



# *Oil-Flooded Rotary Screw Compressed Air Systems*

45-160 kW (50-200 hp), 4.5 to 14 barg (65-200 psig)



# 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 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.



**Let's Get Started Together**

*Ingersoll Rand Contracting Services Video*





# 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. That's what you get with our R-Series oil-flooded rotary screw air compressors.

## 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.

## 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°C (-23°F) to 55°C (131°F). 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

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



### Metal Working

The power source to keep production moving quickly and on time



### Wood Working

Handle multiple tools while keeping out contaminants and moisture



### Mining

Reliable power for equipment and ventilation, on the surface or below ground



### Cement & Construction

Rugged durability and performance to get the job done efficiently

# AIR COMPRESSORS

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.



**How it Works**  
See the R-Series video and product tour

## What Makes Our Rotary Screw Compressors Unique?

### Optimized Drive Components

World-class single and two-stage airends (two-stage available starting at 90 kW), along with a TEFC induction or optional variable speed motor 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

Xe-Series controllers deliver increased control and functionality through an intuitive user interface as well as remote access with any common, current web browser.



### Adaptive Monitoring

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



### 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 and reduces footprint.



## Next Generation Rotary Screw Air Compressors, 45-160 kW

### World-Class Efficiency

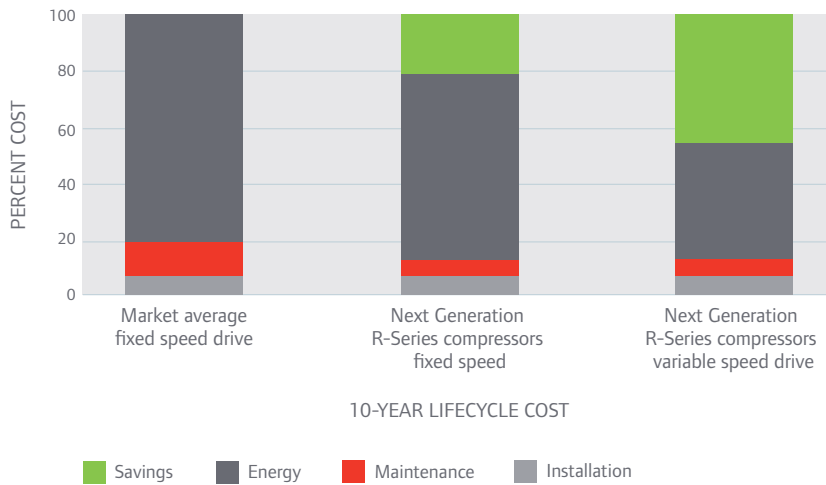
Our Next Generation R-Series compressor includes an all-new, state-of-the-art airend, making it your best choice for performance. The new airend improves efficiency through several advancements, including an optimized rotor profile to help minimize operating expenses.

The new rotor profile also provides world-class airflow. With more airflow for the same power input, your compressor requirements are smaller, reducing both investment costs and energy usage.

For 90-160 kW models, improve performance even more with our optional two-stage airend for increased flow capacity and power gain.



### Significantly reduce total cost of ownership



### 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. For even more efficiency, an optional variable speed drive (VSD) can help you save even more on energy costs.



**View Products**

See our entire portfolio of oil-flooded compressors

RS-Series – 50 and 60 Hz Performance			
Model	Nominal power kW (hp)	Max pressure barg (psig)	Capacity (FAD) m <sup>3</sup> /min (cfm)
RS45i-160i fixed speed	45-150 (60-200)	7.0-14.0 (100-200)	5.9-29.1 (210-1,028)
RS90ie-160ie fixed speed premium	90-150 (125-200)	7.0-14.0 (100-200)	13.7-30.9 (484-1,091)

## Rotary Screw Air Compressors, 45-160 kW

### A Tradition of Proven Design

Ingersoll Rand R-Series rotary screw compressors provide superior operating features, benefits and equipment choices. Mix and match motors and airends to achieve the exact level of performance and economy your operation and budget require. This includes options like our two-stage airend (90 kW and above) that will drastically improve flow capacity and power consumption as well as a variable speed drive that offers the ultimate in energy efficiency.



### Innovative Design, Flexible Choices

*i*

**Efficiency for Constant Demand:** Fixed speed compressors featuring the reliable and efficient IE3 TEFC induction motor (RS models only)

*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



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

Model	Nominal power kW (hp)	Max pressure barg (psig)	Capacity (FAD) m <sup>3</sup> /min (cfm)
R90n-110n VSD	90-110 (125-150)	4.5-10.0 (65-145)	8.5-21.9 (299-772)
R90ne-160ne VSD	90-160 (125-200)	4.5-10.0 (65-145)	8.9-30.0 (313-1,060)

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 our 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.



**Maximum Performance**

Use desiccant dryers when your application demands low dew points and the highest air quality.

