



MSG[®] TURBO-AIR[®] 11000

Centrifugal Air & Gas Compressor

MSG TURBO-AIR 11000 is a more standardized compressor with a shorter delivery time. The MSG TURBO-AIR 11000 was designed from the ground up with input from actual end-users, assuring that this machine was built around customer needs for a more efficient and easily maintainable compressor.

Features

MSG[®] TURBO-AIR[®] INTEGRALLY GEARED CENTRIFUGAL COMPRESSORS

MSG TURBO-AIR compressors offer outstanding design flexibility. MSG compressors are application engineered with numerous available configurations:

Flows from 70 to 3800 m³/min (2500 to 135,000 CFM)

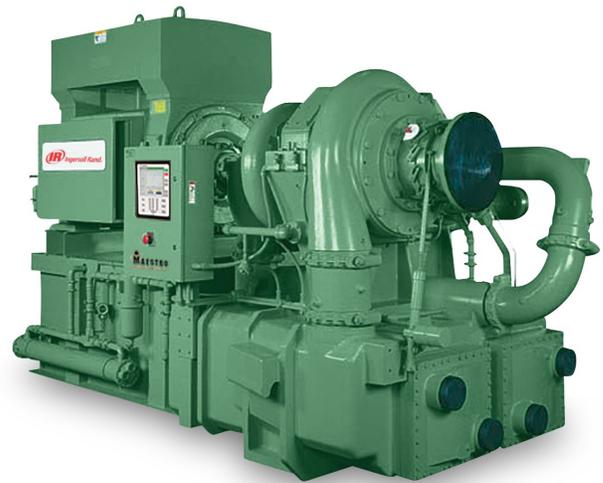
Input capacity to over 18,650 kW (25,000 hp)

Discharge pressures to 100 barg (1450 psig)

FEATURES

Oil-Free Air and Gas

- Prevents system contamination
- Reduces the potential for compressed air pipeline fires caused by oil carryover
- No costly waste disposal associated with oil-laden condensate
- Eliminates the expense and maintenance of oil separation filters at the discharge



High Reliability

MSG TURBO-AIR centrifugal compressors are designed to be extremely reliable due to: Conservative high-quality gear design Long-life pinion bearing design Thrust loads absorbed at low speed Stainless steel compression elements

Conservative high-quality gear design

Long-life pinion bearing design

Thrust loads absorbed at low speed

Stainless steel compression elements

Low Compressor Operating Life Cycle Cost

MSG TURBO-AIR centrifugal compressors provide better overall operating efficiency than positive displacement or other centrifugal compressors.

Excellent efficiencies at full load, part load and no load

Low maintenance cost

Increased uptime from high-reliability design (limits the need for multiple unit installations for basic reliability reasons)

No sliding or rubbing parts in the compression process that can cause wear and thereby efficiency loss



Easy Operation/Maintenance

State-of-the-art MAESTRO control systems

Fully automated operation for any process conditions

Machine self-diagnostics

Compression elements do not wear or require periodic replacement

Accessible horizontally split gearbox for quick inspection

Removable intercooler and aftercooler bundles for easy cleaning

Simple Installation

Compressor, lubrication system, intercoolers, shaft coupling, coupling guard, interconnecting piping, etc. on a common base

Easy installation with no special foundation requirements

Easy component accessibility

Site connection point flexibility

Reduced floor space required

Dynamic compression process is pulsation-free, so installation of additional dampening equipment is not required.

APPLICATIONS

Engineered Air Applications

- Industrial gases
- Instrument air
- American Petroleum Institute (API) standards
- Soot blowers
- Large plant air
- Power industry related

Gas Compressor Applications

- Fuel gas boosting
- Natural gas gathering
- Hydrocarbon refrigeration gas
- Carbon monoxide
- CO₂ (wet or dry)
- SynGas
- Low molecular weight recycle gas
- High-pressure nitrogen
- Landfill gas

MSG TURBO-AIR centrifugal compressors are exceptional by design.

- One, two or three rotors, up to six stages per gearbox
- Horizontal splitline(s) for easy access to parts

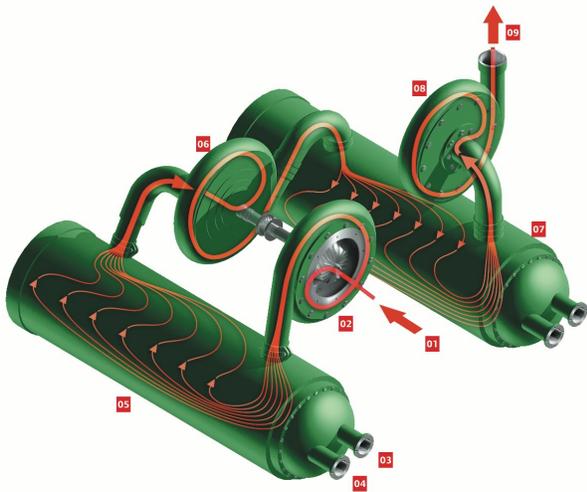
GAS FLOW ARRANGEMENT

MSG TURBO-AIR centrifugal compressors feature an advanced arrangement of gas flow components.

Advantages of this arrangement include:

- Directed gas movement to reduce turbulence induced friction
- Air is cooled after every stage to provide high isothermal efficiency

Air Flow Diagram 01: Compressor inlet 02: First-stage compressor volute 03: Coolant in 04: Coolant out 05: First-stage intercooler 06: Second-stage compressor volute 07: Second-stage intercooler 08: Third-stage compressor volute 09: Compressor discharge



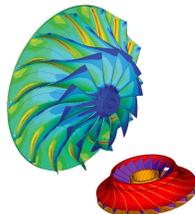
Model Specifications

Specification	Metric	Imperial
Standard Input Power	up to 2670 kW	up to 3700 hp
Discharge Pressure	up to 19 barg	up to 275 psig
Inlet Flow	232 to 417 m ³ /min	8200 to 14,750 CFM

Parts & Accessories



MSG® TURBO-AIR® Centrifugal Compressor Replacement Parts



Upgrade - Aerodynamic Enhancements for Centrifugal Compressors



Upgrade - Variable Inlet Guide Vanes for Centrifugal Compressors



TurboBlend 46 Premium Centrifugal Compressor Lubricant



Centrifugal Oil Filters



Field Overhaul Services



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