

ROBUSCH®

Full Spectrum of Technologies

For your evolving needs



In a competitive global market, our long history of supplying compressed air solutions that suit the customers' exacting requirements sets us apart from the rest.

Using modern machining systems and state-of-the-art production processes, our product range is constantly evolving. Taking care of our ecosystem is part of Robuschi strategy, focusing on promoting environmentally friendly solutions, enhancing energy saving and protecting natural resources.

With a presence in over 50 countries, we offer local service capability, ensuring our advanced technology is backed by technical support.



Our product range



Low Pressure Screw Compressors

- Robox Screw



Turbo Blowers

- Robox Turbo



Multistage Centrifugal Blowers

- Robox Multistage



Side Channel Blowers*

- Robox Side Channel

* Only for wastewater treatment industry



Rotary Lobe Blowers

- RBS • RBS Steam • RBS/AV
- Robox Lobe • CRBS - GRBS
- Robox Aqua • Robox Direct
- Robox Bio&Gas • CRBIO - GRBIO
- RB-DV



Liquid Ring Vacuum Pumps

- RVS • LRVS • CRVS • KRVS



Centrifugal Pumps

- Promix • Prochem



Industries and Applications

...the perfect solution
for every industries

Our team of highly skilled and experienced engineers is focused on developing products that offer maximum benefits to our customers with flexible configurations and even more optimized technical features.



The industrial sectors where it is possible to install our production range are unlimited, due to our different technologies we are able to offer the solution that best suits your needs and plant configurations.

- **Aquaculture**
- **Automotive**
- **Cement**
- **Chemical-Pharmaceutical**
- **Electronics**
- **Energy**
- **Food**
- **Glass Industry**
- **Iron and Steel**
- **Medical**
- **Mining**
- **Oil & Gas**
- **Plastics**
- **Pulp & Paper**
- **Shipyards**
- **Tanning Industry**
- **Textiles**
- **Wastewater Treatment**
- **Woods**

...and many other industries...



Screw Compressors

One Package Two Technologies

We introduced a new **Robox Screw** design and sizes.

Depending on your requirements, this new unique design allows you to utilize either a lobe and screw air end in our engineered Robox enclosure.

To accommodate this innovation, our teams performed a complete package redesign:

- Best in class footprint
- Low noise
- Simple installation
- Easy to service and maintain access throughout the range
- Available up to 1,000 mbar(g)



The low-pressure compressor unit, **Robox Screw**, combines unique characteristics of the “oil-free” RSW screw compressor, with the consolidated characteristics of Robox compact units.

- Low noise emissions as a result of high-efficiency internal compression, silencers and a noise-reducing enclosure
- Flexible to ensure the operation at the point of best efficiency
- Oil free for a more environmentally-friendly operation (Class 0 certification, according to ISO 8573-1)
- Ease of maintenance thanks to its simple and robust construction
- Maximum energy saving
- Available up to 2,500 mbar(g)

High Speed Turbo Blowers



Robox Turbo blower unit up to 1,200 mbar(g) and 26,500 m³/h.

Energy consumption has been a priority for a long time, but now more than ever, our customers are looking for on-going reductions in energy costs.

In wastewater treatment plants for example, energy can account for as much as 75% of the overall operation costs of the facility. Aeration systems are the largest energy user (more than 60% of the total electricity cost). State-of-the-art aeration equipment can make the difference, not only to reduce your carbon footprint, but substantially lower lifecycle costs.

Introducing the **Robox Turbo** range of blowers that can ease energy savings concerns for customers who are conscious of their environmental and financial impacts (total cost of ownership).

Our **Robox Turbo** range of blowers offer a unique design using long lasting air foil bearings. This allows for a best in class footprint, low noise, plug & play compatibility, low cost and easy maintenance throughout the range.



Multistage Centrifugal Blowers



Robuschi has a new comprehensive product line of **multistage centrifugal blowers** broken into small, medium, and large inlet sizes.

Our models cover a broad performance range with capacities stretching from 85 to 70,000 m³/h and present their own unique design features and characteristics.

50 Hz is our standard, but the 60 Hz is also available Robox Multistage models cover a broad performance range to meet our needs.

Each base model presents its own unique performance characteristics and design features that are illustrated in the following pages.

Our Engineers are at your disposal to size the Robox Multistage to best fit your plant. They will provide all the technical information and support as well.

ROBOX 
MULTISTAGE



Side Channel Blowers



Robox Side Channel is the latest product of the ever-evolving Robuschi blower family.

Our portfolio is specifically designed for our Water and Wastewater Treatment customers, who can now benefit from a single and reliable supplier for all needs and applications.

WWT plant's processes can require intermittent air demand in applications such as sand filter back washing or constant flow in secondary treatment to keep in suspension the biological sludge within the requirement flow and pressure. When the installation space is limited and low maintenance is needed, Robox Side Channel blowers can be the alternative solution to meet customer's requirements.

Thanks to their rugged design, these blowers are virtually maintenance free and can operate for up to 20,000 hours with practically no downtime.

Robuschi side channel blowers have a flow up to 700 m³/h and a differential pressure of up to 600 mbar.



