

**General**

The Powerex vacuum system is designed provide vacuum for applications such as laboratories, molding, packaging, printing and other similar facilities.

**Vacuum System**

The package shall include one or two vacuum pumps and associated equipment, one ASME tank and one control panel. Each pump is factory piped to a common intake manifold. The system shall be completely tested prior to shipment.

**Rotary Vane Vacuum Pump**

The vacuum pumps shall be of the rotary vane air-cooled design. Each vacuum pump shall be direct driven through a shaft coupling by a TEFC electric motor. Belt drives shall not be permitted. Each vacuum pump shall be air-cooled and have absolutely no water requirements. Each vacuum pump shall have an end (ultimate) vacuum of 29.3" Hg (15 torr). Lubrication shall be provided by an integral, fully recirculating oil supply that is filtered by an automotive type, spin-on oil filter. Non-recirculating (once through) or partial re-circulating oil supply systems shall not be permitted. Each vacuum pump shall be capable of operation with standard SAE 30 weight oil. The oil separation systems shall be integral and shall consist of no less than three stages of internally installed oil and smoke eliminators through which the exhaust gas stream must pass. This system shall consist of bulk separation, oil mist elimination, and smoke elimination, and shall be capable of removing 99.9+ percent of all oil and smoke particles from the exhaust gas stream. Each vacuum pump shall include a built-in, anti-suck-back valve, mounted at the pump inlet, and three sliding vanes. Each vacuum pump shall be equipped with a 10 micron inlet filter for removal of particulates. The vacuum pumps shall be mounted on vibration isolators. The system shall also include a supplementary check valve between the inlet filter and the pump.

**Motor**

The motor is continuous duty, NEMA rated, C-face, TEFC, suitable for 208-230, or 460V, 3 phase, 60 hertz electrical operation.

**Receiver**

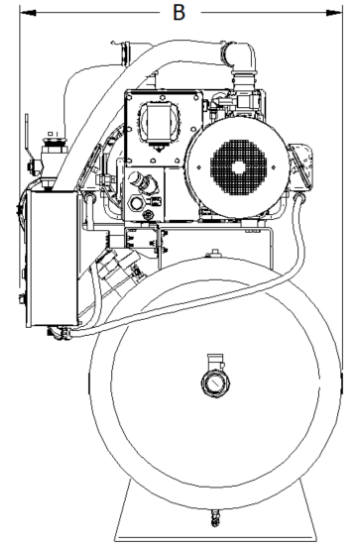
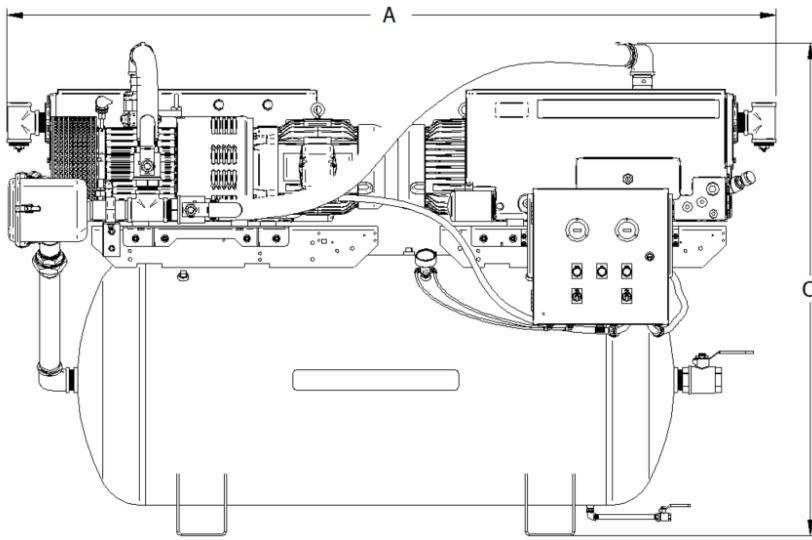
The system shall include an ASME rated receiver rated for full vacuum. The tank shall be equipped with a vacuum gauge and a manual drain.

**Control Panel**

The system shall include a UL listed control panel in a NEMA 1 enclosure in simplex or duplex configurations utilizing a 120V control transformer with fused primary and secondary protection. The control panel also includes the following accessories for each pump: Run time indicator, magnetic starter with 3-leg overload protection and Hand/Off/Auto selector switch. Standard features shall also include minimum run timers via a PLC or time delay relay for each pump and timed lead/lag pump alternation to maintain even run hours on each pump. The lag vacuum pump shall be able to start automatically if the lead vacuum pump fails to operate.

**Available Options**

- Internal tank lining for corrosion resistance
- Tank Sight Gauge
- Exhaust flex hose



Industrial Vacuum System Specification

Model	Total System HP	Pump HP	SCFM @ 19" Hg	SCFM @ 0" Hg	Tank (gal)	BTU/Hr	dB(A) Level	System F.L.A.			Weight	Dimensions			Inlet/Outlet
								208V	230V	460V		A	B	C	
IBVD0153	3	1.5 (2)	14	36	80 H	6502	66	12	10.8	6.4	568	73"	30"	44"	1 ¼"
IBVD0203	4	2 (2)	22	56	80 H	8670	69	14	12.8	7.4	595	73"	30"	44"	1 ¼"
IBVD0303	6	3 (2)	34	90	80 H	13006	69	20	17.6	9.8	716	75"	30"	45"	1 ¼"
IBVD0304	6	3 (2)	34	90	120 H	13006	69	20	17.6	9.8	732	81"	33"	49"	1 ¼"
IBVD0404	10	5 (2)	50	142	120 H	21676	71	32	28.4	15	937	81"	33"	49"	1 ¼"
IBVD0504	10	5 (2)	74	206	120 H	21676	75	31.6	27.8	15	968	84"	33"	51"	2"
IBVD0505	10	5 (2)	74	206	200 H	21676	75	31.6	27.8	15	1239	88"	38"	57"	2"
IBVD0755	15	7.5 (2)	104	282	200 H	32512	83	54.4	45.6	23.8	1615	93"	39"	60"	2"
IBVD1005	20	10 (2)	154	424	200 H	43350	84	68.8	54.4	28.2	1806	93"	39"	60"	2"
IBVD1006	20	10 (2)	154	424	240 H	43350	84	68.8	54.4	28.2	2060	99"	51"	60"	2"