



# MSG TURBO-AIR NX

Centrifugal  
Compressed Air Systems

250–5,650 hp  
185–4,200 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.

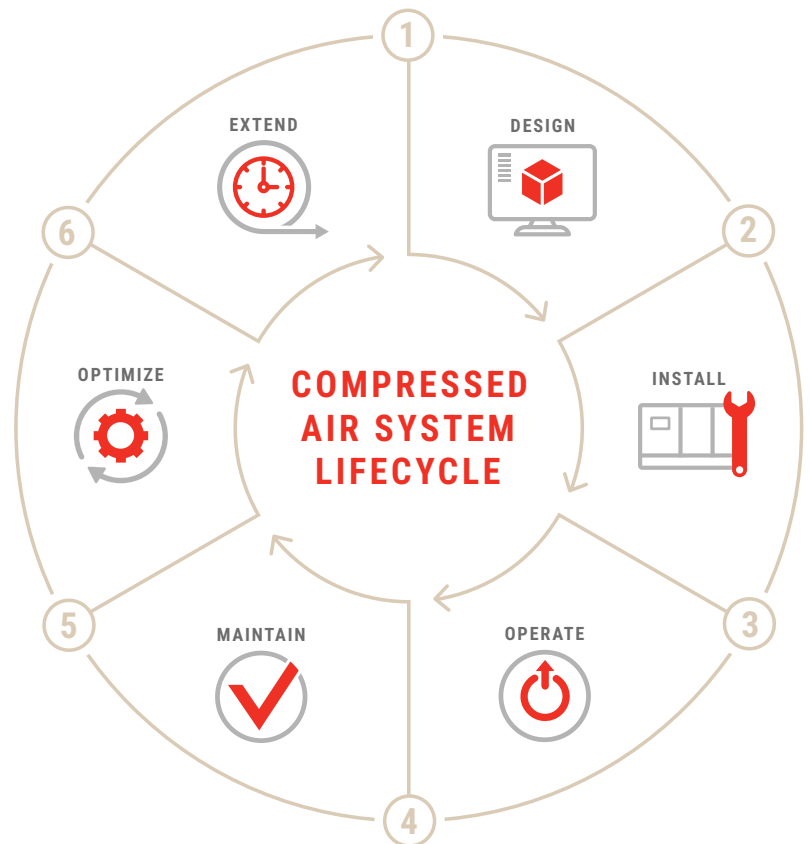
No matter the industry or application, you can count on Ingersoll Rand® as a trusted partner for centrifugal compressed air technologies and services. By focusing on you and your business, we provide collaborative solutions that make you successful, offering a total system approach to maximize efficiency 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.

Your business will benefit from a partnership with Ingersoll Rand through our extensive experience and global expertise to ensure reliability, lower maintenance costs, ease of serviceability and system optimization.



Let's Get Started...  
**Together**

 Watch the Ingersoll Rand Contracting Services Video






# Proactive Maintenance and Support

A proper maintenance strategy is crucial to avoiding downtime and production interruptions. By choosing a CARE maintenance agreement, you are investing in your future with a trusted partner. We can customize a program that best fits your needs, from total risk transfer of your equipment to Ingersoll Rand to a more basic program for parts and services only.



## CARE SERVICES PROGRAM

	Preferred OEM Parts Pricing	Equipment Inspection & Diagnostics	Scheduled Maintenance Service	Operational Risk Transfer
 <b>Package CARE™</b> A fixed cost, no surprises service agreement designed to eliminate the inconvenience associated with maintaining and servicing your compressed air system.				
 <b>Planned CARE™</b> A cost-effective plan for scheduling and executing all required compressed air equipment services over the course of a year.				
 <b>Parts CARE™</b> A service program that includes automated shipments of, or reminders to, deliver OEM parts at an agreed upon price, to keep the compressor operating as efficiently as possible.				

