



# Oil-Flooded Rotary Screw Compressed Air Systems

7.5-45 kW (10-60 hp)



# 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 system approach to maximise efficiency and performance.

## Take a Systems Approach

Delivering reliable oil-flooded compressed air to your facility goes well beyond the compressor itself. Optimise 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 optimisation.





# 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 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.

## 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.



## Customised 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, maximising 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

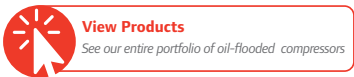
Clean, dry air to achieve a perfect finish for many painting applications

Air 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 maximise efficiency and airflow, while operating reliably to improve your company's bottom line.



## All Air Isn't Equal

Next Generation R-Series air compressors help eliminate waste and control costs to lower your total cost of ownership.



## What Makes Our Rotary Screw Compressors Unique?

### Optimised Drive Components

State-of-the-art airends, high performance motors and an oversized inlet air filter that decreases pressure drop deliver uncompromising efficiency, minimising energy use. Choose the optional VSD for even more energy savings.



### Intuitive Connectivity

Xe-Pro Controllers deliver enhanced control and functionality through an intuitive user interface as well as remote access with any common, current web browser, providing critical real-time monitoring and diagnostics.



### Simple and Serviceable

Smart design elements, including a fully integrated airend, reduced connections and piping, and a sound attenuating enclosure create a compact footprint and provide easy access to internal parts for quicker maintenance.



### Robust Components

Durable parts such as the auto-tensioning, non-stretching poly-v belt, robust hoses and pipe connections with vitron victaulic couplings, and an innovative separator deliver performance integrity and reliability for life.



### Integrated, Compact Design Options

For 7.5-22 kW models, the optional TAS (Total Air System) with an integrated dryer and 3-in-1 heat exchanger provides clean, dry air in a simple package that minimises installation costs, reduces footprint and improves ISO air quality.





## Next Generation R-Series Rotary Screw Air Compressors, 7.5-45 kW

### World-Class Efficiency

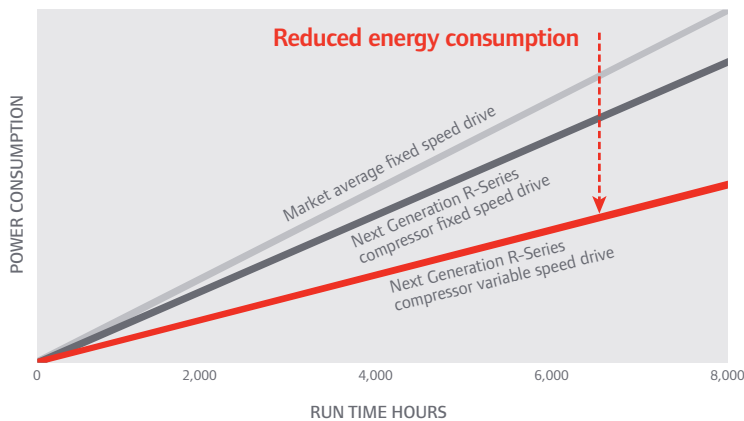
At the heart of each Next Generation R-Series compressor is a state-of-the-art, fully integrated airend. The innovative design includes a failsafe shaft seal, oil filter and oil regulation valve that reduces external hoses to a minimum, ensuring a reliable supply of high-quality air.

For models 30 kW and higher, choose the ie version featuring our most efficient airend, to achieve up to an additional 6% energy savings. Coupled with an IE4 high performance IP55 Premium® efficiency motor, you get an air compressor that delivers uncompromising efficiency.

Our optional variable speed drive (VSD) can help you save even more on energy costs. Available on 7.5-45 kW models, these compressors deliver higher efficiency even at partial loads.

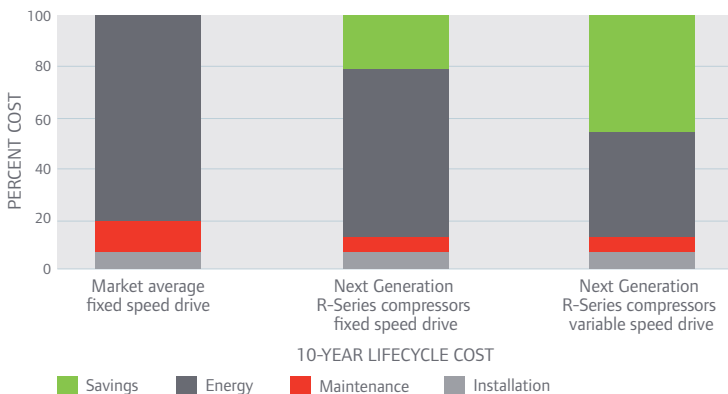


Next Generation R-Series compressors provide superior operating features, benefits and equipment.



### Driving Toward Next Generation Efficiency

Every Next Generation R-Series compressor features an advanced airend and IP55 Premium motor that reduces energy consumption.



### Lower Your Total Cost of Ownership

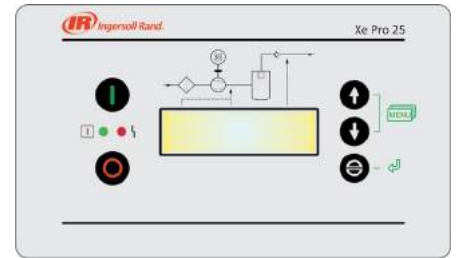
With improved efficiency and more airflow, our Next Generation R-Series compressors significantly reduce energy use, lowering your lifecycle cost.

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

## Reliability and Control You Can Count On

The Xe-Pro Series control system ensures reliable operation and protects your investment by continuously monitoring operational parameters. It has the capability to have programmable inputs and outputs, control additional equipment, as well as provide a variety of critical features.

