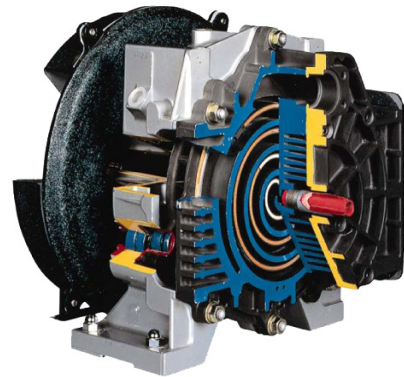


# Medical Air Compressor Systems



## OIL-LESS SCROLL TECHNOLOGY

GENTEC's technology and expertise in clean, dry air systems is unmatched. GENTEC 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.

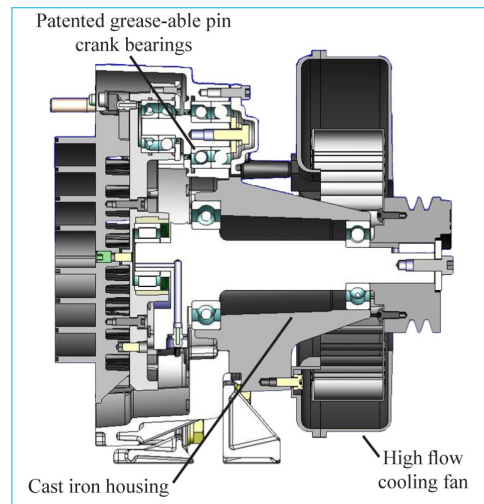


## TECHNOLOGY & INNOVATION

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.

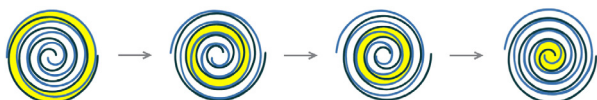
As the leaders in scroll pump technology, our latest design incorporates several innovative features:

- 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.



## OIL-LESS RECIPROCATING PISTON TECHNOLOGY

Our oil-less reciprocating compressors are single stage (1 through 3 HP) and two stage (5 through 15 HP). These oil-less reciprocating piston compressors are used on our medical reciprocating package systems and our medical reciprocating tankmount duplex systems. Features and benefits include:

- No oil anywhere.
- Composite piston reduces bearing heat.
- Dual cooling flywheel and fan
- Corrosion resistant coating extends valve and ring life.
- NFPA 99 compliant.

## MEDICAL SCROLL SYSTEMS SPECIFICATIONS

### Medical Enclosed Scroll Systems

| Model Number            | SCFM @ 50 PSIG* | HP     | Tank (Gal.) |
|-------------------------|-----------------|--------|-------------|
| <b>Duplex Systems</b>   |                 |        |             |
| MSED1003                | 33.2            | 10 (2) | 80          |
| MSED1503                | 49.8            | 15 (2) | 80          |
| MSED2005                | 66.4            | 20 (2) | 200         |
| MSED3006                | 99.6            | 30 (2) | 240         |
| MSED4006                | 132.8           | 40 (2) | 240         |
| <b>Triplex Systems</b>  |                 |        |             |
| MSET1003                | 66.4            | 10 (3) | 80          |
| MSET1505                | 99.6            | 15 (3) | 200         |
| MSET2006                | 132.8           | 20 (3) | 240         |
| MSET3006                | 199.2           | 30 (3) | 240         |
| MSET4006                | 265.6           | 40 (3) | 240         |
| <b>Quadplex Systems</b> |                 |        |             |
| MSEQ1506                | 149.4           | 15 (4) | 240         |
| MSEQ2006                | 199.2           | 20 (4) | 240         |
| MSEQ3007                | 298.8           | 30 (4) | 400         |
| MSEQ4007                | 398.4           | 40 (4) | 400         |

