

# Gas Freeing Fans

globally focused on cleaner solutions

Gas freeing on-board ships is carried out for various reasons including change of cargo, health and safety and tank maintenance. It is essential that this is carried out efficiently and safely. Victor Marine's range of fans competently achieve these aims and are well respected in the marine market.

Designed,  
Assembled &  
Tested in  
the UK

## Key Features

- Designed and Class Approved for use in hazardous areas
- Supply or Extract mode by simple reversal of water supply
- Integral 'Direct In-Line' drive; no gearbox to maintain or fail
- Non-Sparking (ATEX approved)
- Can operate at low pressures
- Lightweight and compact for portability
- Can be supplied for horizontal mounting
- High air-flow throughput
- High static pressure
- Efficient motors
- Marine grade materials
- Fail-safe bleed tube to indicate seal failure

**Inlet Duct**

**LM6 Marine Grade Aluminium**

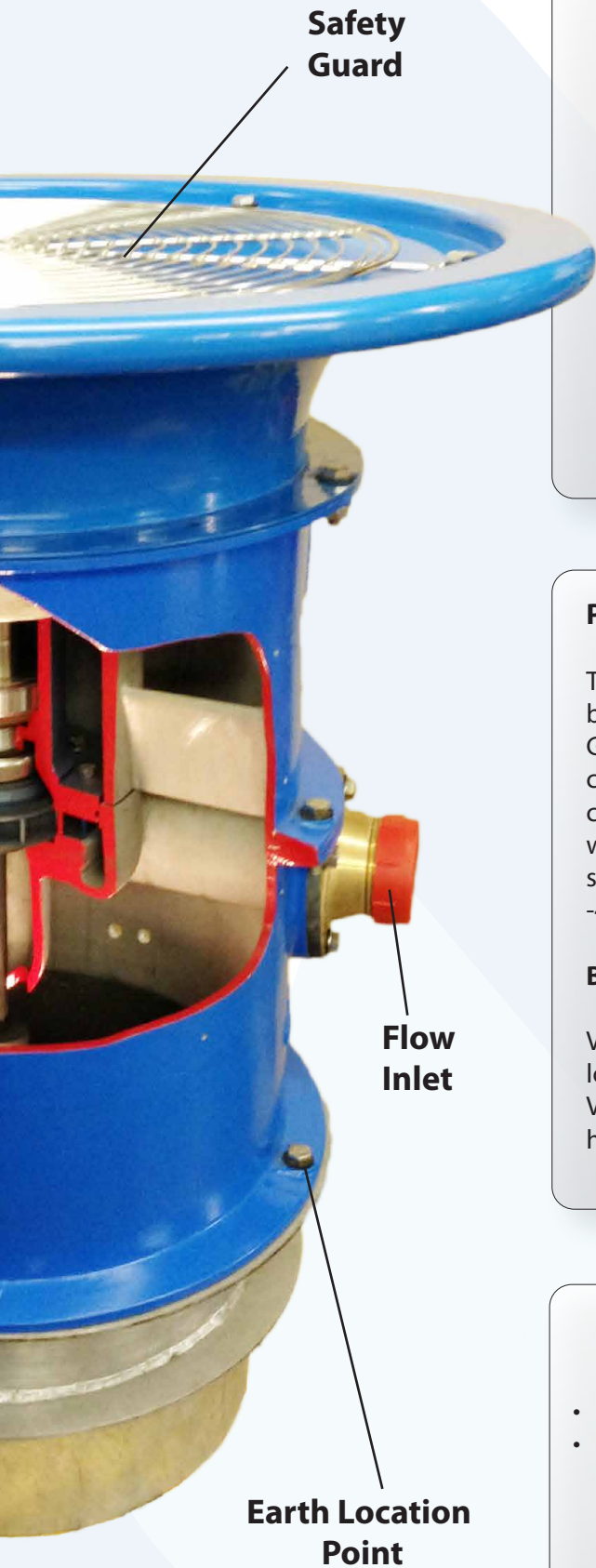
**Inbuilt Stator for Axial Flow**

**2D Francis Turbine Water Motor**

**Water Outlet**

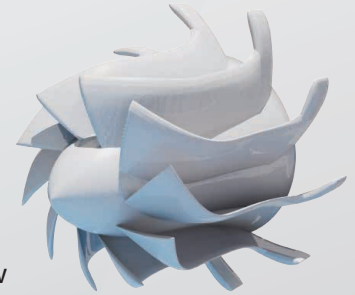
**Tailored Deck Flange**

The product featured above is a VP1350W Water Driven Gas Freeing Fan



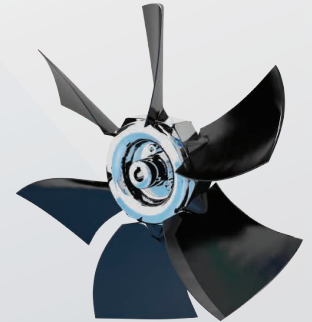
