

Your Ultimate Source for Pressure and Vacuum

Industrials Group EMEA

Rotary Screw Side Channel Claw Rotary Vane Liquid Ring Rotary Lobe Radial Reciprocating Centrifugal

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The Gardner Denver Industrials Group

For further information please visit www.gardnerdenver.com.

Gardner Denver Industrials Group delivers the broadest range of compressors and vacuum products, in a wide array of technologies, to end-user and OEM customers worldwide in the industries we serve.

We provide reliable and energy-efficient equipment that is put to work in a multitude of manufacturing and process applications. Products ranging from versatile low- to high-pressure compressors to customized blowers and vacuum pumps serve industries including general manufacturing, automotive, and waste water treatment, as well as food & beverage, plastics, and power generation. Our global offering also includes a comprehensive suite of aftermarket services to complement our products.

Gardner Denver Industrials Group, part of Gardner Denver Inc., is headquartered in Milwaukee, Wisconsin, USA. Gardner Denver was founded in 1859 and today has approximately 7,000 employees in more than 30 countries.

Your Ultimate Source for Pressure and Vacuum





The Ultimate Industry Expertise

Gardner Denver customers from around the globe, benefit from over 160 years of industry expertise – close partnerships with our customers helping to develop unrivalled application know-how.

At Gardner Denver, it is the people that make the difference – working hard to establish and maintain strong relationships with our customers to gain their trust, respect and loyalty.

You can be sure to get the best and most cost-effective solution, for total peace of mind.

Your Satisfaction is Our Ultimate Goal.



The Industrials Group Compressor Division

The product portfolio of the Compressor Division is one of the widest in the world, covering all mainstream technologies, such as screw, reciprocating, vane and centrifugal air and gas compression.

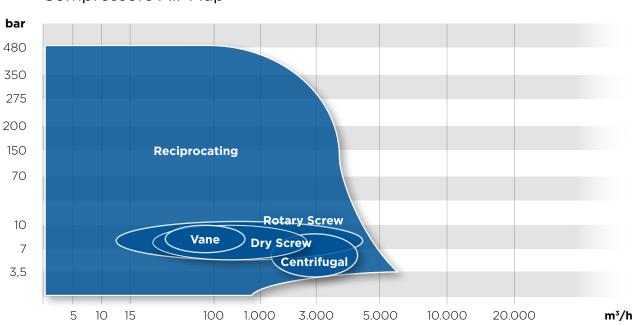
Gardner Denver has consistently been at the forefront of compressed air and gas system development, culminating in some of the most energy efficient and low environmental impact compressors available today, helping customers achieve or surpass their sustainability targets.

From low to high pressure applications and from heavy industry to sensitive product manufacturing, we offer the most appropriate solutions for your business. We ensure that your compressed air and gas installation remains as efficient and as reliable as on day one and throughout the entire product life cycle. Innovative service and warranty programmes allow you to concentrate on your business.





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Compressors Air Map



by Gardner Denver

<u>Gardner</u> Denver

Tamrotor

HIGH PRESSURE SOLUTIONS











www.compair.com sales@compair.com

CompAir offers an extensive range of highly reliable, energy efficient compressors and accessories to suit almost all application.

An extensive network of dedicated CompAir sales offices and distributors across all continents provide global expertise with truly local service, ensuring the advanced technology is backed up with the right support.

CompAir product offering:

- High efficiency and high quality air
- Modern and user-friendly compressor controllers
- Compact designs with small footprint
- Low noise levels
- Low maintenance
- Extended warranty programs
- Complete range of air treatment and accessories

L-Series, lubricated screw compressors

CompAir oil-injected rotary screw compressors incorporate the very latest technological advances and manufacturing processes to provide users with a continuous supply of economic and reliable high quality compressed air. The L-Series compressors are available as fixed speed (L) or regulated-speed (L-RS) models.

D-Series, oil-free screw compressors

The D-range can be relied on to deliver a consistent flow of high quality & economical oil-free compressed air. The two-stage oil-free screw compressors are exceptionally reliable even in demanding applications.