### Medical Scroll Multiplex Systems

| Model Number           | SCFM @ 50 PSIG* | HP      | Tank (Gal.) | Model Number             | SCFM @ 50 PSIG* | HP      | Tank (Gal.) |
|------------------------|-----------------|---------|-------------|--------------------------|-----------------|---------|-------------|
| <b>Duplex Systems</b>  |                 |         |             | <b>Quadplex Systems</b>  |                 |         |             |
| MTSD0303               | 9.5             | 3 (2)   | 80          | MSQ0504                  | 49.8            | 5 (4)   | 120         |
| MTSD0503               | 16.6            | 5 (2)   | 80          | MSQ0755 <sup>2</sup>     | 71.4            | 7.5 (4) | 200         |
| MSD0203 <sup>1</sup>   | 6.0             | 2 (2)   | 80          | MSQ10B5 <sup>2</sup>     | 94.8            | 10 (4)  | 200         |
| MSD0303 <sup>1</sup>   | 9.5             | 3 (2)   | 80          | MSQ1005 <sup>1</sup>     | 99.6            | 10 (4)  | 200         |
| MSD0503 <sup>1</sup>   | 16.6            | 5 (2)   | 80          | MSQ15B5/6 <sup>2</sup>   | 142.8           | 15 (4)  | 200/240     |
| MSD0754 <sup>2</sup>   | 23.8            | 7.5 (2) | 120         | MSQ1505 <sup>1</sup>     | 149.4           | 15 (4)  | 200         |
| MSD10B4 <sup>2</sup>   | 31.6            | 10 (2)  | 120         | MSQ20B5/6 <sup>2</sup>   | 189.6           | 20 (4)  | 200/240     |
| MSD1004 <sup>1</sup>   | 33.2            | 10 (2)  | 120         | <b>Pentaplex Systems</b> |                 |         |             |
| MSD15B4 <sup>2</sup>   | 47.6            | 15 (2)  | 120         | MSP1505 <sup>1</sup>     | 199.2           | 15 (5)  | 200         |
| MSD1504                | 49.8            | 15 (2)  | 120         | <b>Hexaplex Systems</b>  |                 |         |             |
| MSD2004 <sup>2</sup>   | 63.2            | 20 (2)  | 120         | MSH0504 <sup>1</sup>     | 83.0            | 5 (6)   | 120         |
| <b>Triplex Systems</b> |                 |         |             | MSH1506 <sup>1</sup>     | 249.0           | 15 (6)  | 240         |
| MST0503 <sup>1</sup>   | 33.2            | 5 (3)   | 80          | <b>Nine Pump Systems</b> |                 |         |             |
| MST0755 <sup>2</sup>   | 47.6            | 7.5 (3) | 200         | MSN0505 <sup>1</sup>     | 132.8           | 5 (9)   | 200         |
| MST10B5 <sup>2</sup>   | 63.2            | 10 (3)  | 200         |                          |                 |         |             |
| MST1005 <sup>1</sup>   | 66.4            | 10 (3)  | 200         |                          |                 |         |             |
| MST15B5/6 <sup>2</sup> | 95.2            | 15 (3)  | 200/240     |                          |                 |         |             |
| MST1505 <sup>1</sup>   | 99.6            | 15 (3)  | 200         |                          |                 |         |             |
| MST20B5/6 <sup>2</sup> | 126.4           | 20 (3)  | 200/240     |                          |                 |         |             |

## COMPLETE YOUR MEDICAL AIR

### MEDICAL DESICCANT AIR DRYERS

- Pressure swing adsorption technology with a repressurization cycle.
  - In fixed-cycle mode, total cycle time is four minutes, or two minutes per tower.
  - In variable-cycle mode, the total cycle time can be increased up to 120 minutes.
- Manufactured in-house.
- Dryer includes:
  - Self-cleaning ceramic switching valve.
  - Automatic purge saver – dew point dependent.
  - Differential pressure indicators for both inlet and outlet filters.
  - Purge muffler.
  - Tower pressure gauges.
  - Regulators with gauges.
  - Isolation ball valves.



Medical Desiccant Dryer Package includes air dryer, CO monitor, and dew point monitor

### CARBON MONOXIDE MONITOR

- Compact design.
- Digital display.
- User programmable alarms and relays.
- Visual and audible alarms.
- High capacity relays.
- Flow meter for confirmation of airflow.
- Integrated on systems with PBMI controls.



