

ROBUSCH®



Robox Lobe & Robox Screw Blower Solutions



Evolving
Technologies



Get the Best of Both Worlds

Our extensive experience in the low pressure blower market gave us the opportunity to supply generations of customers worldwide with solutions for their operational needs. We are well aware that success is a process based on the will to innovate new products, and on working closely with our customers.

At Robuschi, we have proven that good things come in small well-designed packages. Take for example our Robox Energy Screw Blower. It has provided our clients with state-of-the-art technology, substantial energy savings all combined in an all-in package with a best-in-class footprint.

Now imagine those same important features in a convenient package that can fit either a screw blower or a lobe blower while still accommodating each of the technologies characteristics. It's up to you. Choose the blower technology you need for your operation.



Introducing the Robox Screw and Robox Lobe

Groundbreaking Oil-free Screw and Lobe Blowers

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. You can call it thinking outside the box to create our best Robox yet.

Universality in One Package

With the Robox Screw and Robox Lobe blower, you have the option to allocate one technology (screw blower) or the other (lobe blower) in the same package, providing universality to cover most environmental and industrial applications.

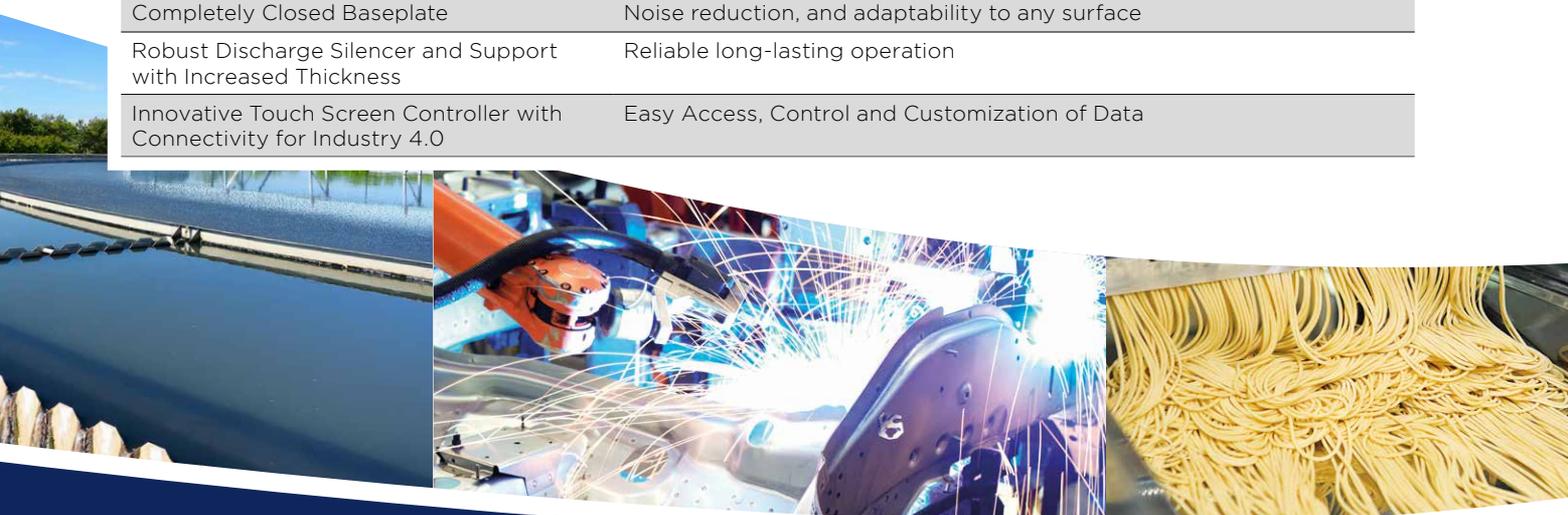
The Ultimate Low Pressure Solution

Both the Lobe and Screw blowers designed for the new Robox Lobe and Robox Screw are able to reach up to 1,000 mbar (g) lending to reliability and efficiency over the long term.

