

**Gardner
Denver**

HIGH PRESSURE SOLUTIONS

Oil & Gas Solutions

Smarter Compressor Technology





Gardner Denver - The Company

With the Gardner Denver Compressor brands, we have grown into one of the world's most respected organisations within high compression technology.

We build our future with total respect for our unique heritage and by demonstrating our passion for our global brands through technology leadership.

Our team is professional, customer focused and leaders in their field ensuring you are equipped with exactly the right high pressure solution.

Oil & Gas

Gardner Denver High Pressure compressors have been the compressor of choice for many organisations operating globally in the Oil and Gas industry sectors for many years. Right now, our systems are working on oil platforms miles from shore, in the remotest of locations, in the most extreme of temperatures found across the globe.

Gardner Denver designs, manufactures, commissions and services high pressure compressed air and gas systems for these specialist markets making Gardner Denver, through its high pressure compressor brands, synonymous with the highest standards of quality and long-term support capabilities.

Our unique range of seawater, freshwater, air or water cooled high pressure systems meet or exceed many international approval standards (e.g. ISO 9001, Lloyds Register, Det Norske Veritas, RINA and The American Bureau of Shipping).

Our research, development and engineering expertise give us an unrivalled flexibility in being able to configure specific high compression systems, tailor-made to your exact requirements.

Key benefits



Operate in harsh environments



Fresh or seawater cooling options



Small compressor footprint



Experts in Heliox breathing systems

Unrivalled Application **Know-how**

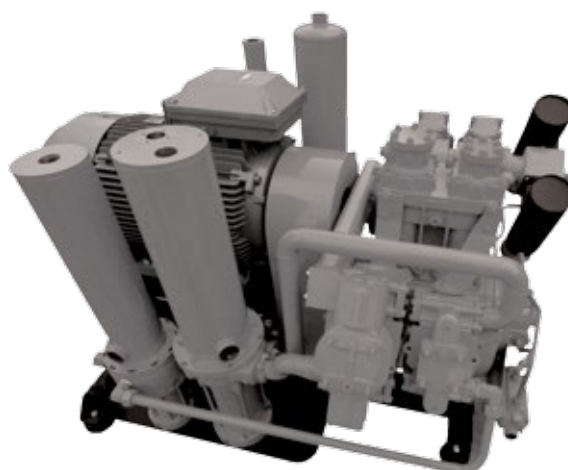
Performance. Reliability. Durability

Here at Gardner Denver, we have the ability to understand our customer we provide intelligent solutions that meet your ultimate needs for high pressure applications.

With the direct drive high efficiency motors or with belt driven arrangement and the latest extended life materials technology, the Gardner Denver High pressure compressor range offers unrivalled high performance.

Our compressors are suitable for a wide range of oil & gas applications. Rely on our expertise to select the right compressor for your needs.

The quality and engineering excellence built into each and every one of our high compression units is able to stand up to even the harshest and most hostile environments.



