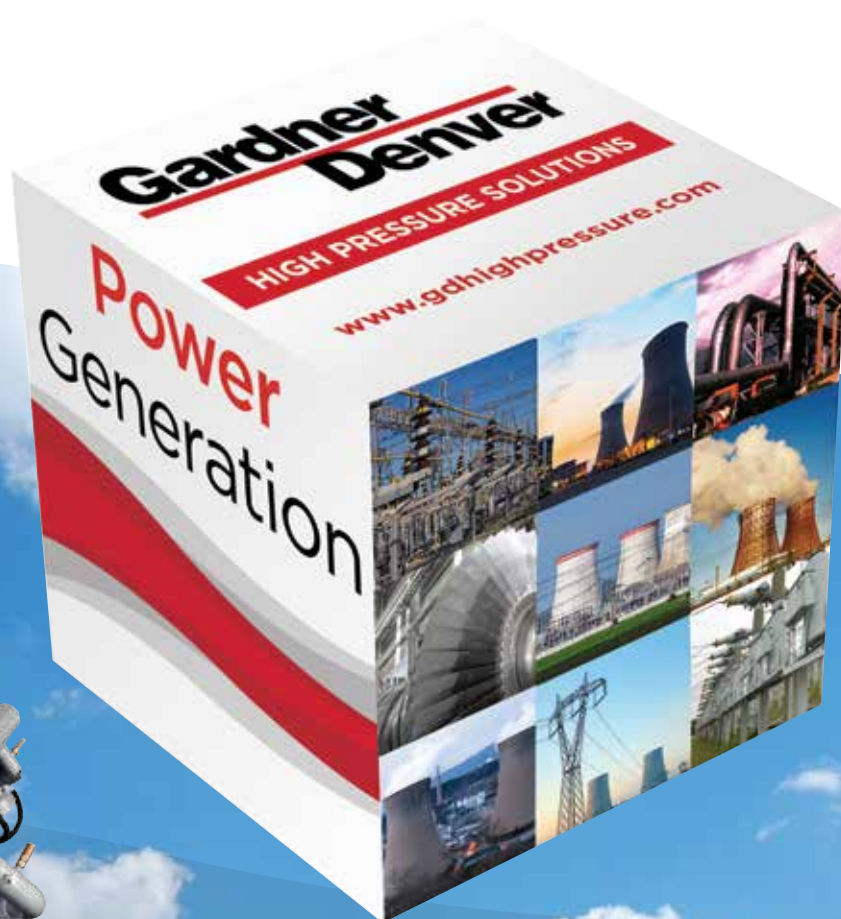


Gardner Denver

HIGH PRESSURE SOLUTIONS

Power Generation Solutions

Smarter Compressor Technology





Gardner Denver High Pressure Compressors

With the Gardner Denver Compressors 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.

Power Industry

Gardner Denver High Pressure compressors have been the compressor of choice for the power industry globally for many years. Servicing the needs of many power stations and distribution networks through a wide range of complex applications.

Our advanced range of reciprocating compressors can operate in water, carbon or nuclear fuelled power plants, delivering high pressure air and gas on demand at point of use. The Gardner Denver range of compressors can provide a continuous supply of high pressure air and gas or be controlled to provide air and gas intermittently as and when required, with a wide range of pressures and flows.

Gardner Denver compressors will support you either through our standard range of compressors or by delivering a custom engineered solution to meet your exacting standards.

BellissMorcom

Reavell

Key benefits

- Operate in harsh environments with extreme low or high ambient temperatures
- Air cooled or fresh or sea water cooling options
- Small compressor foot print
- Simple installation and interface to remote control rooms
- Proven reliable operation with long service life

Unrivalled Application Know-how

Performance. Reliability. Durability

Here at Gardner Denver, we have the ability to understand our customer's specific requirements and are committed to ensuring we provide intelligent solutions that meet your ultimate needs for high pressure applications.

With direct drive high efficiency motors or 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 power generation and distribution applications. Rely on our expertise to select the right compressor for your needs.

Power Generation

Diesel

- Starting air
- NO_x treatment

Steam Power

- Desulphurisation
- Removing fuel residues (soot blowing)
- Gas Feed Boosting
- NO_x treatment
- Hydrogen - Cooling the turbines

Hydro Electric

- Braking air for pneumatic brakes
- Adjusting turbine blades and large valves (e.g. governor)
- Turbine dewatering
- Blowing air (blowing out the water to eliminate the load during starting)
- Preventing pulsation and cavitations

Nuclear

- Starting air for emergency power for the diesel engines
- Nitrogen - Nuclear reactor cooling
- Hydrogen - Cooling turbines
- Hydrogen - Cooling the reactor core
- Hydrogen - Corrosion control and alternator cooling
- Emergency power - Buildings which need emergency power during power cuts e.g. hospitals

