

# Oil-Flooded Rotary Screw Compressed Air Systems

B Ingersoll Rand

185-375 kW (250-500 hp)

**RS** 315 ie

# 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 maximize efficiency and performance.

### Take a Systems Approach

Delivering reliable 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.



BIngersoll Rand. IngersollRandCompressor.com



# 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 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 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.

### **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.



Instrument air, pneumatic valves, control cylinders, fuel purging, service air, fuel atomization. air motors



Metal Working

The power source to keep production moving quickly and on time



Mining Reliable power for equipment and ventilation, on the

ground

surface or below



Manufacturing & Assembly High-quality air for your facility, from

start to finish





Proven design to meet demanding manufacturing environments



Low and high pressure systems for furnaces, packaging, palletizing and shipping

IngersollRandCompressor.com



# AIR COMPRESSORS





**RS250IE COMPRESSOR** 

#### All Air Isn't Equal

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

# What Makes Our Rotary Screw Compressors Unique?

#### **Optimized Drive Components**

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



OPERATE

#### **Flexible Design Options**

Air-cooled and water-cooled configurations, extreme ambient temperature options, high dust filtration and outdoor modifications for harsh environments to best match your application.

#### Leak-free Designs

V-Shield<sup>™</sup> 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<sup>™</sup>) 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.





# **AIR COMPRESSORS**

#### Next Generation Rotary Screw Air Compressors, 200-355 kW (250-500 hp)

#### 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 optimised rotor profile to help minimise 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.

Improve performance even more with our optional two-stage airend for increased flow capacity and efficiency gains.



#### **Driving Toward Next Generation Efficiency**

RS 315

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



### 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.



24

OPERATE

5

## AIR COMPRESSORS

### **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.

### **Optimise Your Demand**

Choose from optimized airends and drives to achieve the exact level of performance and economy your operation and budget require.



24 OPERATE

- **Efficiency for Constant Demand:** Fixed speed compressors featuring the reliable and efficient IE3 TEFC induction motor
- **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
- *Premium Efficiency for Variable Demand:* VSD compressors with enhanced features for improved performance and efficiency

### **Built to Work in Virtually Any Environment**

Next Generation R-Series compressors feature an advanced motor design built to operate at extreme ambient temperatures. A variety of options are available to operate reliably in harsh conditions.

Extreme Environment Options	i	ie	n	ne
Outdoor modification/rain protection	•	•		
Low ambient temperature protection to -23°C	•	•		
High ambient rating up to 55°C	•	•		
Premium high dust filtration	•	•		
Harsh water cooling system (water-cooled only)	•	٠	•	٠
Seawater cooling system (water-cooled only)	•	٠	٠	٠

Next Generation R-Series – 50 and 60 Hz Performance					
Model	Nominal power kW (hp)	Max pressure barg (psig)	Capacity (FAD) m³/min (cfm)		
RS185i-260i fixed speed	185-260 (250-350)	7.5-10.0 (110-145)	34.3-48.2 (1,211-1,702)		
RS185ie-375ie fixed speed premium	185-375 (250-500)	7.5-14.0 (110-200)	30.1-70.5 (1,063-2,488)		
RS200n-250n variable speed	200-250 (268-335)	7.0-10.0 (100-145)	16.8-49.6 (593-1,752)		
RS200ne-355ne variable speed premium	200-355 (268-475)	7.0-10.0 (100-145)	18.3-70.5 (646-2,490)		

6

# 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 maximize 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 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 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



(24)

OPERATE



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 be your trusted partner.



# Total Protection, Eliminate the Risk

PackageCARE<sup>™</sup> represents the greatest value for asset management by transferring operational risk to Ingersoll Rand. We are responsible for scheduled maintenance, as well as using predictive and analytical tools to help prevent unexpected interruptions in your production.



#### **Preventative and Predictive**

PackageCARE<sup>™</sup> is proactive. Other companies only replace parts after they have failed.



#### **No Proration**

We are committed to keeping equipment operational at no additional cost.



#### **Trustworthy Pricing**

Competitive agreements increase in price for parts and service labor at the will of the supplier.



#### **Risk Transfer**

Extended warranties on competitive agreements typically cover defects in materials and workmanship, specifically excluding wear and tear, corrosion, etc. PackageCARE<sup>™</sup> covers it all.



#### No Fine Print

The fine print on many agreements with extended warranties allows companies the opportunity to deny claims. Additionally, certain aspects of a repair are not covered, such as consumables or travel. With PackageCARE<sup>™</sup>, there's no fine print.



#### No Paperwork Hassles

Extended warranties require you to maintain certain records or submit information to the supplier, otherwise coverage can be denied.



#### **No Surprises**

Most extended warranty contract language states they can terminate for convenience. With PackageCARE<sup>™</sup>, we cannot walk away.



#### Flexibility

PackageCARE<sup>™</sup> has more flexibility than an agreement with extended warranty. You can add older equipment, dryers and filters or include a rental compressor.





8

# **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.



 $\checkmark$ 

Electronic Assessment

Air Leak Assessment

System Assessment

# **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-free compressors 75-300 kW (100-400 hp)
- 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

# **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.

- Track System Performance
- Increase System Efficiency
- Improve Production and **Reduce Waste**
- Eliminate the Guesswork



**RENTALS & PERFORMANCE SERVICES** 

-1-

OPTIMIZI

( Ingersoll Rand

RENTAL

SERVICES





# **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



EXTEND

### 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> Supertube 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.



### 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.

# **OIL-FLOODED PARTS AND ACCESSORIES**





# **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 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.

(IR) Ingersoll Rand.

11

# 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.





IngersollRandCompressor.com



#### 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



Ingersoll Rand, IR, the IR logo, PAC, PackageCARE, SimplAir and V-Shield are trademarks of Ingersoll Rand, its subsidiaries and/or affiliates. All other trademarks are the property of their respective owners.

Ingersoll Rand compressors are not designed, intended or approved for breathing air applications. Ingersoll Rand does not approve specialized equipment for breathing air applications and assumes no responsibility or liability for compressors used for breathing air service.

Nothing contained on these pages is intended to extend any warranty or representation, expressed or implied, regarding the product described herein. Any such warranties or other terms and conditions of sale of products shall be in accordance with Ingersoll Rand's standard terms and conditions of sale for such products, which are available upon request.

Product improvement is a continuing goal at Ingersoll Rand. Any designs, diagrams, pictures, photographs and specifications contained within this document are for representative purposes only and may include optional scope and/or functionality and are subject to change without notice or obligation.