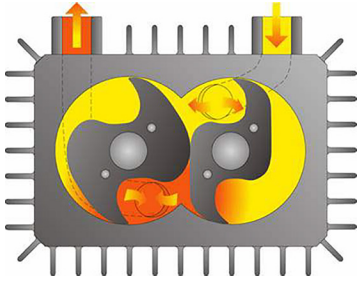


POWEREX[®]



Medical Vacuum Systems



DRY CLAW

Inside the pump housing, two claw shaped rotors take in air as they rotate in opposite directions. The air is compressed by the rotors, then discharged through a silencer to atmosphere. The pumping chamber is dry. There is no contact between the rotors or the cylinder wall eliminating internal wear and parts to replace. The rotors are synchronized by gears requiring a small amount of oil in the gear housing. Gear oil change requirements are minimal at approximately 20,000 hours.

BENEFITS

- Most energy efficient technology
- Oil-free compression chamber
- Extremely low maintenance
- No water and sewage costs
- Suitable for dedicated waste anesthesia (WAGD) systems
- Air-cooled design

AVAILABLE OPTIONS

- **NEW Enclosed Systems**
- Premium Warranty
- Expandable Systems
- Variable Frequency Drive
- Oxygen Assured Pumps
- Internal Tank Lining
- Non-HMI Controls
- Alternate Tank Sizes & Custom Configurations



CVPT0755 with VFD

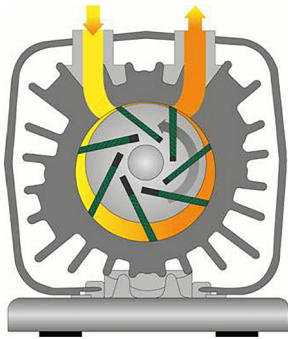
SYSTEMS SPECIFICATIONS

Model	SCFM @ 19" Hg	HP	Tank (Gal.)
Duplex Enclosure			
MCED050	33	5	120
MCED070	52.8	7.5 small	120
MCED075	67.8	7.5 big	120
Triplex Enclosure			
MCET050	66	5	200
MCET070	105.6	7.5 small	200
MCET075	135.6	7.5 big	200
Quadplex Enclosure			
MCEQ050	99	5	200
MCEQ070	158.4	7.5 small	200
MCEQ075	203.4	7.5 big	200

Model	SCFM @ 19" Hg	HP	Tank (Gal.)
Duplex Horizontal Tankmount			
CVTD0203	16	2	80
CVTD0303	21	3	80
CVTD0504A	29	4	120
CVTD0504B	38	5	120
Duplex Vertical Tankmount			
CVTD0203V	16	2	80
CVTD0303V	21	3	80
CVTD0504AV	29	4	120
CVTD0504BV	38	5	120
Duplex Tank-over Skidmount			
CVPDT0502A	29	4	60
CVPDT0502B	38	5	60
CVPDT0752A	52	6.4	60
CVPDT0752B	65	7.5	60

Model	SCFM @ 19" Hg	HP	Tank (Gal.)
Duplex Modular Skidmount			
CVPD0504A°	29	4	120
CVPD0504B°	38	5	120
CVPD0754A°	52	6.4	120
CVPD0754B°	65	7.5	120
CVPD1005°	87	10	200
CVPD1505°	129	15	200
Triplex Modular Skidmount			
CVPT0504A°	58	4	120
CVPT0504B°	76	5	120
CVPT0755A°	104	6.4	200
CVPT0755B°	130	7.5	200
CVPT1005°	174	10	200
CVPT1505°	258	15	200
Quadplex Modular Skidmount			
CVPQ0505A°	87	4	200
CVPQ0505B°	114	5	200
CVPQ0755A°	156	6.4	200
CVPQ0755B°	195	7.5	200
CVPQ1005°	261	10	200
CVPQ1505°	387	15	200
Pentaplex Modular Skidmount			
CVPP1505	516	15	200

Contact factory for alternate tank sizes and expandable systems
 °System is OSHPD (seismic) certified; Certification No. OSP-3093-10



DRY ROTARY VANE

A rotor is mounted eccentrically in the pump cylinder and contains several sliding vanes. As the rotor turns, centrifugal force causes the vanes to slide outward creating a seal against the cylinder wall. The vanes are constructed of a self-lubricating graphite composite material which allows them to operate against the cylinder wall without the need for any other sealing or lubricating fluid. As a result of the offset rotor, a succession of variable volumes are formed in the cylinder housing creating the flow of vapor through the pump. Vapor is pulled into the pump inlet which is then compressed and discharged through the exhaust to atmosphere.