**3D Francis Turbine Water Motor Runner  
Installed in VP1500W ,VP1000W, VP1400W and  
VP700W**

- Higher Efficiency.
- Designed in-house and powered by VM's innovative and efficient 3D Francis turbine, the VP1500 series fans reduce water consumption by 15% compared to conventional turbines, with no compromise on power and air-flow throughput.



**PAGAS Impeller**

The VP1400, VP700 & VP650 have impeller blades made from PAGAS (an Anti-Static Glass Reinforced Polyamide) material capable of working in explosion proof conditions. The PAGAS material is low weight, has a high tensile strength and is suitable in operating temperatures from -40°C to +110°C.



**Blade Profiles**

VP1400 & VP700 – Airfoil type designed for highest efficiency and low power consumption.  
VP650 – Sickle type designed for noise reduction whilst generating high static at lower speeds.

**ATEX Approved Fans**

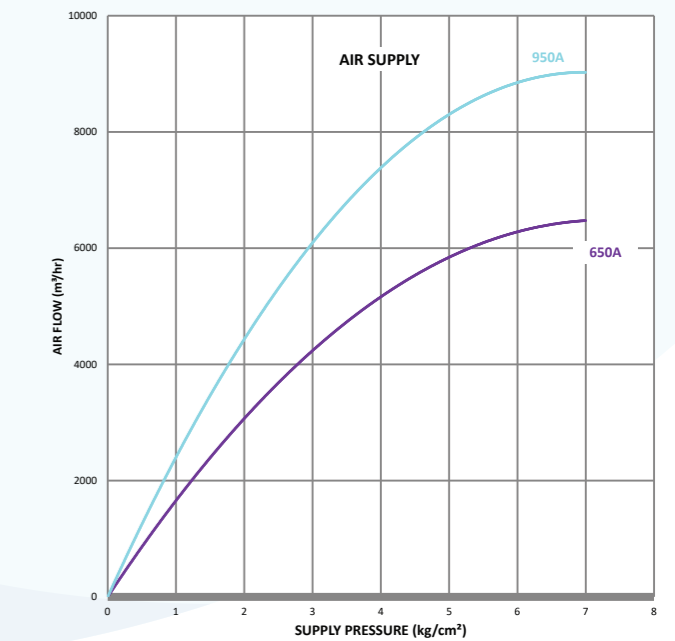
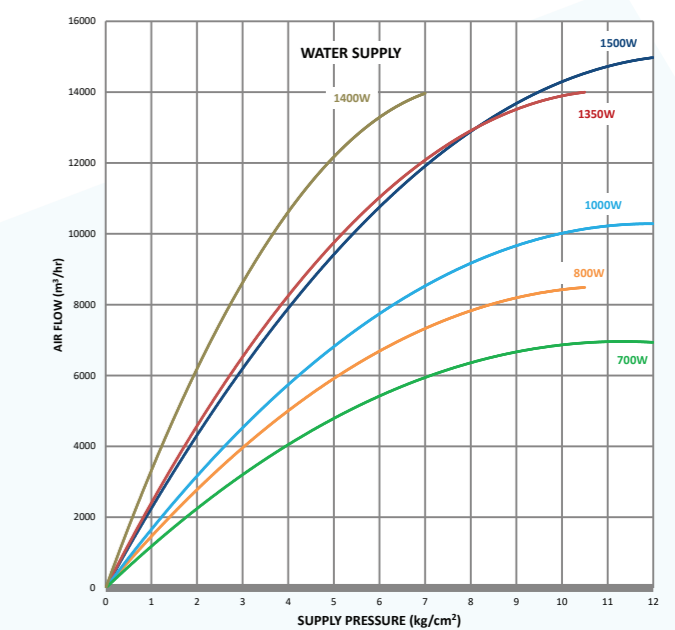
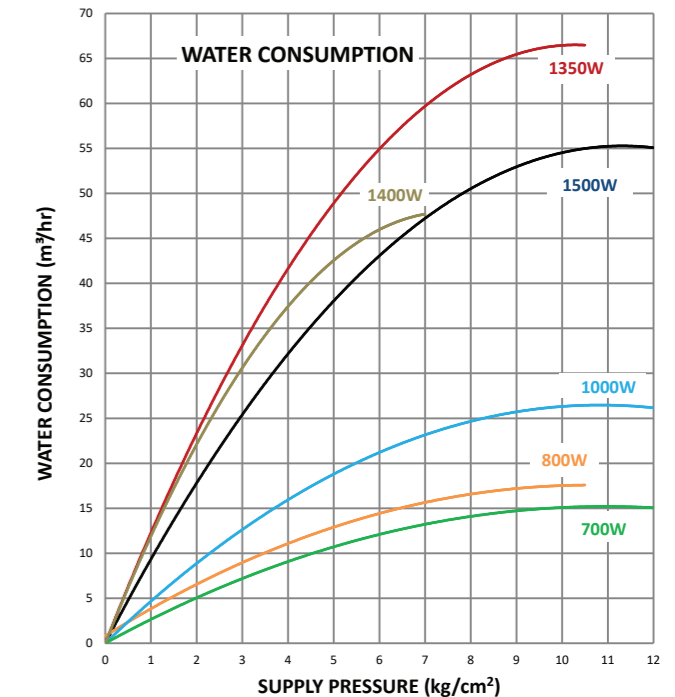
- Use in Hazardous Areas
- Victor Marine design all fans to be able to work in explosive and hazardous conditions. All impellers, casings and motors are designed with compatible materials or with incorporated anti-spark tracks - in full accordance to the EC ATEX directive.