ROBOX®
SIDE CHANNEL

Rotary Lobe Blowers

ROBOX 
LOBE

RBS is the innovative three lobe rotary positive displacement blower equipped with a special low pulse system to reduce pressure pulsations.



Robox Lobe is the low pressure blower package, based on RBS series, operated by an electric motor through a special belt drive, including all accessories and noise enclosure.

- Robust
- Cost efficient
- Dry running
- Maintenance friendly



Robox Aqua and **Robox Direct** series are the new rotary lobe packages, specifically designed for space constraints and for enhanced efficiency. Robox Aqua has been specifically designed for the needs of the aquaculture industry.



Robox Bio&Gas and CRBIO - GRBIO

are blower packages, especially developed for the conveying and compression of biogas, as well as natural and landfill gases.

- Reliable
- Safe
- Resistant
- Full range of accessories
- ATEX certification
- Customised solutions for different biogas applications



CRBS - GRBS consist of table top blower packages with RBS series and fitted with all the necessary accessories.

- Robust
- Dry running
- Maintenance friendly
- Customised according to customer specifications



Rotary Lobe Blowers

RBS Steam – All components in this series are constructed from stainless steel (AISI 316 or DUPLEX), to provide excellent corrosion resistance in a variety of heavy-duty applications such as wastewater treatment, ozone and evaporation processes.

- Different configurations available with various sealing systems
- Excellent resistance to corrosion
- Maintenance friendly





High Vacuum Blowers

The **RBS /AV** PD blowers are rotary lobe compressors used for vacuum installation as booster in combination with primary vacuum pumps when operating at their lowest pressure limit.

Vacuum Blowers

RB-DV (air injection vacuum blower) are three-lobe rotary blowers suitable to operate as dry exhausters up to 90% of vacuum.

It is possible to supply RB-DV as a complete vacuum package, **Robox Lobe DV**.

- Patented and unique air inlet design
- Low noise
- Cool operating temperatures (not overheating on a dead head)
- Low maintenance thanks to its robustness and heavy-duty operation



Vacuum Pumps



The **RVS** series are liquid ring vacuum pumps and thanks to innovative features, they are able to suck in gas and vapors, without contamination from lubricants, even with dragged fluid and virtually isothermal gas compression. The series can achieve up to 33 mbar (a) and capacity up to 4200 m³/h.

Thanks to its construction characteristics, the liquid ring vacuum pumps are renowned for low water consumption, minimum noise level and vibrations, reliable service and easy maintenance.

The variety of construction materials allows for a large field of applications.

Furthermore, the vacuum portfolio is wide-ranging with complete packages (**LRVS, CRVS, KRVS**) in total or partial water and oil recirculation versions. They can also be used as compressors for pressures up to 2 bar g. max.



ROBUSCHI®

Centrifugal Pumps



Robuschi centrifugal pumps, recently renewed with a fluodynamic design and a consequent increase in performance, capacity and efficiency, are of two families:

Prochem, chemical process pumps

Promix, centrifugal pumps for slurry

The following series belong to **Prochem** family:

RNS with closed impeller: suitable for moving clean or slightly turbid liquids and mainly used in the chemical and petrochemical industries;

RKNS with recessed open impeller suitable for moving liquids with suspended solid particles or filament impurities and used mainly in the chemical and petrochemical industries.

The following series belong to **Promix** family:

RA CNS series with open channel impeller:
mainly used in the paper, sugar and food industries;














RCNS - RCPNS series with closed channel impeller:
generally used in the paper and sugar industries and in the waste water treatment plants;

RKCS series with recessed open impeller:
used in the paper and sugar industries and in the wastewater treatment plants.
















Performances

Capacity (m³/h)










		300	700	800	2.600	2.850	3.280	4.100	4.200	9.400	10.100	10.500	14.000	25.000	50.000	70.000
Robox Screw																
RBS																
Robox Lobe																
Robox Aqua - Robox Direct																
CRBS - GRBS																
Robox Bio&Gas																
CRBIO - GRBIO																
RBS Steam																
RB-DV																
Robox Side Channel																
Robox Multistage																
Robox Turbo																
RBS/AV																
RVS - LRVS - CRVS - KRVS																
Promix - Prochem																

Pressure (mbar g)

Robox Screw		400	1000	2000	2500
RBS		400	1000	2000	2500
Robox Lobe		400	1000	2000	2500
Robox Aqua - Robox Direct		400	1000	2000	2500
CRBS - GRBS		400	1000	2000	2500
Robox Bio&Gas		400	1000	2000	2500
CRBIO - GRBIO		400	1000	2000	2500
RBS Steam		400	1000	2000	2500
Robox Side Channel		400	1000	2000	2500
Robox Multistage		400	1000	2000	2500
Robox Turbo		400	1000	2000	2500
RVS - LRVS - CRVS - KRVS		400	1000	2000	2500
Promix - Prochem		Available according to PN 10 - PN 16 standards.			

Performances

Vacuum (mbar a)

		500	300	200	100	33	20	0	0.001
RBS									
Robox Lobe									
CRBS - GRBS									
Robox Ble&Gas									
RBS Steam									
RB-DV									
RBS/AV									
RVS - LRVS - CRVS - KRVS									



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