Key Features and Benefits

The Robox Lobe and Robox Screw is packed with features to make it the first choice for your compressed air needs whatever the industry.

Feature	Benefit
Flexibility	Interchangeable Blower Technology (Lobe or Screw)
	Use the blower technology that fits your application
Easily Accessible Parts in Enclosure	When re-purposing your plant or processes this can save you money and make the switch virtually seamless
State-of-the-art Noise Enclosure	Simplified, Fast and Easy Maintenance
Completely Closed Baseplate	Low Noise and Unobtrusive Operation
Robust Discharge Silencer and Support with Increased Thickness	Noise reduction, and adaptability to any surface
Innovative Touch Screen Controller with Connectivity for Industry 4.0	Reliable long-lasting operation
	Easy Access, Control and Customization of Data



State of the Art Design

The Robox blower uses state-of-the-art technology and components highlighted by premium air ends that allow for the interchangeability of blower technologies (lobe or screw) within the package through minimal adaptations.

Premium Efficiency Air Ends

The air ends utilized in the Robox Lobe and Robox Screw are:

ROBOX **LOBE**

RBS (for lobe blower installations)

The air ends employed in the Robox rotary lobe blower series. Low-pulse system, reduces the residual pressure pulsation of the conveyed gas below 2% of the operating pressure.

ROBOX **SCREW**

CDL (for screw blower installations)

This new innovation allows for the addition of a screw blower to the Robox package. The air ends used here are from the CDL state-of-the-art, patented screw blower with 3x5 profile rotors designed with wide-diameter shafts to reduce the deformation caused by internal and external loads, thereby ensuring the blower can work efficiently in even the harshest conditions.



High Efficiency

Both variants offer efficient operation, but when your process warrants the use of the screw blower in your Robox package, you will experience an increase in energy savings.

Market-Leading Performance

At Robuschi, we have been obsessed with improving the performance of our blowers with each new iteration. To continue our passion for performance, we have infused the Robox Lobe and Robox Screw with the best components we can source, and the practical design for which our engineers are known.

The Perfect Fit for Every Application

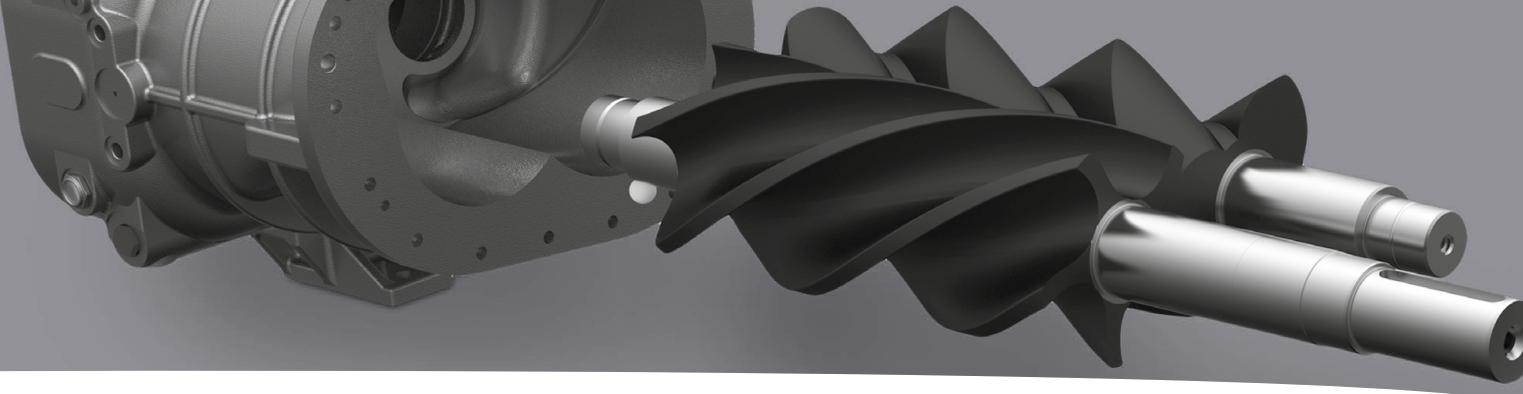
Our team of experienced engineers is focused on developing products that offer maximum benefit to each customer. From water treatment to the industrial sectors, the Robox Screw and Robox Lobe can cover most compressed air processes providing a reliable source of low pressure air, and efficiency.