Type Approvals By:



Drive Medium	VP700W Water	VP800W Water	VP1000W Water	VP1350W Water	VP1400W Water	VP1500W Water	VP650A Compressed Air	VP950A Compressed Air
<b>Max Air Flow</b> m <sup>3</sup> /hr	7000	8700	10540	14350	14000	14800	6750	9000
m <sup>3</sup> /min	116	144	175	238	232	246	112	149
<b>Max Static Pressure</b> N/m <sup>2</sup> (Pa)	970	1130	1790	2600	1500	3120	1015	700
<b>Max Air/Water Requirement</b> m <sup>3</sup> /hr	15	18	27	68	48	56	178	220
<b>Max Working Pressure</b> kg/cm <sup>2</sup>	12	10.5	12	10.5	7	12	7	7
<b>Max Noise (Radial)</b> db @ 1m	91	88	88	89	95	88	104	118
<b>Exhaust Mode</b>	Yes, Reversible	Yes, Reversible	Yes, Reversible	Yes, Reversible	Yes, Special Impeller	Yes, Reversible	Yes, Special Impeller	Yes, Reversible
<b>Materials</b>								
Casing	Stainless Steel 316	Aluminium LM6	Stainless Steel 316	Aluminium LM6	Stainless Steel 316	Stainless Steel 316	Stainless Steel 316	Stainless Steel 316
Impeller	Polyamide (PAGAS)	Aluminium LM6	Aluminium LM6	Aluminium LM6	Polymide (PAGAS)	Aluminium LM6	Polymide (PAGAS)	Aluminium LM6
Spark Track	N/A	N/A	Beryllium copper	N/A	N/A	Beryllium Copper	N/A	Beryllium copper
Air Stator	N/A	Aluminium LM6	N/A	Aluminium LM6	N/A	Stainless Steel 316	Stainless Steel 316	N/A
Fastenings	Stainless Steel 316	Stainless Steel 316	Stainless Steel 316	Stainless Steel 316	Stainless Steel 316	Stainless Steel 316	Stainless Steel 316	Stainless Steel 316
Couplings	Stainless Steel 316	Bronze	Stainless Steel 316	Bronze	Stainless Steel 316	Stainless Steel 316	Bronze	Bronze
Motor Type	3D Francis Turbine	2D Francis Turbine	3D Francis Turbine	2D Francis Turbine	3D Francis Turbine	3D Francis Turbine	Air ATEX Approved	Air ATEX Approved
Stainless Steel fans also available in Hyper Duplex.								
<b>Installation*</b>								
To suit deck opening	ID 318mm, PCD 389mm	ID 318mm, PCD 389mm	ID 318mm, PCD 389mm	ID 318mm, PCD 389mm	ID 400mm, PCD 480mm	ID 318mm, PCD 389mm	ID 318mm, PCD 389mm	ID 318mm, PCD 389mm
Standard Air/Water Connections	1.5" BSP	2.5" NST (BW)	2" BSP	2.5" NST (BW)	2" BSP	2" BSP	1" CLAW	1" CLAW
<b>Weight</b>								
Operational: kgs	19	31	27	31	25	27	17	24
<b>Suitable</b>	Oil, Gas, Product, Chemical Handysize, SR, LPG	Oil, Gas Panamax, Aframax	Oil, Gas, Product, Chemical LR2, LR1, MR, LPG	Oil, Gas, Suezmax, UL/VLCC, LPG	Oil, Gas, Product, Chemical Suezmax, UL/VLCC, LPG	Oil, Gas, Product, Chemical Suezmax, UL/VLCC, LPG	Oil, Gas, Product, Chemical Handysize, SR, LPG	Oil, Gas, Product, Chemical LR2, LR1, MR, LPG
<b>Envelope Dimensions</b>	H: 465 Ø: 365	H: 690 Ø: 580	H: 572 Ø: 580	H: 689 Ø: 580	H: 514 Ø: 503	H: 572 Ø: 580	H: 410 Ø: 559	H: 368 Ø: 580
<b>Visual</b>								



