

# Oil-less Scroll Enclosure Systems



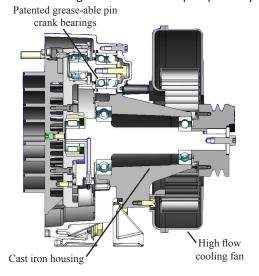
## **OIL-LESS SCROLL TECHNOLOGY**



Powerex has led scroll technology since 1991 when we introduced the first completely oil-less scroll air compressor. Our technology and expertise in clean, dry air systems is unmatched. Powerex manufactures compressors, pumps, air receivers, control panels, air dryers, dew point monitors, and more, to provide a total system approach to your air compressor needs. All facilities are ISO9001 registered so you can be assured of the highest quality. The enclosed scroll compressors feature compact footprints, energy efficient operation, low maintenance, and environmentally friendly design, all in one complete package.

#### **TECHNOLOGY & INNOVATION**

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.

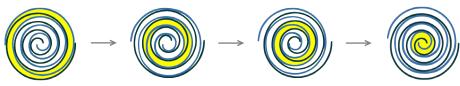


As the leaders in scroll pump technology, our latest design incorporates several innovative features:

- 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.

#### **COMPRESSION PRINCIPLE**

As the orbiting scroll orbits from No.1 to No.4 position, a crescent-shaped cavity is gradually reduced, compressing the air and exhausting it through the final discharge point at the center.



#### **SOUND ENCLOSURE CABINET**

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.

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

#### **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.

#### 3-5 HP SIMPLEX MODELS

- Sounds levels: 49-51 dB(A).
- 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.

### **10-40 HP MULTIPLEX MODELS**

- Sounds levels: 53-60 dB(A).
- 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.

#### **SYSTEMS SPECIFICATIONS**

Model	HP	Maximum Pressure (PSIG)*	Performance SCFM @ 100 PSIG	Operating Pressure (PSIG)†	Noise Level dB(A)	Integral Receiver (gal)	Discharge Connection	Dimensions LxWxH (in)	Weight of Unit (lb)
SES0308	3	116	8.8	95-115	49	13	3/8"	34x21x33	310
SES0508	5	116	15.2	91-115	51	13	3/8"	34x21x33	335
SED1007	10	116	30.5	90-116	53	_	1"	38x26x61	825
SET1507	15	116	45.7	90-116	56	-	1"	38x26x61	965
SEQ2007	20	116	61	90-116	58	-	1"	38x26x61	1125
SEH3007	30	116	91.5	90-116	59	-	1"	38x58x62	1640
SEO4007	40	116	122	90-116	60	-	1"	38x58x62	2000

Model	HP	Maximum Pressure (PSIG)*	Performance SCFM @ 100 PSIG	Operating Pressure (PSIG)†	Noise Level dB(A)	Integral Receiver (gal)	Discharge Connection	Dimensions LxWxH (in)	Weight of Unit (lb)
SES0308HP1,2	3	145	7.1	115-145	49	13	3/8"	34x21x33	310
SES0508HP1,2	5	145	12.5	115-145	51	13	3/8"	34x21x33	335
SED1007HP	10	145	25	119-145	53	-	1"	38x26x61	825
SET1507HP	15	145	37.5	119-145	56	-	1"	38x26x61	965
SEQ2007HP	20	145	50	119-145	58	-	1"	38x26x61	1125
SEH3007HP	30	145	75	119-145	59	-	1"	38x58x62	1640
SEO4007HP	40	145	100	119-145	60	-	1"	38x58x62	2000

## **ACCESSORIES & OPTIONS**

- Air receivers 30-600 gal.
- · Corrosion resistant tank lining.
- Auto tank drains.
- Desiccant air treatment systems.
- Refrigerated air treatment systems.
- · Remote inlet filters.
- Master lead/lag controllers for multiple cabinets.
- NFPA 99 compliant systems.
- · Laboratory system packaging.
- Air quality monitors (CO,dew point).
- Special motors (premium efficient, 50Hz).

\*Performance and maximum pressure shown at sea level conditions.
†Operating pressure range adjustable (consult factory for parameters).
¹Single phase models use motors that require input voltage of 230V.
²Single 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.

## **WHY POWEREX?**

Powerex has been designing and packaging systems since 1988 and has built a foundation on engineering, innovation, quality and service to become a leader in both air and vacuum systems. Because of our high level of vertical integration and a full in-house engineering team, Powerex has the ability to customize a system to meet your air or vacuum requirements.

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## THE POWEREX OIL-LESS ADVANTAGE

#### **BENEFITS OF AN OIL-LESS COMPRESSOR**

- · Extremely reliable.
- 100% oil free system.
- No contamination of product.
- No contamination of powered equipment.
- More environmentally friendly.
- · Less filtration required.
- Less maintenance no oil changes needed!
- No oil water separators needed.

#### DISADVANTAGES OF AN OIL-FLOODED COMPRESSOR

- Potential oil contamination of product.
- · Potential oil contamination of powered equipment.
- Low-quality "oil free" compressors can damage equipment.
- Potential oil contamination of environment.
- · Require additional activated carbon filters.
- Higher level of maintenance oil changes and filter maintenance required.

For more information, contact your local Powerex distributor or Powerex sales representative today!



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