



ROBUSCH®



Side Channel Blower



**Evolving
Technologies**



Enhanced Portfolio

Side channel blowers are the latest product of the ever-evolving Robuschi blower family. With this new technology, the available blower options now include lobe, screw, multistage, high-speed turbo and side channel blowers.

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 continuous with practically no downtime.

Robuschi Robox Side Channel Blowers have a flow up to 700 m³/h and a differential pressure of up to 600 mbar(g).

Regardless of your operating needs, we have the perfect solution for your (everyday) needs.



Simple Components for a Robust Design

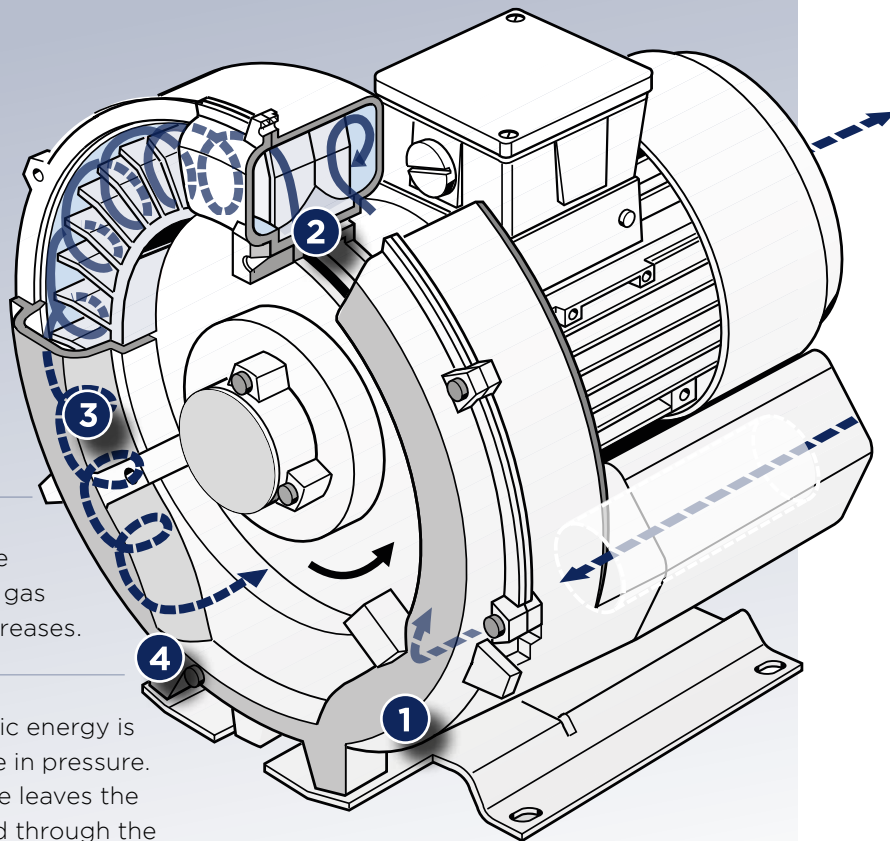


1. Cover
2. Impeller
3. Housing
4. Bearing
5. Base
6. Motor
7. Silencer
8. Cooling fan



How Does a Side Channel Blower Work?

- 1** The gas/air enters the side channel blower through the inlet port and into the rotating impeller.
- 2** Here the gas/air particles are pushed in the direction of the rotation of the impeller.
- 3** Centrifugal force created by the accelerating blades pushes the gas outward, while the pressure increases.
- 4** With every rotation, more kinetic energy is added and converted into a rise in pressure. The compressed air/gas mixture leaves the impeller blades and is conveyed through the discharge silencer.

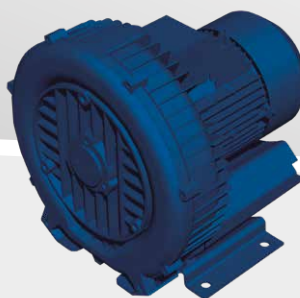


Model arrangements

Robox Side Channel Blowers can cover a range of flow and pressure combinations. The following arrangements are available and allow achieving the best performance in each operating conditions:

- **single stage**
- **single stage with increased/higher flow**
- **double stage**
- **double flow**

options also available.



Single Stage



Double Stage



Technical Features & Advantages

Highest Quality for a Maintenance Free & Long-lasting Solution

The new Robox Side Channel blower performs flawlessly and with virtually no maintenance. Every component is manufactured to our highest quality standards and tested for guaranteed continuous operation and maximum performance.*

Contact Free Compression

The impeller rotates with no contact between the rotating parts. Wear-and-tear is avoided and lubrication is not needed.

Reduced Footprint

The compact design typical of this technology allows installation where space is limited improving the operating process and maximizing overall cost efficiency.

Low Noise

The blower package includes inlet and discharge silencers specially designed to reduce the noise of the blower. Reduced noise emissions are also assured by the absence of air pulsations.

