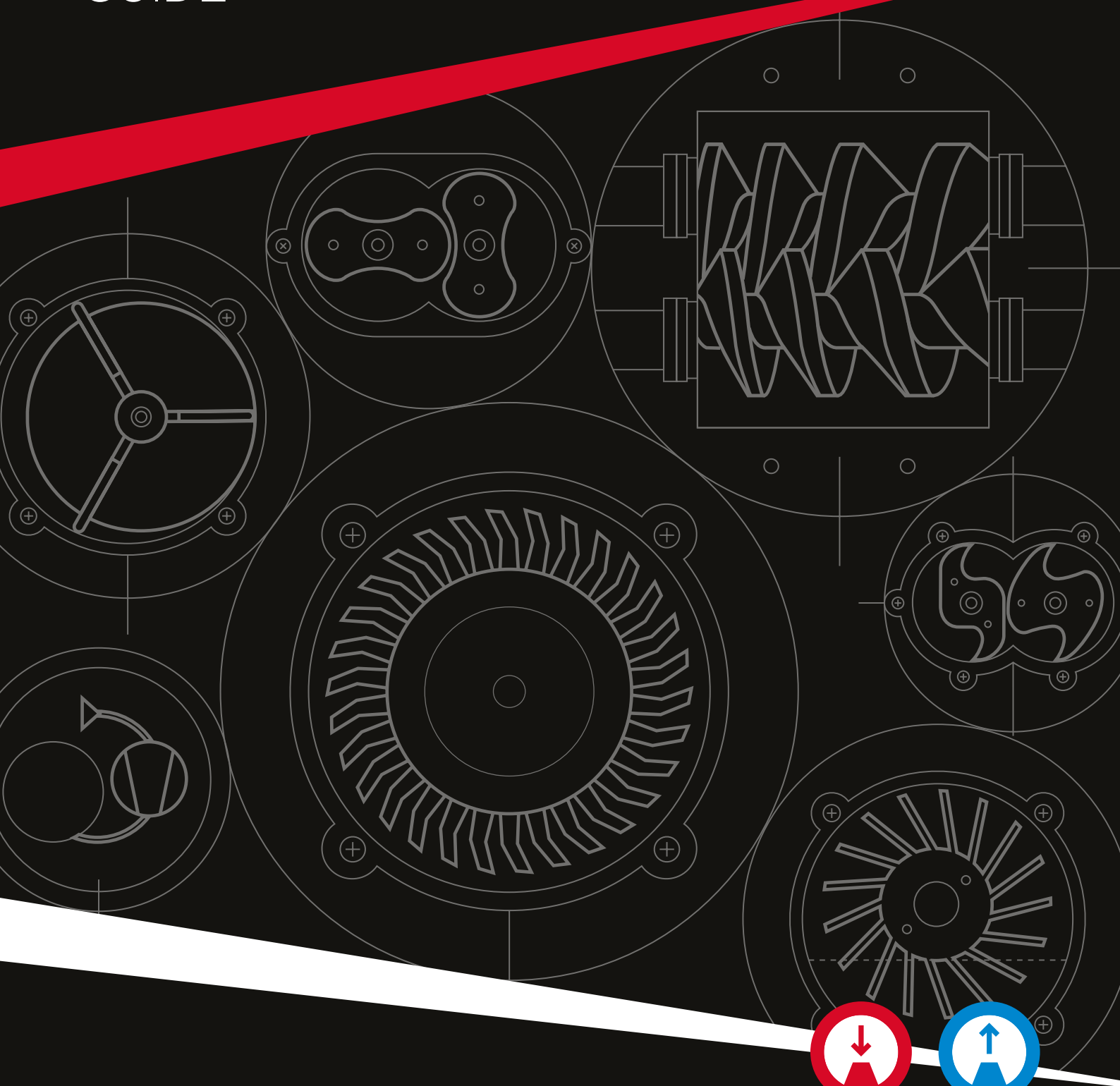
# PRODUCTS FOR VACUUM & PRESSURE

## PRODUCT GUIDE

Elmo Rietschle®



VACUUM PRESSURE

VAKUUM EXPERTEN

# OPERATING RANGE.

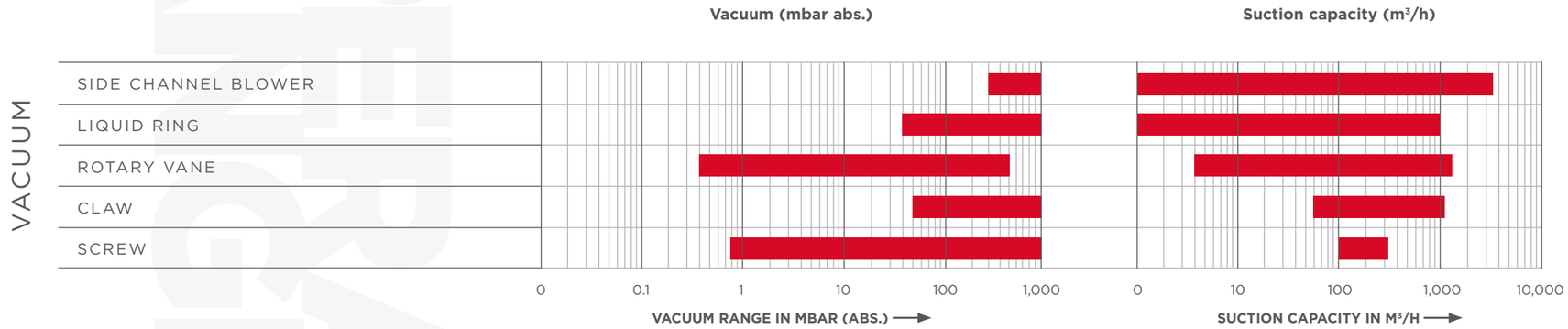
We offer the widest range of vacuum and low pressure technologies. Delivering outstanding choice of both oil lubricated and dry running solutions.

