RM Series Oil-Flooded Rotary Screw Compressors

90-160kW

Reliability · Efficiency · Energy-saving

Ingersoll Rand®

Ingersoll Rand Industrial Intelligence Helps Your Business

Ingersoll Rand works to keep you ahead of your competition with advanced compressed air systems that boost productivity, lower operating expenses and extend equipment life. These innovations are designed into every Next Generation RM-Series oil-flooded rotary screw air compressor—industry-leading airend enhancements for superior efficiency, world-class delivered capacity and exceptional reliability. All supported by unique advantages, including expert design and engineering, a comprehensive suite of support programs and long-life Ingersoll Rand-branded consumables.

Next Generation RM-Series compressors. The intelligence you need—to win.

Global Presence, Local Service

Manufacturing Facilities

Buffalo, NY, US
Campbellsville, KY, US
Mocksville, NC, US
West Chester, PA, US
Curitiba, Brazil
Unicov, Czech Republic
Wasquehal, France
Oberhausen, Germany
Fogliano, Italy
Milan, Italy
Vignate, Italy
Ahmedabad, India
Shanghai, China
Wujiang, China

Global Distribution Centers

Charlotte, NC, US
Genk, Belgium
Singapore
Shanghai, China

Efficient Operation and Powerful Information

We Started At The Core

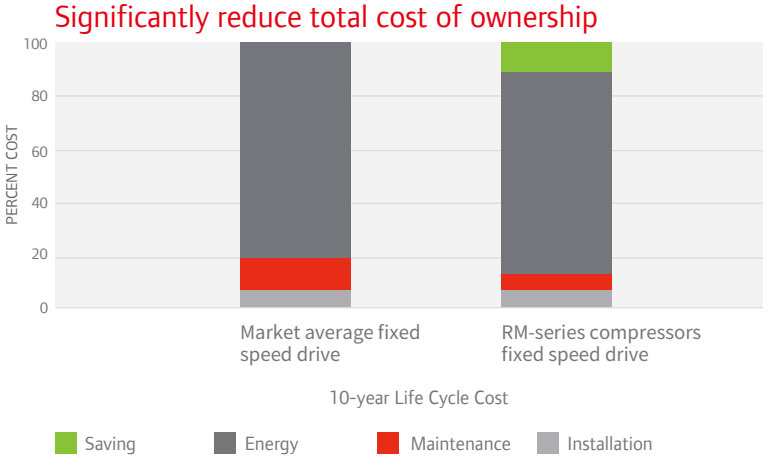
When we made the Next Generation RM-Series we started with an all-new, state-of-the-art airend, making it your best choice for performance. The new airend improves efficiency as much as 15% through several advancements, including an optimised rotor profile to help minimise operating expenses. The new rotor profile also provides world-class airflow, delivering up to 9% more than previous models. With more airflow for the same power input, your compressor requirements are smaller, reducing both investment costs and energy usage, to lower your total cost of ownership.

Knowledge Is Power

The best compressors deliver air and actionable information. That's why every Next Generation RM-Series compressor includes an intelligent controller that monitors key operations and adjusts system parameters to maximise uptime and minimise energy consumption. It gives you real-time facts to make and execute informed decisions…from virtually anywhere in the world.

Driving Toward Maximum Efficiency

Every RM-Series compressor's drive motor features a highly efficient airend, in combination with motor meeting IE3 energy-efficiency standards, helping you save up to 12-30% on energy costs.



Rotary comparison at 79% average volume capacity; 4000 hours per year; 0.05$/kWh

Luminance Controller

With powerful control and remote management capability, new generation Luminance controller of Ingersoll Rand guarantees steady operation and also greatly improves operating and management efficiency of your unit.

Le Controller Features

More User-friendly Interface

- High-resolution 7.6″ touch screen
- More intuitive key parameter & information display

More Advanced Algorithm

- Advanced controller algorithm for smaller pressure fluctuation and lower energy consumption
- Sequencer for up to 8 compressors with Luminance and no other system controllers

More Efficient Management

- Built-in Internet connection for efficient remote management of operating status and maintenance schedule of the unit
- Automatic alarm & fault reminder and performance report sending

Easier Upgrade

- Modular design for easier iterative upgrade of software functions and continuous improvement of user experience

Steadier Performance

- Fully isolated design with stronger anti-interference capability and better electromagnetic compatibility
- Used in a variety of operating ambient conditions and operating life of at least 40,000 hours for 5 years

Stronger Core

- Multi-core processor for significant improvement of computing speed and communication capability
- Significantly reduce data collection and operation interface delay for more timely communication

Shorter Scheduled Downtime

Better performance of the unit

Visual Maintenance Plan

A panoramic view of maintenance plans under control

Timely Maintenance

Longer service life of the unit

Lower Malfunction Risk

Minimized unscheduled downtime

Quick Contact With Product Experts

Better professional insights

Service Contract

PackageCARE™

when the agreement becomes effective, all operating risks transfer from you to us to free you from any concerns. You will enjoy 100% o perating risk transfer for any machine model and life.

