



Oil-Free Scroll Air Compressor Systems

2-37 kW



ISO 8573
Class 0
Oil-Free Air

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-free scroll compressed air technologies and services. By focusing on you and your business, we provide collaborative solutions that make you successful, offering a total systems approach to maximise efficiency and performance.

Take a Systems Approach

Delivering reliable oil-free compressed air to your facility goes well beyond the compressor itself. Optimise total cost of ownership (TCO) with a systems approach that delivers industry leading value through experienced installation and maintenance support, genuine OEM parts, accessories and consumables that extend the life of your system.

Your business will benefit from Ingersoll Rand's partnership. Through our extensive experience and global expertise we help to ensure reliability, lower maintenance costs and ease of serviceability.

Let's Get Started Together

Throughout the entire lifecycle, our systems approach helps you achieve the lowest operating cost.





When High Air Purity is a High Priority

There's a lot riding on the quality of your air. The presence of particles, condensation, oil and oil vapor in a compressed air system can lead to downtime, product spoilage and recall, damage to your brand reputation, or worse, harmed consumers and product liability.

For reliability

A robust product and system design delivers top quality air, protecting sensitive downstream equipment, lowering maintenance and extending equipment life

For productivity

The use of an oil-free Class 0 certified compressor guarantees contaminationfree air, eliminating the risk of product spoilage and waste

For serviceability

Our oil-free equipment is designed specifically to make maintenance easy by providing clear access to consumable components

For lower cost of ownership

Higher initial costs for oil-free systems are more than offset by lower operational and maintenance costs over a system's life to maintain the highest air quality

Class 0 ISO 8573 Oil-Free Air

ISO 8573-1 Air quality grade

Quality grade	Oil and oil vapor mg/m ³
0	< 0.01
1	0.01
2	0.1
3	1
4	5

Class 0 is the most stringent air class defined by ISO 8573, part 1. Our W-Series oil-free scroll compressors are Class 0 for no oil content to ensure your air quality exceeds specifications.

Oil-Free Scroll Compressors for Your Application

Ingersoll Rand offers a wide portfolio of reliable oil-free products that will adapt to your industry and application. We will assess and propose the best oil-free solution to increase the productivity of your installation, **providing zero risk of contamination of your final product.**



Hospitals, Labs, Universities



Pharmaceutical, Biotech



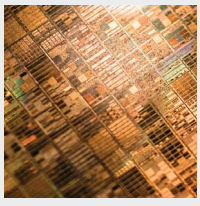
Medical Devices, Plastics



Canning, Beverages, Brewery



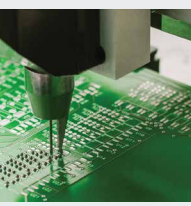
Glass Manufacturing



Electronics, Semiconductor



Food Processing



Electronics Assembly



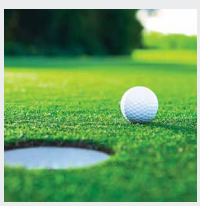
Textiles Industry



Bottling, Distillery



Printing Industry



Turf Management

AIR COMPRESSORS

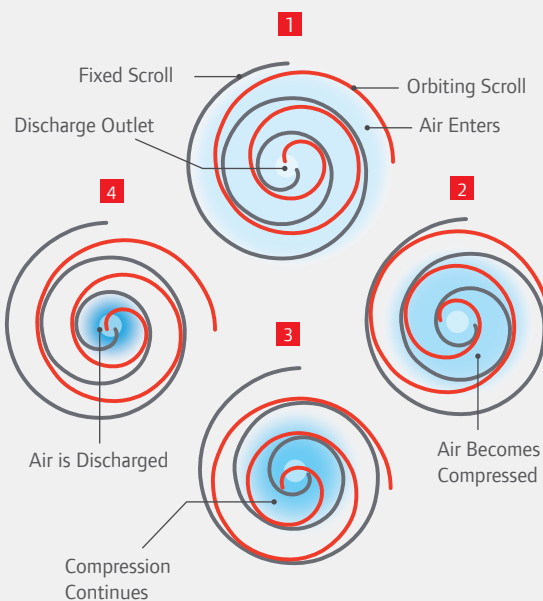


When quiet operation, low maintenance and a small footprint are critical, scroll air compressors are the smart choice. Their compact and innovative design make them ideal for many commercial applications where reliable, oil-free air is required.

How Scroll Compressors Work

Scroll compressors use two interlacing spiral scrolls to pump, compress and pressurise air.

- 1** One scroll remains in a fixed position, while the other scroll orbits around it without rotating.
- 2** This motion traps the air in the pockets between the two scrolls, and pushes the air towards the center. As the air moves closer to the center, the pockets become smaller, and the air is compressed.
- 3** The process constantly repeats to maintain suction.
- 4** Once the air reaches the center, it is discharged through an outlet.



**NO OIL
ANYWHERE !**

None in the compressor
None in the air
None in the condensate



Scroll Compressor Advantages

Smaller footprint	►	Takes up less floor space
Fewer components	►	Higher reliability, longer life, less maintenance
Lower sound level	►	Healthy work environment
100% oil-free	►	Can be used in any industry
Use less consumables	►	Longer service intervals and life
No metal friction	►	Less maintenance
Zero emissions	►	Meets goals for sustainability
Fewer moving parts	►	Lower vibration

100% Oil-free Air

The simple tip seal design of a scroll compressor ensures no metal-to-metal contact anywhere. Therefore, the technology does not require lubrication, ensuring high-quality, oil-free air.



