

# Fuel Gas Boosting Centrifugal Compressors for Power Generation

With hundreds of installations around the globe, custom MSG® integrally geared centrifugal fuel gas boosters have been designed to meet the most demanding gas turbine applications and industry's toughest standards.



## Custom and Standardized Solutions for Your Application

In gas fired power plants, the fuel gas booster compresses natural gas from a pipeline to maintain a consistent fuel supply to the gas turbine. Ingersoll Rand leverages its extensive experience to design robust packages that ensure the highest reliability, and avoid costly turbine trips. Both our custom and standard packages facilitate installation, while meeting applicable industry standards.

Specifications	
Feature	Data
Flow Range	Up to 60,000 cfm (1,700 m <sup>3</sup> /min)
Pressure Range	Up to 1,450 psi (100 bar)
Gases	Natural Gas
Certifications & Classifications	ISO 9001, 29001 & 14001, API, CE, PED, ATEX, CHINA CODE, GOST, KOSHA, ASME

# Why Choose Ingersoll Rand Centrifugal Compressors?

Features	
Attribute	Description
<b>High Reliability and Availability</b>	Longest mean time between failures (MTBF) of any compressor technology
	Non-wearing parts leads to longer intervals between scheduled maintenance, exceeding industry standards
	Highly resilient to damage caused by surging
	Industry-tested, proven designs
	State-of-the-art PLC ensures efficient operation
<b>Optimized Efficiency</b>	Custom designed, 5-axis milled impellers using latest CFD and FEA software
	Up to three pinions per compressor to optimize impeller aerodynamics
	Inlet guide vanes offer efficient, flexible operation
<b>Stringent Industry Compliance</b>	Designed to meet API 617, ASME and CE codes and standards as required
	Customizable to meet your specifications
	Compliance to local codes and standards as needed
<b>Process and Environmentally Friendly</b>	Variety of seal options to reduce flare emissions
	Advanced seal support systems prevent damaging gas condensates from entering the seals
	Atmospheric separation between scroll and gearbox prevents oil from entering process flow
<b>Low Cost Installation and Maintenance</b>	Inherently vibration free, requiring minimal foundation work
	Volutes can handle large gas volumes, reducing overall footprint
	Custom package layouts ensure easy access to maintenance components
	Pre-assembled delivery on skids minimizes overall site installation time and cost
	Horizontally split gearbox and small rotor size greatly reduce maintenance

## MSG® Fuel Gas Booster Features

*Up to 6 stages on 3 rotors*

**Horizontal split gearbox and bearing assembly** simplifies inspection and maintenance

**Throat-mounted inlet guide vanes (IGV)** improve overall efficiency and enhance turndown range

**Electric motor driver designed** to API 541 with optional speed control

**Integral or standalone lubrication systems** designed to customer specifications and/or API 614

**Integral or standalone seal support system** tailored to your specific gas process

**Dry disc or diaphragm coupling** according to customer specifications and API 671

**Flexible package options to simplify installation**, including a variety of engineered packaging configurations, single-point lift, and packaging at regional locations around the world

**State-of-the-art instruments and controls**, including proprietary integrated surge control, trip voting, load sharing, start-up logic, monitoring and protection, as well as remote monitoring and diagnostics available

**Water or air-cooled heat exchangers** supplied per project requirements, including closed-loop cooling water systems for a complete solution



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