\* Multiple deck flanges are available to suit a variety of deck openings. Various couplings (Nakajima, Storz, Camlock etc.) and a variety of hoses can also be supplied.

# Gas Freeing Fan Ancillaries

## Portable Vent Stacks

These Vent Stacks are manufactured from durable galvanised mild steel to a height of 2m for compliance with SOLAS chapter 59 paragraph 2. Specifying a discharge exit velocity of 30m/sec at 2 metres above deck level and for use with either VP1350W mk5 or VP1500W Gas Freeing Fans will ensure requirement is met.



## Lay-flat Hose

### Heavy Duty Supply (Red) and Medium Duty Exhaust (Blue)

Woven polyester reinforcement encased in polyurethane internal and external liner. Available in 38mm and 50mm nominal bore and a maximum length of 50 metres.



## Air Supply Hose (Black)

Neoprene rubber reinforced with multiple rayon braids. Available in 19mm and 25mm nominal bore.



## Connections and Spanners

We stock an extensive range of hose connections, hose couplings, hose spanners and deck valve adapters, mostly with BSP threads. Hose spanners are manufactured from a non-sparking alloy for complete safety.



## Flanges

All fans are supplied with a standard 318mm deck flange. Other deck flanges are available on request.



## Fan Trolley

Manufactured in a lightweight tubular construction, this trolley is available to ease transportation of the fans in restricted areas; complete with durable wheels and a fan retaining strap for added protection.



## Air Ducting

Specially designed for marine 'hazardous areas', this is flame retardant and anti-static, heavy duty spiral wound PVC coated, flexible fabric ducting. Produced in standard 300mm diameter nominal bore or special purpose diameters and lengths, these ducts are suitable for both supply and exhaust mode operation. Various mild steel, stainless steel (AISI 316) and galvanised flanges to suit both deck opening and VP gas freeing fan outlet ducts are available; many sizes ex-stock.



## Spares Kits

Some of our spares are listed below and are available in *basic* (A), *standard* (B), *complete* (C) or tune-up kits.

Tab Washer; Hex Bolt; Dowty Washer; Internal Circlip; Ball Bearing; Shaft; Impeller Key; Runner Key; Seal Clamp Sleeve; Sealing O Ring; Mechanical Face Seal; Runner; Washer; Nylon Washer; Setscrew; Lip Seal; Waved Washer.



VM/GFF/SEP19

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The manufacturer reserves the right to alter the specification and data to incorporate improvements in design.  
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Oily Water Separators



Tank Washing Machines



Sewage Treatment Plants

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## Agent's Details