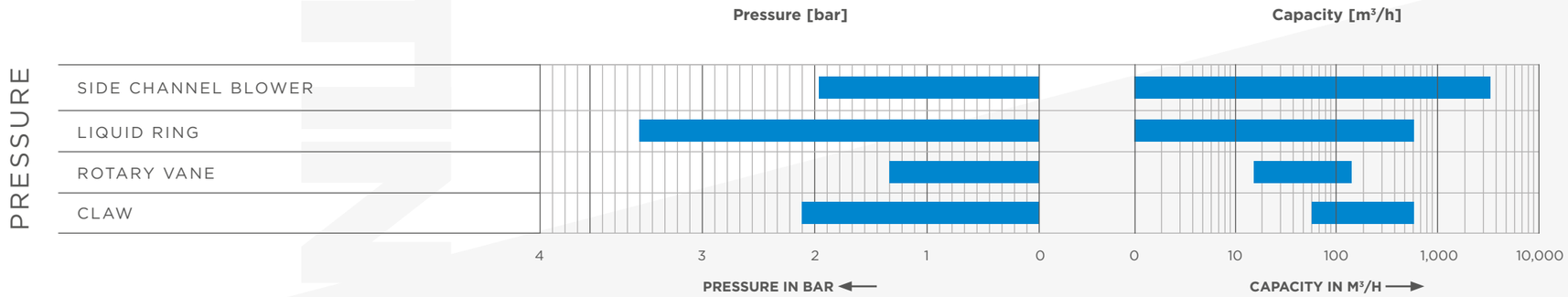
Continual investment in product development and research ensures our products are kept at the forefront of the industries we serve, delivering sustainable solutions that drive energy efficiency and performance for your customers.

Our technologies enable us to offer the optimum solution for your specific application requirements.

