

# HIGH PURITY NORTHWEST INC.



## *DEGAS. DEHYDRATE. FILTER.* **GEN II Vacuum Dehydrator**

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Easy to use. Removes emulsified and dissolved moisture to below 20 ppm. Designed for unattended operation. Particulate removal down to ISO 13/10/8.

# GEN II VACUUM DEHYDRATOR

The easy to use Thermo-Vac degases, dehydrates and filters industrial oil with the push of a button. Our fully automated system takes the guess work out of the oil purification process. The PLC starts and stops each component in the proper order. We've made oil purification easy. This design is the perfect balance of economy with quality components so that performance is maximized at a reasonable cost.



## OPERATION

Oil is drawn into the system, through a strainer, via inlet pump. Oil is then pumped through a low watt density fin tube heater, protected by a flow switch, into the stainless steel vacuum chamber. The heater(s) are temperature controlled to raise the oil to a safe operating temperature. The vacuum chamber contains high surface area pleated dispersal elements that create a massive thin film of oil, maximizing the amount of oil exposed to the vacuum conditions. Gasses and moisture are flashed off and quickly evacuated from the chamber via a vacuum pump.

An air cooled condenser condenses the vapors to water where it is collected in a stainless steel condensate tank. The condensate tank includes a high level switch that shuts the system down and lights a light on the control panel; automatic water drain is also available.

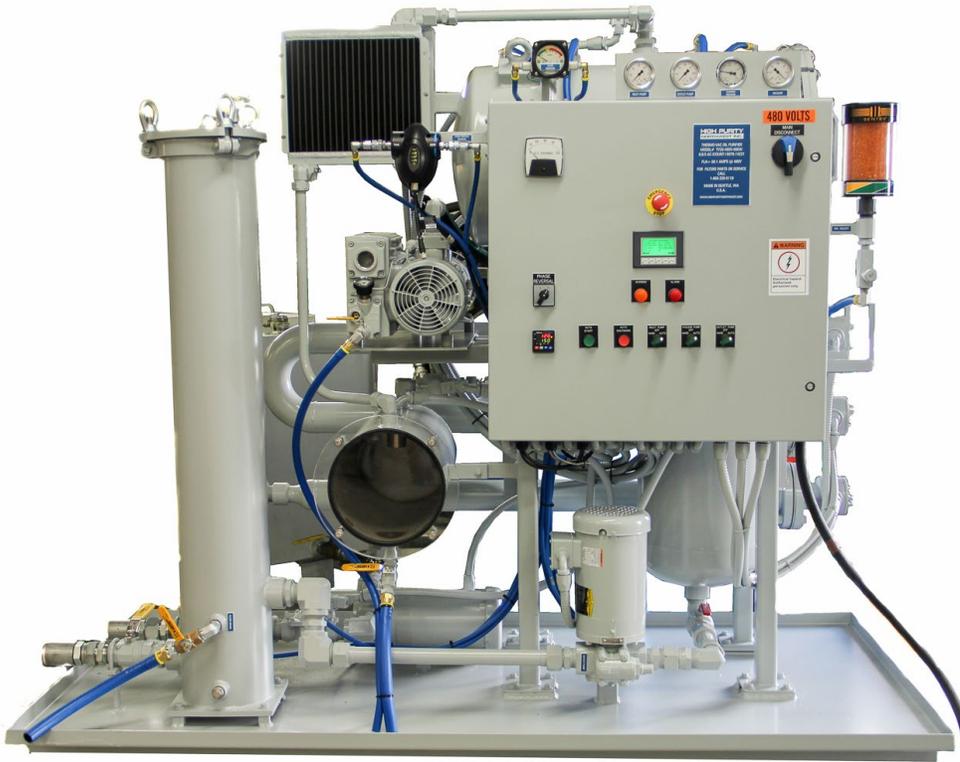
An outlet pump located at the bottom of the vacuum chamber pumps the degassed/dehydrated oil through the  $\beta x[c] \geq 1000$  layered glass fiber absolute coreless filter and exits the skid. Level in the vacuum chamber is maintained by level switches that regulate the inlet and outlet pump accordingly.

