

ARIEL RG282M and RG357M Rotary Screw Compressors

	RG282M	RG357M
Male Rotor Diameter	282mm	357mm
L/D Ratio	2.0	2.1
Capacity, CFM Capacity, m ³ /hr	1,070 to 2,930 1,818 to 4,978	1,940 to 5,200 3,296 to 8,835
Maximum Input Speed	1,800 rpm	1,800 rpm
Gear Ratios	1.06, 1.24, 1.42, 1.61, 1.80, 2.03, 2.25	1.0, 1.35, 1.57, 1.76 2.04, 2.31, 2.65
Rotor Operating Speed	1,484 to 4,050 rpm	1,200 to 3,210 rpm
Rated Power, bhp Rated Power, kW	800 597	1,375 1,026
Maximum Allowable Discharge Pressure, psig Maximum Allowable Discharge Pressure, barg	230 15.9	230 15.9
Suction Pressure Range, psia* Suction Pressure Range, bara*	3 to 75 0.21 to 5.17	3 to 65 0.21 to 4.48

* For extended suction pressures, please contact Ariel.

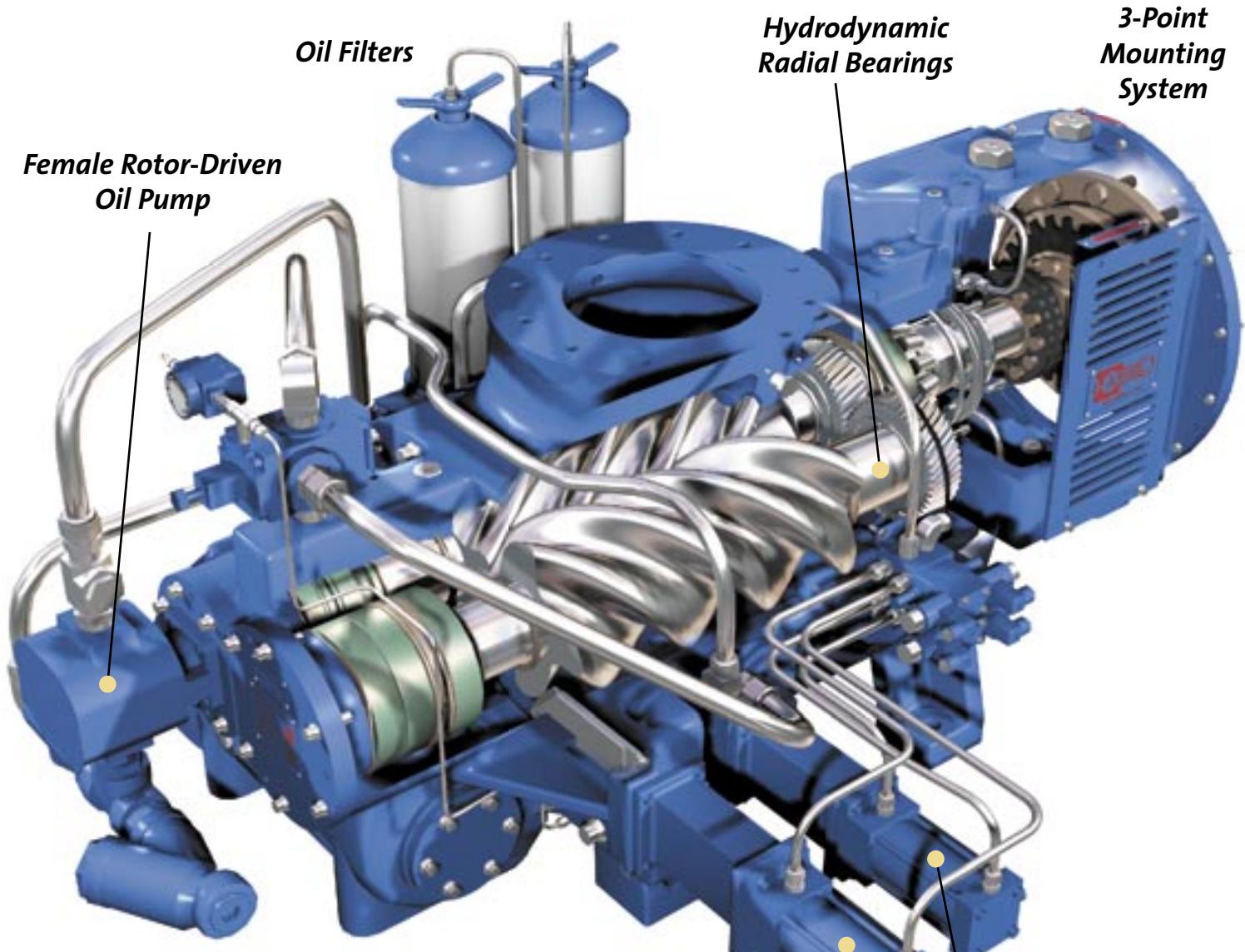
FEATURES

- **Wide Efficiency Range** – A new Ariel 4/6 lobe rotor profile is designed specifically for natural gas service and provides a wide, high-efficiency operating range.
- **Integral Gearbox** – The RG282M and RG357M incorporate an integral gearbox to match current and future needs with a gear ratio change. The seven available gear ratios enable optimum matching of available gas engine drivers with compressor flow and efficiency.
- **Variable Vi** – Since operating conditions always change, the Vi (internal compression ratio) is continuously adjustable from 2.5 to 5.0 while the unit is running. Manual handwheel or hydraulic actuators are available.
- **Capacity Control** – Inlet flow can be continuously adjusted while the unit is running from 100% to 30% of full load capacity. Manual handwheel or hydraulic actuators are available.
- **Flexibility** – Independently controlled Vi and inlet flow allow optimum compressor performance at full- and partial-load operating conditions.
- **Long Bearing Life** – Hydrodynamic radial bearings and thrust-balanced angular contact ball bearings are standard. The thrust from the helical cut drive gears acts opposite the rotor thrust to reduce axial bearing loads.
- **Long Seal Life** – A pressure-balanced, spring-loaded carbon seal is installed on low-speed input shaft.
- **Designed for Packaging** – The optional SAE bell house mounting with integral gear design enables a common skid for a wide range of compressor flows. This feature also minimizes the time required to align the engine and compressor. Top suction and side discharge connections result in low input shaft height and simplified piping arrangement.
- **Ease of Maintenance** – Ample maintenance access is provided to permit changing the seal element without disturbing the compressor or engine connections.
- **Oil Pump** – To ensure adequate oil pressure to the bearings, mechanical seal, Vi and capacity controls, a female rotor-driven oil pump is standard on the RG282M and RG357M.
