

## VP MINOR

### TANK WASHING MACHINE

The VP Minor tank washing machine for either portable use or fixed installation in, crude oil, product and chemical tankers.



- Available in Bronze or Stainless Steel 316L, with fabricated downtube for fixed installation.
- Two or three nozzles available.
- Lightweight, robust and durable.
- Designed for frequent washing operation, and simple service routine.
- Progressive intensity wash.
- Integral turbine – self starting.

### Performance Specification

Suitable for progressively intense tank washing on all types of tankers up to 30,000 DWT.

**Materials:** Stainless Steel 316L or Bronze. Extension tube in Stainless Steel as above or Mild Steel with triple epoxy coating.

All machines are available with rubber protectors to protect tank coatings.

**Flanges:** 38mm (1½"). Any relevant flange standard.

**Wash Pattern:** Spherical with progressive intensity wash.

**Mounting:** Mounted on extension tube with stiffening to meet vessel vibration frequency criteria, in either Stainless Steel 316L or Mild Steel with triple epoxy coating after shot-blasting. Complete with deck flange, inlet bend, inlet flange, filter plate and gasket. Down tube lengths available 1 – 4 metres

**Hose connection:** 1½" BSP male connection.(Portable machine)



**Design:** Two or three nozzles with smooth jet flow incorporating an integral turbine drive. Fits through standard 318mm or down to 215mm deck opening. Turbine driven, self starting, fitted with automatic slip device. Long life gears, grease packed and sealed against leakage, or media lubricated gearbox to prevent cargo contamination.

**Note:** A particularly easy machine to service with the gear assembly being removed in seconds.

**Temperature:** Suitable for hot and cold wash up to 93°C with standard wash chemicals.

**Typical wash cycle:** No more than 29 minutes according to pressure and nozzle size.

**Weight :** 9 kgs portable, 10kgs flanged.

**Height:** 210mm portable, 240mm flanged.

**Nozzles:** 2 x 7mm to 2 x 11mm and 3 x 7mm to 3 x 9mm  
Performance details below

PERFORMANCE DATA															
Ø NOZZLE SIZES	3 x 7mm			3 x 8mm			3 x 9mm			2 x 10mm			2 x 11mm		
Pressure kg/cm <sup>2</sup>	6.0	8.0	10.0	6.0	8.0	10.0	6.0	8.0	10.0	6.0	8.0	10.0	6.0	8.0	10.0
Flow m <sup>3</sup> /hr	10.9	11.9	12.8	13.3	14.7	15.8	15.6	17.4	18.9	13.0	14.2	16.0	15.0	16.2	17.7
(1) Jet length - m.(C.O.W.)	9.6	10.3	11.0	10.1	10.8	11.5	10.6	11.3	12.0	11.6	12.4	13.0	12.6	13.3	14.0
(2) Jet Length - (water)	16.0	18.0	20.0	16.5	19.0	21.0	17.0	20.0	22.0	17.5	20.5	24.0	18.0	21.0	25.0
(3) Standard wash time (4 cycles) Mins	29.0	24.0	21.0	28.0	23.0	20.0	27.0	23.0	19.0	26.0	22.0	20.0	24.0	20.0	18.0

(1) Jet – (C.O.W.) = Classification society approved length of wash jet with maximum solid effect (all nozzles operating)

(2) Jet – (Water) – Maximum length of wash jet – horizontal throw (all nozzles operating)

(3) Standard wash time – Defined as 360° coverage of tank surfaces by effective solid wash jet with fine wash pattern.  
A standard wash time is 4 individual cycles as needed to meet IMO Annex II pre-wash requirements

Full design service, shadow drawings and operating manuals. Victor Pyrate will calculate machine type and quantity required.

