

# VACUUM & PRESSURE SOLUTIONS



Elmo Rietschle®

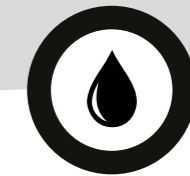
V-SERIES  
OIL LUBRICATED  
ROTARY VANE



VAKUUM EXPERTEN



VACUUM



OIL LUBRICATED



VACUUM



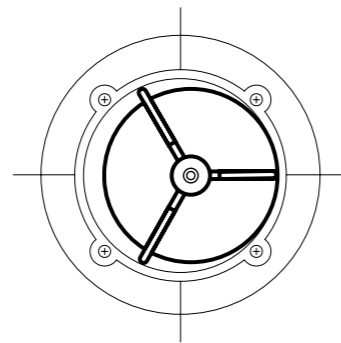
V-VCS 300



V-VCS 75



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.

### ADVANTAGES AT A GLANCE

- +** QUIETEST ROTARY VANE PUMP ON THE MARKET
- +** SMALLER SIZE & LIGHTER WEIGHT
- +** IMPROVED ECO PERFORMANCE
- +** CARE 3 EXTENDED WARRANTY
- +** XD HEAVY DUTY MODELS AVAILABLE FOR WET APPLICATIONS

## THE NEW VCS

Increasing the options within the V-VCS range.

### V-VCS

#### AN ENGINEERED EVOLUTION

The latest evolution in rotary vane design has arrived with the increased VCS range in the Elmo Rietschle V-Series. The V-VCS 40 up to V-VCS300 has been developed to provide ranges from 40m<sup>3</sup>/hr up to 360m<sup>3</sup>/hr. This evolutionary design provides our lowest cost of ownership for an oil lubricated rotary vane vacuum pump, whilst weight, noise and size reductions make it easily adaptable and retrofittable to a wide range of OEM machines.

### ADVANTAGES

#### OUR EVOLUTIONARY NEW DESIGN OFFERS:

- Lower lifetime costs with a reduction in filter requirements with no drop in oil particulate removal whilst consequently reducing maintenance requirements.
- Quietest Rotary Vane pump on the market.
- Reduced oil consumption also combines to make this machine one of our most eco-friendly oil lubricated machines available.
- Design for the OEM market, the VCS model can be easily retrofitted into most machines.

**SIMPLY SCAN THE QR CODE TO FIND OUT MORE:**



### XD

#### HEAVY DUTY MODELS

The V-VCX40 up to V-VCX300 has been developed to improve the overall performance of this tried and tested rotary vane vacuum pump technology for heavy duty applications. The VCX is suitable for wet applications with chemically resistant resin vanes, enlarged and adjustable gas ballast, metal float valve and optimized temperatures to dissipate water.

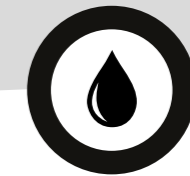
### TECHNICAL DATA

- Volume flow capacities ranging from 40 to 360m<sup>3</sup>/hr.
- Ultimate vacuum 0.5 mbar (abs).
- Noise emissions as low as 62 dB(A).
- High efficiency IE3 and IE4 motor variants available
- Fitted as standard with flange motor.
- Bearings on both sides of the rotor.



V-VCS 150



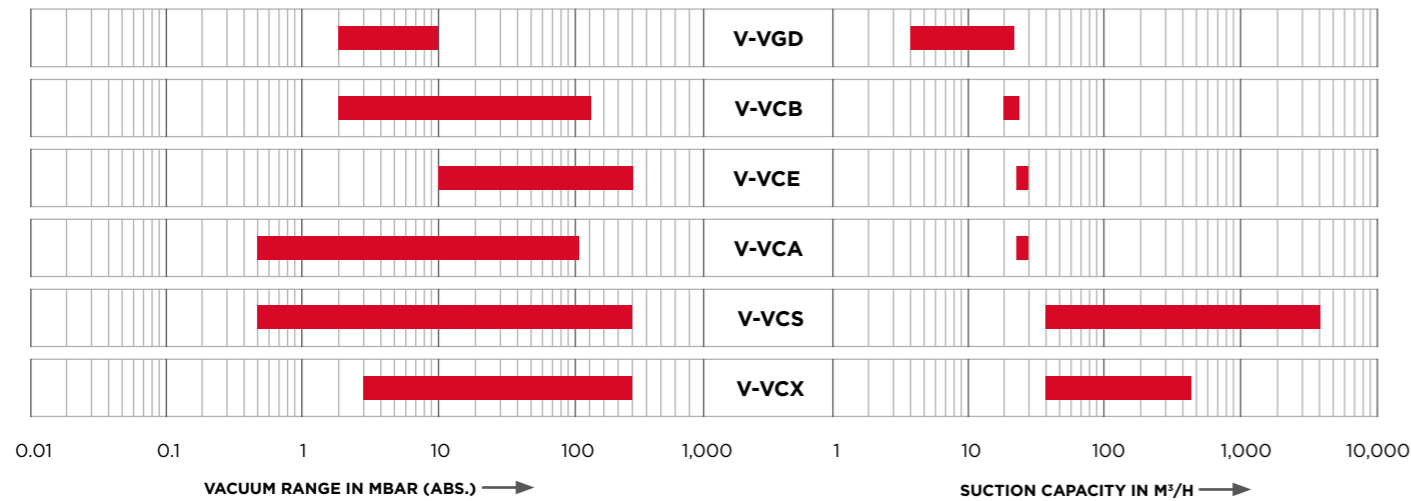


OIL LUBRICATED



VACUUM

## PERFORMANCE DATA



V-VCS 300



V-VCS 150

## OPERATING PRINCIPLE

Pressure increase by volume reduction is the principle behind rotary vane operation. This design offers excellent service for pressure, vacuum or a combination of both.