Stay connected with the Xe-Pro Series via its easy to use touch screen display, or remote access via web-browser or smartphone. Real-time monitoring, diagnostics, trending and analysis will always keep you in total control.



The Xe-Pro Series controller can be ergonomically positioned on top or in front of the compressor.



## Reduce Your Footprint and TCO

Minimise your installation costs and save floor space with our optional Total Air System (TAS) configurations. Easy to install and easy to use, all system components are perfectly matched and ready for plug and play operation right out of the box.

For 7.5 to 22 kW compressors, you will be able to reduce floor space significantly thanks to the compressor and dryer being mounted directly on the high-quality air receiver tank.

Next Generation R-Series TAS configuration for 7.5-22 kW



**View Products**  
See our entire portfolio of oil-flooded compressors

## The Next Generation Advantage

Compare the innovative compressor technology of the Next Generation R-Series with other rotary screw compressors, and the advantages are clear.

|                                 | Next Generation R-Series Air Compressors  | Other Compressors   |
|---------------------------------|---|---|
| <p><b>Energy Efficiency</b></p> | <p>State-of-the art airends provide uncompromising energy efficiency</p> <p>Oversized inlet air filter decreases pressure drop even before compression begins</p>                     | <p>Awirends operate at higher speed to achieve higher flow output at the expense of earlier mechanical wear</p> <p>Lower energy efficiency results in higher operating expenses</p> |
| <p><b>Low Maintenance</b></p>   | <p>Simple and serviceable design provides easy access to internal parts</p> <p>Long-life consumables reduce operating, maintenance and service costs over the compressor's life</p>   | <p>Non-integrated airend design requires additional hoses and moving parts, increasing maintenance costs</p> <p>Using inferior consumables causes more frequent maintenance</p>     |
| <p><b>Reliability</b></p>       | <p>Integrated airend reduces footprint and the number of hoses and other parts subject to wear and tear</p> <p>Innovative oil separator delivers oil carryover of less than 3 ppm</p> | <p>Increased wearable parts result in more machine downtime</p> <p>Potential for greater oil carryover to foul the compression process</p>  |

## Innovative Design, Flexible Choices

Our rotary screw compressor systems provide flexible equipment choices, as well as advanced solutions that ensure reliable flow—even in extreme operating environments. That’s what you expect from Ingersoll Rand. That’s what you get from the Next Generation R-Series rotary screw air compressor.



### Optimise Your Demand

We mix and match motors and airends to achieve the exact level of performance and economy your operation and budget require. Super-premium IE4 efficiency motors are available as an option on most models.

- i** **Efficiency for Constant Demand:** Fixed speed compressors featuring the reliable IP55 Premium efficiency TEFC induction motor
- n** **Efficiency for Variable Demand:** VSD compressors for the highest efficiency, lowest energy use option
- ie** **Premium Efficiency for Constant Demand:** Fixed speed compressors with the continuous duty IP55 Premium efficiency 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<br>kW (hp) | Max pressure<br>barg (psig) | Capacity (FAD)<br>m <sup>3</sup> /min (cfm) |
|-----------------------------------|--------------------------|-----------------------------|---|
| 7.5ie-11ie Premium Fixed Speed    | 7.5-11 (10-15)           | 5-13 (70-185)               | 0.85-1.94 (30.0-68.5)                       |
| 7.5ne-11ne Premium Variable Speed | 7.5-11 (10-15)           | 5-13 (70-185)               | 0.41-1.84 (14.5-65.0)                       |
| RSe15i-22i Fixed Speed            | 15-22 (20-30)            | 5-13 (70-185)               | 1.80-3.67 (63.5-129.6)                      |
| RSe15n-22n Variable Speed         | 15-22 (20-30)            | 5-13 (70-185)               | 0.83-3.57 (29.3-126.1)                      |
| RSe30i-45i Fixed Speed            | 30-45 (40-60)            | 5-13 (70-185)               | 4.27-8.05 (150.8-284.3)                     |
| RSe30ie-45ie Fixed Speed Premium  | 30-45 (40-60)            | 5-10 (70-145)               | 5.17-8.70 (182.6-307.2)                     |
| RSe30n-45n Variable Speed         | 30-45 (40-60)            | 5-13 (70-185)               | 1.40-8.02 (49.4-283.2)                      |

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 maximise 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.



### Minimise 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 minimises flow restriction
- **Ergonomic bowl design with no-touch filter** simplifies element replacement
- **Proprietary media coating technology** protects against corrosion



**View Products**

Find the Right Air Treatment Products for Your Application





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

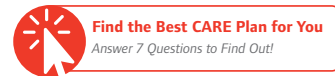


- Predictable, on-time planned maintenance
- Preventative diagnostics to catch potential problems
- Up to 5-year coverage on major airend components in new centrifugal compressors

### PartsCARE™ Genuine OEM Parts Coverage



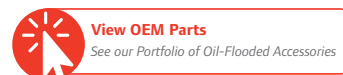
- Parts delivered at an agreed upon price
- Pre-established inventory to reduce lead time
- Four additional years of coverage on airend



## 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.

- 8,000+ hours run time, longest FG on market
- Resists foam, sludge, varnish and corrosive acid
- Superior dispersing characteristics for easier removal of water
- Long maintenance intervals



**The Ultra Difference**

*See which lubricant is right for your compressor*



## 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.



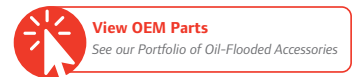
## SimplAir® Piping System

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

Maximise 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](http://www.IRCO.com).

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