VACUUM

PRESSURE




ROTARY VANE

ROTARY CLAW

ROTARY SCREW

SIDE CHANNEL BLOWER

LIQUID RING

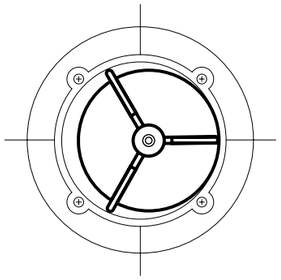
ROTARY LOBE

VACUUM SYSTEMS SOLUTIONS

OIL LUBRICATED

VACUUM

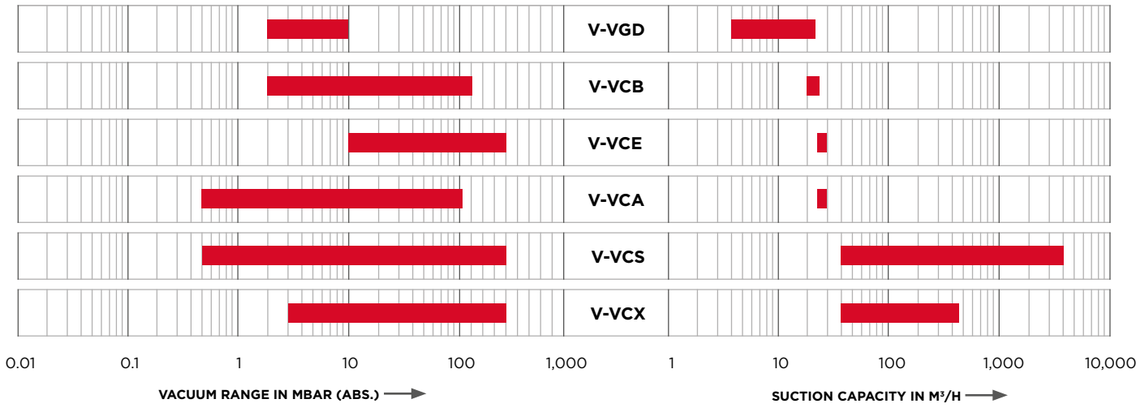
V-VGD



# V-SERIES OIL LUBRICATED

Elmo Rietschle Oil-lubricated rotary vane vacuum pumps are used in a wide variety of industrial applications. Offering the largest range of oil-flooded vacuum pumps for industrial coarse and fine vacuum operation.

## PERFORMANCE DATA




V-VCS

## ADVANTAGES AT A GLANCE

- QUIETEST ROTARY VANE PUMP ON THE MARKET
- SMALLER SIZE & LIGHTER WEIGHT
- IMPROVED ECO PERFORMANCE
- XD HEAVY DUTY MODELS AVAILABLE FOR WET APPLICATIONS

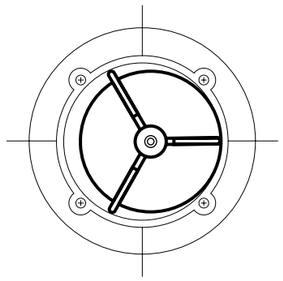
V-VCS 300

V-VCS 150


V-VTN

V-VTA/VTR

V-DTN



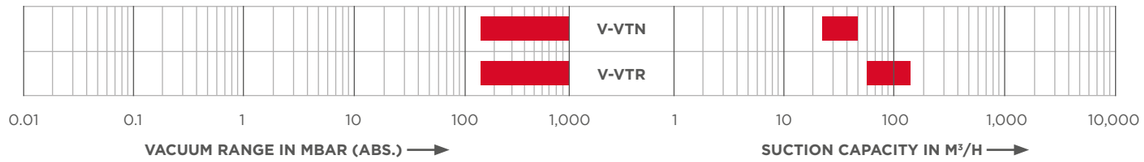
# V-SERIES DRY RUNNING ROTARY VANE

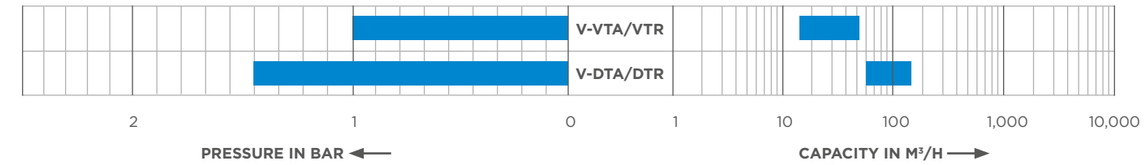
The range of eco-friendly dry running rotary vane pumps from Elmo Rietschle have a wide performance range, making them suited to a broad range of applications. Design features include maximized cooling air pathways, heat resistant materials, sound reduction covers and relief valves.

