

Roots™ Blowers, Compressors & Controls



Revolving Around You™

Howden's range of Roots products are available in varying sizes with a broad spectrum of performance and controllability.

Roots blowers, compressors and controls have been applied to multiple applications in a wide array of industries such as: pneumatic conveying, gas separation, waste water treatment, steam recompression, petrochemical production, and many others.



Howden is a truly global company, with an established presence in more than 26 countries across every continent. Our network of local support services enables us to respond urgently to customer queries and maintenance requirements, and we understand the importance of local circumstances, from environmental legislation to energy costs.



Every product we deliver is backed by an unequivocal lifetime commitment to spare parts and product support. Replacement parts are made using the original production drawings, so that compatibility and quality are guaranteed. We also offer a full upgrade and enhancement program that allows customers to take advantage of new developments, or adapt existing equipment to changed conditions.



Universal RAI[®] Blower

Heavy-duty, bi-lobe rotary blowers in a compact, sturdy design engineered for continuous use with exceptional reliability.

- Cost effective design
- Pressures to 15 psig (1034 mbar)
- Vacuums to 16" Hg (539 mbar)
- Flows to 2370 cfm (4026 m³/hr)
- Available with metric drive shaft



Universal RAI[®] DSL Blower

This model features Dual Splash Lubrication (DSL) on both the gear end and drive end. Dual splash lube provides:

- More oil capacity
- Cooler operation
- Greater reliability
- Available with metric drive shaft and pipe connections



Universal RAI-J[®] Blower

Incorporates Roots WHISPAIR[®] technology to reduce noise levels 3-5 dBA.

Universal RAI-G[®] Blower

This model features mechanical seals that virtually eliminate leakage.

- 1/8" (0.3137 cm) NPT purge port for buffer gas applications



Universal RAI-J[®] DSL Blower

DSL features are incorporated into the Universal RAI-J model for long life and quiet performance.

- All of the Universal RAI family of blowers feature detachable feet, allowing you to mount the blower into your custom system



RAM-J Blower

Incorporates Roots WHISPAIR technology to reduce noise levels.

- Pressure to 18 psig (1240 mbar)
- Vacuum to 16" Hg (539 mbar)
- Flows to 3550 cfm (6030 m³/hr)

RAM-GJ Blower

Standard gas blowers suitable for both vacuum and pressure service. Features a piston ring system between the compression and vent cavities

- Long life mechanical seals



RAM-VJ Blower

RAM WHISPAIR units are available with an inlet spray nozzle and seal water flow meter for water injection. This feature cools the vacuum unit to enable it to reach deeper vacuum.

- Vacuum to 24" Hg (813 mbar)
- Flows to 2500 cfm (4250 m³/hr)



RAM-DPJ Blower

This RAM WHISPAIR, dry, high-pressure blower features a discharge jet plenum designed to allow externally cooled gas to flow into the casing and the Whispair™ jets control pressure equalization.

- Pressure to 30 psig (2068 mbar)
- Flows to 520 cfm (885 m³/hr)



RAM-DVJ Exhauster

This dry exhauster features a jet plenum designed to allow cool, atmospheric air to flow into the casing. This design allows continuous operation at levels to blank-off with a single stage unit.

- Vacuum to 27" Hg (910 mbar)
- Flows to 2400 cfm (4077



ROOTS-FLO Blower

This heavy duty rotary unit is a compact design engineered for reliable pneumatic conveying of grain and similar products.

- Vacuums to 16" Hg (539 mbar)
- Pressure to 15 psig (1034 mbar)
- This unit is your drop in replacement solution



2504 DVJ WHISPAIR Exhauster

This WHISPAIR dry vacuum exhauster has a discharge jet plenum design which allows cool, atmospheric air to flow into the cylinder.

- Design permits continuous operation at vacuum levels to 20" Hg (675 mbar) with a single stage unit.



RCS 800 Blower

Piston rings reduce air leakage while lip-type oil seals prevent lubricant from entering the air chamber.

- Pressures to 18 psig (1241 mbar)
- Vacuums to 16" Hg (539 mbar)
- Flows to 6300 cfm (10710 m³/hr)



RCS-VJ Exhauster

RCS WHISPAIR units are available with an inlet spray nozzle and seal water flow meter for water injection. This feature cools the vacuum unit to enable it to reach deeper vacuum.

- Vacuums to 24" Hg (810 mbar)
- Flows to 4080 cfm (6930 m³/hr)

RCS-J Blower

Incorporates Roots WHISPAIR technology to reduce noise levels.