## Desiccant Dryers

Choose desiccant dryers when very low dew points are necessary for high-quality air and to prevent potential freeze-up. Depending on whether you require lower initial capital costs, or lower energy use, choose from heatless, externally heated or heat blower desiccant models.

### Desiccant Dryer Features

- **Delivers reliable -40°C (-40°F) pressure dew point** in most operating conditions
- **High-strength desiccant** and durable valves
- **Low pressure drop design** saves energy
- **Advanced microprocessor control** is easy to use and maximizes uptime



**View Products**  
Find the Right Dryer for Your Application



# 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 oil-flooded compressor system maintenance requirements, choose from one of these programs:



- Greatest value
- Equipment risk transfer
- Up to 10 years
- Scheduled maintenance and all repairs
- No production interruptions



- All planned maintenance
- Predictable, on-time
- Preventative diagnostics
- Up to 10-year coverage on airend components



- Genuine OEM parts at an agreed-to price
- Planned parts inventory
- Experienced support
- Up to 5-year coverage on airend

## IT ALL ADDS UP TO PEACE OF MIND



### Lower Cost of Ownership

CARE service programs provide the most cost-effective solutions based on your customized maintenance strategy.

### Quality Results

Ingersoll Rand factory-trained service technicians are backed by more than 145 years of industry experience.

### Increased Uptime

Our CARE programs help decrease unplanned downtime and costly production interruptions.

### Efficient Energy Use

Peak system efficiency is achieved through properly performed maintenance and inspection.

### Peace of Mind

Our world-class services will help you achieve the results you need, while you focus on what's important to your business.



**Find the Best CARE Plan for You**  
Answer 7 Questions to Find Out!





# RENTALS & PERFORMANCE SERVICES

Productivity is reduced by air loss caused by emergencies, maintenance and ongoing inefficiencies in your facility. Use our rental services to minimize short term production loss, and performance services to meet longer term sustainability goals.



## Ingersoll Rand Rentals

Minimize costly interruptions using Ingersoll Rand’s comprehensive Rental Services. You’ll get a quick response, a broad line of robust products and unparalleled on-site experience that satisfies your exact requirements when you need it for emergencies or long-term planning.



### The Air You Need, the Way You Want it

- Oil-flooded compressors 45-160 kW (60-200 hp), 10-14 barg (155-200 psi)
- Extensive compressor inventory
- Air dryers with dew points from -40°C to 3°C (-40°F to 38°F)
- Heavy-duty, outdoor-ready designs
- Connection accessories
- Short- and long-term agreements
- Multiple depot and service locations
- Comprehensive contingency planning
- Electric systems for low-cost operation



**Air the Way You Want It**  
Learn more about our rental services

## PERFORMANCE SERVICES

The core of your operations depends on reliable compressed air. By identifying, analyzing and correcting problems throughout your system—wherever they occur—it’s easy to keep things optimized and your profitability maximized.

### Our Performance Services Assessment Tools Help You:

- Track Systems Performance
- Increase System Efficiency
- Improve Production and Reduce Waste



#### Electronic Assessment

Analysis of compressor performance, energy use and air flow



#### Air Leak Assessment

Identify, tag and prioritize leaks based on severity and ROI



#### System Assessment

Comprehensive analysis of compressed air supply, transmission or demand



**Know the Health of Your Compressor?**  
Learn more about system optimization

# 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.

## Ultra Coolants

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



### Ultra Coolant

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



### Ultra EL

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



### Ultra FG

#### Food Grade Lubricant

- 6,000+ hours run time, longest FG on market
- Reduces contaminant threat
- Excellent stability and detergent action



#### The Ultra Difference

See which lubricant is right for your compressor



## SimplAir® Piping System

Typical steel distribution systems can be costly and labor intensive. Our SimplAir piping system is your cost-effective alternative for air, inert gas and vacuum lines. Durable aluminum piping and a large range of “quick-connect” fittings, enable fast, easy installation, lowering installation costs.



#### Simplify Installation

Learn how SimplAir lowers your cost of ownership



## Systems Automation and Control

As much as 20% to 60% of the energy used to operate compressed air systems is wasted! From inline flow controllers to fully integrated system automation, our control solutions deliver reliable critical system access to lower energy costs.



#### Be in Control

See our automation and control solutions



## F-Series In-Line Filters

Our advanced compressed air filters reduce contamination in your air stream to help protect finished goods, critical processes and valuable equipment.



## Heavy-Duty No-Loss 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.



## Installation Solutions

From receiver tanks to couplings, our installation solutions offer everything you need to deliver clean, dry air from the compressor to your point of use.



## OEM Replacement Parts

We have the exact genuine OEM parts you need—from a replacement bullgear to a missing bolt—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).



[IngersollRandProducts.com](http://IngersollRandProducts.com)



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