

Oil-Flooded Rotary Screw Compressed Air Systems

5-50 hp (4-37 kW)



YOUR TRUSTED PARTNER IN COMPRESSED AIR

Staying ahead of your competition with advanced compressed air systems and services that boost productivity, lower operating expenses and extend equipment life is critical to your success.

No matter the industry or application, you can count on Ingersoll Rand® as a trusted partner for oil-flooded compressed air technologies and services. By focusing on you and your business, we provide collaborative solutions that make you successful, offering a total systems approach to maximize efficiency and performance.

Take a Systems Approach

Delivering reliable oil-flooded compressed air to your facility goes well beyond the compressor itself. Optimize total cost of ownership (TCO) through a systems approach that employs the best air compression technologies to deliver reliability for life—from design to decommissioning.

Your business will benefit from Ingersoll Rand's partnership through our extensive experience and global expertise to ensure reliability, lower maintenance costs, ease of serviceability and system optimization.



WHY CHOOSE A WORLD-CLASS ROTARY SCREW COMPRESSED AIR SYSTEM?

You need a reliable, cost-effective compressed air solution, all backed by a global network of experts. That's what you get with our Next Generation R-Series oil-flooded rotary screw air compressors.

For Efficiency and Air Flow

Advanced airoend and drive component design provide world-class specific power and best-in-class air flow, resulting in reduced energy use.

For Reliability

Every component in our oil-flooded compressor system supports maximum reliability for increased productivity, longer equipment life, lower operating costs and higher profitability.

For Virtually Any Environment

Our oil-flooded compressors have an optional feature that allows operation both indoors and outdoors at extreme ambient temperatures ranging from -10°F (-23°C) to 131°F (55°C). A compact footprint provides space saving convenience.

For Lower Cost of Ownership

Intuitive microprocessor controls, easy serviceability and long-life consumables significantly reduce operating, maintenance and service costs over the lifetime of your compressed air system.



Customized Products for Your Application

Ingersoll Rand offers a wide portfolio of reliable products that will adapt to your industry and application. We will assess and propose the best solution to lower the total cost of ownership of your compressed air system, maximizing the productivity of your operation.



Manufacturing & Assembly



Metal Working



Craft Brewing



Vehicle Services



Paint Shops



Air compressor use accounts for a significant part of your energy costs. Our design team used advanced computer modeling techniques to create rotary screw compressors that maximize efficiency and airflow, while operating reliably to improve your company's bottom line.



Next Generation Rotary Screw Air Compressors, 15-50 hp

Best-in-Class Efficiency

Our Next Generation R-Series compressors include an all-new, state-of-the-art airend, making it your best choice for performance. The new airend improves efficiency through several advancements, including an optimized rotor profile to help minimize operating expenses.

The new rotor profile also provides world-class airflow. With more airflow for the same power input, you can reduce both your initial investment and lifetime energy usage.



Flexible Choices

Choose from reliable fixed speed and ultra-efficient VSD compressors to best match your demand profile.

See Our Entire Portfolio of Oil-flooded Compressors



What Makes Our Rotary Screw Compressors Unique?

Optimized Drive Components



World-class airends, along with efficient induction or optional variable speed motors minimize energy use.

Leak-free Designs



V-Shield™ technology provides a totally integrated, leak-free design, featuring PTFE stainless steel braided oil hoses and O-ring face seals.

Intuitive Control

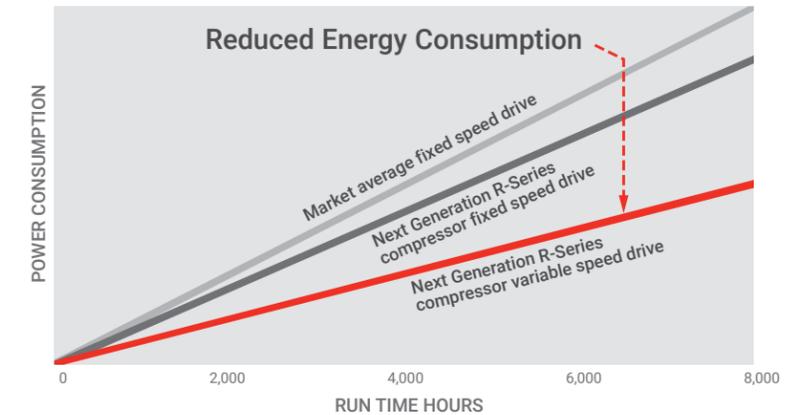


Advanced controllers deliver increased control and functionality through an intuitive user interface.

