



# Oil-Flooded Rotary Screw Compressed Air Systems

4-37 kW (5.5-50 hp)



# Your Trusted Partner in Compressed Air



## Flexible Choices

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

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 help you reach your business goals. By offering a total systems approach, Ingersoll Rand maximizes efficiency and performance.

## Why Choose a World-Class Rotary Screw Compressed Air System?

You need a reliable, cost-effective solution with industry-leading energy efficiency, all backed by a global network of experts. Ingersoll Rand delivers the equipment and services your business demands.

### For efficiency and air flow

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

### 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.

### Built to work in virtually any environment

Our oil-flooded compressors operate both indoors and outdoors at extreme ambient temperatures. 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.



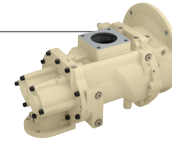
# AIR COMPRESSORS

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

## 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.



### Simple & Serviceable

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



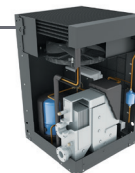
### Intuitive Control

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



### 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.



## 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

High-quality air for your facility, from start to finish



#### Metal Working

The power source to keep production moving quickly and on time



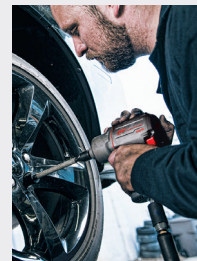
#### Craft Brewing

Compressed air for your growing business including washing and bottling operations



#### Woodworking

Power for sawing, clamping, hoisting, actuation & controls, pressure treatment



#### Vehicle Services

Reliable compressed air for powering tools for repairs, filling tires, painting and more



#### Paint Shops

Clean, dry air to achieve a perfect finish for many painting applications

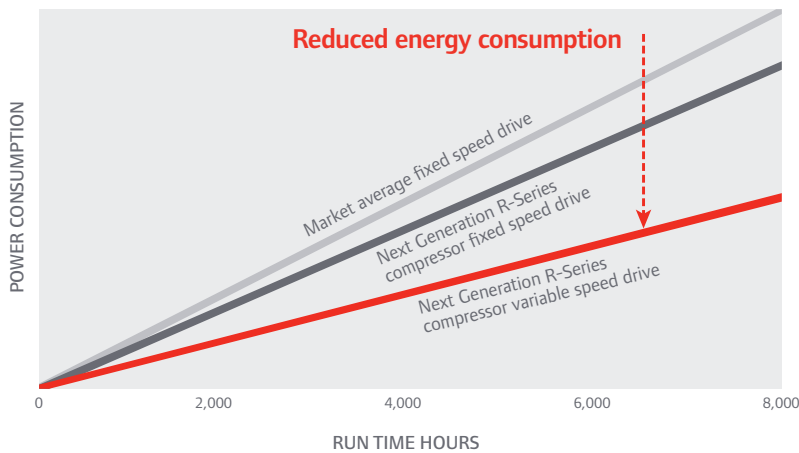
# AIR COMPRESSORS

## Next Generation Rotary Screw Air Compressors, 11-37 kW

### Best-in-Class Efficiency

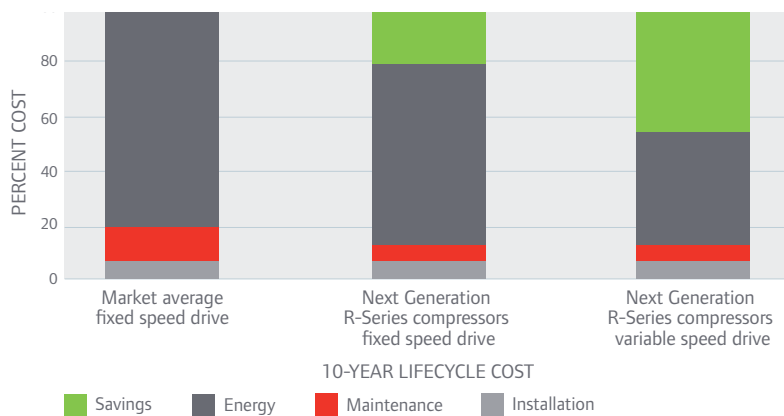
Our Next Generation R-Series compressors include an all-new, state-of-the-art airend, making it your best choice for performance. The new airend improves efficiency through several advancements, including an optimized rotor profile to help minimize operating expenses.

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.



