

POWEREX[®]



Clean Air & Vacuum Systems

For Industrial Applications



**Designed &
Manufactured
in the USA**

with U.S. and Imported Components

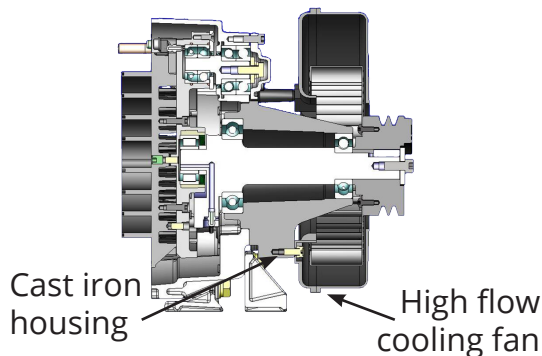
Scroll Enclosure Systems



Oil-less Scroll



Patented grease-able pin crank bearings

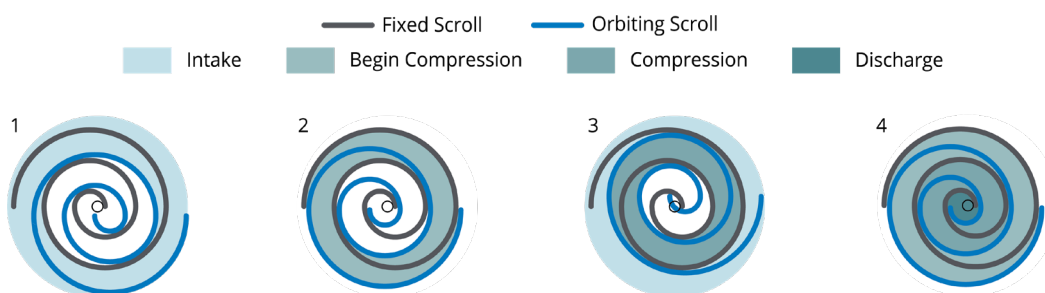


Our innovative scroll technology is completely oil-less, extremely quiet, and energy efficient. The scroll pump has few moving parts, making it reliable and easier to maintain. The self lubricating tip seals and absence of a gearbox means the pump is truly 100% oil free. As the leaders in scroll pump technology, our latest design incorporates several innovative features:

- Main bearings are housed in durable cast iron instead of aluminum which prevents fretting and premature failure of the bearing race. This pump can be operated at 100% duty with confidence.
- The patented bearing re-grease feature has been improved to allow maintenance from the front side of the pump, cutting service time in half.
- The patented tip seal design yields the highest flow rates and longevity of any other dry scroll compressor.
- The improved efficiency and cooling results in lower operating temperatures.
- Extremely low vibration.
- Industry first 10hp scroll pump improves system efficiency by producing more output using fewer pumps.