DH-Series, water-injected oil-free screw compressors

The DH-range offers market-leading energy efficiency whilst using no oil anywhere in the compressor. The single-stage, direct driven design achieves lower speeds combined with lower operating temperatures. High quality water injection lubricates, cools and seals the compression process achieving with maximum 60 °C operating temperatures near isothermal compression.









www.compair.com · sales@compair.com

Quantima, oil-free high-speed centrifugal compressor

Quantima delivers a range of benefits, the most tangible of which is energy savings, directly and significantly benefiting both the environment and the customer's bottom line.

Quantima is a smaller, quieter compressor with zero risk of oil contamination and the added peace of mind delivered with extremely reliable operation and 24/7 remote monitoring and predictive maintenance.

Quantima's Q-drive compression assembly has no gearbox, no oil, no contact and no mechanical wear just a single moving part spinning in a magnetic field. This sophisticated construction means there is no performance degradation over the life of the compressor.

A variable speed drive enables Quantima to precisely match air output to plant demand, providing reduced power consumption and off load running.





www.compair.com · sales@compair.com

C-Series, portable compressors

No matter what the application, may it be breaking, sand-blasting, drilling or cable blowing CompAir provides the right solution.

The portable compressors from CompAir prove their reliability in the toughest site conditions and deliver significant cost savings through energy efficiency and low maintenance.

The patented Bi-Turbo compression technology of the TurboScrew makes these compressors outstanding in efficiency. They consume up to 30% less fuel and are the smallest and lightest compressors in their class.









[®]hydrovane

www.hydrovaneproducts.com info.hydrovane@gardnerdenver.com

The Hydrovane series rotary sliding vane compressors are reliable, versatile, powerful and cost effective.

They can be found throughout all sectors of industry, including automotive, food and beverage, energy and manufacturing with specialist solutions within transit, gas and snow. In fact they are the perfect business solution to meet your requirements for reliable, high quality compressed air or gas.

With its low noise level the Hydrovane compressor can be installed right alongside your equipment.

The rotary vane principle

The single rotor design, running at standard motor speeds facilitates the use of a direct drive arrangement, without the need for belts and pulleys.

Rotary sliding vane, single stage lubricant sealed compression element directly driven as standard by a high efficiency IP55 motor (except where specified).

A reliable compressed air supply is a necessity. With over three quarters of a million sold compressor worldwide, we know we can satisfy your requirements.

Built-in pressure control ensures the compressor exactly matches air demand. Engineered for global markets, the

compressors are rated for continuous operation in ambient temperatures up to 40° C / 104° F.





by Gardner Denver

www.championcompressors.eu

Flexible and affordable compressed air systems

Champion offers a wide range of oil injected screw compressors, piston compressors and a complete air treatment range. Our compressed air solutions are sold and serviced through a worldwide distribution and reseller network and are used for applications in the industrial and craft sectors.

- Champion stationary rotary screw compressors, both fixed and variable speed drive, are the answer to the needs of industry and of small/medium-sized companies. The complete range is designed for continuous operation under the most severe conditions of use, with particular attention to modularity, energy consumption, low operating and maintenance costs, and ease of installation and use.
- Champions piston compressor range is designed to cover all the possible professional uses of compressed air. Our piston compressors in various forms and sizes, provide a truly complete range of choice.
- A modern production system and process demands increased levels of air quality. Our complete Air Treatment Range ensures product quality and efficient operation.to provide users with a portable supply of economic and reliable compressed air.









Gardner Denver

www.gardnerdenverproducts.com gdcompressors.eu@gardnerdenver.com

The Gardner Denver Compressors brand in EMEA offers everything needed to set up a stable, clean and efficient compressed air system.

- The Gardner Denver rotary screw compressor range from 2.2 – 500 kW is designed to meet the highest requirements which the modern work environment and machine operators place on them. As a result, Gardner Denver compressors are extremely energy efficient, quiet and reliable.
- The oil-free EnviroAire range from 15 160 kW provides high quality and energy efficient compressed air for use in a wide range of applications. The totally oil-free design eliminates the issue of contaminated air, reducing the risk and associated cost of product spoilage and rework, particularly for those customers operating in sterile environments. Variable and fixed speed compressor technologies are available.
- Modern production systems and processes demand increasing levels of air quality. Our complete Air Treatment range ensures the highest product quality and efficient operation.
- Compressor systems typically comprise multiple compressors delivering air to a common header, where the combined capacity of these machines is generally greater than the maximum site demand. The Gardner Denver Connect air management system ensures that the system operates to the highest levels of efficiency.