 Learn About the Health of Your Air System





## What Makes Our MSG TURBO-AIR NX Centrifugal Compressors Unique



### Efficient Design

Highly efficient aerodynamic components combine with low mechanical losses and power conserving IGV to provide up to 5% better specific power than competitive models.



### Robust Reliability

Industry-leading reliable design with time-tested split pinion bearings, AGMA 12 or 13 gearing, a robust thrust management system and stainless steel compression elements.



### Smart Control, Seamless Support

The MXS Controller offers intuitive touch-screen operation and on-board IOT connectivity for peak compressor performance. With built-in edge devices and CARE packages, Ingersoll Rand is just a signal away for real-time monitoring and service.



### Less Downtime

Our compressors are designed to simplify installation and maintenance, including a single-point electrical connection, a horizontally split gearbox and cleanable in-place cooler bundles.

## Configured for Your Application

MSG TURBO-AIR NX centrifugal compressors are completely packaged on a common base to reduce footprint and are available in a number of configurations to meet your system requirements.

 See Our Entire Portfolio of Centrifugal Products



MSG TURBO-AIR NX 2500

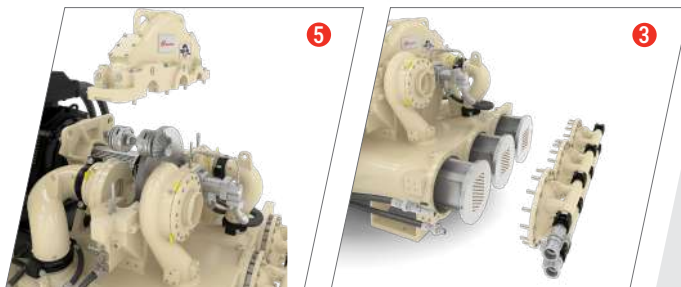


## Purely Efficient Centrifugal Technology

The MSG TURBO-AIR NX Series offer best-in-class efficiency, maximum uptime and hassle-free, low-cost installation, operation and maintenance. The complete package offers a number of innovations that are standard, along with options that can be customized for your specific operation.

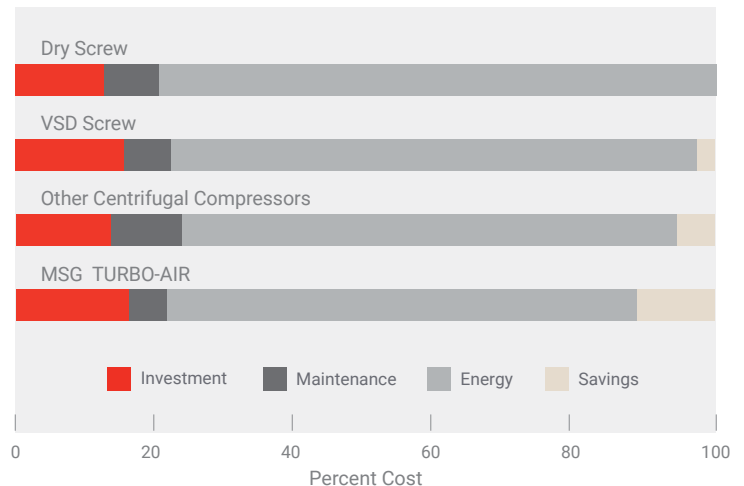


- 1 World-class drive motors to meet your specific size requirements
- 2 The MXS Controller provides intuitive system management from virtually anywhere
- 3 Cooling System designed in compliance with ASME
- 4 Condensate System with easy-to-access condensate connections
- 5 Pivot shoe bearings or hydrodynamic bearings (model specific) enhance mechanical reliability



## Low Total Cost of Ownership

Energy use is the biggest long-term cost of running a compressed air system, especially with today's changing energy prices. To understand your return on investment, consider the full life-cycle cost—including the purchase price, energy use, and maintenance.








Features and options may not be available on all models. Visit our website or contact your Ingersoll Rand representative for more information.