How it Works

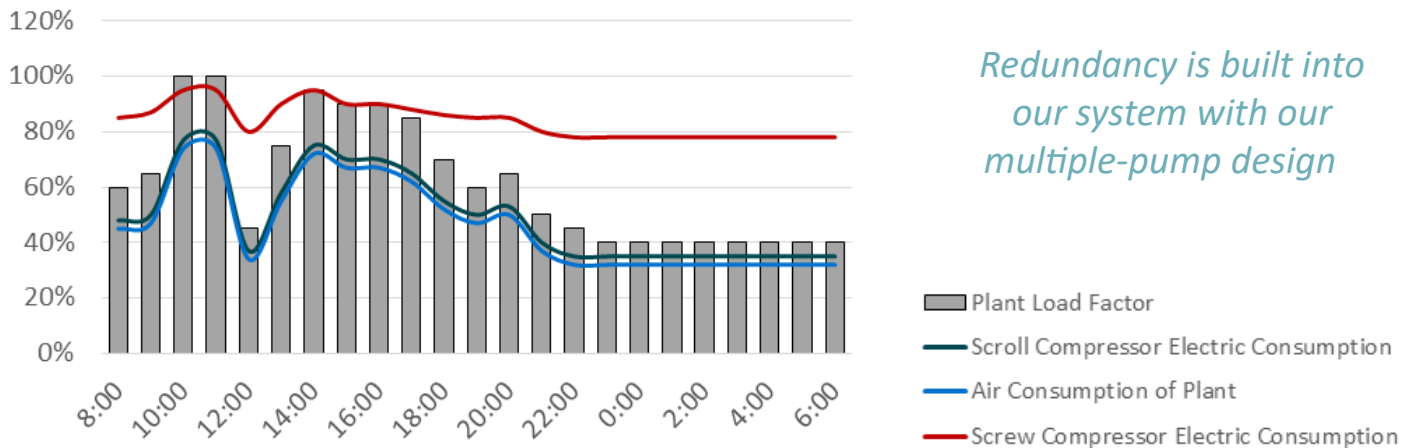
As the scroll orbits, a crescent-shaped cavity is gradually reduced, compressing the air and exhausting it through the final discharge point at the center. During operation, all the gas passages are in various stages of compression at all times, resulting in nearly continuous compression and discharge.



Energy Efficiency

With the Powerex Variable Pump Drive system, each compressor pump is automatically staged on/off individually based on actual system demand, maximizing energy efficiency at all usage levels. Lead compressor status will alternate every time a pump is called for – or every 10 minutes, whichever comes first – which maintains equal run hours and extends maintenance intervals.

Redundancy is built into our system with our multiple pump design, eliminating the need to purchase an additional compressor.



WhisperAIR™ Sound Enclosure Cabinet

Powerex's trademarked oil-free enclosure systems offer the lowest noise levels in the industry. Each system is packaged in a rigid steel frame with powder coated panels and lined with sound-deadening insulation. The low noise levels are unmatched in the industry and allow installation at the point of use, while the small footprint simultaneously maximizes floor space.



WhisperAIR™
OIL-LESS
SCROLL

Scroll Enclosure Systems Features

3-5 HP Simplex Models

- 3-5 HP systems are UL/CSA certified.
- Integral 13 gallon tank ASME/CRN.
- Inlet filtration with replaceable element.
- Front mounted control panel includes:
 - On/Off switch.
 - Power on light.
 - High temperature shutdown with indication light.
 - Run time hourmeter.
 - Pressure gauge.
 - Automatic start/stop operation.
 - Control voltage starter with motor overload protection.
- Internal vibration isolators.
- Air-cooled aftercooler.
- ODP Motor.

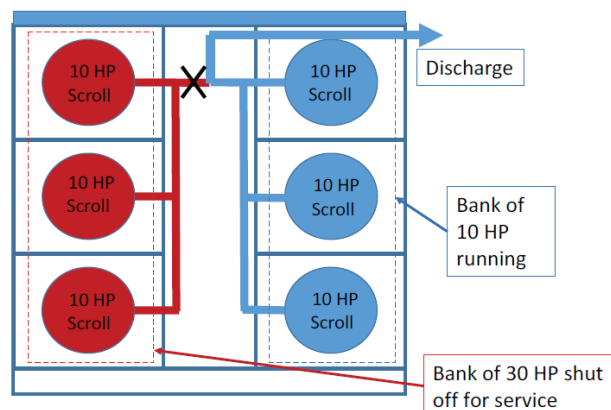
10-60 HP Multiplex Models

- 10-20 HP systems are UL/CSA certified.
- Inlet filtration with replaceable element.
- Front mounted control panel includes:
 - On/Off switch.
 - Power on light.
 - High temperature shutdown with indication on the display.
 - Run time hourmeter for each pump.
 - Maintenance counter with alarm warning display.
 - System pressure display.
 - Full voltage starter with overload protection.
 - General compressor fault with remote contacts.
- Internal vibration isolators.
- Air-cooled aftercooler for each compressor.
- TEFC Motor.