Belliss & Morcom

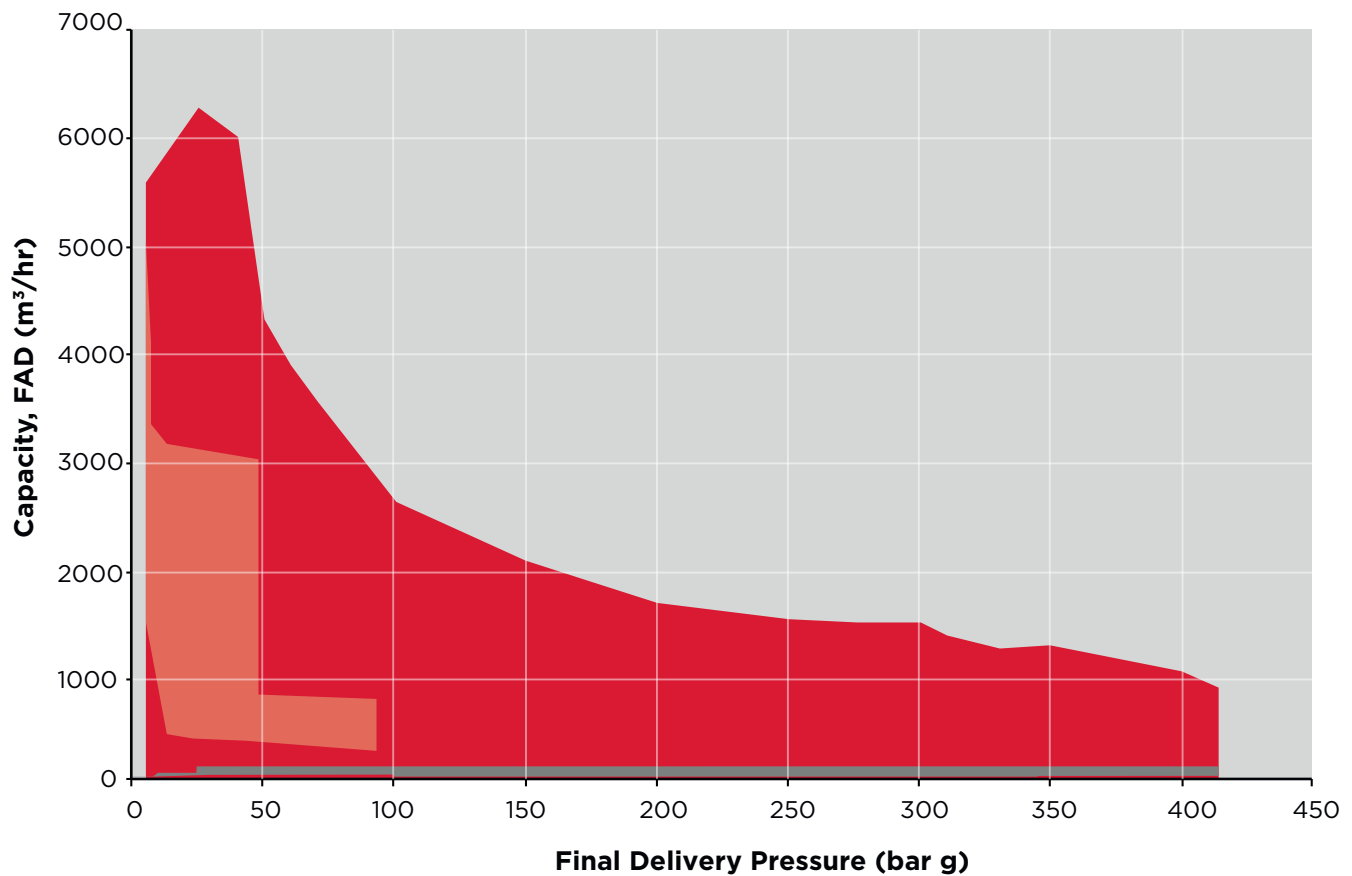
Reavell

High Pressure **Applications** For The Oil & Gas Industry

				
Seismic Survey	Offshore	Onshore	Pipeline	Breathing Air
• Providing high pressure air to power air guns for surveying the seabed	• Drill string compensation • Air and nitrogen drilling systems • Well head cleaning • Revitalising oil wells	• Air and nitrogen drilling systems • Well head cleaning • Revitalising oil wells • Coiled tube for oil well	• Cleaning pipelines • Evacuation of gas from pipeline • Checking pipelines • Leak testing systems (air and helium)	• Standard breathing air systems • Specialist Heliox breathing systems for saturation diving • Control and general service air

Range & Performance Capability

The Gardner Denver High Pressure Compressor range offers diversity and variety for numerous industry applications all over the world, with pristine compressor technology from one to six stages.



Typical Gases Compressed

	Base Compressor	Range Capability			Typical Gases Compressed							
	Model	Pressure Range bar g	Capacity Range m³/hr	Number of Stages	Nitrogen	Helium	CO ₂	CO	Methane	Hydrogen	Argon	Air
Medium Pressure Air Cooled	5204 - 5213	16 - 40	3 - 65	2	•	•	•	•	•	•	•	•
High Pressure Air Cooled	5307 - 5470	20 - 414	5 - 1000	3 - 4	•	•	•	•	•	•	•	•
Medium Pressure Water Cooled	5212 - 5236	10 - 40	25 - 320	2	•	•	•	•	•	•	•	•
High Pressure Water Cooled	5317 - 5460	40 - 414	25 - 1600	3 - 4	•	•	•	•	•	•	•	•
Oil Free Water Cooled	V130 - W540	8 - 90	400 - 3200	2 - 3	•		•					•

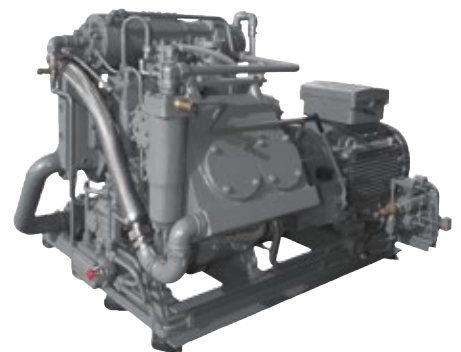
Specific Compressor Selection(s) would determine if gases are capable of being compressed on certain models, please refer to our experts for advice.



“Our fully qualified engineers assess all critical factors such as location, radiated heat, noise and air inlet conditions to ensure the complete compressor installation functions reliably whatever the environment”

Unrivalled Application Know-how

The Gardner Denver ranges are also available as complete packages that include all essential ancillary items such as starter control panels with PLC logic systems, energy efficient motors, air dryers, air receivers, filters and optional cooling systems to suit all site conditions and application requirements.