## Purely Efficient Centrifugal Technology

Integrally geared centrifugal compressors represent the latest technology, offering significant advantages over outdated, less-efficient and more costly compressor designs. Compare the innovative technology of the MSG® TURBO-AIR® NX with other compressors, and the advantages are clear.

MSG TURBO-AIR COMPRESSORS	OTHER COMPRESSORS
<p><b>LOW MAINTENANCE</b></p>  <ul style="list-style-type: none"> <li>• Compression elements do not wear or require periodic replacement</li> <li>• Oil filter elements are easily replaced</li> <li>• Bearings designed for extended life</li> </ul>	<ul style="list-style-type: none"> <li>• Require regular maintenance and periodic replacement of airends</li> <li>• Result in high operating expenses and significant machine downtime</li> </ul>
<p><b>OIL-FREE AIR</b></p>  <ul style="list-style-type: none"> <li>• 100% oil-free per ISO 8573-1 certification</li> <li>• Prevent contamination of system</li> </ul>	<ul style="list-style-type: none"> <li>• Oil filters must be installed at discharge</li> <li>• Potential for oil carryover that fouls the process</li> </ul>
<p><b>RELIABILITY</b></p>  <ul style="list-style-type: none"> <li>• Centrifugal compressors are proven to have a long meantime between failures (MTBF), and independent research has shown an industry-leading availability of 99.7%</li> <li>• Conservative high-quality gear design</li> </ul>	<ul style="list-style-type: none"> <li>• Contacting compression elements are subject to wear</li> <li>• Limited rotating element life</li> <li>• Designed-in wearing items to generate aftermarket revenues</li> </ul>
<p><b>OPTIMUM CONTROL</b></p>  <ul style="list-style-type: none"> <li>• Automatic operation for any operating condition</li> <li>• State-of-the-art controls</li> <li>• PLC control available</li> </ul>	<ul style="list-style-type: none"> <li>• Limited control capability</li> <li>• Costly, high-maintenance variable speed configurations</li> </ul>
<p><b>NO VIBRATION</b></p>  <ul style="list-style-type: none"> <li>• Essentially vibration-free</li> <li>• No special foundation is required</li> </ul>	<ul style="list-style-type: none"> <li>• Special foundations needed to handle heavy weight</li> <li>• Precautions must be taken to prevent transmission of vibration to other equipment</li> </ul>

## Designed for Your Application





**The Right Compressor for Your Operation**

We offer a broad portfolio of reliable centrifugal MSG Turbo-Air NX Series products that will adapt to your application.

1 NX 1800

2 NX 2500

3 NX 5000

4 NX 8000

5 NX 12000

E Engineered-To-Order (ETO)

## Model Specifications

MSG TURBO-AIR NX Performance			
Model	Nominal Power kW (hp)	Discharge Pressure barg (psig)	Flow m <sup>3</sup> /min (cfm)
1 MSG TA-NX 1800	185–315 (250–410)	2.7–14.5 (39–210)	34–60 (1,200–2,100)
2 MSG TA-NX 2500	335–1,100 (450–1,500)	2.5–40 (35–585)	65–137 (2,300–4,800)
3 MSG TA-NX 5000	600–1,900 (800–2,500)	2.5–40 (35–585)	125–240 (4,500–8,600)
4 MSG TA-NX 8000	750–2,700 (1000–3,750)	2.5–40 (35–585)	135–310 (4,850–11,100)
5 MSG TA-NX 12000	1,100–4,200 (1,500–5,650)	3.5–40 (50–585)	210–525 (7,500–18,500)

 See Our Entire Portfolio of Centrifugal Products



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.

- 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



 Find the Right Dryer for Your Application

**Cost-Effective Operation**  
Choose refrigerated dryers for lower capital, operating and maintenance costs for many industrial 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 heat blower desiccant models.