BENEFITS

- No oil anywhere
- Easy to maintain
- No water and sewage costs
- Suitable for dedicated waste anesthesia (WAGD) systems
- Less routine maintenance (no oil changes)
- Lower initial cost as compared to oil-free pump technology

AVAILABLE OPTIONS

- Premium Warranty
- Expandable Systems
- Internal Tank Lining
- Non-HMI Controls
- X-Series Vanes for up to 20,000 hours of life
- Alternate Tank Sizes & Custom Configurations

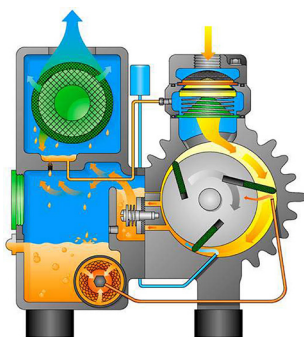
SYSTEMS SPECIFICATIONS

Model	SCFM @ 19" Hg	HP	Tank (Gal.)
Duplex Horizontal Tankmount			
VOTD0755	30.4	7.5	200
VOTD1006	56	8.6	240
Duplex Vertical Tankmount			
VVOTD0153	5.3	1.5	80
VVOTD0203	8	2	80
VVOTD0303	13.5	3	80
VVOTD0404	17	5	120
VVOTD0504	20	5	120

Model	SCFM @ 19" Hg	HP	Tank (Gal.)
Duplex Modular Skidmount			
VOPD0403	17	5	80
VOPD0503	20	5	80
VOPD0754	30.4	7.5	120
VOPD1004	56	8.6	120
Triplex Modular Skidmount			
VOPT0503	40	2	80
VOPT0754	60.8	7.5	120
VOPT1004	112	8.6	120
Quadplex Modular Skidmount			
VOPQ0505	60	5	200
VOPQ0755	91.2	7.5	200
VOPQ1005	168	8.6	200



VOPD1004



BENEFITS

- 30,000 hour vane life
- Air-cooled design
- Semi-synthetic oil
- Oil-flooded for lubrication and heat dissipation
- Lowest initial cost
- Highest ultimate vacuum levels 29.3" Hg
- No water and sewage costs
- Most suitable for high ambient temperatures

AVAILABLE OPTIONS

- Premium Warranty
- Expandable Systems
- High Temperature Alarm
- Oil Temperature Gauges
- Synthetic Oil
- Internal Tank Lining
- Non-HMI Controls
- Alternate Tank Sizes & Custom Configurations



VVTD0503

OIL-SEALED ROTARY VANE

A rotor is mounted eccentrically in the pump cylinder and contains several sliding vanes. As the rotor turns, centrifugal force causes the vanes to slide outward against the cylinder wall. Oil is injected into the pumping chamber to create a seal between the vanes and the cylinder wall and to lubricate the vanes for reduced wear. As a result of the offset rotor, a succession of variable volumes is formed in the cylinder housing creating the flow of air through the pump. Air is pulled into the pump inlet which is then compressed and discharged into the exhaust box. At this point oil is mixed with the air and is passed through several stages of internal oil and mist eliminators to remove 99.9% of the lubricating oil before the exhaust is released to atmosphere. The separated oil is then returned to the oil reservoir.