### 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.



### Lower Your Total Cost of Ownership

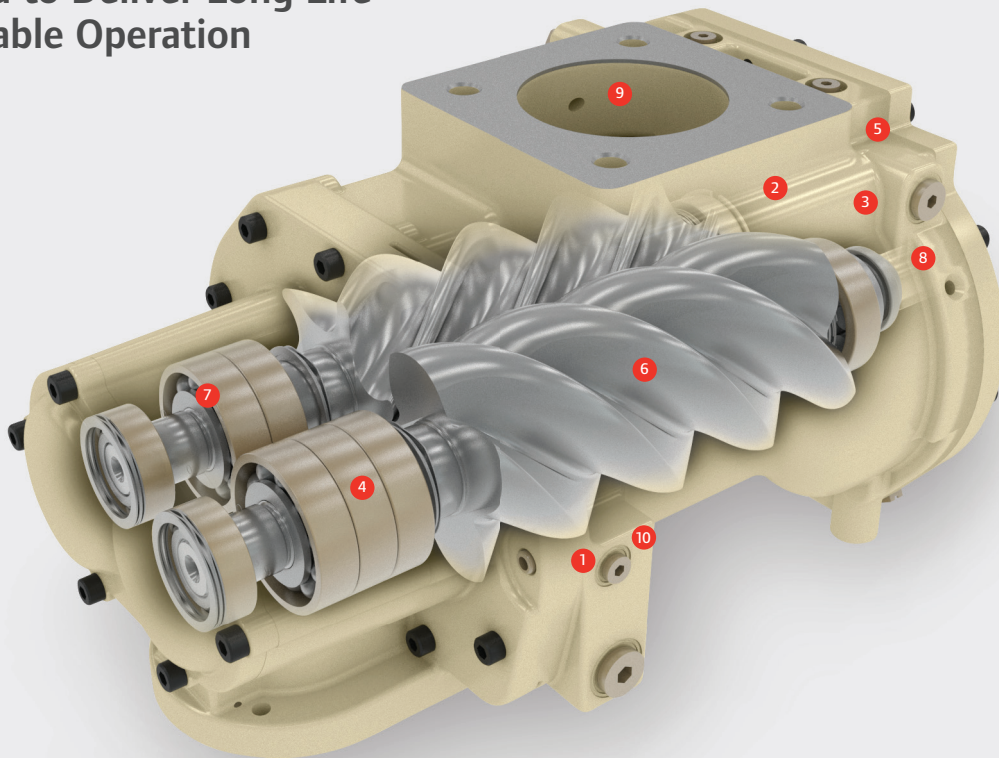
With up to 17.5% improved efficiency and 18% more airflow, our Next Generation R-Series compressors significantly reduce energy use, lowering your lifecycle cost.

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

## The Airend—The Heart of Every Compressor

Air compressor use accounts for a significant part of your business's energy costs. Our engineers and design experts used advanced computer modeling techniques to create a superior airend that improves efficiency up to 18%—plus best-in-class airflow capacity, quieter operation and a longer, more reliable life: multiple advantages to improve your business's bottom line.

### Designed to Deliver Long Life and Reliable Operation



**1 Strategically positioned lubrication points** efficiently deliver oil exactly where it's needed, improving reliability and lowering power consumption

**2 Advanced gear design** transmits drive power more efficiently and reliably

**3 Integral gearbox** reduces windage losses and drivetrain length for more efficient performance and easier serviceability

**4 Enhanced bearing arrangement** reduces resistance and improves power management for maximum reliability and performance

**5 Maintenance-free, sealed drive system** requires no regular service and protects against damaging dirt and moisture

**6 Optimized rotor profile** helps deliver superior energy efficiency—up to 18% more

**7 Lower friction bearing arrangements** improve energy efficiency

**8 Optimized gear lubrication** increases reliability and reduces power consumption through strategically injecting oil into gear mesh

**9 Streamlined inlet and outlet flow passage** reduces pressure drops

**10 Optimized oil-injection process** lowers temperature and increases efficiency during compression

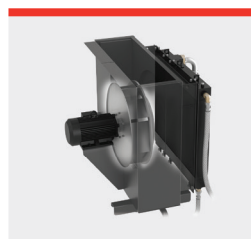
# AIR COMPRESSORS

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.



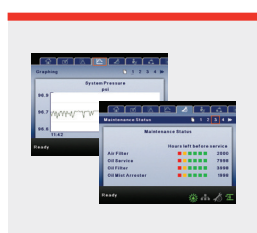
## Leak-free Designs

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



## Advanced Cooling System

An advanced cooling system allows heat exchangers to expand and contract, reducing thermal stress for improved system durability.