## ADVANTAGES AT A GLANCE

- DRY RUNNING
- LOW NOISE LEVEL
- ROBUST AND ECONOMICAL
- LONG UP TIMES
- EASY TO OPERATE

## PERFORMANCE DATA



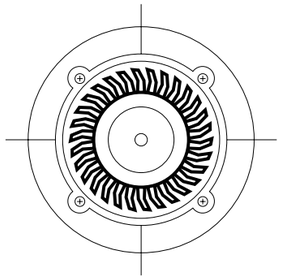




V-DTA/DTR

OIL FREE VACUUM PRESSURE

## ADVANTAGES AT A GLANCE

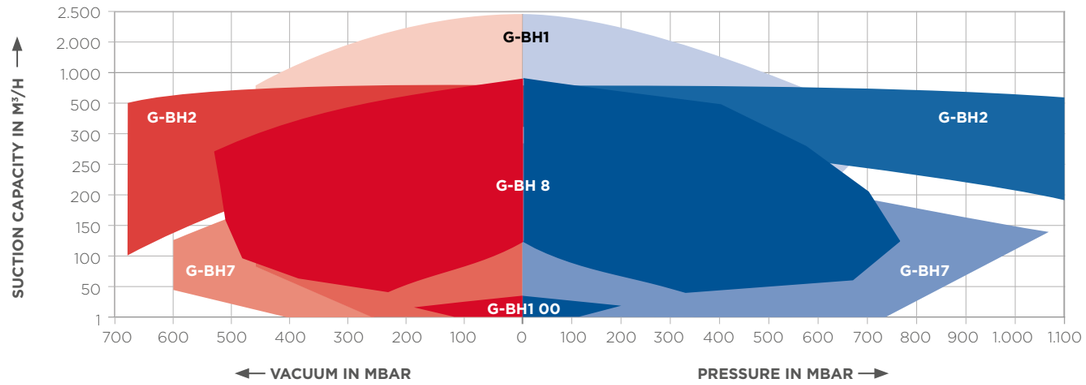
- **RELIABLE AND BUILT-TO-LAST, VIRTUALLY MAINTENANCE FREE**
- **ROBUST YET LIGHT WEIGHT**
- **FOR USE WORLDWIDE**
- **ADJUSTABLE SPEED CONTROL**
- **VARIABLE PERFORMANCE CONTROL**



# G-SERIES SIDE CHANNEL

Elmo Rietschle Side Channel Blowers have proven their reliability in service for many decades, performing flawlessly day in and day out with virtually no down time.

## PERFORMANCE DATA




Available in a wide selection of performance ranges up to 3,000 m³/h and differential pressures of up to 1,000 mbar. They cover most requirements flexibly and powerfully.

The G-Series side channel blowers feature voltage range motors for 50 / 60 / 87 and 100 Hz in protection class IP 55 or higher (IP56 or IP65) (insulation class F) and are UL 507 and CSA 22.2 No. 113 approved and are also available with ATEX certification.

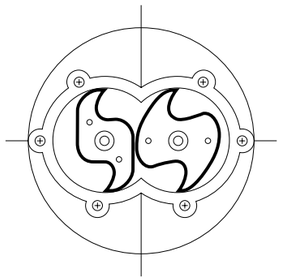
c UL us Ex IE3 CE

V-VLR 62/122

VLR 301

DLR 301

VLR 501



# C-SERIES CLAW

Our dry running C-Series generates contact free vacuum or compressed air efficiently and economically due to the principle of internal compression. This leads to considerable energy savings compared to the traditional rotary lobe design without internal compression.