Driving Toward Next Generation Efficiency

Every Next Generation R-Series compressor features an advanced airend and IE3-rated/NEMA Premium® motor that reduces total cost of ownership.

See Our Entire Portfolio of Oil-flooded Compressors



Simple & Serviceable



A compact footprint, easy to access components and our fully synthetic Ultra Coolant reduce maintenance costs.

Advanced Cooling Systems

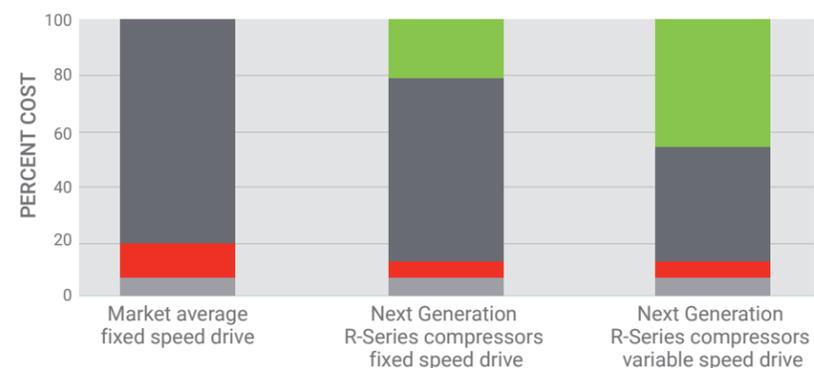


A free-floating cooling system allows heat exchangers to expand and contract, reducing thermal stress for improved system durability.

Integrated, Compact Design Options



Optional Total Air System (TAS) provides clean, dry air in a single package that minimizes installation costs, reduces footprint and improves ISO air quality.



Lower Your Total Cost of Ownership

With up to 17.5% improved efficiency and 18% more airflow, our Next Generation R-Series compressors significantly reduce energy use, lowering your lifecycle cost.

Rotary comparison at 79% average volume capacity; 4,000 hours per year; 0.05/kWh



Every Next Generation R-Series compressor includes the elements of a smart design for more productivity, longer equipment life, lower operating costs and higher profitability.



Adaptive Monitoring

Progressive Adaptive Control (PAC™) monitors key operating parameters and continuously adapts to prevent unexpected downtime.



Extreme Environment Operation

At ambient temperatures between 36°F and 115°F (2°C and 46°C), with available options to handle temperatures between 131°F and -10°F (55°C and -23°C), as well as exposure to inclement weather.

Innovative Design, Flexible Choices

- i** **Efficiency for Constant Demand:** Fixed speed compressors featuring the reliable and efficient IE3 TEFC induction motor
- n** **Efficiency for Variable Demand:** VSD compressors with the highest efficiency motor available
- ie** **Premium Efficiency for Constant Demand:** Fixed speed compressors with the continuous duty IE3 TEFC induction motor and enhanced features for improved performance and efficiency
- ne** **Premium Efficiency for Variable Demand:** VSD compressors with enhanced features for improved performance and efficiency



| Next Generation R-Series – 50 and 60 Hz Performance | | | |
|---|-----------------------|--------------------------|-----------------------------|
| Model | Nominal Power hp (kW) | Max Pressure psig (barg) | Capacity (FAD) cfm (m³/min) |
| RSa 11i-22i fixed speed | 15-30 (11-22) | 110-200 (7.5-13.8) | 55-126 (1.55-3.57) |
| RSa11i-22i TAS fixed speed | 15-30 (11-22) | 103-193 (7.0-13.0) | 55-126 (1.55-3.57) |
| RS 15ie-22ie fixed speed | 20-30 (15-22) | 110-200 (7.5-13.8) | 63-144 (1.78-4.08) |
| RSa 15n-22n VSD | 20-30 (15-22) | 100-145 (6.9-10.0) | 75-111 (2.12-3.14) |
| RSa15n-22n VSD TAS | 20-30 (15-22) | 103-138 (7.0-9.5) | 75-111 (2.12-3.14) |
| RS 15ne-22ne VSD | 20-30 (15-22) | 100-145 (6.9-10.0) | 83-121 (2.34-3.41) |
| RS 30i-37i fixed speed | 40-50 (30-37) | 110-145 (8.0-10.0) | 132-231 (3.7-6.6) |
| RS 30ie-37ie fixed speed | 40-50 (30-37) | 110-200 (7.5-14.0) | 134-250 (3.8-7.2) |
| RS 30n-37n VSD | 40-50 (30-37) | 100-145 (6.9-10.0) | 74-231 (2.0-6.5) |
| RS 30n-37ne VSD | 40-50 (30-37) | 100-145 (6.9-10.0) | 72-253 (2.0-7.2) |