Wastewater Treatment

- Aeration
- Back washing, and sand filtration
- Desalinization
- Ozonation

Industrial Sector

- Pneumatic conveying for granular, powdered and sensitive bulk materials
- Lime cement fluidisation
- Many others



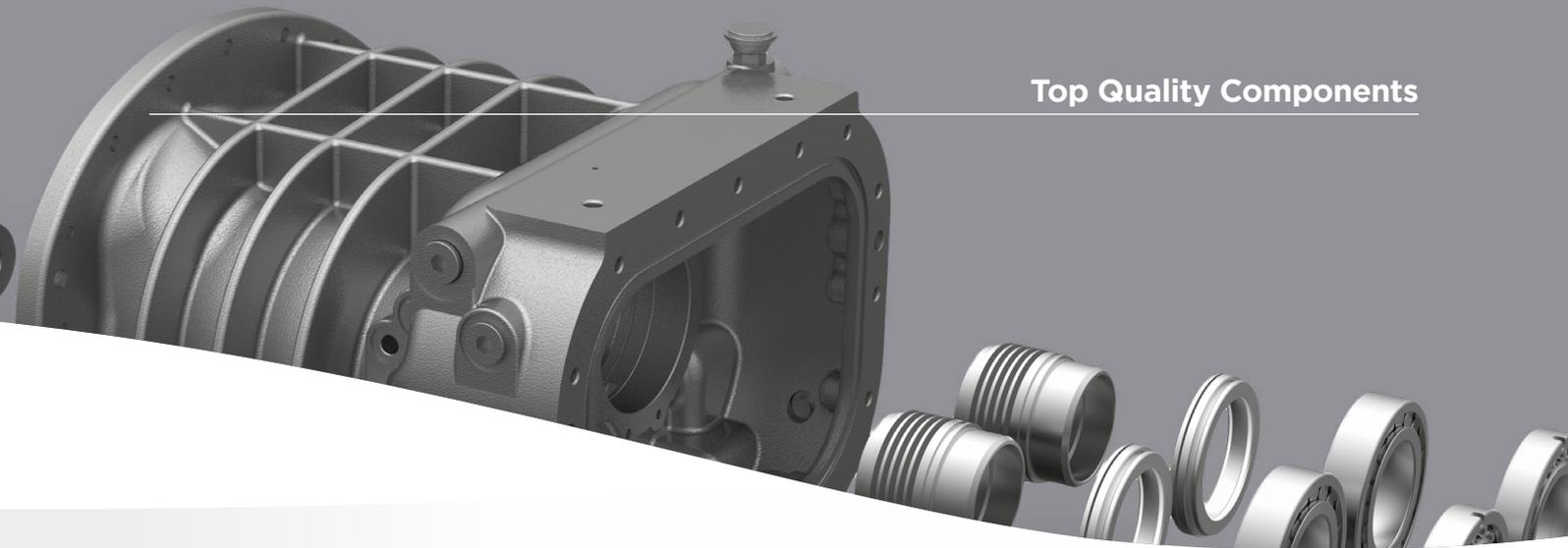
Top Quality Components

RBS Lobe Blower



Benefits at a glance

- *Splash-lubricated helical tooth synchronized gears for optimum rotor timing*
- *High quality lobe profile rotors controlled by three-dimensional instruments for top volumetric efficiency*
- *Durable shafts and robust design to reliable operation. Special coating (on request)*
- *Long life steel cage bearings*
- *Pirex mirrors for clear oil inspection*
- *Special seals for severe duty applications (on request)*