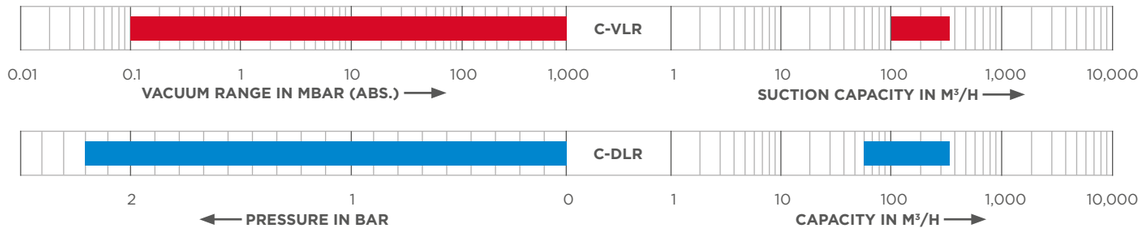
## ADVANTAGES AT A GLANCE

- DRY, CONTACT-FREE OPERATION
- PROCESS SAFE AND RELIABLE
- NO OIL IN THE COMPRESSION CHAMBER
- FREQUENCY CONTROL AVAILABLE
- LOW SOUND LEVEL
- NO GREASING OF BEARINGS

C-SERIES

OIL FREE VACUUM PRESSURE

## PERFORMANCE DATA




### WIDE SPECTRUM OF PERFORMANCE

With the C-VLR claw vacuum pumps and C-DLR claw compressors the following ultimate pressures are attainable during continuous operation: vacuum up to 50 mbar (abs.) and pressure up to 2.2 bar. Combination pressure-vacuum pumps provide underpressure up to -0.6 bar and overpressure up to + 1.0 bar.

### INNOVATIVE CLAW TECHNOLOGY

The claws of the C-Series feature an optimized, high precision shape and roll together without contact, synchronised by a precision gear set. The compression is achieved dry and wear free. Special seals separate the compression chamber and gearbox.

The claw rotors control the transportation of the medium by opening and closing the inlet and outlet channels. Thus no sealing fluid within the compression chamber is needed.

The overhung rotor design in all sizes up to model 300 is another outstanding feature of this technology. Gas tight versions with reduced leakage rates are available. We hold the patent on the newly designed triple lobe rotors with intermediate charging of air – for the first time vacuum and pressure are being created in one stage.

Explosion proof versions with reduced leakage are available as well as ATEX compliant vacuum pumps and compressors.

DLR 501

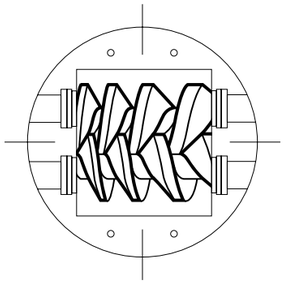
VLR 1000

OIL FREE

VACUUM

## ADVANTAGES AT A GLANCE

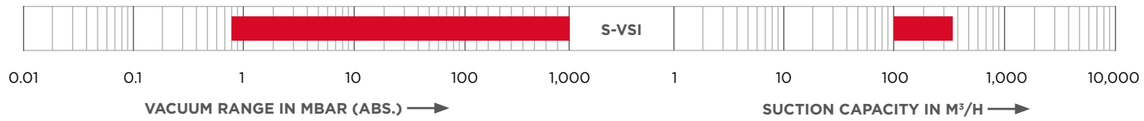
- DRY RUNNING
- HIGH VACUUM IN ONE STAGE
- APPLICATION SPECIFIC OPTIONS
- SHORT EVACUATION TIME DUE TO HIGH SUCTION CAPACITIES
- FLUSHING / CIP CAPABLE
- INSENSITIVE AGAINST WATER SHOCKS
- NO OIL IN THE CHAMBER



# S-SERIES SCREW

The dry and contact free operation of the Elmo Rietschle S-Series screw vacuum pumps requires no lubrication in the pumping chamber. This translates into major advantages: no process contamination and no pollution caused by the pump operation.

## PERFORMANCE DATA




### WIDE PERFORMANCE RANGE

Our screw vacuum pumps achieve ultimate vacuum of 0.08 mbar (abs.) and operate at any pressure between end vacuum and atmospheric pressure.

