

# TANK WASHING MACHINES

Victor Marine Ltd are specialists in the design and manufacture of Tank Washing Machines and their accessories.

With nearly 70 years of experience in the supply of tank cleaning systems, our products have a proven track record of quality, efficiency & reliability.

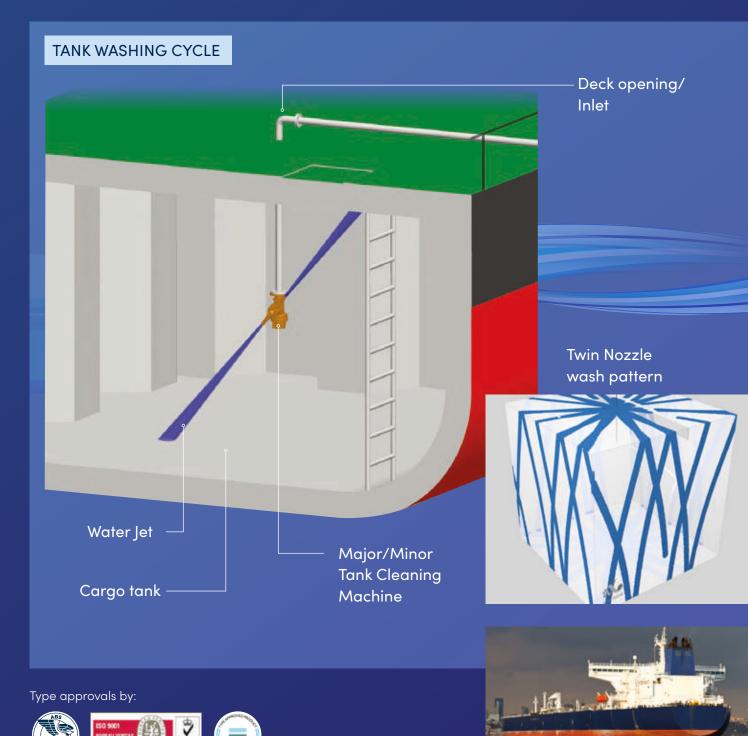




# Tank Washing Machines

Tank Washing is a vital part of a ship's operations and it is essential that the equipment on-board is robust, reliable and fit for purpose. Developing and manufacturing Tank Washing Equipment for nearly 70 years, Victor Marine has a wealth of knowledge and experience in providing tank cleaning solutions suitable for VLCCs to smaller product tankers and chemical carriers.





"Victor Marine's Tank Washing equipment, marketed under the original established brand name of Victor Pyrate, are of proven high quality and are efficient, economical and robust."

The wide range of portable and fixed tank cleaning machines on offer from Victor Marine are all available with various styles of down tubes and hoses.

All machines are made in stainless steel to ensure durability and longevity. The internal gears and components are manufactured from high quality materials which ensure low wear and can operate under high pressures within a wide range of temperatures.

Victor Marine can offer portable and fixed twin nozzle tank washing machines which set a standard above the rest.

#### **Key Features**

- Wash pattern is of orbital progressive intensity to meet IMO Annex II pre-wash requirement standard;
- Jet lengths from 9m to 26m;
- Wash cycle times as low as 16 minutes;
- Machines capable of operating at a pressure as low as 6 kg/cm<sup>2</sup>;
- Nozzle sizes ranging from 7mm to 18mm;
- Automatic 'slip-clutch' to prevent accidental damage in use;
- Simple to service with the use of high performance long life gears;
- Alternative flange (up to 180mm diameter) and fixings available;
- Fully Type Approved by Class Societies worldwide.

Our Minor unit is offered with either 'sealed for life' or media lubricated drive to ensure no cargo contamination.





#### Stainless Steel VP Minor

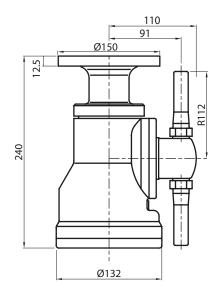
The VP Minor is a pre-programmed twin nozzle tank washing machine manufactured from 316 stainless steel. This unit is suitable for use on both small and medium crude oil, chemical and product tankers and can be supplied as either fixed or portable.

The VP Minor is also available as a 'sealed for life' machine which has been specifically designed to operate with aggressive and abrasive types of drive media. The 'sealed for life' machines are also the perfect choice when considering the cleaning of mud or slop tanks; this is due to the nature of the sealed gearbox design.

