

**Gardner**  
**Denver**

**Innovative**  
**High Temperature Solutions**

Turnkey Solutions for EPC Contracts





## About Gardner Denver

**Gardner Denver, with more than 150 years of experience, is the parent company of CompAir and is headquartered in the USA. A leading global provider of compression, vacuum and associated aftermarket equipment, Gardner Denver has manufacturing facilities in more than 30 countries worldwide.**

The Gardner Denver Industrials Group designs, manufactures, markets and services rotary screw, reciprocating and sliding vane compressors in addition to multistage, positive displacement and centrifugal compressors, plus blowers and vacuum pumps.

In order to service the Engineering, Procurement and Construction (EPC) market, we deliver successful

outcomes, a wide range of compressed air and vacuum machines, industrial engineered solutions and customised projects. We provide full turnkey solutions from initial site surveys through to design, installation and final commissioning. Our fully qualified engineers assess all critical factors to ensure the complete compressor installation functions reliably, whatever the environment.

## Leading high temperature innovation

The Middle East region is particularly vulnerable to climate change. It is one of the world's most water-scarce and dry regions; and climate change offers unprecedented challenges. It means existing machines often become inadequate or obsolete. This has motivated Gardner Denver to invest in innovation across different technologies. Our compressors are capable of operating in ambient temperatures of up to 55°C, temperatures not uncommon in the middle east due to global warming.

# High temperatures, reliable solutions

Gardner Denver design and deliver compressor packages that operate in temperatures of up to 55°C both in oil-free and lubricated configurations. During the first phase of the project, our engineers design and manufacture solutions that fit with customer specifications.

## Air cooled oil-free screw compressors

Air-cooled oil-free rotary screw compressors deliver exceptional compressed air supply reliability. Gardner Denver leads the way in the design, development and manufacture of air cooled oil-free screw compressors that can operate in these extreme temperatures. Oil-free means that there is no oil for

sealing the rotors or for cooling the compressor's moving parts, or indeed the compressed air itself. Gardner Denver's oil-free compressors incorporate innovative refrigeration technology to address high ambient temperatures.



## Benefits at a Glance

- Operating temperatures of up to 55°C.
- Connection points with customer: compressed air outlet, cooling water drains and electrical supply
- Robust construction
- Reliable
- Extended uptime and low service costs
- Evacuation ducts for cooling air outlet

Technical requirements for equipment which operate at temperatures of up to 55°C

Type of compressor	Cooling Type	Operating Pressure	Capacity	Installation Area	Applicable International Standard & Code
Air cooled oil-free screw compressor / Oil Injection Rotary Screw Compressor	Air cooled	Up to 10 barg	Up to 3,000 m <sup>3</sup> /hr (FAD)	Outdoor up to 55°C	API 619 / ISO 10440-2



## Whatever **the conditions**

The compressor packages are designed to operate in temperatures of up to 55°C, working under strenuous conditions either outdoor or indoor, refineries, deserts (high inlet temperatures) and sandy environments. These compressors are built to withstand the most extreme temperatures, and so designed to work in challenging environments.

## Innovation **in Design**

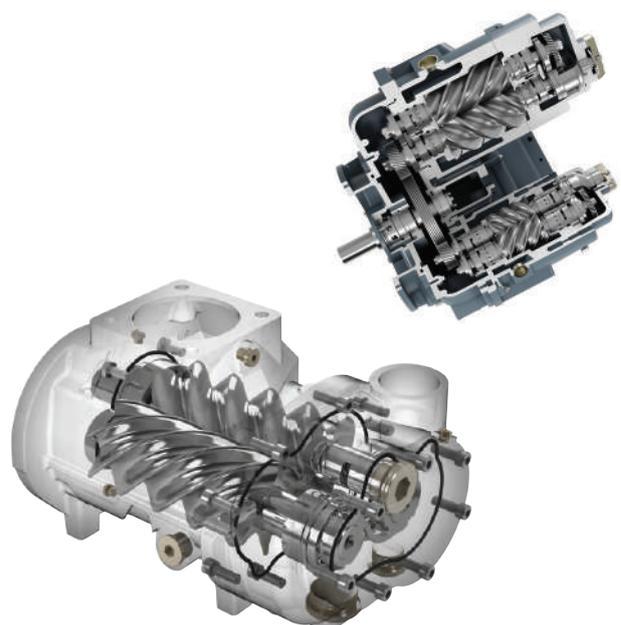
These compressors are adapted to work normally in temperatures of up to 55°C, but how do Gardner Denver deliver this technological innovation?

### **Air-end**

Stainless steel air-end for 2nd stage and open clearance between male and female rotors

### **Cooling fan configuration**

50% x 2 sets cooling fan configuration with enlarged cooling fan.