### RUGGED AND DURABLE DESIGN

In the pump housing, two parallel screw rotors, both timing gear synchronized, turn in opposite directions. Gas is compressed in the direction of the discharge port. Gearbox and mechanical seals are oil lubricated. Cooling is achieved through the continuous flow of coolant through the pump housing. Our S-Series screw pumps feature high vapour and liquid tolerance, are easy to service and have a long service life – the low rotational speed ensures low noise and low vibration operation.

### MULTIPLE APPLICATIONS

Elmo Rietschle screw vacuum pumps are primarily used in applications across many different industries where clean, oil free vacuum is needed. They can also be combined with a vacuum booster in customized vacuum systems for very high suction capacities.

General industrial applications such as packaging, drying and coating or vacuum furnaces are best served by our S-VSI range of pumps.

**S-VSI 301(01)**

**S-VSI 301(31)**

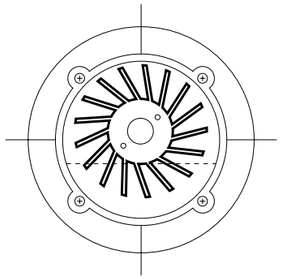
OIL FREE

VACUUM

PRESSURE

L-BV3

L-BV5



# L-SERIES LIQUID RING

Extreme conditions, which prevail in humid and wet processes, lead to lime scale or abrasion, and hence to a considerable reduction in the performance of the pump. Our liquid ring pumps, however, meet these challenges. The use of high quality materials such as stainless steel and ceramics ensure utmost reliability and constant operating characteristics – for years to come.

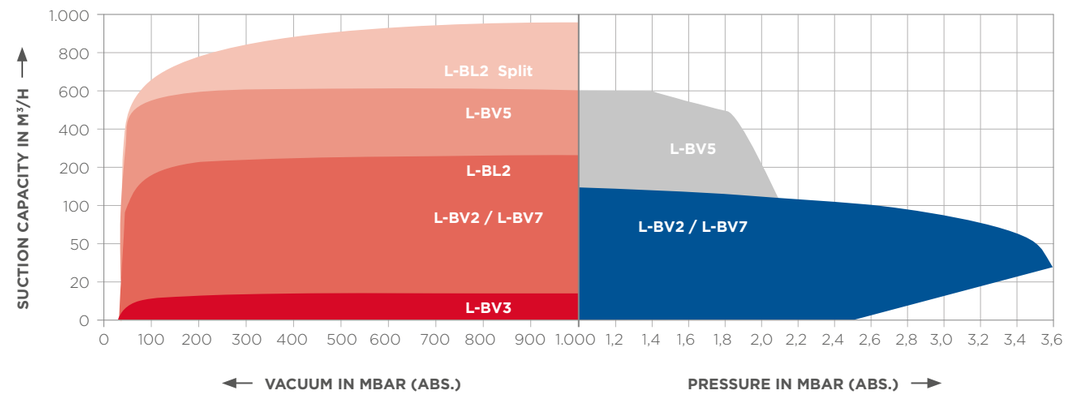
L-BL2 COMPACT

L-BV54

## ADVANTAGES AT A GLANCE

- DRY RUNNING
- HIGH VACUUM IN ONE STAGE
- APPLICATION SPECIFIC OPTIONS
- SHORT EVACUATION TIME DUE TO HIGH SUCTION CAPACITIES
- FLUSHING / CIP CAPABLE
- INSENSITIVE AGAINST WATER SHOCKS

## PERFORMANCE DATA




### RELIABLE AND ECONOMICAL

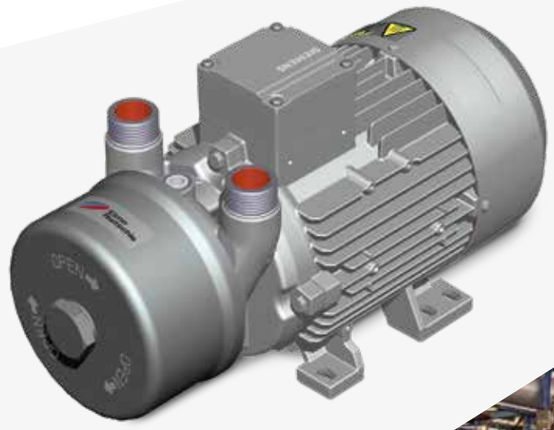
The L-Series liquid ring vacuum pumps and compressors last longer and are more reliable than modular pumps and will considerably reduce your operating costs.