CDL Screw Blower

Benefits at a glance

Seals with permanent non-wearing design

- Extends longevity reducing maintenance costs
- Contactless dual-ring design

Piston Ring Air Seals

- Delivers leak-free operation
- Provides maximized seal life

Dual-Splash Lubrication with Eccentric Slinger Ring

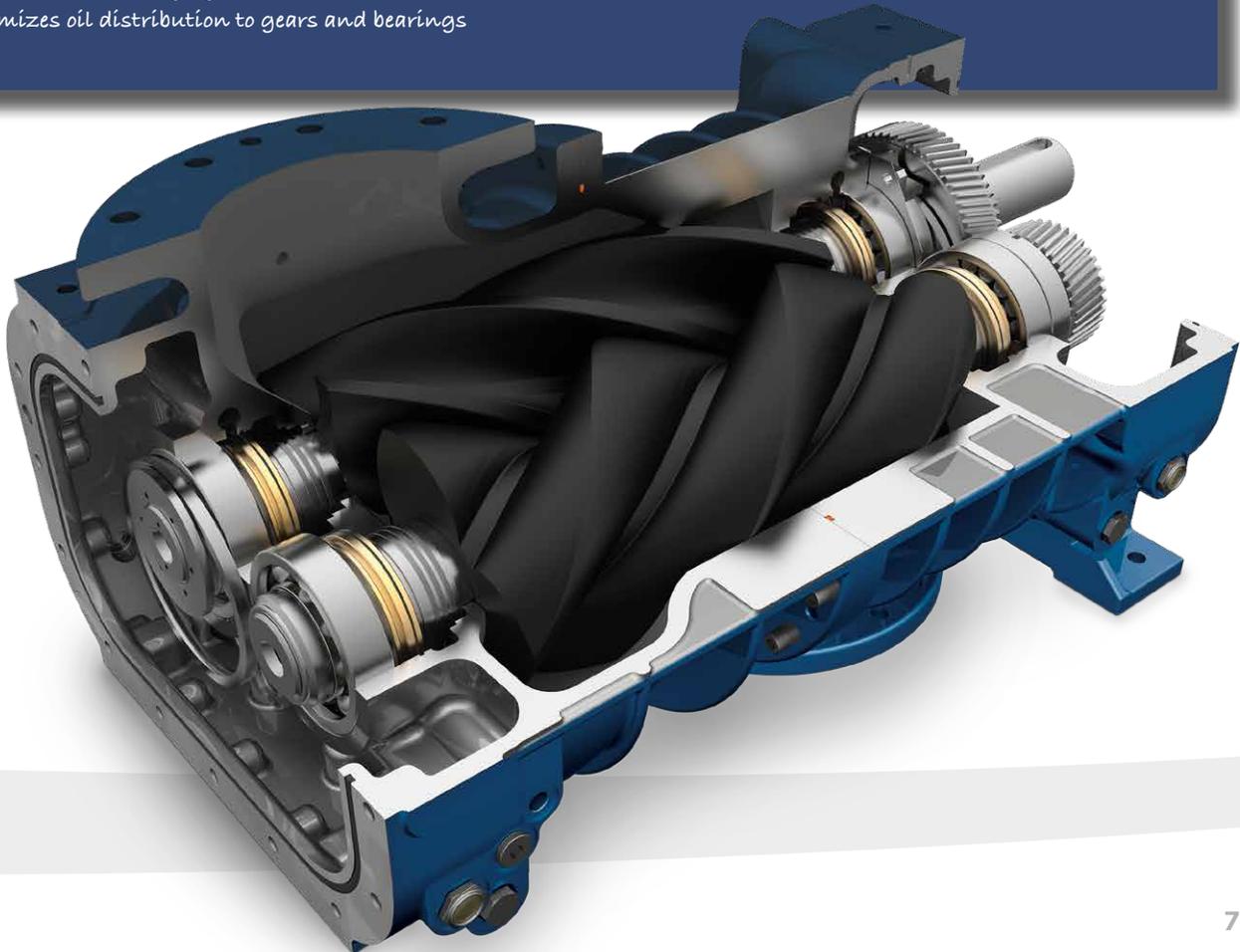
- Maximizes efficiency by reducing power consumption
- Optimizes oil distribution to gears and bearings

