

# Next Generation R-Series Oil-Flooded Rotary Screw Air Compressors

200-355 kW



# 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.



**Let's Get Started Together**

*Ingersoll Rand Contracting Services Video*





# Why Choose a World-Class Oil-flooded 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 are flexibly designed to have standard and optional features that allow operation both indoors and outdoors within an extended ambient temperature range.

## 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.



### Utilities

Instrument air, pneumatic valves, control cylinders, fuel purging, service air, fuel atomisation, air motors



### 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



### Manufacturing

Proven design to meet demanding manufacturing environments



### Glass

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.



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.



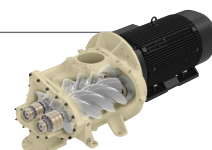
### How it Works

See the R-Series video and product tour

## What Makes Our Oil-flooded Rotary Screw Compressors Unique?

### Optimised Drive Components

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



### 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™ technology provides a totally integrated, leak-free design, featuring O-ring face seals.



### Intuitive Control

The new generation Luminance controller has powerful control and remote management functions, which greatly improve the operation and efficiency management of the machine while ensuring the stable operation of the compressor.



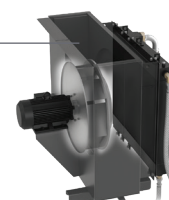
### Adaptive Monitoring

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.





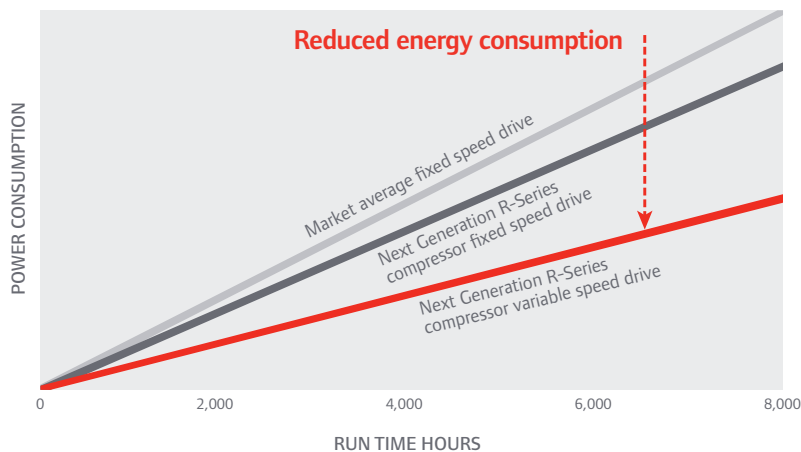
## Next Generation Oil-flooded Rotary Screw Air Compressors, 200-355 kW

### 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 optimised rotor profile to help minimise operating expenses.

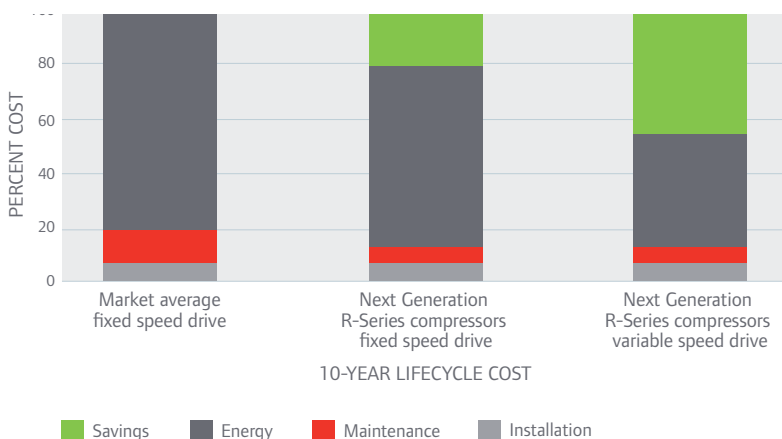
The new rotor profile also provides world-class airflow. With more airflow for the same power input, your compressor requirements are smaller, reducing both investment costs and energy usage.

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



### Driving Toward Next Generation Efficiency

The second-generation R-series RS200-355 series compressors both use advanced compression hosts and IE3 grade TEFC motors, which can reduce the overall cost of ownership.