Gas turbine

- Starting air
- Purging air
- Nitrogen - Sealing gas
- Gas Feed Boosting



Power Distribution

Electrical sub station

- Extinguish any arc on switchgear
- Operate the power cylinder controlling the mechanical function of the circuit
- Insulate the open switch to prevent further arcing

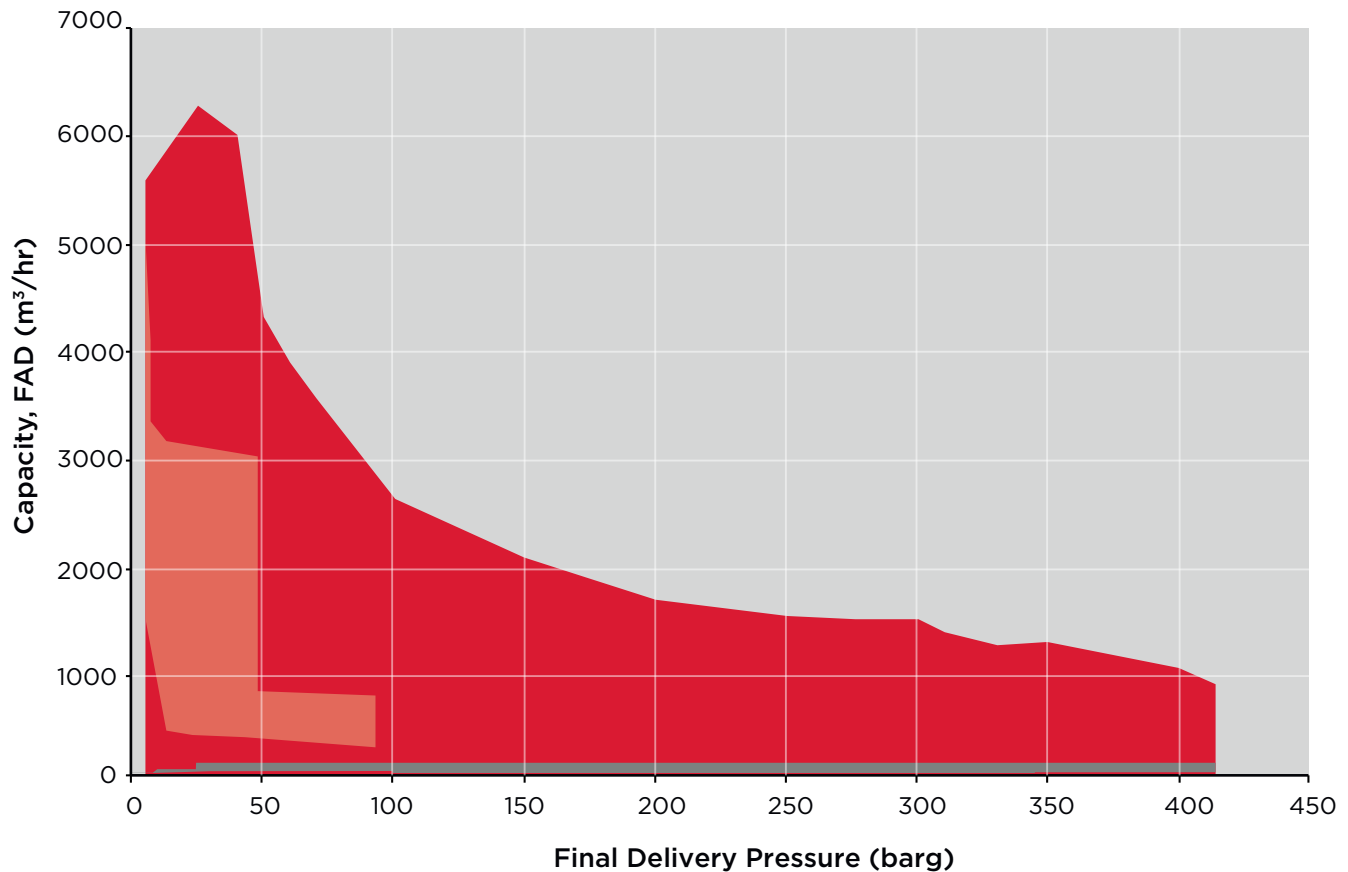
Air and gas distribution

- Starting air
- Desulphurisation
- Feeding biogas into the national and international network



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 barg	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
Single Compressor Block	One single stage block resulting in the most efficient solution
Half Load Capability	Reduced power at partial load conditions for the WH range
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
High Quality Oil Free output (Oil Free models)	Guaranteed oil free output with no risk of oil contamination
Single Turnkey Partners	A single source for all air and gas requirements
Global Supply & Local Support	Dedicated sales and service centres protect your investments
Direct Drive Shaftless Motor	Reduces power absorbed and eliminates any belt drive losses
Expert Selection Ability	Ability to select for all applications and environments

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.

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

Specifications subject to change without notice.