High precision and low friction bearings

- Provide absolute strength and stability on multiple planes to handle extreme applications
- Extended bearing life

O-Rings

- Durable protection
- No gaskets





Top Quality Design

New Compact Suction Silencer

Silencer equipped with a dedicated filter cartridge for improved reliability and quicker maintenance and the new concept allows to minimise pressure drops. Noise reduction due to absorptive and reactive internal resonance chamber design.

Robust Discharge Silencer

Reactive discharge silencer with increased thickness and spark arrester. This design prevents contamination of conveyed gas with sparks generated from the blower. Costly spark traps are no longer necessary.

Check Valve

Proven and robust check valve specifically designed by Robuschi is now positioned to ensure a quick and easy inspection, and replacement.

Lubrication System

Dual splash lubrication system that is simple, reliable and compact, and provides minimal maintenance without the need for an external oil circuit.

State-Of-The Art Noise Enclosure

The new powder coated enclosure ensures long lasting protection from corrosion, chemicals and the environment. In addition, the noise enclosure's structure is equipped with tight-fitting frames for the doors and roof support, and all the panels/doors are independent of each other and easily removable for inspection. The new hood design inhibits noise emission thanks to enclosure air inlet and outlet ducts muzzled with a lined single-chamber plenum and lined bends. The closed baseplate is suitable for any kind of floors and it guarantees a proper noise reduction.

In addition the enclosure provides:

- Compact dimensions that optimize floor space usage
- Side-by-side installation
- Baseplate equipped with dedicated holes for easy access with forklifts and easy handling
- Dedicated access for relief valve inspection / setting to reduce maintenance time
- Access for routine maintenance operations from the front/rear/left/right side of the hood
- Easy service with rear panel opening without the need to disconnect the process pipe
- Electrical cable installation possible both from the top and bottom





ROBOX

CONNECT

download catalogue
Robox Connect



Leading-edge Robox Connect Controller

The new touch screen controller is very user friendly with an intuitive menu. It provides you with a real-time view of the Robox Lobe and Robox Screw's operation, and allows you to continuously monitor the device. This ensures you spot problems and malfunctions before they happen thereby protecting your investment.

The controller manages a variety of operating functions available from the built-in screen, as well as remotely. You can monitor and configure each measured parameter and alarm from any display using a remote connection.

Main Robox Connect Controller Functions

- Multiple language configuration
- 44 analog and digital inputs / outputs
- Sequencing mode (multi-blower control)
- Interval maintenance with a dedicated P&I chart
- Parameter data transmission via Field Bus
- Parameter trends
- Alarms detections
- Data logger for service troubleshooting
- Suitable for any kind of starter device

What Are The Controlled Parameters?

- Suction pressure (P1)
- Discharge pressure (P2)
- Noise enclosure temperature (T1)
- Discharge temperature (T2)
- Oil sump temperature driven side/oil injection temperature (T3)
- Oil sump temperature gears side/tank oil temperature (T4)
- Airend shaft speed indicator
- Oil level gear/driven side (*optional*) (L3 - L4)
- Main motor PTC
- Emergency stop kit (*optional*)

Industry 4.0 Solution

The new Controller is compatible with iConn, the Industry 4.0 solution. iConn is the new and smart and proactive real-time monitoring service that delivers in-depth and real-time data, which is essential for optimised and efficient operation of the device. It provides remote availability via the Internet, which saves you time by eliminating the need to be onsite for diagnostic activities. iConn allows you to perform online tasks, such as supervision, optimising maintenance and parts management, and paves the way for the development of predictive models.