**MEDICAL RECIPROCATING PISTON SYSTEMS SPECIFICATIONS**
**Medical Reciprocating Tankmount Systems**

| Model Number                    | SCFM @ 50 PSIG* | HP      | Tank (Gal.) |
|---------------------------------|-----------------|---------|-------------|
| <b>Duplex Tankmount Systems</b> |                 |         |             |
| MTD0103                         | 3.4             | 1 (2)   | 80          |
| MTD0203                         | 8.3             | 2 (2)   | 80          |
| MTD0303                         | 11.3            | 3 (2)   | 80          |
| MTD0304                         | 11.3            | 3 (2)   | 120         |
| MTD0504                         | 18.6            | 5 (2)   | 120         |
| MTD0505                         | 18.6            | 5 (2)   | 200         |
| MTD0756 <sup>2</sup>            | 29.0            | 7.5 (2) | 240         |
| MTD1006                         | 36.2            | 10 (2)  | 240         |
| MTD1506                         | 50.9            | 15 (2)  | 240         |

**Medical Reciprocating Package Systems**

| Model Number                   | SCFM @ 50 PSIG* | HP      | Tank (Gal.) |
|--------------------------------|-----------------|---------|-------------|
| <b>Duplex Package Systems</b>  |                 |         |             |
| MPD0308                        | 11.3            | 3 (2)   | 80          |
| MPD0508                        | 18.6            | 5 (2)   | 120         |
| MPD0608 <sup>2</sup>           | 21.4            | 7.5 (2) | 120         |
| MPD0758 <sup>2</sup>           | 29.0            | 7.5 (2) | 120         |
| MPD1008                        | 36.2            | 10 (2)  | 200         |
| MPD1508                        | 50.9            | 15 (2)  | 200         |
| <b>Triplex Package Systems</b> |                 |         |             |
| MPT0508                        | 37.2            | 5 (3)   | 200         |
| MPT0608 <sup>2</sup>           | 42.8            | 7.5 (3) | 200         |
| MPT0758 <sup>2</sup>           | 58.0            | 7.5 (3) | 200         |
| MPT1008                        | 72.4            | 10 (3)  | 240         |
| MPT1508                        | 101.8           | 15 (3)  | 240         |
| <b>Quadplex Systems</b>        |                 |         |             |
| MPQ0508                        | 55.8            | 5 (4)   | 240         |
| MPQ0608 <sup>2</sup>           | 64.2            | 7.5 (4) | 240         |
| MPQ0758 <sup>2</sup>           | 87.0            | 7.5 (4) | 240         |
| MPQ1008                        | 108.6           | 10 (4)  | 240         |
| MPQ1508                        | 152.7           | 15 (4)  | 240         |

\*SCFM @ 50 PSIG is shown with one compressor in reserve per NFPA 99 guidelines.

<sup>1</sup>System is OSHPD (seismic) certified; Certification No. OSP-3080-10.

<sup>2</sup>System includes our new 7.5 or 10 HP pumps.

All systems are fully compliant with the latest edition of NFPA 99 and are manufactured in ISO 9001 certified facilities.

## CONFIGURATION OPTIONS



Skid Mount



Horizontal Tank Mount



Medical Enclosed Scroll

## SYSTEM DESIGN FEATURES

- Multiple compressors.
- ASME receiver.
- UL listed control panel (PBMI or Basic).\*
- Air purification system.
- Carbon monoxide monitor.
- Dew point monitor.
- All interconnecting piping and wiring.
- Vibration isolation pads and flex connectors.
- Most of our multiplex scroll packages now OSHPD certified!

## CONTROL PANEL OPTIONS

### 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.
  - High dew point and CO levels.
- Panel door includes:
  - Visual and audible alarms.
  - HOA switch for each pump.
  - 3-position dryer switch.
- Integrated dew point and carbon monoxide monitors.
- Building automation gateway with BacNet® protocol.
- Email notifications for alarms and service alerts.

### OPTIONAL BASIC CONTROL PANEL

- UL508A listed and labeled, NEMA 4/12 enclosure.
- Timed lead/lag compressor alternation.
- Visual and audible reserve compressor in use alarm.
- Redundant control circuit transformers.
- Dry contacts for remote alarm monitoring.
- Each compressor provided with:
  - Hand/Off/Auto selector switch.
  - Magnetic starter with 3 leg overload protection.
  - Visual and audible high temperature shut down.
  - Hour meter.
  - Compressor run light.
- Dew point monitor with LCD dew point display.
- Carbon monoxide monitor with LCD display of CO concentrations.