### SAFE AND RESILIENT

Our pumps have stainless steel shafts which makes them corrosion resistant. They work safely and reliably even extreme conditions, like those in humid processes.

### NO MORE LIMESCALE

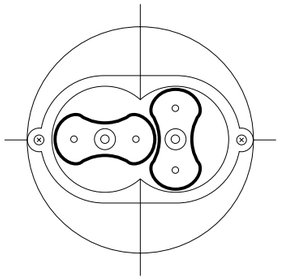
The unique ceramic internal coating of the L-Series pump housings means that the pumps will not calcify due to fluid deposits. The special coating has been developed by us in cooperation with our expert partners. The benefit: years of optimal performance at low maintenance cost.



L-BV7

OIL FREE

VACUUM



# R-SERIES ROTARY LOBE

Rotary lobe vacuum pumps R-VWP can be used in many applications that need coarse or fine vacuum. Two symmetrically shaped rotors rotate against each other, synchronized by a pair of gear wheels. The pumps are dry running, and consequently the compression chamber is free of grease or oil. Gear box and bearings are oil lubricated.

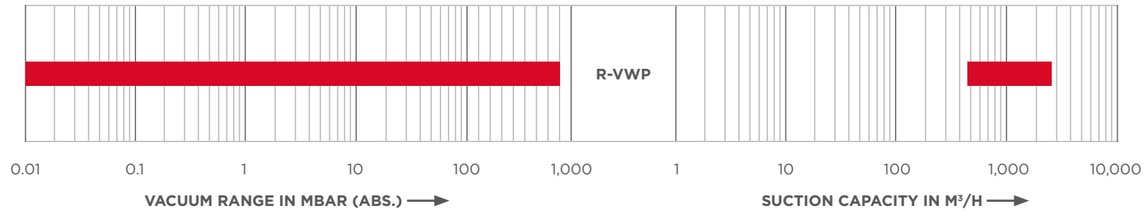
**VACUUM PUMP STANDS**

Pump sets consisting of oil lubricated rotary vanes or screws as backing pump in combination with rotary lobe vacuum pumps as booster pump are used when both high end vacuum and suction capacity are required.

## ADVANTAGES AT A GLANCE

- **ROBUST AND ECONOMICAL**
- **DRY RUNNING**
- **MODULAR DESIGN**
- **AVAILABLE AS SINGLE AGGREGATES**
- **AVAILABLE AS INDIVIDUALLY ENGINEERED PUMP SETS**
- **FREQUENCY CONTROL AVAILABLE**

## PERFORMANCE DATA




**R-VWP**

VACUUM PRESSURE

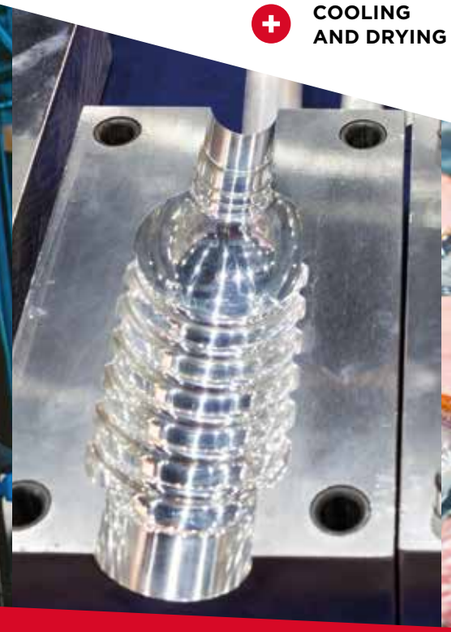
# CUSTOM BUILT TO MATCH NEEDS PRECISELY.

Our specialist teams of project engineers have designed and built tailor-made solutions to meet our customers' specific vacuum and pressure needs for many decades. We are committed to extensive and continuous research and development that enable us to engineer tailored solutions for a wide range of applications.