Easily Serviceable

Pump Bank Isolation on our 40-60 HP systems ease of maintenance and service, allowing for the isolation of the compressor bank for service while the other bank continues to run.

- OSHA-approved service on half capacity while other half is running
- Electrically - motor protector disconnect and circuit breakers
- Mechanically - ball valves



Accessories and Options

Industrial Air Treatment Package

The TDD Industrial air treatment package is engineered to provide clean and dry compressed air at a low dew point. The TDD package is ideal for critical process applications that require moisture-free compressed air such as instrument air systems, food packaging and processing applications to prevent contamination and spoilage, and pharmaceutical manufacturing where dry compressed air is vital to maintain high purity and quality.

Features

Regenerative Desiccant Process

- This drying system employs a regenerative process, utilizing adsorbent desiccant material to capture and hold moisture. The desiccant is then regenerated, allowing the dryer to continue delivering consistent and efficient drying performance.

Energy-Efficient

- Our -40°F Desiccant Dryer is built with energy efficiency in mind. The system is equipped with advanced controls that optimize the drying process, minimizing energy consumption while still maintaining outstanding moisture removal capabilities.

Compact Design

- All components mounted and plumbed together on a common skid for ease of install while reducing footprint.

Low Maintenance

- The -40°F Desiccant Dryer is engineered for long-term reliability and requires minimal maintenance, reducing downtime and overall operational costs.



Available Options

- -94°F Dew Point Rating
- Additional Carbon Final Filter
- NEMA4 Control Panel
- Refrigerated Dryer

Scroll Enclosure Systems Specifications

Standard Pressure Models			
Model	System HP	Standard SCFM @ 100 PSIG High Pressure SCFM @ 145 PSIG	dB(A) Level
SES02081	2	5.7	49
SES03081,2 SES0308HP 1,2	3	8.8 7.1	49
SES05081,2 SES0508HP1,2	5	15.2 12.5	51
SED1007 SED1007HP	10	30.5 25	53
SET1507 SET1507HP	15	45.7 37.5	56
SED15B7 SED15B7HP	15	46.2 34	63
SEQ2007 SEQ2007HP	20	61 50	58
SED20B7 SED20B7HP	20	62.4 49	64
SET2257 SET2257HP	22.5	69.3 51	65
SEH3007 SEH3007HP	30	91.5 75	62
SET30B7 SET30B7HP	30	93.6 73.5	66
SEO4007 SEO4007HP	40	122 100	63
SEQ40B7 SEQ40B7HP	40	124.8 98	66
SEH45B7 SEH45B7HP	45	138.6 102	66
SEP50B7 SEP50B7HP	50	156 122.5	67
SEH60B7 SEH60B7HP	60	187.2 147	69

**Performance and maximum pressure shown at sea level conditions.*

†Operating pressure range adjustable (consult factory for parameters).

1 Single phase models use motors that require input voltage of 230V.

2 Single phase 3 HP units require the installation of an additional 30 gal external tank and 5 HP units will require the installation of additional 60 gal external tank.

Tank-Mounted Scroll Compressor Systems

Features

- 100% oil-less scroll pump technology - perfect for applications where clean dry air is required
- Less noise and vibration than comparable reciprocating piston compressors
- Easy installation and maintenance
- Energy efficient
- Maximizes floor space
- Lower overall maintenance cost than oil-flooded systems
- UL listed magnetic starter
- UL508A listen control panel
- Industry's first 10 HP scroll pump

Major Oil-Free Applications

- Food processing
- Environmental
- Gas generation
- Pharmaceutical
- Petrochemical
- Laboratories
- Instrumentation
- Chemical processing
- Manufacturing