Our products are used for applications in almost every market sector, ranging from industrial movement to environmental processes, and from healthcare applications to energy production.

- Automotive
- Environmental
- Food & beverage
- General industrial
- Pulp & paper

We rely on local independent distributors to deliver our products and services to market, a philosophy that has worked for us for decades.

Gardner Denver Compressors' extensive distribution base ensures superior local service with:

- Guidance on selecting the right compressed air solution for specific applications
- Providing expert routine maintenance through factory trained service personnel
- Professional air audits to identify cost savings







BellissMorcom Reavell <u>Gardner</u> Denver

Gardner Denver

HIGH PRESSURE SOLUTIONS

www.gdhighpressure.com highpressure@gardnerdenver.com

Gardner Denver specialises in high pressure air and gas compression technology through its high pressure ranges Belliss and Morcom, Gardner Denver and Reavell.

Though a highly skilled and knowledgeable global team boasting over a century of experience within the sector, Gardner Denver have become renowned for providing high quality turnkey solutions assisting with specialist air and gas requirements, utilising the latest technological innovations to create bespoke solutions that meet our customers requirements.

Our product range covers a wide range of reciprocating piston technologies, be it 1 to 5 stages, lubricated or oil free air, water or air cooled, with a pressure range from 2 up to 414 barg. Whatever your requirements for high pressure air and gas Gardner Denver will have a compressor to suit.

By investing in a Gardner Denver high pressure compressor you will benefit from:

- Reduced energy costs
- Reduced total cost of ownership
- Reduced compressor footprint
- Reduced compressor operating noise levels

From simple compressors through to complex customengineered solutions, Gardner Denver covers a wide range of applications in support of some of the world's leading companies: its reputation for quality speaks for itself.

Take a look at some of our most popular industries and applications:

Breathing air – Standard breathing air systems for leisure diving to specialist Heliox saturation diving systems for professionals

Defence — Thermal imaging, weapons systems

Food & Beverage — PET bottle blowing, nitrogen blanketing

Marine — Engine start, ballast control

Oil & Gas — Well head cleaning, seismic survey, ballast control

Power generation & distribution – Switch gear protection, pipeline testing

Transportation – Compressed natural gas systems (CNG)

Whatever your requirement for high pressure air or gas, our team of specialist engineers and project managers can work closely with you to design a solution which is bespoke to you. We make sure our solution is highly engineered, safe and performs exactly how you want it.





Tamrotor

www.tamrotor.fi tamrotor.fi@gardnerdenver.com

Tamrotor brings together the complete OEM competencies into one brand, to offer our customers a wide range of compression technologies to suit a multitude of applications. So today, our customers don't only get the benefit of our state-of-the art manufacturing techniques or our extensive product portfolio. They can also rely on the expertise of our staff.

Customised for OEM applications

When we first designed our Tamrotor products, we set ourselves the task of providing a highly-durable product offer alongside efficient operation and ease of maintenance.

Our experience gained in harsh rock drilling applications taught us the importance of product reliability and longevity, and naturally this has benefited all customers who use Tamrotor products in their applications. Today, we are proud to say that all our OEM products are suitable for continuous 24/7 running.

- Industrial and portable air compressor solutions
- Construction and rock drilling equipment
- Vehicle and mobile applications
- Train and locomotive air applications
- Fire fighting equipment

Whatever your application, you can be rest assured that our portfolio provides a perfect fit to your individual requirements.

- The Enduro air end has set new standards for air end endurance and efficiency. The world's most popular and reliable air end can be economically used in a wide range of compressor applications.
- The Tempest family of integrated screw compressors is ideal for all compressed air needs. The wide range of Tempest products covers all Enduro air ends from 4 kW up to 75 kW.
- Proven for years in the most difficult applications, these products are hard at work in drilling equipment, as well as mining and construction vehicles and applications. The CT series is as much at home working deep underground as it is in the mountains!