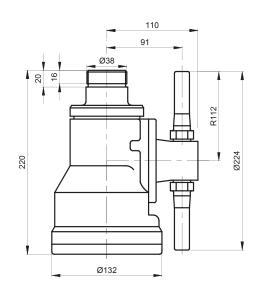
| Wash Pattern  | Pre-programmable Rotary 360°  |
|---|---|
| <b>Jet Length</b><br>Maximum<br>Typical                       | 17 mtrs (56 ft)<br>9-16 mtrs (30-52 ft)   |
| Operating Pressure<br>Maximum<br>Typical                      | 12 kg/cm (170 psi)<br>6-10 kg/cm (85-142 psi)   |
| Flow Capacity<br>Minimum<br>Maximum                           | 7 m /hr (31 US gal/min)<br>19 m /hr (84 US gal/min)   |
| <b>Wash Cycle</b><br>Time<br>Typical<br>Type                  | Variable on supply pressure (see table below)<br>Between 16-30 mins<br>4 cycles for complete wash       |
| Maximum Operating<br>Temperature                              | 95°C (203°F)  |
| Installation<br>Min deck opening<br>Fixed Flanged<br>Portable | Ø 200mm (8.0 inches)<br>Std DIN 40 NP10 (Ø 150mm with 4x18mm holes on a 110 PCD)<br>1½" BSP Male thread |
| <b>Weight</b><br>Fixed Flanged<br>Portable                    | 10.2 kgs (22.5 lbs)<br>8.2 kgs (18.1 lbs)   |

|                    | VP Minor Nozzle Diameter |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
|--------------------|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Supply<br>Pressure | 2x7mm                    |               |               | 2x8mm         |               |               | 2x9mm         |               |               | 2x10mm        |               |               | 2x11mm        |               |               |
| (kg/cm)            | Flow<br>m³/hr            | Jet<br>Length | Cycle<br>Time | Flow<br>m³/hr | Jet<br>Length | Cycle<br>Time | Flow<br>m³/hr | Jet<br>Length | Cycle<br>Time | Flow<br>m³/hr | Jet<br>Length | Cycle<br>Time | Flow<br>m³/hr | Jet<br>Length | Cycle<br>Time |
| 6                  | 7.3                      | 9.1           | 27            | 10            | 9.5           | 26            | 10.4          | 10.6          | 27            | 13            | 11.6          | 26            | 15            | 14            | 24            |
| 8                  | 8                        | 10.5          | 21            | 11.3          | 10.8          | 20            | 11.6          | 11.3          | 23            | 14.2          | 13            | 22            | 16.2          | 15            | 20            |
| 10                 | 8.5                      | 11            | 18.5          | 12.2          | 12            | 18            | 12.6          | 12.5          | 19            | 16            | 14.8          | 20            | 17.7          | 16            | 18            |
| 12                 | 9.2                      | 11.6          | 18            | 13            | 12.5          | 17            | 13.73         | 13            | 16            | 17.6          | 15.5          | 18            | 19.3          | 17            | 17            |

**VP Minor - Fixed** 



#### **VP Minor - Portable**



## Stainless Steel VP Major

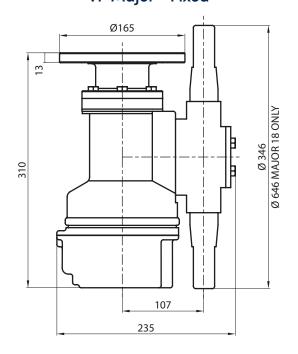
The VP Major is a pre-programmed twin nozzle tank washing machine manufactured from 316 stainless steel. This unit is suitable for use on both medium and large crude oil, chemical and product tankers and can be supplied as either fixed or portable.



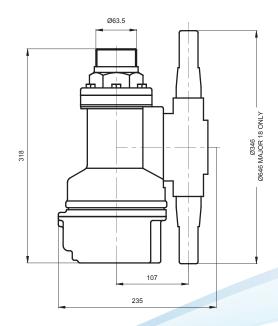
| Wash Pattern  | Pre-programmable Rotary 360°   |
|---|--|
| <b>Jet Length</b><br>Maximum<br>Typical                       | 26 mtrs (85ft)<br>19-25 mtrs (62-82ft)   |
| Operating Pressure<br>Maximum<br>Typical                      | 12 kg/cm2 (170 psi)<br>8-10 kg/cm2 (114-142 psi)   |
| Flow Capacity<br>Minimum<br>Maximum                           | 23m3/hr (101 US gal/min)<br>70m3/hr (308 US gal/min)   |
| <b>Wash Cycle</b><br>Time<br>Typical<br>Type                  | Variable on supply pressure (see table below)<br>Between 34-50 minutes<br>4 cycles for complete wash |
| Maximum Operating<br>Temperature                              | 95ºC (203ºF)   |
| Installation<br>Min deck opening<br>Fixed Flanged<br>Portable | Ø 245mm (9.6 inches)<br>Std DIN 50 NP16 (Ø 165mm with 4x18mm holes on a 125 PCD)<br>2" VP Thread     |
| <b>Weight</b><br>Fixed Flanged<br>Portable                    | 21kgs (46 lbs)<br>19.5kgs (43 lbs)   |