- Delivers reliable -40°C (-40°F) 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

**Maximum Performance**  
Use desiccant dryers when your application demands low dew points and the highest air quality

## Remanufacturing Services

Replacing compressed air equipment can significantly impact your bottom line. Fortunately, Ingersoll Rand's remanufactured products can reduce that impact with an economic and environmentally sustainable alternative to new equipment.

Our qualified technicians have extensive knowledge and experience in parts restoration and remanufacturing of centrifugal air compressors, including:

- Compressor overhaul
- Compressor airend remanufacturing
- Remanufactured and engineered packages
- Performance re-rates
- Clean and dynamic balance of all rotating assemblies
- Cooler refurbishing

You will receive a 'like-new' piece of equipment while reducing equipment costs, downtime and energy usage...as well as taking advantage of the latest technology advances.



### Design and Installation

Fully integrated services for any air compressor system, including equipment, building, piping, installation and commissioning.

- Complete system design
- Efficient project management
- Single-source responsibility
- Comprehensive experience



### On-board IoT Platform

Visibility into day-to-day operations that maximizes your uptime and peace of mind, offering real-time data monitoring for your compressed air system.

- Detailed system performance analysis
- Diagnostic reporting
- Remote access to operating data
- Maintenance notifications



### Air Assessment Services

Our air assessment tools help track systems performance, increase system efficiency, improve production and reduce waste.

- Electronic Assessment
- Air Leak Assessment
- System Assessment
- Air Quality Testing



### RENTAL SERVICES

### Ingersoll Rand Rentals


Minimize costly interruptions for emergencies or long-term planning. You'll get a quick response, robust products and unparalleled on-site experience.

- Extensive compressor and accessories inventory
- Heavy-duty, outdoor-ready designs
- Short- and long-term agreements
- Multiple depot and service locations



## PROTECT Your Investment

Only use approved Ingersoll Rand Coolants, TurboBlend and Techtrol Gold TL are the only coolants formulated specifically for MSG TURBO-AIR centrifugal compressors.

 Learn more about TurboBlend Coolant

## TurboBlend 46 Coolant

TurboBlend, our mineral based oil has stood the test of time and offered reliable compressor operation for decades as the standard fill in any one of our MSG TURBO-AIR NX centrifugal compressors. Techtrol Gold TL, an engineered synthetic coolant specifically designed for longer lubricant life is available as a premium option allowing for longer intervals between recommended change-outs.


Ingersoll Rand Coolant offers significant advantages:

- Premium base stock provides exceptional performance
- Extended operating coolant life of two years (16,000 hours) for TurboBlend and three years (24,000 hours) for Techtrol Gold TL
- Eliminates deposits and build-up of debris caused by fluid breakdown allowing bearings to run cooler, minimizing downtime and costs
- Superior film strength protects against metal-to-metal contact
- Stable viscosity over a wide temperature range ensures optimized compressor performance and efficiency, even in varying environmental conditions and mechanical loads
- Exclusive blend formulated specifically for Ingersoll Rand centrifugal compressors that exceeds lubricant specifications to assure consistent quality

## Genuine OEM Parts

OEM Replacement Parts | No-Loss Drains  
Filters | Installation Solutions




 Learn More About Genuine OEM Parts

## 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

## Smarter Compressed Air Monitoring Starts Here


Maximize efficiency, reduce costs, and stay ahead of maintenance needs with Ingersoll Rand **System Performance Manager** — a powerful tool that puts cutting-edge technology to work for you.

This sophisticated software uses advanced algorithms to pinpoint inefficiencies in your compressor operation. Not only does it identify areas for improvement, but it also delivers expert recommendations for adjustments based on real-time operating data.

### Real-time Data, Real-time Solutions

With actionable insights, System Performance Manager empowers you to implement optimal maintenance strategies, ensuring your equipment runs at peak performance and unlocking potential cost savings over time.

## System Performance MANAGER

 Discover more about System Performance Manager

Powered by



Ecoplant is a cloud-based platform for monitoring and controlling compressed air systems in industrial settings.



## 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.





#### 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](http://www.IRCO.com).

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