The Industrials Group Vacuum Pumps and Blowers Division

The Vacuum Pumps and Blowers Division of the Industrial Group offers a unique choice of technologies. Three product groups are at the heart of our organisation:

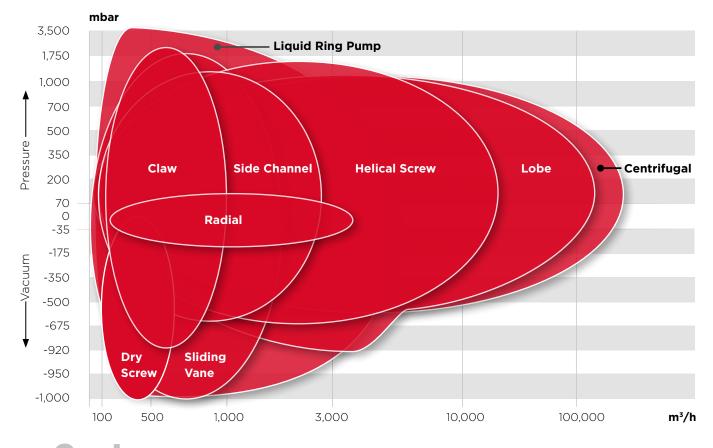
- VP-Tech (Elmo Rietschle and Robuschi)
- Low Pressure (Robuschi, Gardner Denver)
- Transport Solutions (Drum, Wittig, Webster Drives, Gardner Denver, Robuschi, Hydrovane, Solimar, SSP, Air Drive).

Our application engineers are leading experts for a wide range of industries and we will make sure you get the best machines for your needs. We do not only concentrate on providing top quality machines at a competitive price. We deliver innovative solutions that combine energy efficiency and performance to make us the life cycle champions of our industry.









Blowers Air Map

Gardner Denver







www.gd-elmorietschle.com info.elmorietschle@gardnerdenver.com

The Elmo Rietschle brand and its wide choice of technologies for vacuum and pressure applications offer a unique product offering within Gardner Denver.

These products are suitable for many different applications, including the following:

- Pneumatic conveying
- Plastics: transfer of granules, calibration, dryers
- The food industry: thermoforming, sealing, mixing and packaging
- Graphic arts: printing
- The environment: production of biogas, water treatment
- The healthcare industry: medical vacuum, respiratory assistance
- Glass: bottling
- Chemistry, pharmaceuticals: distillation process, packaging
- Automotive: manufacturing of parts

Elmo Rietschle is committed to developing products that meet the highest standards of quality, reliability and performance.

Technologies supported:

- Side channel
- Liquid ring
- Dry running and oil lubricated rotary vane
- Claw
- Screw
- Rotary lobe

Leading global manufacturers in almost all industries have made us the world market leader for side channel blowers. Customer focus and technology leadership are key factors in retaining this reputation.

Elmo Rietschle also develops customized solutions. Drawing on a wealth of experience, its know-how is just as applicable to the medical field as to heavy industry.

The brand also includes Wittig stationary rotary vane compressors, well known for their reliability and low operating costs.





ROBUSCH

www.robuschi.com info.robuschi@gardnerdenver.com

Oil-free low pressure and vacuum solutions

Based in Parma, Italy, and founded in 1941, Robuschi has always combined its experience with the most advanced technological innovation. Its activity began with the centrifugal pumps production, later on with low pressure blowers and vacuum pumps.

Blowers, Compressors and pumps are used for a broad range of applications in the waste water treatment, in the chemical - pharmaceutical, in the food, in the paper industries, so in every processing industries, where it needs fluid handling. In these highly demanding fields, Robuschi can offer solutions for several different requests and also according to the ATEX certification.

In pressure applications Robuschi is capable to offer P. D. Blowers & Screw Compressors wide range up to 2,500 mbar (g). Sure the innovative ROBOX screw Hi pressure and Low pressure versions aim at providing the best solutions for every requirement. Flexibility, high efficiency and wide range of options are the key. Robuschi is able to supply a broad choice of products even in vacuum operation through its Vacuum Blowers and Compressors range, reaching up to 100 mbar abs., with its High Vacuum Blowers, used as a booster with a primary vacuum system, getting up to 0.001 mbar abs and through the single stage liquid ring vacuum pumps (RVS) associated with complete packages, achieving vacuum pressure up to 33 mbar abs.