| Supply<br>Pressure<br>(kg/cm) | VP Major Nozzle Diameter |               |               |               |               |               |               |               |               |                     |               |               |
|-------------------------------|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------------|---------------|---------------|
|                               | 2x12mm                   |               |               | 2x14mm        |               |               | 2x16mm        |               |               | 2x18mm (Fixed Only) |               |               |
|                               | Flow<br>m³/hr            | Jet<br>Length | Cycle<br>Time | Flow<br>m³/hr | Jet<br>Length | Cycle<br>Time | Flow<br>m³/hr | Jet<br>Length | Cycle<br>Time | Flow<br>m³/hr       | Jet<br>Length | Cycle<br>Time |
| 8                             | 32                       | 19            | 39            | 42            | 20            | 43            | 50            | 22            | 42            | 57                  | 23            | 49            |
| 10                            | 35                       | 20.5          | 36            | 45            | 23            | 39            | 55            | 24            | 39            | 64                  | 25            | 46            |
| 12                            | 40                       | 21.5          | 34            | 51            | 24            | 37            | 61            | 25            | 37            | 70                  | 26            | 44            |

#### **VP Major - Fixed**



#### **VP Major - Portable**



# Tank Washing Ancillaries



#### **Washing** Machine and Hose Saddle

#### **Tank Washing Hose**

Neoprene with styrene butadiene rubber (SBR) liner reinforcement with multiple rayon braids.

Electrical continuity is ensured by twin braided stainless steel wires. All hoses are fully tested prior to despatch.

Available in 38mm and 50mm nominal bore and a maximum length of 50 metres.



#### **VP Watergun**

A powerful water gun with effective jet lengths of up to 25m with a low recoil for rapid cleaning of decks and bulk cargo holds. Supplied complete with a tripod stand, the lightweight design is ideal for one-person operation.



#### **Victor Marine services**

**Design.** The designers at Victor Marine have a wealth of experience and industry knowledge. Customers can discuss their specific requirements for any project, and the development team will collaborate and create an innovative, bespoke solution. Our comprehensive in-house engineering and testing facilities means we can design, manufacture and build many systems under our own roof. Victor Marine can also provide a range of shadow drawings, certification and process options.

Commissioning and Servicing. Our range of Gas Freeing Fans & Tank Washing Equipment are designed to be installed and maintained by clients' in house/on-board service teams. Victor Marine Ltd can also offer engineers worldwide through our network of agents for all Commissioning and Servicing requirements. Our Agents & Engineers are fully qualified and trained to a high level on all of our products...

After sales and tech support. Victor Marine maintains a worldwide network of agents who can provide customers with a comprehensive after-sales service for example installation, commissioning, technical support, servicing and spares.



### Tank Washing Ancillaries

#### **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 nonsparking alloy for complete safety.



#### **VP Tripod**

Marine grade aluminium tripod to aid in the lifting of tank washing machines in and out of deck openings. Sizes available on request.



For easy handling and longevity of tank cleaning hoses, this lightweight, epoxy coated aluminium alloy hose saddle comprises of a saddle, deck plate, hose guide and positioning clamp.

Optionally, there is a choice of base plate sizes and materials standard size 318mm. Weight: 7kg



#### **VP Major / Minor Spares Kits**

Supplied as basic or standard kits.
The kits include all major items required to overhaul the machines.
Alternatively spares are available as

individual items

upon request.







Victor Marine Ltd Unit 7, Waterloo Court Markham Vale Markham Lane Chesterfield, UK S44 5HN

Contact us today for more information

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Victor Marine Ltd are specialists in the design and manufacture of Oily Water Separators, Tank Washing Machines, Sewage Treatment Plants and Gas Freeing Fans. Formed in 2005 from the merger of two established brands in the marine industry, namely Victor Pyrate Ltd and Hodge Separators Ltd, the company has over 100 years of experience in supplying equipment to the marine industry.

Victor Marine is an autonomous company within the Samuel Hodge Group, a British engineering company founded in 1897, with its origins in ship repairing and machine tool rebuilding.