- **Integrated Oil System** – A complete single attachment point oil system, including filters and control valves, is available as a factory installed option.
- **Dedicated Manufacturing Facility** – Ariel rotary screw compressors are manufactured at a dedicated facility specifically equipped to machine, assemble, and test rotary compressors.
- **Production Unit Performance Testing** – Each rotary screw compressor is performance tested on air to measure the unit's capacity and power consumption.



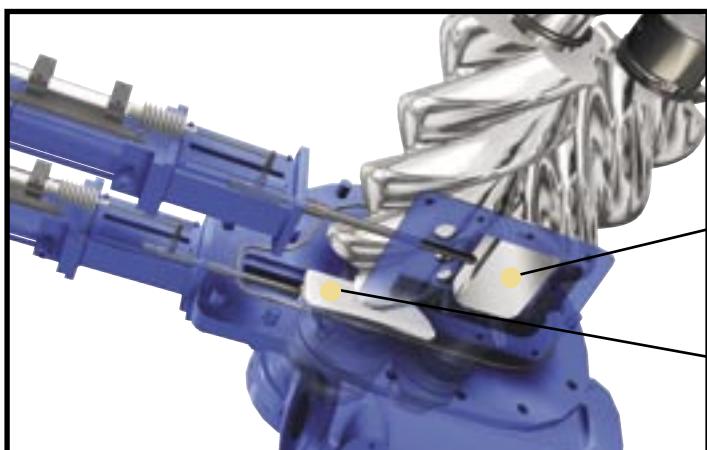
The RG282M and RG357M's unique oil system includes a reliable female rotor-driven oil pump. As an option, the compressors accommodate existing oil systems with a single-point connector.

A WORLD STANDARD GAS COMPRESSOR



Oil System Single-Point Connection

VIEW FROM BELOW



Hydraulically Actuated Capacity Control

Hydraulically Actuated Volume Ratio Control

THE ARIEL NETWORK

Ariel's success is based on strong relationships built on mutual respect and trust. Employees, vendors, distributors, and end users are all part of the Ariel Network.

Ariel Compressors are marketed and packaged through a long-established network of elite compression system engineering companies. Ariel's Authorized Distributors integrate the compressor with a structural skid, a prime mover, piping, pulsation control, cooling systems, process valving, and control systems.

- All Ariel distributors adhere to Ariel's strict packaging standards.
- Ariel's large network offers the most complete service and parts coverage available in the world.



The Ariel network of authorized distributors have the engineering expertise and experience to design and assemble complete packaged systems—ready for delivery to the field.

CUSTOMER SERVICE

We are committed to supporting our compressors for life. If there is a problem with an Ariel compressor, we'll help you solve it — now.

- The Ariel Network is composed of more than 1000 Ariel-trained field servicemen and technicians, worldwide.
- Ariel's policy has always been to routinely ship standard parts within 24 hours of receiving an order.
- Ariel gas compressors are backed by more than 100 parts and service outlets close to every major natural gas field.
- Ariel's Service and Technical Schools are held frequently, free of charge, for engineers and field servicemen. These courses are taught by Ariel engineers and technicians directly involved in the subject material.
- The availability of Ariel manufactured parts at competitive prices will ensure your Ariel compressor's maximum reliability and productivity.
- Ariel's goal is to offer the best customer care and service. Our warranty and our treatment of warranty issues clearly show our commitment to this goal.



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