Maximise blower reliability and focus more time on your core business with iConn.



Choose the New Robox for a Superior Package!

REMEMBER

the **New Robox** allows for easier installation in small spaces and thereby providing you property cost savings.

There are many reasons to choose the New Robox Lobe and Robox Screw:

Unique Design

Thanks to its exclusive features Robox Screw and Robox Lobe have compact dimensions with the possibility of side-by-side installation. They are extremely easy to be installed with no requirement for ducting, so the compressor rooms can be kept to the minimum size.

Best-in-class Footprint

The new package size 3.5 requires on average 11% less space to deliver 22% more air flow.

One Package Two Technologies

Take advantages of the one solution for both lobe and screw blower technologies. Whether revamping plants, or your processes, you can review and compare each technology's benefits for your operation before you commit to buy. Either way you choose, the New Robox Lobe and Robox Screw will fit your requirements.

Low Noise

Low noise emissions are ensured by our new discharge and suction silencer design. In addition, canopy enhancements grant noise reduction thanks to the special sound proofing material, upgraded panel thickness and enclosure air inlet and outlet ducts muzzled with a lined single-chamber plenum and lined bends.

Easy Installation

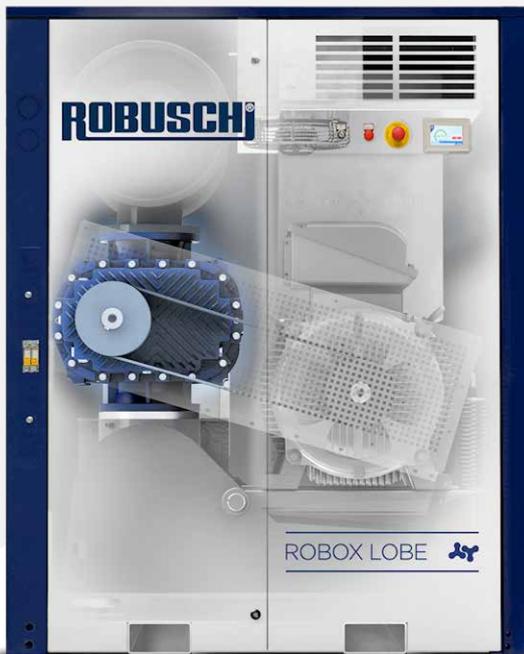
Save time and money thanks to the easy and flexible installation of the new Robox Screw and Robox Lobe blower. Handle the Robox with ease utilizing the rigid base's dedicated channels for forklifts, and place it on any even surface, with no need for special foundations. Thanks to its compact design, the Robox can be quickly and easily integrated into your existing system.

Accessible Service and Maintenance

The design of this New Robox package ensures that the service points are easily accessible. To help you see inside, the enclosure side doors are hinged and removable. In addition, oil level can be checked while the Robox is running from the outside.