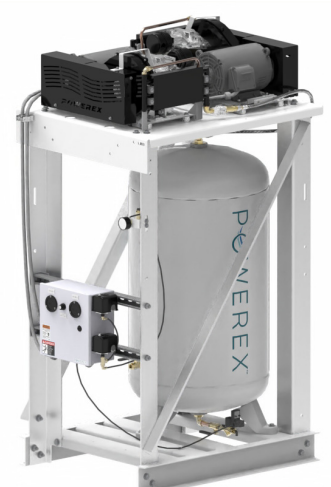
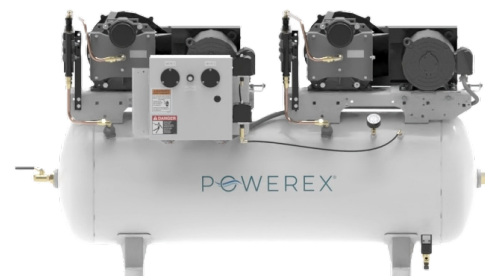
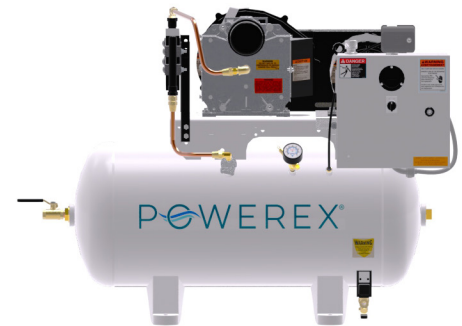
Options for All Models

- Premium warranty
- Refrigerated or desiccant air treatment system
- 50 Hz motor

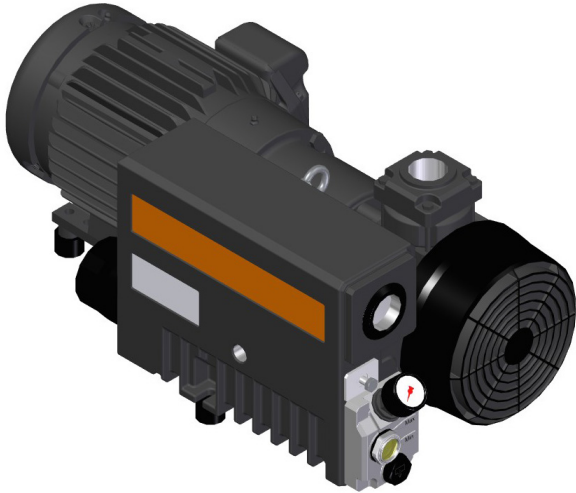
Horizontal Tank-mounted Scroll Compressors				
Model	SCFM @ 100 PSIG	HP	Phase	Tank (gal.)
STS - Simplex Systems				
STS030	8.8 (7.1)	3	3	30/60
STS130	8.8 (7.1)	3	1	30/60
STS050	15.2 (12.5)	5	3	30/60
STS151	15.2 (12.5)	5	1	30/60
STS075	23.1 (17.0)	7.5	3	120/200/240
STS10B	31.2 (24.5)	10	3	120/200/240
STD - Duplex Systems				
STD030	17.6 (14.2)	3 (2)	3	80
STD130	17.6 (14.2)	3 (2)	1	80
STD050	30.4 (25)	5 (2)	3	80/120
STD151	30.4 (25)	5 (2)	1	80/120
STD075	46.2 (34.0)	7.5 (2)	3	120/200/240
STD10B	62.4 (49.0)	10 (2)	3	120/200/240

Vertical Tank-mounted Scroll Compressors			
Model	SCFM @ 100 PSIG	HP	Tank (gal.)
STSV - Simplex Systems			
STSV0302	8.8 (7.1)	3.0	60
STSV1302	8.8 (7.1)	3.0	60
STSV0502	15.2 (12.5)	5.0	60
STDV - Duplex Systems			
STDV0303	17.6 (14.2)	3.0	80
STDV0503	30.4 (25.0)	5.0	80

*Values for high pressure option are indicated in parentheses.