PlannedCARE™

PlannedCARE: all-round genuine spare parts and maintenance services

You will enjoy preventative diagnosis, current state analysis & trend judgment; 10 years' airend warranty (for new oil-flooded rotary screw air compressor)

PartsCARE™

PartsCARE: genuine spare parts for daily maintenance

You will enjoy regular shipment of spare parts and daily maintenance reminder, 5 years' airend warranty (for new oil-flooded rotary screw air compressor)

Peace of Mind

Lower TCO

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.

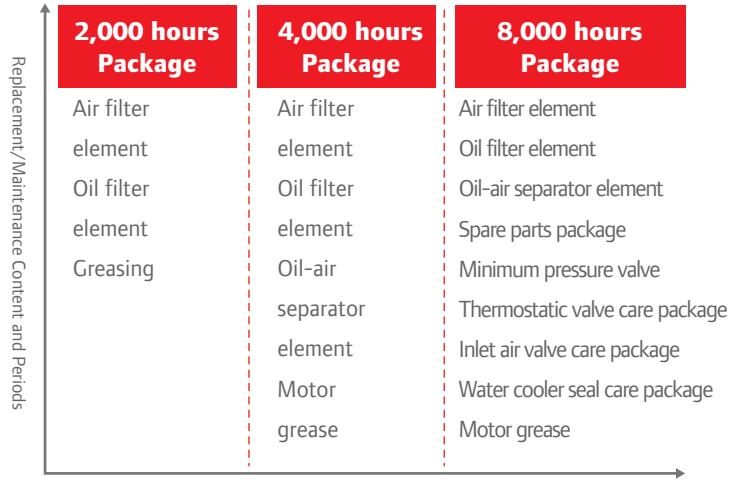
Efficient Energy Use

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,

Maintenance Service Package



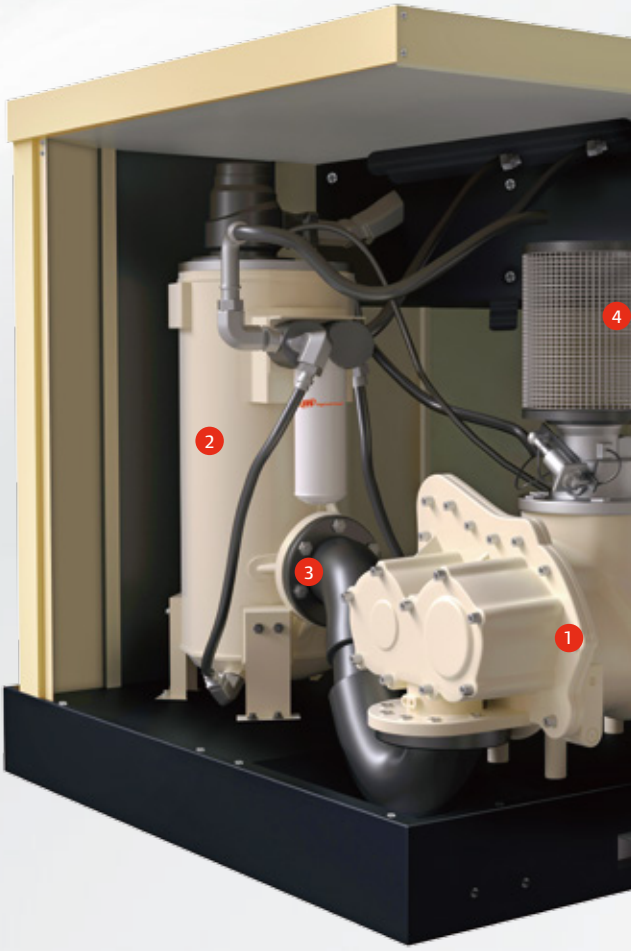
Reliability: constant air quality guarantee with genuine spare parts
Scheduling: regular maintenance & care as planned to decrease failure probability and increase operating stability
Efficiency: one chart No. replacing a number of spare parts lists to increase procurement & management efficiency
Comprehensiveness: all parts and components required for maintenance or service at a time are included for shorter lead time than individual parts
Economy: visual service cost budget and superiority in price to purchase of individual parts

One-stop service with OEM quality guarantee

The Elements Of Smart Design

1 Efficient

New design of high efficiency airend brings up to 15% increase of efficiency, up to 9% increase of air capacity, and long life reliable operation.