### Lower Your Total Cost of Ownership

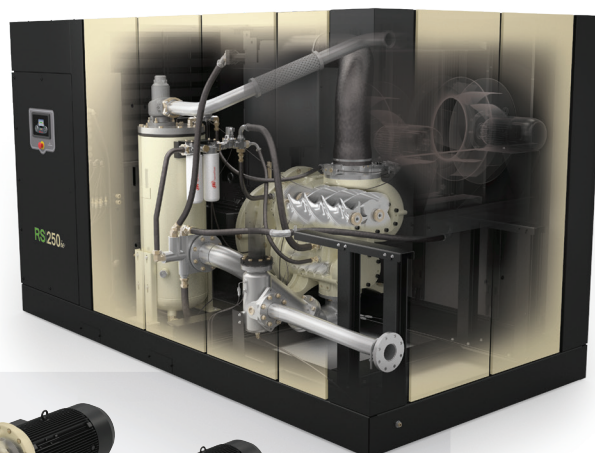
With improved efficiency and more airflow, our Next Generation R-Series compressors significantly reduce energy use, lowering your lifecycle cost.

# AIR COMPRESSORS



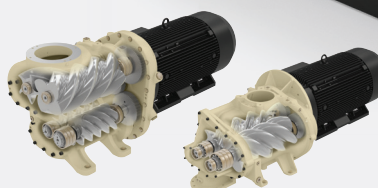
## Innovative Design, Flexible Choices

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

Mix and match motors and airends to achieve the exact level of performance and economy your operation and budget require.



- i** **Efficiency for Constant Demand:** Single stage compressor and reliable high-efficiency IE3 TEFC induction motor
- n** **Efficiency for Variable Demand:** VSD compressor and reliable high-efficiency IE3 TEFC induction motor
- ie** **Premium Efficiency for Constant Demand:** Two-stage compressor and reliable high-efficiency IE3 TEFC induction motor improve performance and efficiency
- ne** **Premium Efficiency for Variable Demand:** VSD two-stage compressor and reliable high-efficiency IE3 TEFC induction motor to improve 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>i</i>	<i>ie</i>	<i>n</i>	<i>ne</i>
▶ Outdoor modification/rain protection *	•	•	•	•
▶ Low ambient temperature protection to -10°C	•	•		
▶ High ambient rating up to 55°C**	•	•		
▶ Premium high dust filtration	•	•	•	•
▶ Harsh water cooling system (water-cooled only)	•	•	•	•
▶ Seawater cooling system (water-cooled only)	•	•	•	•

\* Suitable for air-cooled units

\*\* Suitable for 200 and 315 fixed frequency

Next Generation R-Series – 50 Hz Performance			
Model	Nominal power kW (hp)	Max pressure barg (psig)	Capacity (FAD) m <sup>3</sup> /min (cfm)
RS200i-355i fixed speed	200-355 (250-475)	7.5-10.0 (110-145)	35.7-67.5 (1260-2383)
RS200ie-355ie fixed speed premium	200-355 (250-475)	7.5-14.0 (110-200)	31.0-71.0 (1095-2507)
RS200n-355n variable speed	200-355 (250-475)	7.0-10.0 (100-145)	16.8-68.2 (593-2408)
RS200ne-355ne variable speed premium	200-355 (250-475)	7.0-10.0 (100-145)	18.7-70.0 (660-2472)

# 200-355kW Configuration

Category	Description	Fixed speed <i>i / ie</i>	Variable speed <i>n / ne</i>
Standard Configuration			
Airend	Airend of excellent performance	●	●
Controller	Energy-saving controller, support bilingual Chinese/English	●	●
	Programmable start-stop operation and remote connection	●	●
Progressive adaptive control (PAC™)	Monitor maintenance for filter element and other wearing parts and correspondingly adjust system operating parameters	●	●
	Real-time electronic maintenance indicator and stoppage protection	●	●
Cooling system	Free-floating air cooling system for improved energy efficiency and durability	●	●
	Highly efficient, energy saving and low noise centrifugal fan	●	●
	Used in environment up to 46°C	●	●
	Water separator	●	●
	Non destructive drainage valve	○	○*
V-Shield™ technology	Shock-absorbing pads	●	●
	Using fluorinated sealing materials and reusable leak free connectors	●	●
Auxiliary system	Noise reduction shell	●	●
	Whole machine pre filter screen	●	●
	Long-lasting filter element and separator element	●	●
	Full-load/no-load flow regulation system control	●	
Electric motors and electrical systems	Control panel of IP54/NEMA4 protection grade	●	
	Control panel of IP54/NEMA12 protection grade		●
	Star delta buck starter	●	
	High efficiency enclosed TEFC IP55 electric motor – Grade B temperature rise, Class F insulation	○**	●
	Space heater and resistance temperature detector	●	●
General configuration	Simple single air inlet-outlet pipeline (Single inlet and outlet air duct)	●	●
	12-month warranty program	●	●
Optional devices			
Protection against harsh environment	Outdoor / rain proofing option	○	○
	Protection against low temperature (down to -10°C )	○	○
	Protection against high temperature (up to 55°C )	○	
	High quality and high dust intake filter	○	○
Environment-friendly option	Condensate collection system	○	○
	Ultra FG food grade coolant	○	○
Power supply protection	Power off and restart (PORO)	○	○
	Phase monitoring (protection)	○	○
	Soft starter	○	
General options	Large air volume	○	
	Comprehensive maintenance package	○	○

