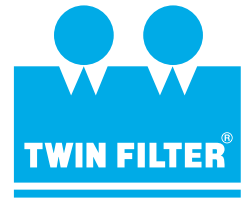


# VERTICAL PRESSURE LEAF FILTER UNIT



## 600 VPL-DE

The Vertical Pressure Leaf or Diatomaceous Earth filter unit is completely self-contained and equipped with all necessary auxiliaries to perform an effective filter job. The large filtration area of the VPL/ DE filter unit allows filtering fluids with a high dirt load, at a high flow rate, down to low NTU. The process design allows a laminar flow through the filter vessel and leafs. This results in a long filtration cycle and the lowest possible NTU output. There is no need for opening the filter vessel during clean out. This system saves up to 90% down time compared to conventional VPL system and filter presses.



VPL - DE filter unit

### SYSTEM DESIGN FEATURES

- Revolutionary wash down system, saving time and therefore minimizing downtime of the filter unit (<10 min)
- Compact and light weight design
- Innovated mixing system by air
- Designed for offshore duty
- Filter leafs in SS316L with polypropylene filter cloth
- The cake discharge is efficient and quick
- Safety railing, ladder and service platform
- All major connections on one side
- Certified hoisting slings and forklift pockets
- Closed system
- One frame

### APPLICATIONS

Completion fluids  
Work over fluids  
Offshore brines  
Seawater  
Waste water treatment

### FILTER UNIT RANGE

420 VPL-DE  
600 VPL-DE  
840 VPL-DE  
1200 VPL-DE

*We care, we filter*

# VERTICAL PRESSURE LEAF FILTER UNIT

## TECHNICAL SPECIFICATIONS

### Machinery

#### 600 VPL-DE

Filter area	600 ft <sup>2</sup> (56 m <sup>2</sup> )
Number of filter leaves	20 pcs
Material of filter leaves	SS 316L with polypropylene filter cloth
Maximum flow	15 BBL/min (145 m <sup>3</sup> /hr)
Maximum working pressure	7 bar (105 Psi)
Maximum working temperature	158 °F (70 °C)
Design code Vessel VPL/DE	PED (PD 5500)
Vessel diameter	43.3 " (1100 mm)
Volume mixing vessel	13 BBL (2 m <sup>3</sup> )
Easy to handle vessel lid	Hydraulic jack operated
Safety valves set point	7 bar (105 Psi)
Cleaning device	Pneumatic driven rotating device with high efficiency spray nozzle
Pump 1	Pre coat air driven pumps
Pump 2	Body feet air driven pump
Standard instruments	<ul style="list-style-type: none"><li>• in-/ outlet pressure gauges</li><li>• relief valve 7 bar (105 Psi)</li><li>• flow indicator</li></ul>
Control panel	Compressed air actuated, all main valves are operated from this easy access panel

### Piping and connections

Bypass	4" SS
Dump connection	4" SS hammer union fig 100 4" NPT-M
Main butterfly valves	4" air operated from control board
Inlet/outlet connections	4" SS hammer union fig 100 4" NPT-M
Washwater inlet	2" SS union fig. 100 on 2" NPT-M

### Construction

Weight (empty)	9900 lbs (4500 kg)
Dimensions (LxWxH)	9.2x 6.6x 9.7 ft (2.80x 2.00x 2.95 m)
Material of construction	SS 316L All wetted parts
Frame work	MPI & load test
Lifting	Forklift pockets and certified hoisting slings

## OPTIONAL

- Double execution for continuous filtration
- Non-Pneumatic operated design
- Other vessel/ frame dimensions
- Other design codes (ASME)
- One frame with diesel driven pump

*We care, we filter*