velocity of 2m1/s and represents less than 10% of the total extract air flow rate.

This technology has a positive capture and containment of the thermal plume generated by the cooking process.

The Jet Stream technology incorporated in the bottom channel reduces the spillage of fumes.



# ENERGY SAVING GALLEY VENTILATION SYSTEMS (optional)

**VéTEC** – Ventilation on demand system – regulates/adjusts fan speeds (exhaust and supply) with electrical dampers based on the cooking activity below the hoods. Up to 62% saving on fan energy costs and air conditioning costs.

**Maestro** – Galley management system – provides you with real-time data of your Vianen system and alerts you in case of maintenance and insight to your energy consumption, maintenance schedule and the return on investment.

**Victoria** - Intelligent online monitoring system – remote monitoring system observes and manages energy consumption and detects potential optimizations.



# **CONTROL CABINET (optional)**

The Vianen Control Cabinet is fabricated in type 304 (or 316L) stainless steel, measures 800 x 800 x 250mm and is secured by a lock. The Control Cabinet is tailor made to each project. The options include:

- Maestro Galley Management System to adjust and monitor the optional VéTEC, Water Wash and UV-C systems.
- A digital touchscreen provides information relating to the status of the systems and any alarm condition.
- A tank containing detergent is housed within the cabinet.
- A main hot water feed is required (to be provided by others) to a 3/4" water connection.

  The recommended minimum water supply temperature is 65°C and maximum of 4°dH water hardness.

  Water usage for wall and island hoods is approximately 1.75 L/min/m.
- The Vianen Control Cabinet will in all cases be linked to the ventilation system to ensure the Vianen. systems only operates when the extract fan is running.
- Should the extract fan fail or stop the safety system will immediately shut down the UV-C system.
- Multiple hood connections to one control cabinet are possible according to the galley layout.



# INSTALLATION, COMMISSIONING AND TRAINING

To assist in streamlining the hoods to the wall during installation, a round profile according to USPHS construction guidelines is integrated during fabrication, reducing the time required to fit the hoods on board.

Stainless steel hanging brackets, 70mm high for fixing with M8 rods, are fitted on top of the corners of the hood for quick installation.

To offer customers a total solution, we provide installation and commissioning of our systems as well as after sales services, training and maintenance

# V-LEL INTEGRATED LIGHT FITTINGS IP65

The hoods are fitted with V-LEL, which are specially designed for VIANEN hoods.

The standard type is 220/230 V - 50/60 Hz.

Standard sizes: 1229 mm - 40 W

: 629 mm - 20 W

On request Vianen can deliver alternative light fittings to suit customer requirements. Inbuilt emergency lights can also be delivered upon request.

The BEAUFORT® galley hoods are available in the following configurations:

Designed to perfection with an innovative seamless construction

VIANEN BEAUFORT	Α	JET STREAM SUPPLY max. 5%	WALL MOUNTED
VIANEN BEAUFORT	Е	JET STREAM SUPPLY max. 5%	SINGLE SIDED ISLAND
VIANEN BEAUFORT	D	JET STREAM SUPPLY max. 5%	DOUBLE SIDED ISLAND

#### STANDARD DIMENSIONS

WALL HOODS	Length seamless up to 5950* mm. Width 1350 mm Height 600/350** mm	
ISLAND HOODS	Length seamless up to 5950* mm Width 2600 mm Height 600/350** mm	

- \* Hoods can be manufactured in parts if required for local transport into the galley.
- \* Due to the height of the hood there is no collision with heavy duty kettles or ovens in the arrangement.

Deviations to these standards can be adapted to meet customer requirements.

# FECON® GREASE EXTRACTION FILTER

The FECON® filters are specially designed for Vianen hoods to remove grease particles from the extract air. The Vianen FECON® filters is NSF approved and UL1046 classified.

- Solid and durable construction stainless steel 304 (316L upon request)
- High efficiency rates of 98% by 8 micron
- Excellent levels of hygiene NSF approved
- Flame retardant UL1046 certified
- Placed at an angle of approximately 45° in the hood
- Locked in for the most demanding environments
- Size of the filter is related to the exhaust volume to ensure a permanent pressure drop of 100Pa over the hood
- Easy maintenance in any commercial dish wash machine

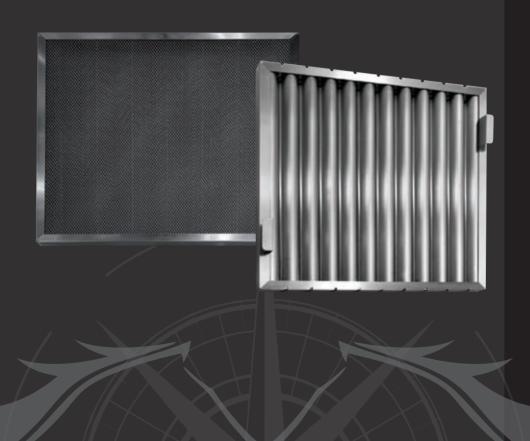
Vianen FECON® filters are constructed from stainless steel type 304 (DIN 1.4031 grit 320) 1.20 mm thick. The 36 mm thick filter is constructed without rivets and is provided with two integrated handles formed from the surrounding frame.

On the top and bottom the filter 10% is open for the out stream of grease and moisture. The FECON® filters are resistant to most aggressive detergents. See maintenance manual for advised detergents.

#### **CERTIFICATES**

NSF - tested and approved for their high standard of hygiene UL1046 - tested and approved





Standard

Material: AISI 304; Thickness 1.0 - 1.2mm

28% Energy Saving

Seamless installation profiles

Seamless construction

Manufactured according to USPHS construction

guidelines

FECON® UL, NSF, TNO grease extraction filters

V-LEL integrated IP65 LED lights

UL1046, CE and SOLAS design requirements Duct connections: spigots 70mm height

Mounting brackets

Optional

Material: AISI 316L

V-ITL lights or LED spots NORSOK or NFPA 96

Duct flanges up to ISO 15138

All Vianen hoods are available with several options to further increase their efficiency safety and improve the air-quality.

- UV-C filtration
- MUAP Make-up Supply Air
- Automatic Water Wash (with optional Misty system)
- Fire Suppression System
- VéTEC Ventilation on demand system
- Maestro Galley Management System
- Victoria Online Intelligent Monitoring System
- Powder coated in any RAL colour
- Fire suppression system
- Fire damper
- Glass touch panels

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