

# **Oil-Flooded Rotary Screw Compressed Air Systems**

**RS** 315*ie* 

IR Ingersoll Rand

(IR)

160-355 kW (215-475 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<sup>®</sup> 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 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.



2

# 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 Next Generation 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 improved 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 flexible standard and optional design features that allow operation both indoors and outdoors at extreme ambient temperatures ranging from -10°C to 55°C, as well as harsh environments.

#### 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.





Food & Beverage

Pneumatic machinery, valves, motors and other non-contact applications



Metal Working

The power source to keep production moving quickly and on time



Mining

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



Manufacturing & Assembly

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



Automotive

Proven design to meet demanding manufacturing environments



Low and high pressure systems for furnaces, packaging, palletizing

and shipping



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



## What Makes Our Rotary Screw Compressors Unique?



World-class single- and two-stage airends, along with fixed or variable speed motors minimise energy use.

#### **Flexible Design Options**



Air-cooled and water-cooled configurations, extreme ambient temperature options and dust filtration to match your application. Leak-free Designs



Robust hoses, pipe connections, O-rings and seals ensure reliability and reduce the opportunity for leaks.





Xe-Series controllers deliver increased control and functionality through an intuitive user interface as well as remote access.

#### Enhanced Serviceability



Intuitive machine layout, premium grade extended-life lubricant and easy component access simplify service and maintenance.

#### Intelligent Uptime



Helix<sup>™</sup> Connected Platform gives you real-time insights and data to keep your compressor operating at peak performance while ensuring uptime.



# Next Generation Rotary Screw Air Compressors, 160-355 kW (215-475 hp)

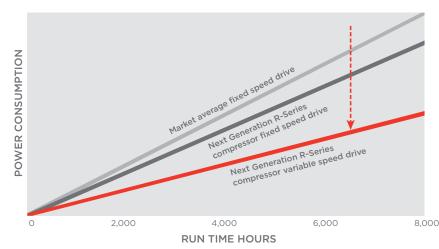
### **World-Class Efficiency**

Ingersoll Rand Next Generation R-Series compressors include state-of-the-art airends, making them your best choice for performance. Our airends are designed and manufactured in-house and improve efficiency through several advancements, including optimised rotor profiles to help minimise operating expenses.

Our rotor profile also provides improved airflow. With more airflow for the same power input, your compressor requirements are smaller, reducing both investment costs and energy usage.



RS315ie COMPRESSOR



### **Reduced Energy Consumption**

### Driving Toward Next Generation Efficiency

Every Next Generation R-Series compressor features an advanced airend and premium efficiency motor that reduce total cost of ownership.

### The Two-Stage Advantage

For higher flow requirements, Next Generation R-Series compressors offer a two-stage airend for exceptional efficiency.

160-250 kW models feature a revolutionary new patent-pending airend design that leverages a second gear on the drive shaft. This optimises the compression ratio, resulting in exceptional efficiency in a compact footprint.



RSe160-250 KW TWO-STAGE CONFIGURATION





# 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 air compressor.

#### See Our Entire Portfolio o Oil-flooded Compressors

### **Optimise Your Demand**

Choose from optimised airends and drives to achieve the performance and economy your operation and budget require.

**Efficiency for Constant Demand:** Fixed speed single-stage compressors featuring a reliable premium efficiency motor

RS 250

- **1 Efficiency for Variable Demand:** VSD single-stage compressors featuring a reliable premium efficiency motor
- *ie* **Premium Efficiency for Constant Demand:** Fixed speed two-stage compressors with enhanced features for improved performance and efficiency
- *Premium Efficiency for Variable Demand:* VSD two-stage 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) @7.0 barg m³/min (cfm)
RSe160i-290i fixed speed	160-250 (215-335)	7.5-13.0 (109-189)	32.1-47.1 (1,134-1,663)
RSe160ie-290ie fixed speed premium	160-250 (215-335)	7.5-10.0 (109-145)	33.7-47.9 (1,190-1,692)
RSe160n-290n variable speed	160-250 (215-335)	13.0 (189)	31.9-46.6 (1,127-1,646)
RSe160ne-290ne variable speed premium	160-250 (215-335)	10.0 (145)	32.1-47.6 (1,134-1,681)
RS315i-355i fixed speed	315-355 (425-475)	7.5-10.0 (109-145)	63.0-67.5 (2,225-2,384)
RS315ie-355ie fixed speed premium	315-355 (425-475)	7.5-14.0 (109-203)	65.0-71.0 (2,295-2,507)
RS315n-355n variable speed	315-355 (425-475)	10.0 (145)	62.3-68.2 (2,200-2,408)
RS315ne-355ne variable speed premium	315-355 (425-475)	10.0 (145)	64.4-70.0 (2,274-2,472)

# 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 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 maximise energy savings or non-cycling dryers for a lower initial cost.