Oil Free for No-Contamination

Our Robox Side Channel is completely oil-free to meet the most rigorous of environmental standards with reduced risk of contamination.

Direct Coupling

The Impeller is directly mounted on the electric motor shaft. Resulting in less vibration and reduced noise levels, direct coupling can increase efficiency over the entire operating life of the blower.

Fixed or Variable Speed

The Robox Side Channel operates at a fixed speed. In order to enhance the operating range, it can also be equipped with an integrated Variable Frequency Drive (VFD), mounted directly on the package (plug & play solution - it only needs a connection to the pipework and electric power).

Other advantages

Robuschi Side Channel Blowers are available with different drive speed options. Adjustable speed is possible via external or integral Invertor.

Motors include both 50 and 60Hz frequency options in a range of voltages and are supplied as standard with high efficiency IE3 EN 60034 approved motors

Rated to IP 55 protection class certification.

* Robuschi Side Channel Blowers are manufactured in Bad Neustadt, Germany by Gardner Denver GmbH.

Accessories

A



Suction filter

B1



Hose flange

B2



Threaded flange

C1



Pressure relief valve
(with adapter, gasket and screws)

C2



Pressure relief valve
(for pipeline mounting)

D



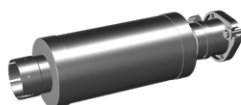
Non-return valve

E



90° elbow

F

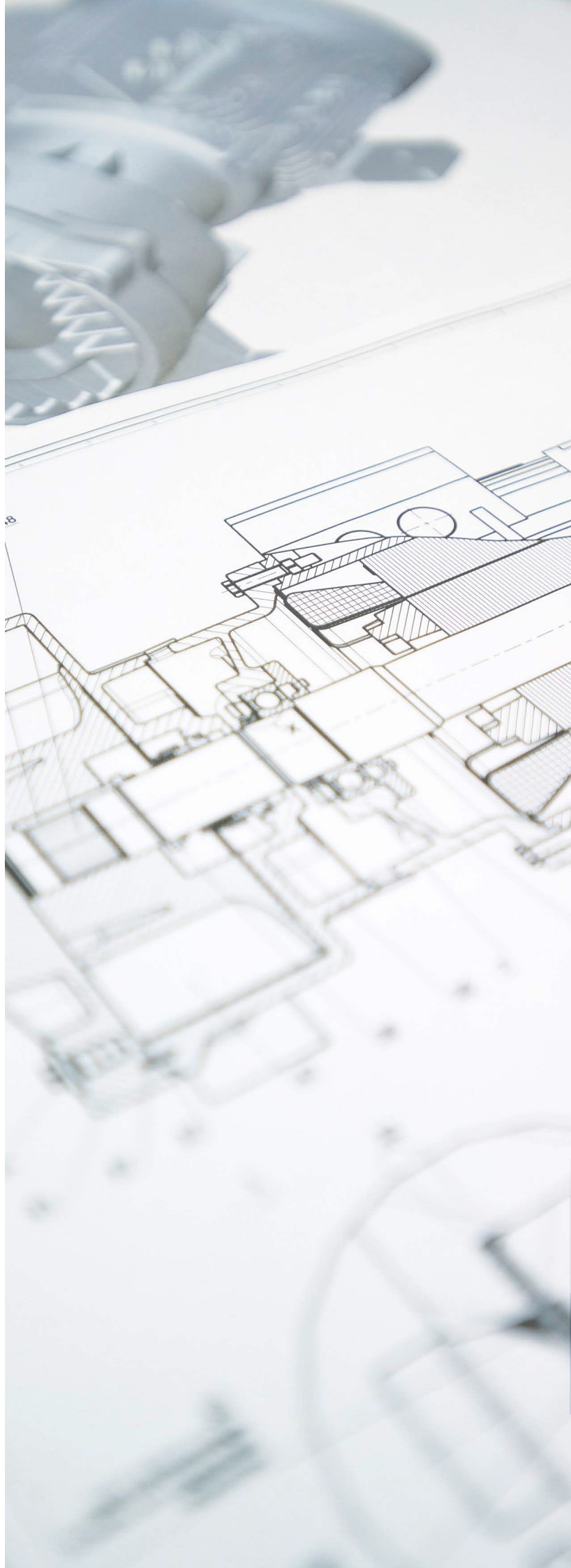


Additional silencer

G



Rubber buffer



ROBUSCH®

Robox Range to Boost Your Bottom Line



Total Blower Capability

Range up to 2,500 mbar(g) and flow up to 70,000 m³/h.



ROBOX  Lobe

ROBOX  Screw

ROBOX  Turbo

ROBOX  Multistage

ROBOX  Side Channel



Maximum uptime. Extending performance.

We provide a range of services to ensure our customers' machines are well maintained to deliver maximum performance.

We offer preventative and planned maintenance programs, genuine parts, on-site service, professional maintenance and efficient training.

Within our service portfolio, you will find many and varied options and services needed to get optimal performance, maximum uptime and operating efficiency from your Robuschi equipment.



Find your Genuine Parts at



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PARTS**

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