Finally Robuschi completes its air and gas product series with Centrifugal pumps lines: PROCHEM, suitable for the conveyance of clear or aggressive liquids mainly used in the chemical and petrochemical industry and PROMIX series for handling viscous liquids and slurry, used in the paper, sugar and food industries.

- Power Generation
- Cement / Limestone
- Food
- Vacuum Trucks
- Chemical
- Pulp & Paper
- Water & Wastewater







DRIM

WEBSTER DRIVES

AIR DRIVE



Gardner Denver

TRANSPORT SOLUTIONS

www.gd-transport.com info.drum@gardnerdenver.com

Gardner Denver's Transport Business Unit includes Drum, Wittig, Airdrive, Webster, CycloBlower, Hydrovane Transit, SSP and Solimar products. These are internationally recognized brands, renowned for their expertise in both unloading technologies used for dry and liquid bulk products, as well as drive systems for various mobile applications.

We serve the following industries:

- Transport industry
- Food and beverage industry
- Petrochemical industry
- Liquid and industrial waste collection
- Construction and public works
- Public transit
- Special (utility & off road) vehicles

The group's products enjoy a very strong reputation in the various industries in which they are employed:

- Pumps, compressors and hydraulic drive systems for the unloading of liquid foodstuffs, chemicals and gases from road tankers and tankcontainers
- Compressors, and blowers for the unloading of all sorts of dry bulk products from silotrucks and silocontainers

- Vacuumpumps for waste collection vehicles
- Hydraulic drives and cooling systems pumps, compressors, blowers and other mobile equipment
- Compressors used in the metro transit field to control the pneumatics of trains, trams, metro's and trolley buses
- Compressors and alternator systems (underfloor)
 on utility- and tyre repair vehicles
- Pumps and loading systems for the safe transfer of liquids in various industries and tank storage
- Special geared drive systems for the transmission of power in mobile applications

The Gardner Denver Transport business unit combines core state-of-the-art manufacturing companies, within a network of innovative, experienced sales companies, distributors and OEMs. By working closely with customers and using our considerable knowledge of mobile applications, we are able to produce innovative solutions to provide technical and financial benefits for all concerned. Our expertise lies in combining Gardner Denver products and ancillaries into systems for various transport applications, including an outstanding after sales service.











<u>Gardner</u> Denver

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Tamrotor



<u>CHAMPION</u>

by Gardner Denver



HIGH PRESSURE SOLUTIONS





Gardner Denver

TRANSPORT SOLUTIONS

The Ultimate Service Capability

Our customers rely on us day after day to keep their systems running cost-effectively and at optimum performance. We take customer care very seriously and have developed our aftermarket capabilities year on year.

Today, Gardner Denver is known globally for its excellent service and support.

- Custom engineered and turn-key solutions
- Local service centres
- Factory-trained service engineers
- Professional auditing and reporting
- Worldwide service network
- Innovative warranty programs

Only genuine spare parts and lubricants are specifically designed to guarantee the reliability, optimum efficiency and performance of Gardner Denver products. Our extensive distribution network and intelligent stocking policies provide excellent availability of genuine spare parts and lubricants.

parts and services @gardnerdenver.com





Gardner Denver Industries

Gardner Denver Industrials Group provides solutions to a broad range of applications and processes used in many industries. These solutions reduce energy consumption, improve reliability and uptime, eliminate pollution and provide cost savings.

Compressors

- General Manufacturing
- Petrochemical/Chemical
- Food & Beverage
- Mining & Construction
- Oil & Gas
- Pharmaceutical/Medical/Environmental
- Automotive
- Power Generation

Blowers & Vacuum Pumps

- Water & Waste Water Treatment
- Surface Cleaning
- Food & Non Food Packaging
- Food & Beverage
- Plastics
- Medical
- **Central Vacuum** •
- Construction
- Bulk Material Transfer
- Printing & Paper Handling
 - ... and many more.

Your Satisfaction is our Ultimate Goal

Compressors

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