### **Refrigerated Dryer Features**

- Dew points as low as 3°C, meeting Class 4 requirements
- Proprietary heat exchanger designed by Ingersoll Rand for maximum efficiency
- 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 a variety of 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 or heat blower desiccant models.

### **Desiccant Dryer Features**

- Delivers reliable -40°C (-70°C option available) 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 maximises uptime

Find the Right Dryer for Your Application



7



# MAINTENANCE SERVICES



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.



# Maintenance Program Advantages

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 compressor maintenance agreement, you are investing in your future with a trusted partner.

Depending on your rotary screw compressor system we can customise a service program that best fits your needs. Our suite of CARE compressor maintenance programs range from total

risk transfer of your equipment to Ingersoll Rand to more basic programs for parts and services only, providing flexible solutions for the life of your compressed air system.

### Each of Our Maintenance Programs Offer Significant Benefits, Including:

- Genuine OEM parts eliminate exposure to unnecessary equipment wear and tear, reducing downtime
- Rapid response, because as an Ingersoll Rand service program customer, you are our top priority
- Optimised services for your specific operation that are structured to lower electricity consumption

- Early detection and predictability that eliminates surprises and unwanted costs
- Automated shipment or scheduling reminders prevent overlooking or under-maintaining equipment
- Equipment that lasts longer and runs better by replacing the right parts at the right time
- Premium monitoring via the Helix™ Connected Platform to maximise productivity

Choose the Right Maintenance Program for You

### IT ALL ADDS UP TO PEACE OF MIND



#### Lower Cost of Ownership

Our service programs provide the most cost-effective solutions based on your customised maintenance strategy.



Quality Results

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



Increased Uptime

Service 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.

# **RENTALS & PERFORMANCE SERVICES**

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





## **Ingersoll Rand Rentals**

Minimise 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 (145-200 psi)
- Extensive compressor inventory
- Air dryers with dew points from -40°C to 3°C
- 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



# **HELIX** Deep Insights for Dependability

Developed to give you essential visibility into day-to-day operational intelligence that maximises your uptime and peace of mind, the Helix<sup>™</sup> Connected Platform from Ingersoll Rand offers real-time data monitoring for your compressed air system.

Advanced sensor technology inside the compressor sends data on a regular basis to our cloud-based platform. This data gives you a clear view into the functionality and health of your compressor, and is easily accessible around-the-clock from your PC, tablet or smartphone. With a range of connectivity service offerings available, Helix<sup>™</sup> monitoring can be tailored to meet your specific operational needs.

- Deep insights for preventive maintenance, efficient repair work, and detailed analysis of equipment performance over time
- Diagnostic reporting that help maintenance teams keep your compressor operating at peak performance and reduce the risk of downtime
- Continuous real-time operating data available anytime, anywhere
- Equipment maintenance notifications that help ensure reliability and extend equipment life

Learn More about the Helix™ Connected Platform





# 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 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.



### Ultra EL

- Up to 16,000 hours run time
- Lower total cost of ownership, reduced waste
- Increases compressor efficiency
- High flash point for enhanced safety



### Ultra Coolant

- Up to 8,000 hours run time
- Lower total cost of ownership, reduced waste
- Environmentally friendly



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# Ultra FG

### Food Grade Lubricant

- 8,000+ hours run time, longest FG on market
- Reduces contaminant threat
- Excellent stability and detergent action





### SimplAir<sup>®</sup> 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 marinegrade aluminum piping and a large range of "quick-connect" fittings, enable fast, easy installation, lowering installation costs.





### 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.

See Our Automation and Control Solutions



10





## **In-Line Filters**

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



### Condensation Managment

No-loss electronic and pneumatic drains and oil water separators 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 reliably 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 rotor to a missing bolt with extensive inventories maintained in strategic locations around the world.

See All of Our Genuine OEM Parts and Accessories

### 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.

IngersollRand.com



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