ROTARY LOBE BLOWERS AND SCREW COMPRESSORS FOR STEAM APPLICATIONS

Reliable, Safe, and Efficient Blowers and Compressors for Steam

AERZEN
Application-specific design of the package and the stage to meet desired MTBO targets and other site requirements:

**5 year overhauls and 30 year service life are possible in many applications.**

- Standard designs, modified standard designs, and fully custom process gas packages.
- Insulating jacket and water injection nozzle included.
- Suitable for gases entrained with CO2, NH3, hydrocarbons, or particulates.

**GM Blower**

**Performance Data**

- ~2:1 Pressure ratio, up to 15 psi (1000 mbar) pressure difference
- 35 to 8,500 cfm (60 to 14,000 m³/h)
- 3 lobes with patented integral pulsation cancellation

**Materials and Coatings:**

- Standard materials with electroless nickel plating
- Material options (Recommended for ZLD Crystallizer)
  - Ni-Resist D2B housing
  - Stainless steel rotors

**Package Options:**

- Direct, belt, or gearbox drive
- Controls and instrumentation
- Special sound enclosures
  - High wind, snow, seismic loads
  - Winter, desert, or harsh loads environments

See G1-069 Brochure
GR Blower

**Performance Data**
- ~2:1 Pressure ratio, up to 15 psi (1000 mbar) pressure difference
- 60 to 30,000 cfm (100 to 50,000 m³/h)

**Materials:**
- Standard materials with electroless nickel plating
- Optional: 100% stainless steel

**Seals:**
- Carbon labyrinth rings
  - Low cost, high reliability
- Double mechanical water-purged seals
  - Zero steam loss or process contamination

See G1-151 brochure for more information

---

**Screw Compressors For Steam Technology**

Modified VM compressors and fully custom VRa process gas packages

**Seals:**
Water/steam/gas purged carbon labyrinth rings

**Housing Material:**
Nickel-resist cast iron, electroless nickel plated cast iron, or stainless steel

**Rotor Material:**
Forged stainless steel, one piece

**Options:**
- Water/steam purged mechanical seals
- Stainless steel housings
- Fully API 619 compliant packages
- Controls and instrumentation
- Special sound enclosures
  - High wind, snow, seismic loads
  - Winter, desert, or harsh loads environments

---

**VM 10 to VM 140 Oil-Free Screw Compressor Performance Data**
- 80 to 5,000 cfm (136 to 8,495 m³/h)
- 15 to 72.5 psi dP (1 to 5 bar dP)

See V1-080 brochure for more information

**VRa API 619 Oil-Free Screw Compressor Performance Data**
- 160 to 90,000 cfm (275 to 150,000 m³/h)
- 15 to 100 psi dP (1 to 7 bar dP)

See V1-067 brochure for more information

---

VM 237i for steam.

100% stainless steel VRa 736 M with water injection.
Installation examples

Aerzen Blower Package for Steam Compression

GM 240 S for steam in a ZLD Crystallizer at a battery manufacturer

VM 237i Steam Compressor for Lithium Ion Battery Production