● Standard configuration ○ Option Configuration

○\* 200-250n/ne is optional  
315-355n/ne as standard

○\*\* 200-250i/ie is optional  
315-355i/ie as standard

'Blank' indicates that this configuration cannot be provided



**i Ingersoll Rand-50 Hz Unit performance**

Model	Max.pressure barg	Nominal power kW	Volume flow (FAD)* m <sup>3</sup> /min	External dimensions (Length x Width x Height) mm	Weight** (Air-cooled/Water-cooled) kg
200i	7.5	200	41.5	3752 × 2150 × 2504	6205 / 6095
	8.5	200	40.0		
	10.0	200	35.7		
250i	7.5	250	50.2		6380 / 6270
	8.5	250	48.1		
	10.0	250	43.0		

**ie Ingersoll Rand-50 Hz Unit performance**

200ie	7.5	200	43.6	4320 × 2150 × 2504 (Air-cooled) 3620 × 2150 × 2504 (Water-cooled)	7480 / 7165
	8.5	200	41.0		
	10.0	200	38.5		
	14.0	200	31.0		
250ie	7.5	250	54.1		7655 / 7340
	8.5	250	50.8		
	10.0	250	46.6		
	14.0	250	38.8		

**n Ingersoll Rand-50 Hz Unit performance**

200n	7.0-10.0	200	16.8-41.2	3752 × 2150 × 2504	6841 / 6731
250n	7.0-10.0	250	16.8-49.2		7161 / 7051

**ne Ingersoll Rand-50 Hz Unit performance**

200ne	7.0-10.0	200	18.7-43.7	4320 × 2150 × 2504 (Air-cooled)	8116 / 7801
250ne	7.0-10.0	250	18.7-53.1	3620 × 2150 × 2504 (Water-cooled)	8436 / 8121

**i Ingersoll Rand-50 Hz Unit performance**

Model	Max.pressure barg	Nominal power kW	Volume flow (FAD)* m <sup>3</sup> /min	External dimensions (Length x Width x Height) mm	Weight** (Air-cooled/Water-cooled) kg
315i	7.5	315	63.0	5000 × 2150 × 2505 (Air-cooled) 3650 × 2150 × 2455 (Water-cooled)	8300 / 6850
	8.5	315	60.0		
	10.0	315	57.0		
355i	7.5	355	67.5		
	8.5	355	65.0		
	10.0	355	62.7		

**ie Ingersoll Rand-50 Hz Unit performance**

315ie	7.5	315	65.0	5000 × 2150 × 2505 (Air-cooled) 3650 × 2150 × 2455 (Water-cooled)	8760 / 7750
	8.5	315	63.0		
	10.0	315	59.0		
	14.0	315	49.0		
355ie	7.5	355	71.0		
	8.5	355	70.0		
	10.0	355	65.0		
	14.0	355	52.0		

**n Ingersoll Rand-50 Hz Unit performance**

315n	7.0-10.0	315	17.8-62.3	5000 × 2150 × 2505 (Air-cooled)	8404 / 7250
355n	7.0-10.0	355	17.5-68.2	3650 × 2150 × 2455 (Water-cooled)	

**ne Ingersoll Rand-50 Hz Unit performance**

315ne	7.0-10.0	315	18.3-64.4	5000 × 2150 × 2505 (Air-cooled)	9330 / 8000
355ne	7.0-10.0	355	18.3-70	3650 × 2150 × 2455 (Water-cooled)	

\*FAD (volumetric flow rate) is the operating parameter of the entire machine, measured according to the testing standard in Appendix C of ISO1217:2009

\*\*Weight deviation for reference only

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
- **Intuitive microprocessor control** for easy operation
- **Corrosion-free heat exchanger** design for reliable 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
- **Low pressure drop design** saves energy
- **High-strength desiccant** and durable valves
- **Advanced microprocessor control** is easy to use and maximises 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 shutdowns 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:**



### Package CARE™

- Greatest value
- Equipment risk transfer
- Foreseeable service costs
- Scheduled maintenance and all repairs
- No production interruption



### Planned CARE™

- All planned maintenance
- Predictable, on-time
- Preventative diagnostics
- Coverage on airend components



### Parts CARE™

- Genuine OEM parts at an agreed-to price
- Planned parts inventory
- Experienced support
- Fixed parts price

## 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.

### Superior Experience

Ingersoll Rand factory-trained service technicians are backed by more than 160 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 can focus on what's important to your business.