2 Reliable

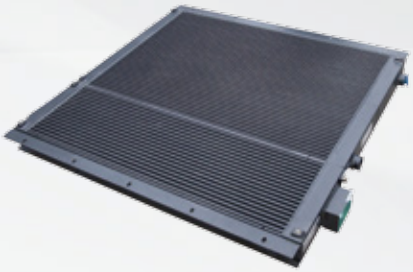
Three-stage separation system with conical baffle removes all but 3 ppm of lubricating oil from delivered air—protecting downstream equipment and extending filter life—to maximise productivity and minimise expenses.

3 Robust

V-shield™ technology uses plane-sealed O ring that helps deliver repeatable, leak-free connections.

Intelligent

Luminance controller enables real-time system parameter monitoring. keeps you informed of compressor status and alarms to exempt you from losses due to unexpected sudden shutdown.



6 Reliable / Efficient / Easy To Maintain

Unwelded oil / after-cooler horizontally arranged in parallel on top of the unit decreases distortion & leakage caused by heat stress, increases reliability, extend service life, reduce maintenance work, and reduce customers' use cost during life cycle of the unit and improve their productivity.

5 Motor

Premium IEC60034-30 IE3 motor enables IP55 protection grade and Class F insulation with Brise.

4 Efficient / Superior In Productivity

The air intake system with large-allowance inlet air and low pressure drop air filter effectively reduces inlet air pressure and improve efficiency of the unit, and reduces maintenance work and cost to facilitate the production for customers.

High Dust Filtration Options:

Various dust filter options provide an effective solution for operation in dusty environment, including the following filter upgrade:
Air filter upgrade – As a heavy-duty high-capacity filter enclosed in the housing and used in dirty & dusty environment, it is divided into 2 separation stages: larger dust particles are mechanically separated & injected in the primary centrifugal separation stage, and then enters into high-capacity dry element. The minimum filtration efficiency of 3 μm filter is 99.0% (for ISO 12103-1 A2 fine dust, the velocity is 15cm/s).

55℃ High Temperature Unit Options:

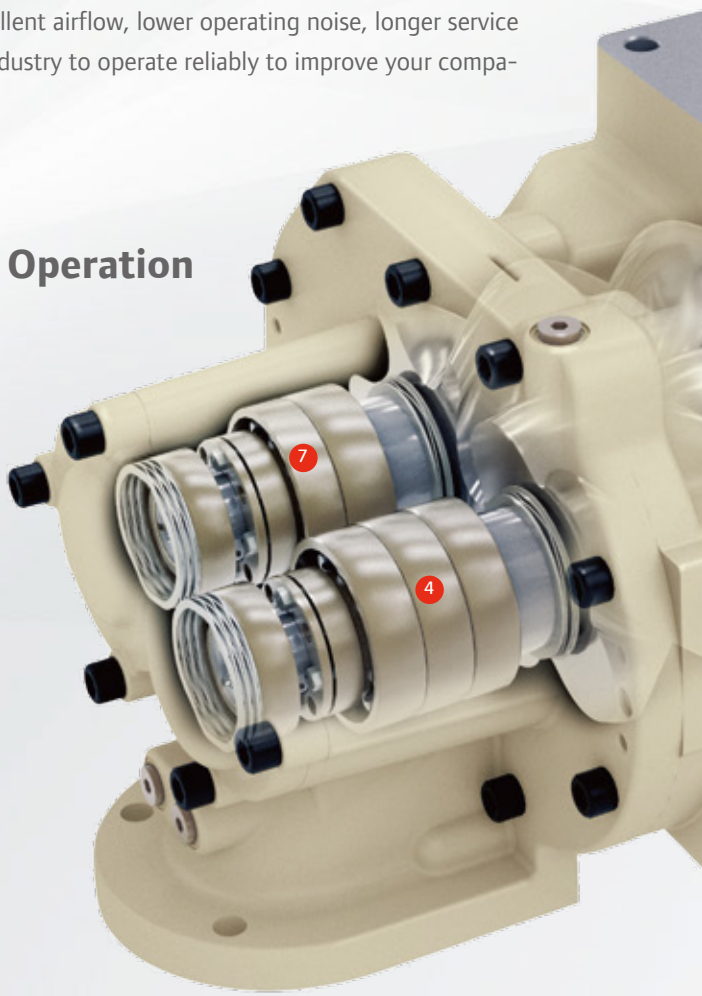
High temperature options allow the compressor to operate in ambient temperature of 2-55℃*.