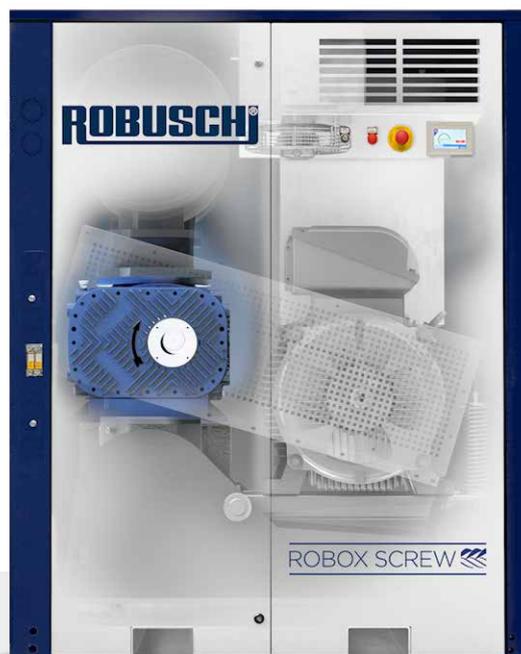
ROBOX

LOBE



ROBOX

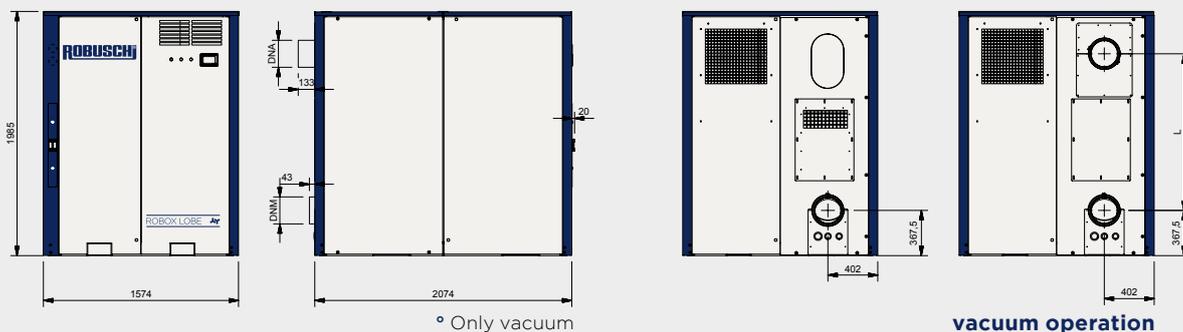
SCREW



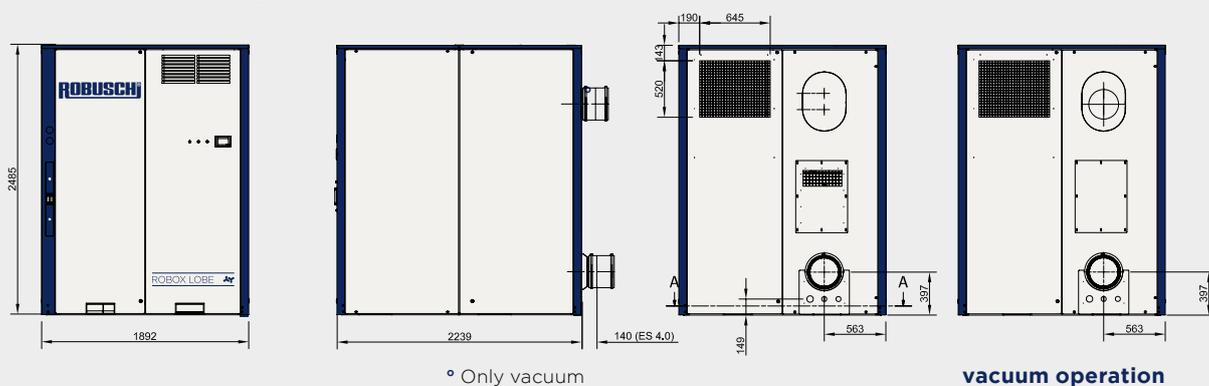
Technical Data

Robox Lobe - ES - EL Dimensions and Weights

3.5 NEW SIZE ROBOX LOBE



4 NEW SIZE ROBOX LOBE



Robox Lobe		Weight without noise enclosure *	Weight with noise enclosure *	DNM/DNA	L
Frame	Airend Size	EL kg	ES kg		
3.5	RBS 86	770	1360	200	1125.5
	RBS 105	854	1450	200	1205.5
	RBS 106	894	1490	200	1204.5
	RBS 115	994	1590	200	1274.5
4	RBS 125	1500	2060	250	1492
	RBS 126	1565	2125	250	1612
	RBS 135	1830	2390	300	1644