## Adaptive Monitoring

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



## Extreme Environment Operation

At ambient temperatures between 2°C and 46°C, with available options to handle temperatures between 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*

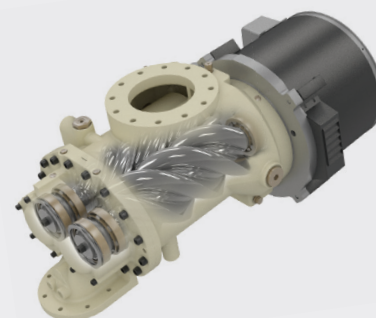
**Efficiency for Variable Demand:** VSD compressors with the highest efficiency motor available

*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

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**Premium Efficiency for Variable Demand:** VSD compressors with enhanced features for improved performance and efficiency



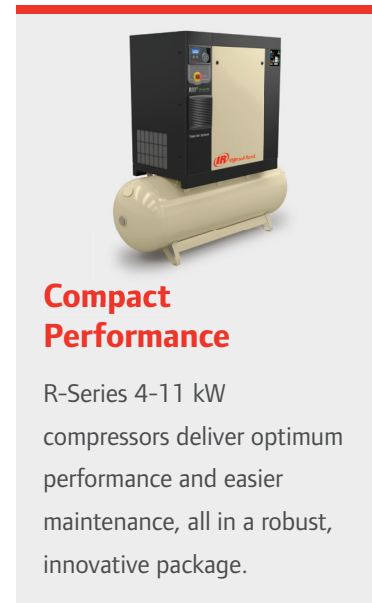
### Next Generation R-Series – 50 and 60 Hz Performance

Model	Nominal power kW (hp)	Max pressure barg (psig)	Capacity (FAD) m <sup>3</sup> /min (cfm)
RS 11i-22i fixed speed	11-22 (15-30)	7.5-14.0 (110-200)	1.20-3.69 (42-130)
RS 15n-22n VSD	15-22 (20-30)	7.1-13.8 (103-200)	2.39-3.35 (84-123)
RS 15ie-22ie fixed speed	15-22 (20-30)	7.1-13.8 (103-200)	1.78-4.08 (63-144)
RS 15ne-22ne VSD	15-22 (20-30)	9.3-10.0 (135-145)	2.34-3.54 (83-125)
RS 30i-37i fixed speed	30-37 (40-50)	7.5-14.0 (110-200)	3.7-7.0 (132-250)
RS 30ie-37ie fixed speed	30-37 (40-50)	7.5-14.0 (110-200)	3.8-7.2 (134-250)
RS 30n-37n VSD	30-37 (40-50)	4.5-10.0 (65-145)	2.0-6.5 (74-231)

## R-Series 4-11 kW Fixed Speed and VSD

The durable Ingersoll Rand R-Series 4-11 kW compressor extends the R-Series family into the smallest rotary screw offering with benefits like innovative features and a compact design that fits virtually any application environment.

- **TEFC motor and Danfoss drive** (VSD models) provides world-class reliability and 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 and easy access to all critical operating parameters
- **Optional Total Air System (TAS)** provides clean, dry air in a single package



### Compact Performance

R-Series 4-11 kW compressors deliver optimum performance and easier maintenance, all in a robust, innovative package.

R-Series and UP6 50 and 60 Hz Performance			
Model	Nominal power kW (hp)	Max pressure barg (psig)	Capacity (FAD) m <sup>3</sup> /min (cfm)
R Series 4i-11i fixed speed	4-11 (5-15)	7.5-14.0 (110-200)	0.4-1.6 (14.3-57.5)
R Series 4n-11n VSD	4-11 (5-15)	7.5-14.0 (110-200)	0.4-1.6 (14.3-57.5)
UP6 4-11 fixed speed	4-11 (5-15)	8.2-10.3 (119-150)	0.4-1.6 (13.0-55.0)



### Exceptional Value, Proven Design

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

## UP6 Series 4-11 kW 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, delivering efficient performance.

- **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

# AIR TREATMENT

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 3°C (38°F)**, 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 80°C (176°F), 250 psig/17.2 barg 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



# MAINTENANCE SERVICES

Ensure reliability for the life of your compressed air equipment with our CARE service programs. With CARE, 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 centrifugal 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.

# OIL-FLOODED PARTS AND ACCESSORIES

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



Rotors with Ultra EL



Rotors with conventional lubricant

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



### 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

# OIL-FLOODED PARTS AND ACCESSORIES



## 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 with extensive inventories maintained in strategic locations around the world.

## 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.**





Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a \$14 billion global business committed to a world of sustainable progress and enduring results. For more information, visit [www.ingersollrand.com](http://www.ingersollrand.com).



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