## Aftercooler

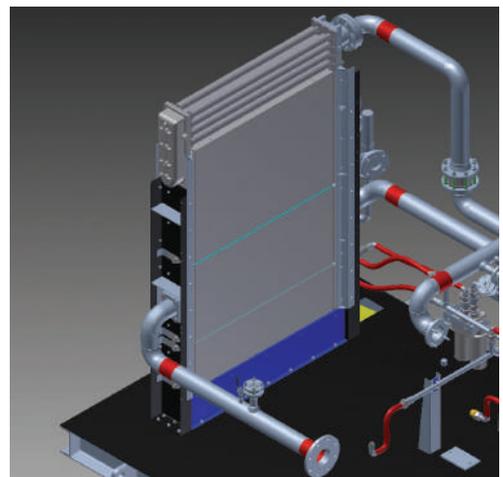
Stainless steel pre-aftercooler consisting of stainless steel pre-aftercooler and aluminum aftercooler for continuous operation with up to 265°C aftercooler inlet temperature.

## Very low CTD

Very low CTD for aftercooler. Compressed air discharge temperature can be cooled down to a maximum ambient temperature of 60°C. No additional cooler is required at the upstream desiccant type dryer.

## No external cooling

All the component of controller design temperature 80 Deg. C. No external cooling is required.

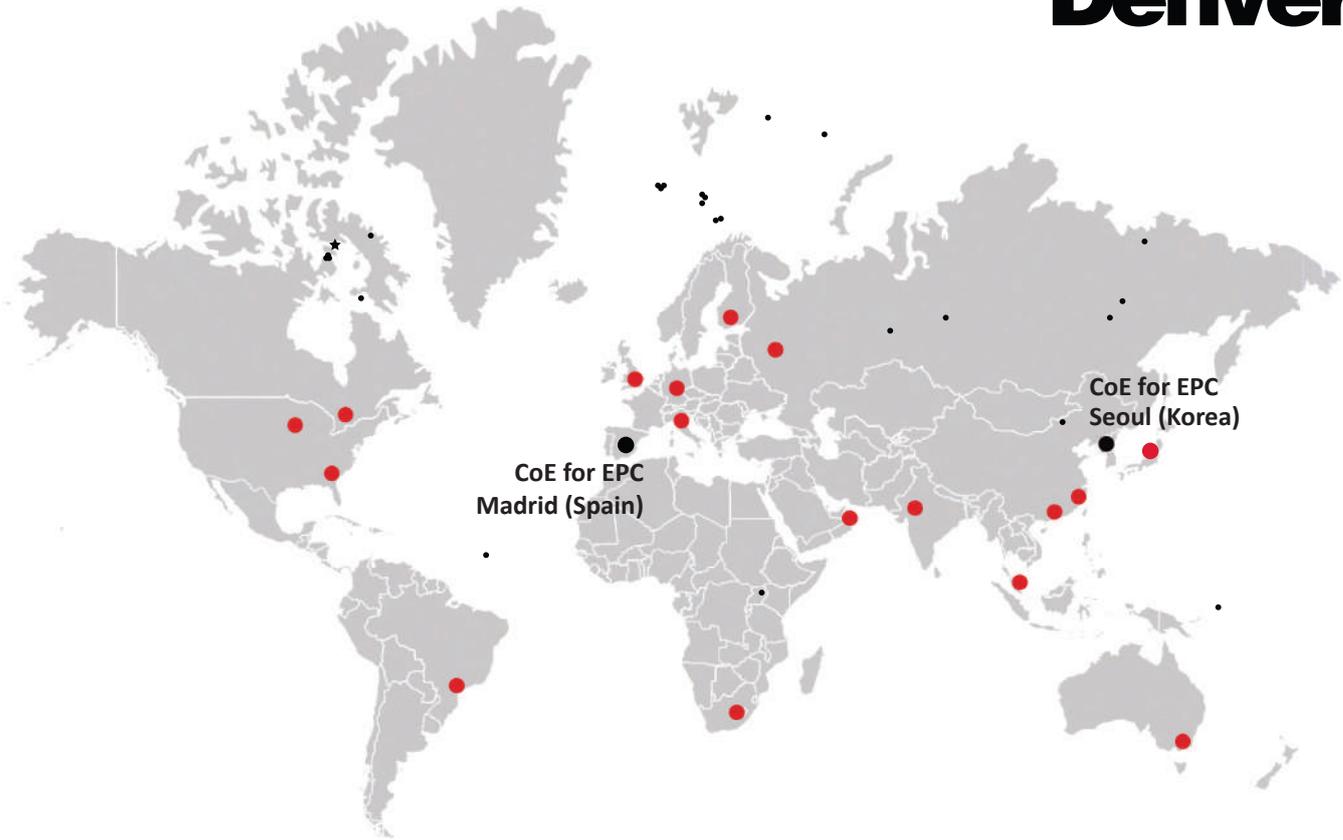


## Peace of mind

Compressed air users can rely on Gardner Denver to keep their systems running with optimum performance and efficiency throughout their lifecycle. Gardner Denver takes customer service very seriously and we have developed our aftermarket capabilities year on year. Today Gardner Denver is known for its excellent service and support on a global scale.

# Global Expertise

# Gardner Denver



Through our intense customer focus and disciplined performance culture, we have positioned ourselves as the industry's first choice for innovative and application critical flow control products, services and solutions.

For more information about Gardner Denver, please, contact your local Gardner Denver Sales & Service Centre, or visit our website.

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