



MSG[®] TURBO-AIR[®] NX 5000

Centrifugal Air Compressor

The MSG TURBO-AIR NX 5000 was designed with extensive engineering processes that utilize the latest advances in technology and computational methods. The MSG TURBO-AIR NX 5000 is one of the most efficient machines in its class and features new patent-pending designs.

Features

FEATURED IMPROVEMENTS






- Highly efficient aerodynamic components (inlets, impellers, scrolls and diffusers) combine with low mechanical losses and power conserving inlet throttle control (IGV) to provide up to 5% better specific power than competitive models.
- Integrated structural base provides a foundation for the main driver and serves as a support platform for the side-mounted lube system/reservoir
- Side-mounted lube reservoir with top-mounted components and standard duplex filters ease maintenance requirements and provide continuous, uninterrupted operation.
- Gearbox inspection covers offer simple accessibility for quick field inspection and onsite assessment of rotating assembly health.
- Split pinion bearing and seal design allows for easy onsite inspection.
- Next generation intercoolers have been optimized for specific flow and pressure requirements and include a straight tube design that is roddable-in-place



- Easy to access dual condensate connections (two connections for each cooler) simplifies and reduces onsite piping and installation
- OEM-optimized cast-in-water manifold, with provisions for optional patent-pending integral trim valves all tied together at a single-point customer water connection
- Expertly optimized stage and gas passages utilizing computational fluid dynamics (CFD)

LOW TOTAL COST OF OWNERSHIP

Comparison: MSG TURBO-AIR NX 5000 vs other Compressors

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



ISO CERTIFIED CLASS ZERO

- Our MSG TURBO-AIR centrifugal compressor product line has been engineered to produce oil-free air for more than 60 years.
- This certification officially acknowledges the ability of our compressors to produce 100% oil-free air, providing our customers with enhanced quality assurance.

Over time, the energy required to power a compressed air system is the largest cost associated with a compressor; particularly in today's fluctuating energy markets. That is why, to accurately determine the return on your investment, it is important to consider the total life-cycle cost of operating the compressor, including the initial investment, energy consumption and maintenance costs.

As the chart below demonstrates, the MSG TURBO-AIR NX 5000 provides some of the lowest total life-cycle costs of any compressor.

The power savings delivered can significantly speed up the payback on your initial investment, and the savings continue to build the more you use the MSG TURBO-AIR NX 5000.

Model Specifications

Model	Nominal Power kW (hp)	Discharge Pressure barg (psig)	Flow m ³ /min (cfm)
NX5000	600-1050 (800-1400)	2.5-14.5 (35-210)	125-210 (4500-7500)

Parts & Accessories



**MSG® TURBO-AIR® Centrifugal
Compressor Replacement Parts**



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