DVJ WHISPAIR Exhauster

These blowers have a WHISPAIR discharge jet plenum design which allows cool, atmospheric air to flow into the cylinder. This design permits continuous operation at vacuum levels to blank-off with a single stage unit, without water injection. The DVJ's cooling design handles the problems caused by high discharge temperatures at vacuum levels beyond 16" Hg.

- Flows to 16870 cfm (28662 m³/hr)
- Vacuums to 27" Hg (910 mbar)



TRI-NADOTM Exhauster

This unit's tri-lobe design results in high efficiency and reduces in-pipe pulsation and noise levels. Incorporates Roots WHISPAIR technology to further reduce noise levels.

- Flows to 5760 cfm (9790 m³/hr)
- Single-stage vacuums to 28" Hg (945 mbar)



MVL Blower Compressor

A rotary positive blower designed for use in truck-mounted applications, though it can be used in stationary applications with an electric motor. Available in three sizes offering a wide range of capabilities.

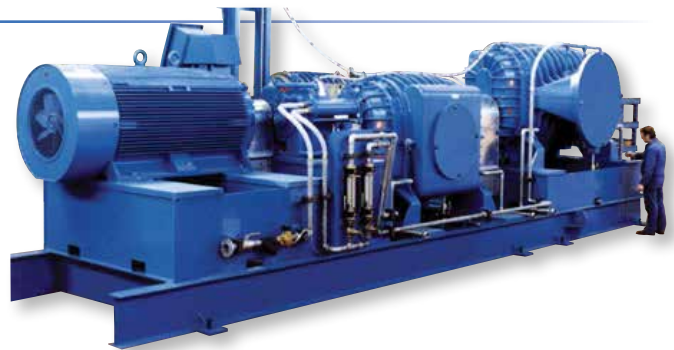
- Flows to 1535 cfm (2611 m³/hr)
- Pressure to 18 psig (1241 mbar)
- Vacuums to 14" Hg (472 mbar)



RAM X[®] Tri-Lobe Blower

The blowers feature Roots WHISPAIR discharge design which, when combined with our tri-lobe impellers, delivers quieter operation than conventional tri-lobe blowers.

- Flows to 5900 cfm (10030 m³/hr)
- Vacuum to 16" Hg (539 mbar)
- Pressures to 15 psig (1034 mbar)



VJ/VJ2 Blower

Water injected, air or gas blower features Roots WHISPAIR plenum with 3-5 dBA quieter operation.

Single stage

- Vacuum to 24" Hg (810 mbar)

Two stage

- Vacuum to 27" Hg (910 mbar)
- Flows to 43200 cfm (72440 m³/hr)
- Two stage reduces power 25%



RAS-J Blower

Air blower that is available with splash lubrication or true pressure lubrication. Features a WHISPAIR plenum with 3-5 dBA quieter operation.

- Pressure to 35 psig (2413 mbar)
- Vacuum to 16" Hg (539 mbar)
- Flows to 43200 cfm (73440 m³/hr)



RAS-J/RGS-J Forty PSL Blower

Extended flow range and efficiency with the advantage of the WHISPAIR plenum

- Up to 82% increase in pressure rise capacity
- Direct connect to 50Hz and 60Hz motors provides the largest flow range possible without gear-reducers
- Available with true pressure lubrication
- Mechanical seals are also available for your unique gas



RGS-J Blower

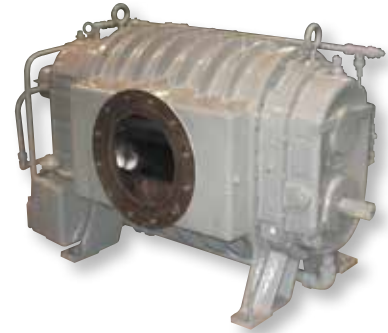
This is a Rotary Positive Displacement Gas Compressor with Integral lubrication to supply oil to the bearings, timing gears, and mechanical face seals. The Compressor is direct driven by an electric motor. The oil system includes a motor driven auxiliary oil pump in the forefront.



RGS-J Blower

Heavy-duty gas blowers designed for continuous service. The wrap-around plenum and WHISPAIR jet handles rapid backflow of gas into the blower from the discharge area.

- Pressure to 35 psig (2413 mbar)
- Vacuum to 16" Hg (542 mbar)
- Flows to 43200 cfm (73440 m³/hr)



RGS-HVB Blower

Designed for applications to the single digit micron range when used in series with a backing pump.

- Steel Degassing
- Laser Booster
- Altitude Chamber