* weight without motor

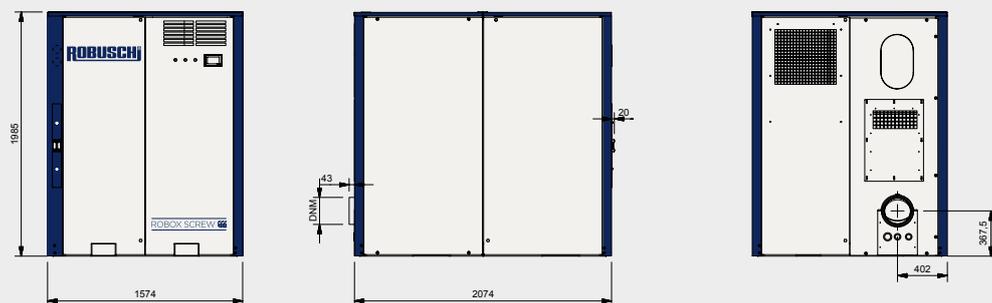
Performance Up to 1,000 mbar(g) and 500 mbar(a)

Robox Lobe ES - EL		PRESSURE			VACUUM		
Frame	Airend Size	MAX CAPACITY m ³ /h	MAX PRESSURE mbar(g)	MAX MOTOR POWER kW	MAX CAPACITY m ³ /h	MAX PRESSURE mbar(a)	MAX MOTOR POWER kW
3.5	RBS 86	3250	700	90	Not available		
	RBS 105	3600	1000	132	3650	500	75
	RBS 106	4900	700	132	4945	450	90
	RBS 115	4290	1000	160	4300	500	90
4	RBS 125	5500	1000	200	5580	500	110
	RBS 126	5620	700	200	7880	450	132
	RBS 135	5900	1000	200	6500	500	132

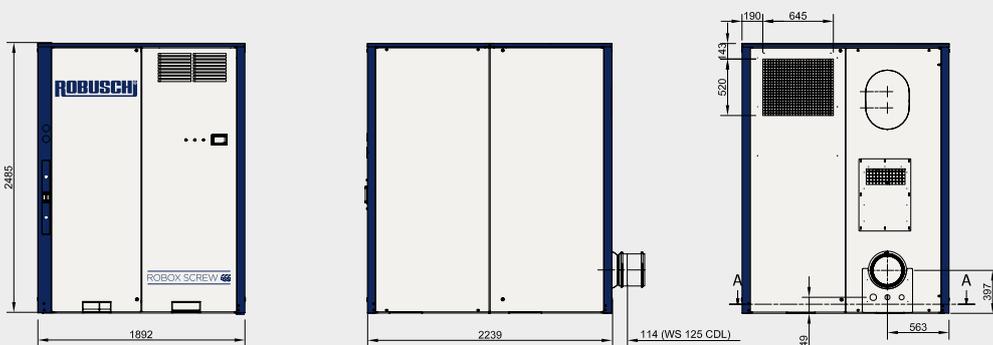
Technical Data

Robox Screw - WS - WL Dimensions and Weights

3.5 NEW SIZE ROBOX SCREW



4 NEW SIZE ROBOX SCREW



Robox Screw		Weight without noise enclosure *	Weight with noise enclosure *	DNM
Frame	Airend Size	WL	WS	
3.5	CDL 105	984	1580	200
4	CDL 125	1800	2360	250

* weight without motor

Performance Up to 1,000 mbar(g)

Robox Screw WS - WL		MAX CAPACITY	MAX PRESSURE	MAX MOTOR POWER
Frame	Airend Size	m ³ /h	mbar(g)	kW
3.5	CDL 105	4300	1000	160
4	CDL 125	5776	1000	200



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.

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