## TYPICAL CUSTOM SOLUTIONS APPLICATIONS.

**BLAST AIR AND VACUUM SUPPLY FOR...**

- **PRINTING AND PAPER INDUSTRIES**
- **LIFTING, HOLDING, HANDLING AND CLAMPING**
- **METALLURGY AND HEAT TREATMENT PROCESSES**
- **DEGASSING PROCESSES**
- **PNEUMATIC CONVEYING**
- **PLASTIC PROCESSING, FORMING, MOLDING, LAMINATING**
- **MOVING, CONVEYING AND PICK & PLACE**
- **DISTILLATION**
- **PACKAGING**
- **IMPREGNATION**
- **COOLING AND DRYING**



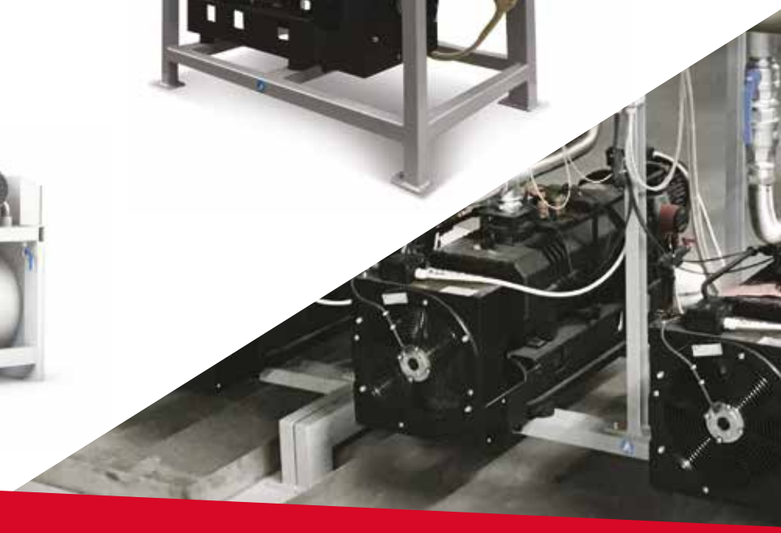
# STANDARD SYSTEMS FOR GENERAL INDUSTRIAL APPLICATIONS.

Our X-Series of systems can be configured as simplex, duplex, triplex or quad pump packages that give you the built-in flexibility demanded of modern system solutions. Pump speed can range from 10m³/hr up to 1200m³/hr and can be expanded by combining multiple pump sets that communicate to provide a seamless interaction between pumping stations.

- Our X-VPK systems utilise VLR dry claw vacuum pump technology that delivers improved efficiency, a cleaner environment and minimal maintenance. Alternatively, for deeper vacuum performance, our systems can incorporate VSI dry screw vacuum pumps.
- Claw and screw pumps also work extremely well at a multitude of motor rotation speeds that offer versatile flexibility and energy efficiency in their performance to perfectly match process requirements.

- All systems can be designed in either horizontal or vertical configuration to best utilise available space. Our SVD series of horizontal or vertical vacuum vessels can be supplied for freestanding or packaged directly into Plug & Play systems. Vessel sizes range from 100 to 2000ltrs in volume.
- No system is complete without filtration. We offer all types from simple dust filters to liquid separators and bacterial filters. We can also provide simplex or duplex filter arrangements.

If you are simply considering an upgrade to an existing vacuum system or an expansion to include more capacity we have the expertise and know-how to offer stand-alone control and motor start systems with a series of control panel capabilities that include touchscreen, HMI displays and an Ethernet based interface that supplies reliable remote management control.



We have locations throughout the world to better supply and support you. Our expert local service personnel speak your language.

Elmo Rietschle®


ELMO RIETSCHLE
**LOW PRESSURE & VACUUM SOLUTIONS**
**www.elmorietschle.com**

| F-SERIES | G-SERIES | L-SERIES | V-SERIES | R-SERIES | C-SERIES | S-SERIES | X-SERIES |
|---|---|---|---|---|---|---|---|
| Radial | Side Channel | Liquid Ring | Rotary Vane | Rotary Lobe | Claw | Screw | Systems |

Ingersoll Rand