Model	Flow Rate (GPM)	Vacuum Flow Rate (CFM)	Heat (KW)	Inlet/Outlet Connection	Chamber Dispersal Element (Qty)	Dimensions (Approx)	Weight (Approx) lbs
TVG2-5	5	25	16	1"	1	45"Wx70"Lx60"H	1,200
TVG2-10	10	25	32	1"	3	50"Wx70"Lx60"H	1,500
TVG2-15	15	25	32	1"	3	50"Wx70"Lx60"H	1,700
TVG2-20	20	25	64	1-1/2"	4	50"Wx70"Lx60"H	1,850
TVG2-30	30	40	64	2"	6	55"Wx70"Lx65"H	2,100
TVG2-50	50	100	96	2.5"	10	65"Wx85"Lx75"H	2,900
TVG2-60	60	100	128	2.5"	12	65"Wx85"Lx75"H	3,200

Voltage Options:

230vac, 3p, 60 Hz; 380vac, 3p, 50Hz; 415vac, 3p, 50Hz; 460vac, 3p, 60 Hz; 575vac, 3p, 60 Hz

Specifications subject to change without notice



## OPTIONS

- Extra Heat
- High Vacuum Booster Pump
- Higher Capacity Vacuum Pump
- Particle Counter
- Flow Meter
- Auto Condensate Drain
- Explosion Proof
- Trailer
- Generator
- Processing and Storage Tanks
- H<sub>2</sub>S Removal System
- System Enclosure Options
- Fullers Earth Cartridge Vessel
- Packed Disc Dispersal Elements

## FEATURES

- Leak Proof Stainless Steel Hydraulic Fittings and Tubing
- Stainless Steel Vacuum Chamber with Access Door and Window
- 6" x 22" Pleated Dispersal Elements
- Fiber Optic Foam Control
- Superior Level Switch Chamber Level Control
- Low Watt Density Fin Tube Heaters
- Digital Temperature Controller
- Individual Heater Selector Switches
- 0.5 Torr Vacuum Pump
- Air Cooled Condenser with Stainless Steel Condensate Tank
- TEFC Motors
- UL Approved NEMA 4 Control Panel
- One Button Operation
- PLC Controller
- Phase Fail Circuit and Reversing Switch
- $\beta[c] \geq 1000$  Absolute Rated Glass Filters
- Hour Meter
- Dirty Filter, Low Oil Level, High Oil Level, Low Flow and High Heat Alarm Lights
- Quality Positive Displacement Gear Pumps
- 50 PSI Working Pressure
- Carbon Steel Base with Drip Pan, Fork Lift Guides and Casters
- Two Part Epoxy Paint
- One Year Warranty

[www.highpuritynorthwest.com](http://www.highpuritynorthwest.com)

[sales@hpnwinc.com](mailto:sales@hpnwinc.com)

Local: (206) 782-2388 | Toll free: (866) 220-5118

2031 196th St. SW Ste. B102, Lynnwood, WA 98036

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Type-	Flow Rate-	Power-	Heat-	Vacuum Pump	Condenser	Inlet Filter	Media	Outlet Filter	Media	Options
<b>Example:</b>										
TVG2-	10-	460-	32KW-	DSA25-	AC-	I-C639/	6MV/	0-C639/	3MV/	DMM

ThermoVac Type	
TVG1	Gen1
TVG2	Gen2

Flow Rate (GPM)
3
5
10
15
20
30
50
60

Power	
380	380V/3/50Hz
415	415V/3/50Hz
460	460V/3/60Hz
575	575V/3/60Hz

Heat
12KW
16KW
24KW
32KW
36KW
48KW
64KW
96KW
128KW

Vacuum Pump	
DSA25	20 CFM Rotary Vane
DSA40	30 CFM Rotary Vane
DSA63	45 CFM Rotary Vane
CPA60	40 CFM Claw Pump

## THERMO-VAC NOMENCLATURE

Options	
Blank	No Options
ACD	Auto Condensate Drain
TSI	Touch Screen Interface
XP7	Explosion Proof; NEMA 7
PA	Explosion Proof, NEMA 4 Purge Air
LPC	Laser Particle Counter
DMM	Doble Moisture Monitor
MV	Vacuum Pump Carbon Treatment
H2S	H2S Removal System
P	Packed Disc Dispersal
FE	Fullers Earth Cartridge Vessel

Filter Element βx(c) ≥ 1000	
Blank	No Filter
1MV	2.5 Micron Glass; Viton
3MV	3 Micron Glass; Viton
6MV	6 Micron Glass; Viton
12MV	12 Micron Glass; Viton
25MV	25 Micron Glass; Viton

Filter Housing	
Blank	No Filter
C518	5"x18" Coreless
C537	5"x37" Coreless
C639	6"x39" Coreless

Condenser	
AC	Air Cooled
LC	Water Cooled
BC	Air & Water Cooled



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