Lubricated Rotary Vane Pump



Our industrial vacuum tank mount systems feature a lubricated rotary vane pump, one of the simplest and most reliable pump types available. The use of oil in the pump produces higher efficiencies, lower operating temperatures, and lower sound levels. These pumps are also the most suitable for high ambient temperatures, which makes them ideal for manufacturing or process applications where environmental temperatures tend to be higher. The lubricated rotary vane pumps have the lowest initial cost and high ultimate vacuum levels. By tank mounting the pumps on an ASME air receiver and adding a UL listed NEMA 1 control panel, Powerex has designed systems that are perfect for applications like material handling, packing, pharmaceutical, food processing, printing, environmental, gas generation, petrochemical, laboratories, instrumentation, chemical processing, and manufacturing.



Powerex is a proud manufacturer of ISO8573-1:2010 "Class Zero" Oil-free compressed air and vacuum systems. By utilizing our oil-less scroll and oil-free rotary tooth technology, Powerex becomes your premiere source for critical air applications such as food and beverage, laboratory, and critical-process industrial applications. We are an ISO 9001:2008 manufacturing facility that is able to provide complete air systems including tanks, UL508A control panels, and dryers.

Systems Specifications

IBVS - Simplex Systems				
Model	SCFM @ 19" Hg	SCFM @ 0" Hg	HP	Tank Size (gal)
IBVS015	7	18	1.5	30 V/60V
IBVS020	11	28	2	60 V
IBVS030	17	45	3	80 V
IBVS040	25	71	5	80 H
IBVS050	37	103	5	80 H
IBVS075	52	141	7.5	120 H
IBVS100	77	212	10	120 H/200 H
IBVS1506	111	305	15	240 H
IBVS2006	137	375	20	240 H
IBVS2506	168	455	25	240 H

IBVD - Duplex Systems				
Model	SCFM @ 19" Hg	SCFM @ 0" Hg	HP	Tank Size (gal)
IBVD015	14	36	3	80 H
IBVD020	22	56	4	80 H
IBVD030	34	90	6	80 H/120 H
IBVD040	50	142	10	120 H
IBVD050	74	206	10	120 H/200 H
IBVD075	104	282	15	200 H
IBVD100	154	424	20	200 H/240 H
IBVD1506	222	610	30	240 H
IBVD2006	274	750	40	240 H
IBVD2506	336	910	50	240 H

Standard Features

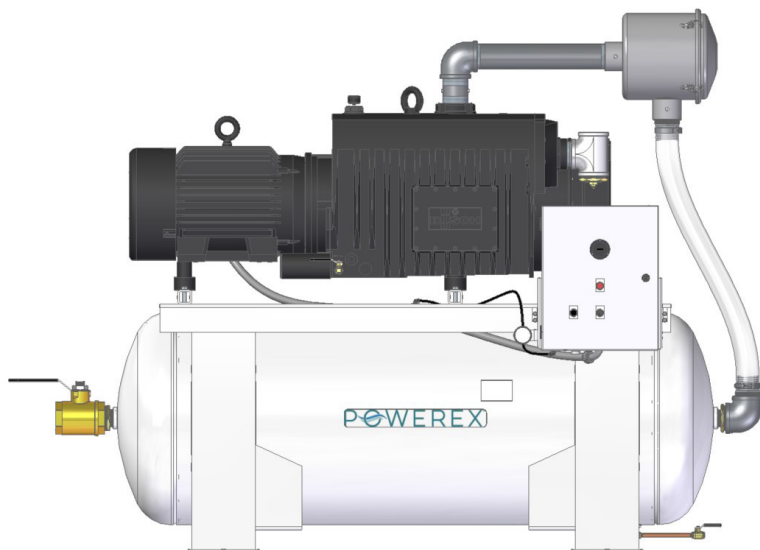
- UL508A control panel
- High temperature alarm
- Condensate Drain
- ASME receiver

Optional Add-ons

- NEMA 4 control panel
- Auto purge with NEMA 4 panel
- Exhaust flex hose (accessory)
- Vacuum regulator
- Inlet air filters
- Oil Mist Eliminators