Gardner Denver Full Turnkey Installation, Commissioning & Training

Correct installation is essential in providing long-term compressor reliability. Gardner Denver provide full turnkey solutions from initial site surveys through to design, installation and final commissioning.

Our fully qualified engineers assess all critical factors such as location, radiated heat, noise and air inlet conditions to ensure the complete compressor installation functions reliably whatever the environment.





What Makes Gardner Denver High Pressure Compressors Unique?

Unrivalled Durability	Ability to work in the most onerous environments
Low Power Consumption	Use of energy efficient equipment ensuring lower operating costs
Small Compact Footprint	Reduction in space requirements leads to cost savings for floor space
Simple Installation	Compact skid packages thus reducing installation costs
Balanced Operation	Dynamically balanced removing the need for any special foundations
Low Maintenance	Use of latest material technology reduces service costs
Robust Construction	Ensures continuous 24/7 operation maintaining production output
High Operating Efficiency	Results in maximum compressor and plant performance
Single Turnkey Partners	A single source for all air and gas requirements
Global Supply & Local Support	Dedicated sales and service centres protect your investments
Expert Selection Ability	Ability to select for all applications and environments

Coiled Tube Drilling

Coiled tube drilling is an application used for revitalising oil wells. A tube is placed down to the bottom of the well, sometimes over 1KM down, along with “soaps”. The mixture of soaps and high pressure air or nitrogen fluidises the well bed.

Debris, sand and sediment can become a heavy mixture in the bottom of the well and can restrict and in some cases stop the oil from flowing from the well. The soaps are injected into the well to soften the sand and sediment and when mixed with air or nitrogen can aerate the mixture and bring it to the surface.

On reaching the surface the mixture is removed and spread over the surrounding land. This mixture is rich in minerals such as titanium. This process reinvigorates the well bed and allows the oil to flow freely again.

Gardner Denver compressors are usually used for this application and the model may vary depending on the flow and pressure requirements of the oil fields. The compressors are usually mounted and installed as part of a packaged set on to the back of a flat bed truck to allow the unit to be easily transported around oil fields in different locations.

Unrivalled Application Know-how

Gardner Denver understands the challenges facing our global client base in today's changing environment and takes pride in offering an exemplary global aftermarket programme covering spare parts, service and support. Our global teams fulfil all service requirements throughout the life cycle of your equipment. Effective maintenance of your high compression systems not only ensures uninterrupted process stability, but offers the additional security of scheduled maintenance programmes.

Choosing our aftermarket professionals offers you a comprehensive service support package that can continue far beyond the initial installation phase.

As part of our life cycle commitment, Gardner Denver can additionally offer you a total solution approach, providing a variety of extended warranty programmes within a service contract framework.

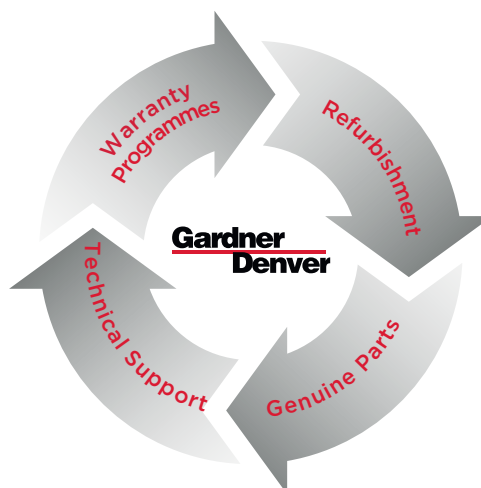
Refurbish and Recycle

When your high pressure compressor reaches the end of its service life, it does not mean you need to replace it.

Even the best engineered high pressure compressed air equipment has a limited life expectancy and after many years of faultless service can become inefficient - costing you valuable time and money.

Gardner Denver offers advanced research and development facilities, a dedicated and experienced team, a class leading manufacturing centre and an undivided attention to high quality engineering excellence.

With one of the industry's most experienced refurbishment teams based in Redditch (UK), Gardner Denver can offer your business a full diagnostic evaluation and recommend a programme of refurbishment which will bring your existing high pressure system back to optimum operating specification.



Gardner Denver

HIGH PRESSURE SOLUTIONS



Global Expertise

For more information about the Gardner Denver High Pressure compressor ranges please contact your local Gardner Denver Sales & Service Centre, or see below for details of our High Pressure Centre of Excellence.

Gardner Denver Ltd

Claybrook Drive, Redditch, Worcestershire, B98 0DS UK

T: +44 (0) 1527 838 600, F: +44 (0) 1527 838 630

E: highpressure@gardnerdenver.com

W: www.gdhighpressure.com



For additional information please contact Gardner Denver or your local representative.

Specifications subject to change without notice.