The option is applicable to 90 and 132kW units.

The Airend—the Heart Of Every Compressor

Air compressor use accounts for a significant part of your energy costs. Designed using advanced computer modeling techniques, our team of skilled engineers have optimized the airend to be with 16% higher efficiency, excellent airflow, lower operating noise, longer service life and higher reliability well known in the industry to operate reliably to improve your company's bottom line.

Designed For Long Life And Reliable Operation



1. Strategically positioned lubrication points effi ciently deliver oil exactly where it's needed, improving reliability and lowering power consumption

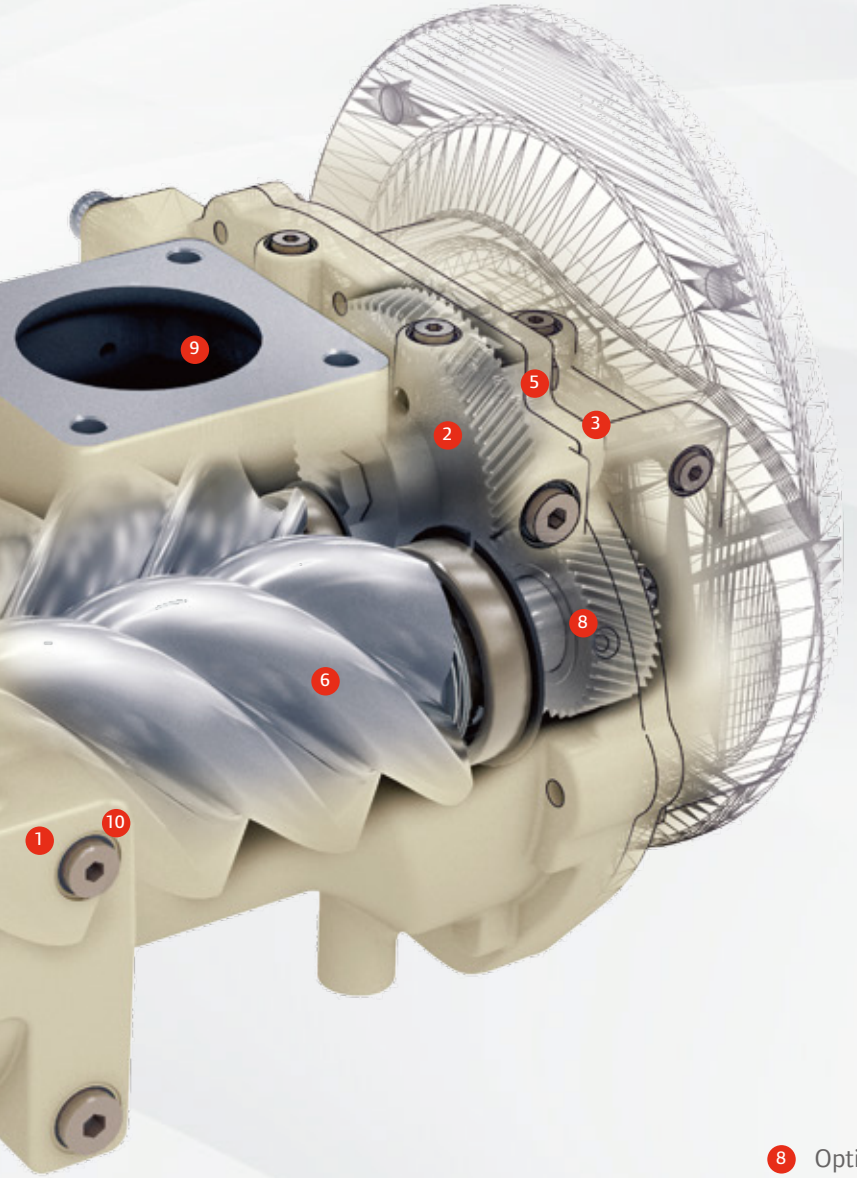
2. Advanced gear transmits drive power more efficiently and reliably

Integral Gearbox

3. Integral gearbox reduces windage losses and drivetrain length for more efficient performance and easier serviceability

4. Enhanced bearing arrangement reduces resistance and improves power management for maximum reliability and performance

5. Maintenance-free, sealed drive system requires no regular service and protects against damaging dirt and moisture



World-class Energy Efficiency

Advanced Rotor Profile

6 Optimised rotor profile helps deliver up to 15% increased efficiency and 9% more airflow, reducing energy cost.

7 Lower friction bearing arrangements improve energy efficiency

8 Optimised gear lubrication increases reliability and reduces power consumption through strategically injecting oil into gear mesh