Key Benefits

- 29.3" Hg end vacuum
- Integrated coalescing filter
- Low annual maintenance cost
- Easy installation
- Low operating temperatures



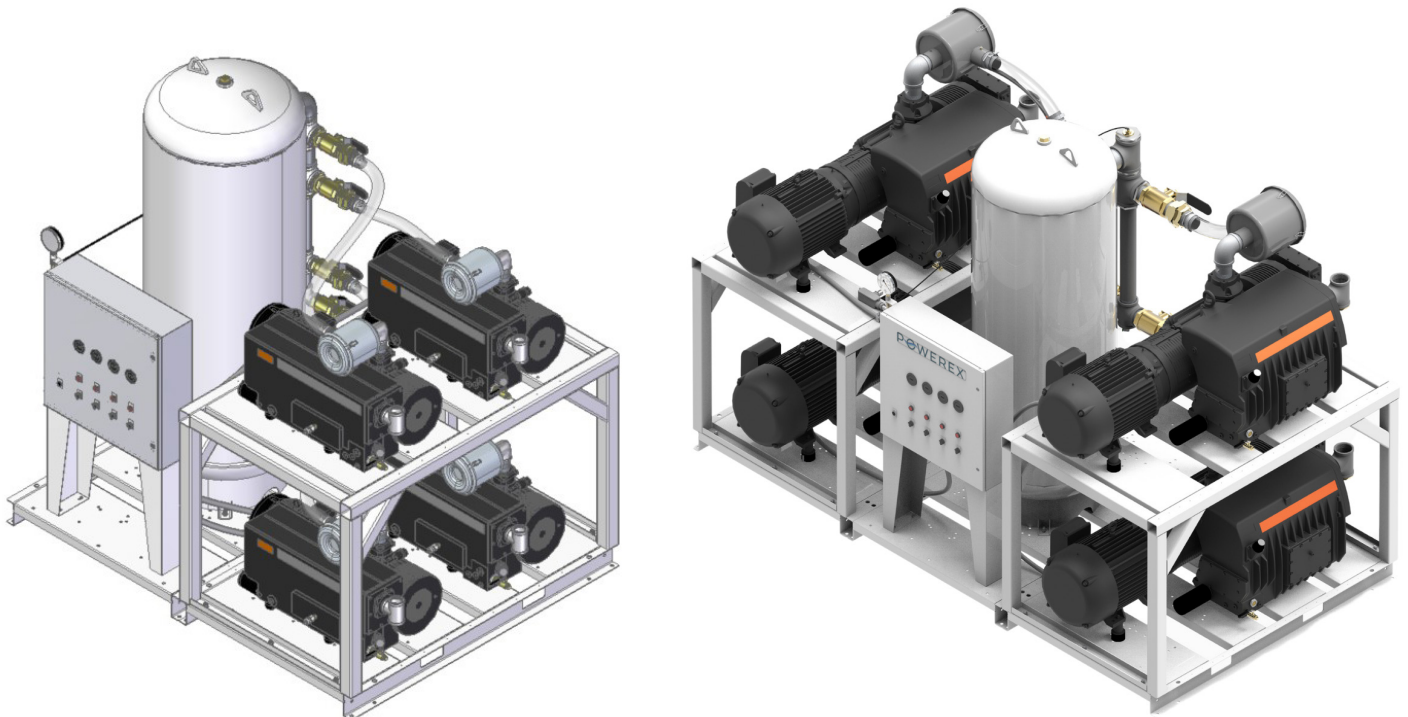
Systems Specifications

IBVT - Triplex Systems

Model	SCFM @ 19" Hg	SCFM @ 0" Hg	HP	Tank Size (gal)
IBVT0505	78	309	15	200 V
IBVT1006	195	636	30	240 V
IBVT1506	333	915	45	240 V
IBVT2006	411	1125	60	240 V
IBVT2506	504	1365	75	240 V