R-Series 5-15 hp Fixed and Variable Speed Drives

The durable Ingersoll Rand R-Series 5-15 hp compressor extends the R-Series family into the smallest rotary screw offering with a compact design that fits virtually any environment.

- TEFC motor and optional VSD provide world-class efficiency
- Totally integrated, leak-free design uses PTFE stainless steel braided hoses
- All-in-one airend features superior air/oil separation and reliability
- Vertically-stacked drive components provide for easy maintenance
- Improved cooler design minimizes thermal expansion stresses
- Xe-Series controllers deliver increased control functionality
- Optional Total Air System (TAS) provides clean, dry air in a single package



Compact Performance

R-Series 5-15 hp compressors deliver optimum performance and easier maintenance, all in a robust, innovative package.

[See Our Entire Portfolio of Oil-flooded Compressors](#)

Exceptional Value, Proven Design

The simplified design of the UP6 provides maximum efficiency and serviceability in a compact footprint.

UP6 Series 5-15 hp Fixed Speed

Offering an exceptional value without sacrificing the reliability you've come to expect from Ingersoll Rand, the UP6 Series of oil-flooded rotary screw compressors provides a complete air solution in an easy to use, easy to access compact package.

- Fewer connections and smart integration eliminate leaks and pressure drops, ensuring maximum reliability
- Advanced, high-efficiency combination cooler with roof mount package exhaust enables easy ducting
- Small footprint frees up valuable floor space and reduces installation costs
- Simple diagnostics for ease-of-operation and reduced downtime
- Premium Poly-V belt drive system minimizes belt stretching and increases air output

| Next Generation R-Series – 50 and 60 Hz Performance | | | |
|---|-----------------------|--------------------------|-----------------------------|
| Model | Nominal Power hp (kW) | Max Pressure psig (barg) | Capacity (FAD) cfm (m³/min) |
| R Series 4i-11i fixed speed | 5-15 (4-11) | 110-200 (7.5-14.0) | 14.3-57.5 (0.4-1.6) |
| R Series 5n-11n | 7.5-15 (5-11) | 115-145 (8.0-10.0) | 14.3-57.5 (0.4-1.6) |
| UP6 4-11 fixed speed | 5-15 (4-11) | 125-150 (8.6-10.3) | 13.0-55.0 (0.4-1.6) |



Moisture and contamination in compressed air cause significant problems in equipment operation, like rust, scale and clogged orifices resulting in product damage or costly shutdowns. Making air treatment equipment an integral component of your compressed air system will improve productivity, system efficiency and product or process quality.

Refrigerated Dryers

Our cost-effective refrigerated dryers provide clean, dry air for most industrial applications. Choose efficient cycling dryers to maximize energy savings or non-cycling dryers for a lower initial cost.

Refrigerated Dryer Features

- Dew points as low as 38°F (3°C), meeting Class 4 requirements
- Corrosion-free heat exchanger design for reliable operation
- Intuitive microprocessor control for easy operation
- Compact design for easy serviceability




Cost-Effective Operation

Choose refrigerated dryers for lower capital, operating and maintenance costs for many industrial applications.

Minimize Contamination

F-Series filters will protect critical processes and valuable equipment by providing high-quality air.



F-Series In-Line Filters

F-Series advanced compressed air filters reduce contamination in your air stream to help protect critical processes and valuable equipment. Rigorously tested and engineered with superior components, F-Series filters will provide years of reliable performance and consistently high-quality air.

F-Series Filter Features

- Patented dual indicator displays accurate pressure drop data
- Rugged aluminum design suitable for 176°F (80°C), 250 psig applications
- Reliable filter element withstands high pressure and minimizes flow restriction
- Ergonomic bowl design with no-touch filter simplifies element replacement
- Proprietary media coating technology protects against corrosion



Ensure reliability for the life of your compressed air equipment with our comprehensive maintenance programs. At Ingersoll Rand, we have one goal—to earn the right to be your trusted partner.