W17i 压缩机

Clean, Quiet and Efficient

Our scroll compressors pack tremendous value into a small, efficient package.



W37i COMPRESSOR



W33i COMPRESSOR



W22i COMPRESSOR

What Makes Our Oil-Free Scroll Compressors Unique?

Efficient Design and Control

Our scroll compressors deliver more flow per kW and reach pressures up to 10 barg in a single stage of compression. We achieve this efficiency through design features such as:

- Start/stop control that minimises wasted energy in unloaded conditions
- A dual-inlet airen design for stable and efficient compression
- Aluminum shell reduces overall product weight



Multiplex Design

The ability to multiplex the design for part-load efficiency means you can operate the exact number of compressors to match your demand.



Cool Operation

Our generously sized fan insures cool operation and longer life of your components.



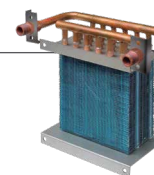
Microprocessor Control

Manages discharge pressure to meet your air demand, while measuring key operating parameters to reduce unwanted downtime.



Cooler Discharge Air Temperature

Aftercooler is included in all packages to cool the discharge air with forced air fans included in the enclosed models to insure heat is removed.



Multi-head rotation control

Through detecting the running time of each machine and the unit rotation time, the controller will keep the machines of each unit running for the same time as far as possible to reduce the user's maintenance cost.

Restart after power failure

The air compressor automatically resumes the operating state before the power failure.

W-Series Features and Specifications

STANDARD FEATURES

Inlet filtration with replaceable element	Pressure gauge
On/Off switch*	Automatic start/stop operation*
Power on light*	Control voltage starter with motor overload protection*
High temperature shutdown with indication light*	Air-cooled aftercooler
Run time hour meter*	Rugged motor sized for duty with ingress protection

* Included on front-mounted control panel

W-Series-50 Hz Performance

Model	Max Pressure barg	Nominal Power kW	Air Flow m ³ /min	Connection Size BSPT	Dimensions (LxWxH) mm	Weight kg	Sound Level dB (A)
W2i-A8	8	2.2	0.24	0.5	830 x 740 x 910	204	58
W2i-A10	10	2.2	0.21	0.5		204	58
W4i-A8	8	3.7	0.40	0.5		231	58
W5i-A8	8	5.5	0.60	0.5		240	59
W5i-A10	10	5.5	0.53	0.5		240	59
W7i-A8	8	7.7	0.84	1	1445 x 800 x 1000	438	62
W7i-A10	10	7.7	0.74	1		438	62
W11i-A8	8	11	1.20	1		495	64
W11i-A10	10	11	1.06	1		495	64
W17i-A8	8	16.5	1.86	1	1140 x 800 x 1680	616	64
W17i-A10	10	16.5	1.65	1		616	64
W22i-A8	8	22	2.48	1	1140 x 800 x 2140	789	65
W22i-A10	10	22	2.2	1		789	65
W33i-A8	8	33	3.72	1.5	1600 x 1140 x 1680	1161	66
W33i-A10	10	33	3.3	1.5		1161	66
W37i-A8	8	37	4.34	1.5	1600 x 1140 x 2140	1360	67
W37i-A10	10	37	3.85	1.5		1360	67



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.

Universal Filter

Ingersoll Rand's advanced F-Series compressed air filters effectively reduce contaminants in the air system to protect critical processes and valuable instrumentation. Rigorously tested and integrated with superior components, filters are ensured to provide long-lasting and high-quality compressed air.



- Dual-pointer differential pressure indicator as standard respectively shows pressure drop and economic operating efficiency
- Uniquely designed smooth deflector insert Holes inserts airflow into the filter cartridge, reducing turbulence and pressure loss.
- Precision die-cast aluminium case is suitable for applications at a maximum operating temperature of 80° C (176° F) and a maximum operating pressure of 17 bar g (250 psig).
- Cartridges with stainless steel screens can withstand high differential pressures while reducing the throttling effect of the cartridge.
- Ergonomic filter cup is designed for contactless and easy cartridge replacement

Refrigerated Dryers

Cost-effective refrigerated dryers provide clean, dry air for most industrial applications. Cycling dryers maximise energy savings, while non-cycling dryers minimise initial cost.



- 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

OEM Parts and Services

Ingersoll Rand is your trusted partner for the long haul. Our services include skilled project management and installation for start-up, system expansion or decommissioning, as well as flexible maintenance programs that meet your specific requirements. And our genuine OEM parts ensure that your compressor is running reliably and efficiently.

Installation



- Project management services



- SimplAir® piping systems



- Air system accessories

Maintenance Programs



- PackageCARE™ full risk transfer



- PlannedCARE™ planned maintenance

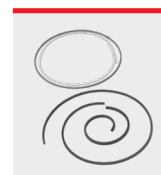


- PartsCARE™ parts and assistance

Genuine OEM Parts



- Filters (annually)



- Tip seals and grease (2-4 years*)



- Replacement airends (4-8 Years*)

*Part life depends on application and use—higher pressure designs will require maintenance sooner.



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.

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