IBVQ - Quadplex Systems

Model	SCFM @ 19" Hg	SCFM @ 0" Hg	HP	Tank Size (gal)
IBVQ0506	104	412	20	240 V
IBVQ0756	208	564	30	240 V
IBVQ1006	260	848	40	240 V
IBVQ1506	444	1220	60	240 V
IBVQ2006	548	1500	80	240 V
IBVQ2506	672	1820	100	240 V



Base-mount Systems Specifications

Simplex				
Base Model	System HP	SCFM @ 19" Hg	SCFM 0" Hg	BUSCH Vane Pump
IBVS015	1.5	7	18	RA0025
IBVS020	2	11	28	RA0040
IBVS030	3	17	45	RA0063
IBVS040	5	25	71	RA0100
IBVS050	5	37	103	RA0155A
IBVS075	7.5	52	141	RA0205
IBVS090	10	65	177	RA0255
IBVS100	10	77	212	RA0305
IBVS150	15	111	305	RC0400
IBVS200	20	137	375	RC0502
IBVS250	25	168	455	RC0630

The industrial vacuum Base-Mount systems are tank-less systems. Depending on the application systems can connect to an existing receiver or controls.

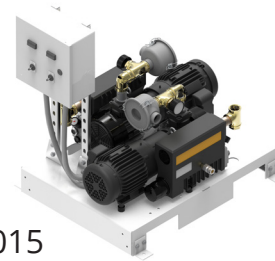
Standard Features

- UL508A control panel
- Vacuum Gauge
- Inlet air Filter
- High temperature alarm
- Condensate Drain

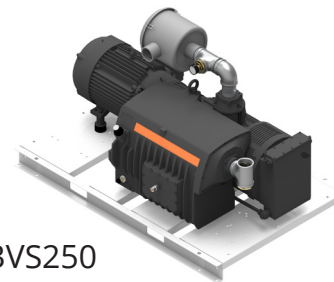
Optional Add-ons

- NEMA 4 control panel

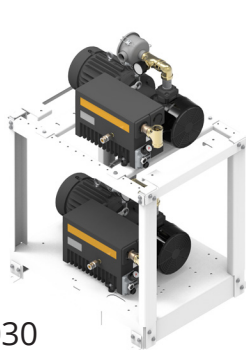
Duplex				
Base Model	System HP	SCFM @ 19" Hg	SCFM 0" Hg	BUSCH Vane Pump
IBVD015	3	50	142	RA0025
IBVD020	4	74	206	RA0040
IBVD030	6	104	282	RA0063
IBVD040	10	130	354	RA0100
IBVD050	10	154	424	RA0155A
IBVD075	15	222	610	RA0205
IBVD090	20	130	354	RA0255
IBVD100	20	336	910	RA0305
IBVD150	30	222	610	RC0400
IBVD200	40	274	750	RC0502
IBVD250	50	336	910	RC0630



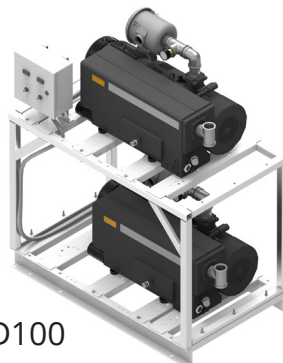
IBVD015



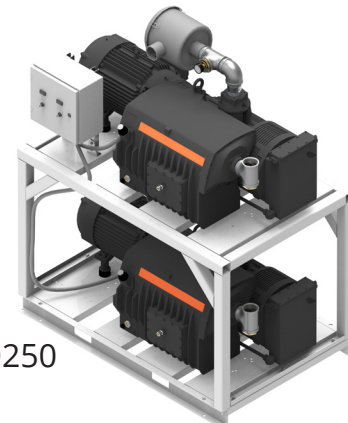
IBVS250



IBVD030



IBVD100



IBVD250



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