The CARE Service Program Advantage

Compressed air is critical to your operation. A proper maintenance strategy is crucial to avoiding unplanned, unbudgeted downtime and production interruptions. By choosing an Ingersoll Rand CARE service program, you are investing in your future with a trusted partner.

Depending on your rotary screw compressor system maintenance requirements, choose from one of these two programs. Each program includes genuine OEM parts that eliminate inferior performance caused by generic parts that will cost you more in the long run.

PlannedCARE™ Comprehensive Parts and Service Coverage



- Predictable, on-time planned maintenance
- Preventative diagnostics to catch potential problems
- Up to 5-year coverage on major airend components in new rotary compressors

PartsCARE™ Genuine OEM Parts Coverage



- Parts delivered at an agreed upon price
- Pre-established inventory to reduce lead time
- Four additional years of coverage on airend



Start-Up & Maintenance Kits

Our start-up kits provide the parts and protection you need for the first year. And by using genuine OEM parts, you also receive the assurance that your air compressor will consistently perform at an optimal level.

Our OEM annual maintenance kit is an integral part of factory-recommended annual maintenance. These kits include the major consumable components replaced each year.

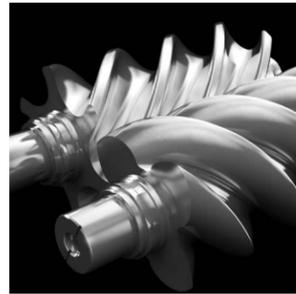




A compressed air system is a significant investment. You expect consistently reliable, clean, dry air at the lowest possible operating cost. Choose our genuine parts and accessories to ensure that your compressor is running efficiently and productively.

Rotary Compressor Lubricants

Synthetic lubricants are better for the environment, last longer, are less expensive and are less prone to contamination. Our synthetic Ultra lubricant family is specifically designed to help rotary screw compressors maintain peak performance.



Rotors with Ultra EL lubricant



Rotors with conventional lubricant

See Which Lubricant is Right for Your Compressor



Ultra Coolant

Ultra Coolant's unique formulation allows for long life, excellent cooling performance and improved compressor efficiency.

- Up to 8,000 hours run time
- Industry leading compressor lubricant
- Environmentally friendly



Ultra EL

Ultra EL performs up to twice as long as other rotary lubricants, lowering lifecycle costs.

- Up to 16,000 hours run time
- Increases compressor efficiency
- High flash point for enhanced safety



Ultra FG

High-quality, H1 and NSF certified Ultra FG food grade lubricant is designed specifically for the food and beverage industries to meet production quality standards.

- Up to 8,000 hours run time
- Resists foam, sludge, varnish and corrosive acid
- Superior dispersing characteristics for easier removal of water
- Long maintenance intervals
- Allergen-free and GMO-free
- Halal, kosher and pareve certified



Heavy-Duty Drains

No-loss electronic and pneumatic drains are the most reliable, durable and energy-efficient way to remove condensate from air compressors and system components.



Oil/Water Separators

Unique and efficient PolySep Oil Water Separators offer unrivaled performance that can easily separate and permanently absorb virtually all lubricants.



SimplAir® Piping System

Our durable aluminum piping system is your cost-effective alternative for air, inert gas and vacuum lines. "Quick-connect" fittings enable easy installation, lowering installation costs.



OEM Replacement Parts

We have the exact genuine OEM parts you need—from a replacement rotor to a missing bolt—with extensive inventories maintained in strategic locations around the world.

Learn about the True Value of Genuine OEM Parts

Reliable Compressed Air from Start to Finish

Maximize your total cost of ownership with Ingersoll Rand's extensive knowledge of compressor technologies, services, parts and accessories—we are your trusted partner in compressed air systems.





About Ingersoll Rand Inc.

Ingersoll Rand Inc. (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to helping make life better for our employees, customers and communities. Customers lean on us for our technology-driven excellence in mission-critical flow creation and industrial solutions across 40+ respected brands where our products and services excel in the most complex and harsh conditions. Our employees develop customers for life through their daily commitment to expertise, productivity and efficiency. For more information, visit www.irco.com.

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