SYSTEMS SPECIFICATIONS

Model	SCFM @ 19" Hg	HP	Tank (Gal.)
Duplex Horizontal Tankmount			
VTD0153	7	1.5	80
VTD0203	11	2	80
VTD0303	17	3	80
VTD0404	26	5	120
VTD0504	37	5	120
VTD0755	52	7.5	200
VTD1006	77	10	240
Duplex Vertical Tankmount			
VVTD0153	7	1.5	80
VVTD0203	11	2	80
VVTD0303	17	3	80
VVTD0403	26	5	80
VVTD0503	41	5	80
Duplex Tankover Systems			
VPDT0402	26	5	60
VPDT0502	37	5	60
VPDT0752	52	7.5	60

Model	SCFM @ 19" Hg	HP	Tank (Gal.)
Duplex Modular Skidmount			
VPD0754°	52	7.5	120
VPD1004°	77	10	120
VPD1505°	11	15	200
VPD2005°	137	20	200
VPD2505°	168	25	200
Triplex Modular Skidmount			
VPT0504°	74	5	120
VPT0754°	104	7.5	120
VPT1004°	154	10	120
VPT1505°	222	15	200
VPT2005°	274	20	200
VPT2505°	336	25	200
Quadplex Modular Skidmount			
VPQ0505°	111	5	200
VPQ0755°	156	7.5	200
VPQ1005°	231	10	200
VPQ1505°	333	15	200
VPQ2005°	411	20	200
VPQ2505°	504	25	200

Contact factory for alternate tank sizes and expandable systems
 °System is OSHPD (seismic) certified; Certification No. OSP-3093-10

MEDICAL VACUUM SYSTEMS OPTIONS

SYSTEM DESIGN FEATURES

- Fully compliant with the latest edition of NFPA 99
- Multiple vacuum pumps
- ASME receiver
- UL Listed control panel (HMI or Non-HMI)
- All interconnecting piping and wiring
- Vibration isolation pads and flex connectors
- Manufactured in ISO 9001:2008 UL certified facilities

CONFIGURATION TYPES



Tank-over Skidmount



Modular Skidmount



Vertical Tankmount



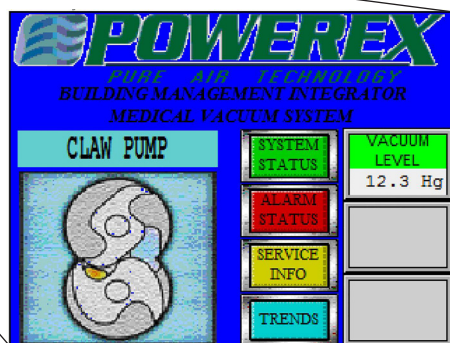
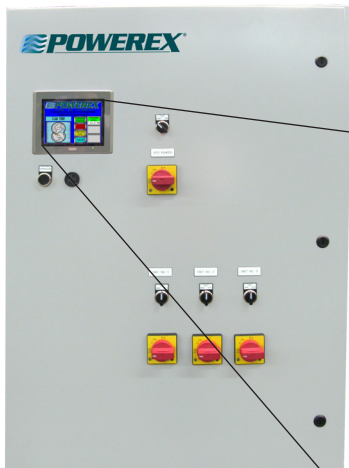
Horizontal Tankmount

STANDARD PREMIUM CONTROL PANEL

- PLC controller and 6" color HMI (Human Machine Interface) touch screen displays the operating status of the unit
- UL508A listed and labeled, NEMA 4/12 enclosure
- Visual and audible alarms for:
 - System overload trip
 - High temperature conditions
 - Service intervals
- Panel door includes:
 - Visual and audible alarms
 - HOA switch for each pump
- Building automation gateway with BacNet® protocol
- Email notifications for alarms and service alerts.

OPTIONAL NON-HMI CONTROL PANEL

- UL508A listed and labeled, NEMA 4/12 enclosure.
- Timed lead/lag alternation.
- Visual and audible reserve in use alarm.
- Redundant control circuit transformers.
- Dry contacts for remote alarm monitoring.
- Each vacuum pump provided with:
 - Hand/Off/Auto selector switch.
 - Magnetic starter with 3 leg overload protection.
 - Visual and audible high temperature shut down.
 - Hour meter.



Powerex manufactures industry-leading comprehensive medical air and vacuum systems, from source equipment to pipeline

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The leader in oil-free air technology