## Reforge of REMAN

Air compressors operating under high temperature and loading for long suffer from descent performance over time due to mechanical wear, air corrosion, aging or improper use and service. Ingersoll Rand reforge of REMAN safeguard your air compressors with professional, reliable and quick services, including overhaul and replacement of the entire machine, airend, motor and coolers.

## Performance Services



### Electronic Assessment

By identifying, analysing and correcting problems throughout your system - wherever they occur - our global service team can reveal the root cause through big data analysis, and then recommend highly cost-effective solutions to keep your profitability maximized and total operation cost reduced.



### Air Leak Assessment

- Track system performance
- Increase system efficiency
- Improve production and reduce waste
- Eliminate misjudgment



### System Assessment



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.

## Genuine Parts

By virtue of our powerful global supply chain system, Ingersoll Rand has been able to provide various high-quality genuine parts, maintaining an efficient and reliable operating state of your equipment.



### Ultra Coolant

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



### Service Kit

It covers the parts to be regularly replaced due to normal wear, and also provides repair assembly of main parts for normal and smooth operation of the machine.



### Ultra FG

Food Grade Lubricant

- USDA/NSF H-1 class certified for occasional food contact environment
- Contaminants broken down and neutralized to prevent pathogen spreading
- Excellent chemical stability for better protection of air compressor components



### Xe series intelligent controllers

the culmination of improving reliability, efficiency, and productivity

- Beautiful and intuitive user interface, with key parameters clearly visible at a glance
- Advanced control algorithms to enhance performance and reliability
- Built in Ethernet, supports local network remote browsing and email reminders
- Rich data interfaces
- Multi language support



### Built-in Filter

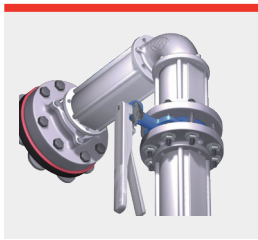
Our advanced compressed air filters reduce contamination in your air stream to help protect finished goods, critical processes and valuable equipment.



### System Automation and Control

As much as 20% to 60% of the energy used to operate compressed air systems is saved by Ingersoll Rand's turn-key solutions, from single-machine regulation to power distribution, speed regulation and centralized control of the whole station building. Centralized control system achieves all-round real-time monitoring and control, effectively reducing operating cost via guard-free station building.

# OIL-FLOODED PARTS & ACCESSORIES



## SimplAir® Piping System

Traditional steel pipeline has such disadvantages as long installation period, inconvenient modification, large pressure loss and a tendency to rust which impair the compressed air quality. Ingersoll Rand SimplAir piping system, with its unique design and performance, effectively solves these problems for our customers, and saves energy.



## Condensate Management

Ingersoll Rand no-loss electronic and pneumatic drains, along with our oil/water separators, are the most reliable, durable and energy-efficient way to remove condensate for customers.



## Heat Recovery

Energy cost of air compressor may exceed 10% of total power cost of most manufacturing enterprises, while about 85% energy consumed in practical operation of air compressor is converted into heat, which is cooled through the air compressor or dissipated into the atmosphere. Ingersoll Rand air compressor heat recovery system recovers as much heat wasted as possible to meet process or domestic heat demand while ensuring normal, reliable operation of the air compressor. Oil-spray, oil-free and centrifugal heat recovery is available.

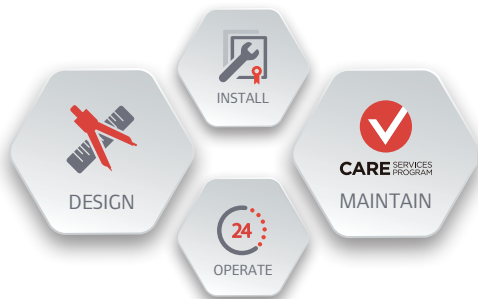


## Installation Solutions

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.

## 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 Inc. (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to Making Life Better for our employees, customers, shareholders, and planet. Customers lean on us for exceptional performance and durability in mission-critical flow creation and industrial solutions. Supported by over 80+ respected brands, our products and services excel in very 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).



#### **Contact Ingersoll Rand**

Add.: F11, L'Avenue, 99 Xianxia Road, Shanghai  
Tel.: 021-22216000  
Website: [www.IngersollRand.com](http://www.IngersollRand.com)

**24h National Toll-free  
Service Hotline:**

**800 820 2128  
400 820 2128**