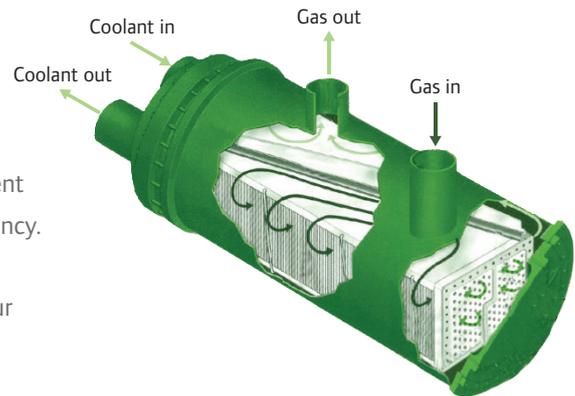


# MSG<sup>®</sup> and TURBO-AIR<sup>®</sup> Centrifugal Cooler Offering

ingersollrand.com

## Partner with Ingersoll Rand for your centrifugal compressor cooler needs.

An air or gas heat exchanger plays a vital role in efficient compressor operation. Optimizing its performance throughout the entire equipment service life is essential to ensure excellent reliability and energy efficiency. Implementing a sound preventive maintenance strategy, including an upgrade at the end of the cooler's useful life, is key to keeping your compressor system running smoothly.



## The causes of cooler degradation

### Fouling

When contaminants infiltrate a cooling system, they can build up in the heat exchanger and cause reduced performance and operating range, resulting in higher energy costs, as well as reduced turndown and rise to surge. This limits the compressor's ability to efficiently modulate the outlet capacity, and prevents it from meeting the flow & pressure requirements of your production process, especially in high ambient temperature conditions.

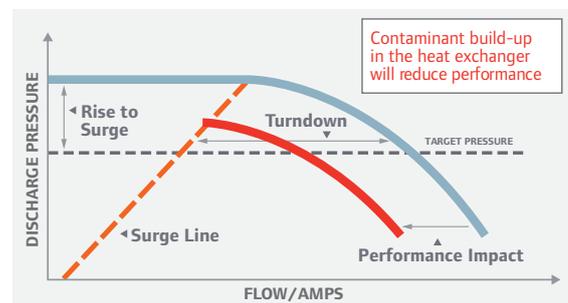
### Leakages

Leakages can occur due to worn gaskets, seals or O-rings.

This introduces danger of cooling liquid carryover into the compressed air or gas stream, bringing about severe risk of damage to aero components, seals and piping. This same fluid content can end up downstream, ultimately affecting air treatment equipment or your production process, resulting in damage or production losses.

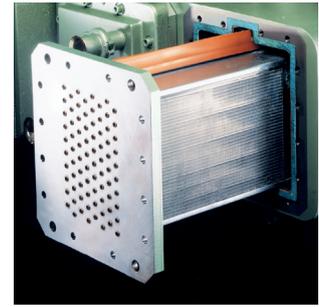
### Mechanical Damage

Poor cooling water quality, or even corrosive cooling water, can cause heat exchanger tube erosion and fractured cooling fins, eventually leading to leakages.



## The benefits of Ingersoll Rand's OEM coolers & service

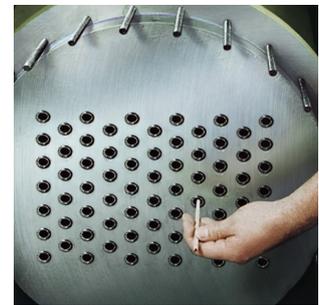
The state of the art design and construction of Ingersoll Rand coolers employ features to ensure efficient performance through high heat transfer efficiency, predictable thermal operation, coolant conservation, and easy inspection and maintenance procedures.



## Why go for Ingersoll Rand OEM?

**We own the design** - To benefit from an optimized compressed air or gas system, heat exchangers must be properly designed and sized in order to provide the lowest possible air temperatures with minimal pressure drop, avoiding unnecessary energy losses. Ingersoll Rand coolers are engineered to precisely match your centrifugal compressor capacity requirements.

**We know what it takes to keep it running** - Once your compressor system is in operation, regularly scheduled preventive maintenance is critical. Monitoring cooling water quality and system temperature and pressure, as well as cleaning and inspecting your equipment, will help to avoid intercooler performance degradation and all risks involved.



## Our Service offering

We offer a variety of services for your intercooler system, including:

- Inspection, assessment and comparison with performance design values
- Onsite equipment and system troubleshooting
- Preventive maintenance—monitoring, cleaning and service using genuine OEM parts
- OEM cooler bundle replacements and upgrades—Various high-grade material options available (e.g. CuNi, Coatings), providing extended service life with a short payback period

## Want to Learn More?

Visit our website or call your local Ingersoll Rand representative today to learn more about intercooler maintenance.



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