9 Streamlined inlet and outlet flow passage reduces pressure drops

10 Optimised oil-injection process lowers temperature and increases efficiency during compression

Air Treatment

Moisture and contamination in compressed air cause significant problems in equipment operation, such as rust, scale and clogged orifices that result 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

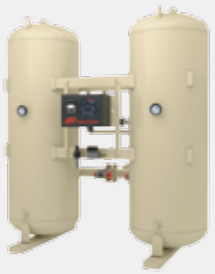
Our cost-effective refrigerated dryers provide clean, dry air for most industrial applications. Choose efficient cycling dryers to maximize energy savings or non-cycling dryers for a lower initial cost

Refrigerated Dryer Features

- Dew points as low as 3°C (38°F), meeting ISO Class 4 requirements
- Corrosion-free heat exchanger design for reliable operation
- Intuitive microprocessor control for easy operation
- Compact design for easy service-ability

Cost-effective Operation

Choose refrigerated dryers for lower capital, operating and maintenance costs for many industrial applications.



Better Performance

Dehumidification dryer can be used at low dew point and for higher air quality in your applications.

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 heated blower desiccant models.

Desiccant Dryer Features

- Deliver reliable -40℃ 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

90-160kW Performance

Model	Max. Pressure barg - 50HZ	Nominal Power kW	Capacity m^3/min	Dimensions (mm) (L x W x H)	Weight (air/water-cooled) kg
RM90i_A7.5/W7.5	7.5	90	16.5	2455 x 1586 x 1670	2262 / 2266
RM90i_A8.5/W8.5	8.5	90	16.4	2455 x 1586 x 1670	2262 / 2266
RM90i_A10/W10	10	90	15.1	2455 x 1586 x 1670	2262 / 2266
RM110i_A7.5/W7.5	7.5	110	20.8	2455 x 1586 x 1670	2590 / 2602
RM110i_A8.5/W8.5	8.5	110	20.0	2455 x 1586 x 1670	2590 / 2602
RM110i_A10/W10	10	110	18.0	2455 x 1586 x 1670	2590 / 2602
RM132i_A7.5/W7.5	7.5	132	25.5	2520 x 1598 x 1740	3159 / 3122
RM132i_A8.5/W8.5	8.5	132	24.8	2520 x 1598 x 1740	3159 / 3122
RM132i_A10/W10	10	132	22.0	2520 x 1598 x 1740	3159 / 3122
RM160i_A7.5/W7.5	7.5	160	30.6	2520 x 1598 x 1740	3234 / 3241
RM160i_A8.5/W8.5	8.5	160	30.0	2520 x 1598 x 1740	3234 / 3241
RM160i_A10/W10	10	160	26.4	2520 x 1598 x 1740	3234 / 3241

90-160kW Configuration

Standard Configuration Category	Description	Fixed Speed *i*
Airend	Airend of excellent performance	●
Controller	Energy-saving controller, available in Chinese and English	●
	Programmable start-stop operation and remote connection	●
	Built-in sequence control program to jointly control up to 8 compressors	●
	Monitor maintenance for filter element and other wearing parts and correspondingly adjust system operating parameters	●
	Real-time electronic maintenance indicator and stoppage protection	●
	Standard Modbus RTU protocol, RS485 interface	●
Cooling system	Highly efficient, energy saving and low noise fan	●
	Used in environment up to 46℃	●
V-Shield™ technology	shock-absorbing pads and high-class flexible metal hose	●
	Recyclable fluorinated material for non-leakage seal	●
Auxiliary system	Noise-reducing housing of the unit	●
	Dust pre-filter mesh for the whole machine	●
	Long-lasting filter element and separator element	●
	8,000-hour Ultra Coolant™	●
	Full-load/no-load flow regulation system control	●
Master motor & electrical system	Control panel of IP54/NEMA4 protection grade	●
	Star triangle buck starter	●
	High efficiency enclosed TEFC,IP55 electric motor – Grade B temperature rise, Class F insulation	●
General configuration	Simple single air inlet-outlet pipeline (single air inlet and single air outlet)	●
	12-month warranty program	●
Options		
Protection against harsh environment	High temperature protection (up to 55℃)*	○
	Dusty intake air filter	○
Environment-friendly option	Food-grade coolant Ultra FG	○

● Standard ○ Optional *90 and 132kW units can reach the temperature.

Ingersoll Rand

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 product portfolio covers multiple areas, including air compressor, pump, blower, flow management, loading, power tools and material lifting system, as well as famous multi-functional Club Car. Our 16,000+ employees worldwide develop customers for life through their daily commitment to expertise, productivity and efficiency. For more information, visit www.IRCO.com.

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