In a cylindrical housing (1) a rotor (2) is positioned eccentrically so that it is on the top almost touching the cylinder (3). Rotor blades (5) are positioned inside rotor slots (4). When the rotor starts turning, due to centrifugal force the blades are thrown out and slide against the internal surface of the cylinder.

In this way a cell (6) is formed between two blades with a volume that changes constantly during rotation. Air enters from the inlet port (7) into a cell until the rear blade reaches the far end of the inlet port (8). At this point the cell (6) has achieved its maximum air volume.

As the cell then moves away from the port its volume (9) becomes smaller and smaller, the air is thus compressed and the pressure rises.

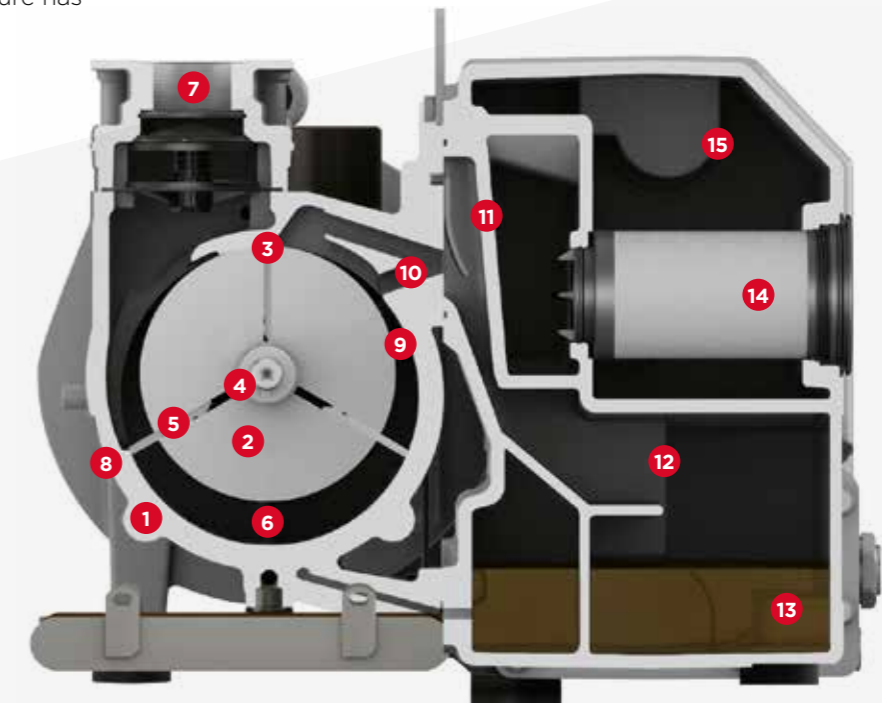
Some models are fitted with outlet valves (11) next to the outlet port (10) which stop the backflow of discharged air when the maximum pressure has been reached.

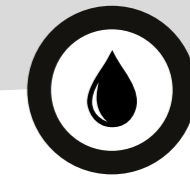
### DE-OILING ONCE THROUGH VACUUM PUMPS

After its passage through outlet port (10) and outlet valves (11), the oil-gas mixture reaches the de-oiling chamber (12) where the oil is separated from the gas in two steps. Larger oil drops are mechanically separated from the gas and are eventually deposited in the oil sludge recipient (13).

The remaining oil gas mixture is then taken through fine filter elements (14) which separate even the smallest oil particles. These are then reintroduced through an oil suction pipe into the pump's oil circuit. The virtually oil free gas can be let outside either through the air outlet (15) or through other hose or piping arrangements.

SIMPLY SCAN THE QR CODE TO REQUEST A QUOTE:





OIL LUBRICATED



VACUUM

## GENUINE PARTS

For optimum performance and optimum efficiency. Keep your equipment 100% genuine and maintain productivity.

### SERVICE KITS

All you need to service your equipment in one single, tidy box. Providing all you need to keep your equipment running longer, maintaining efficiency and productivity.

Elmo Rietschle service kits are a cost-effective solution that keeps your equipment genuine, using the same parts they were fitted with when they left our factory.



### STANDARD SERVICE KIT

Kit includes all parts required for early life maintenance of your machine.

### EXTENDED SERVICE KIT

Kit includes all parts for maintenance to extend the life of your machine.



REDUCE DOWNTIME



MAINTAIN PERFORMANCE



LOCAL SUPPORT

### WEARING PARTS SERVICE KIT

Kit includes new replacement parts for all wearing elements essential for longer machine life.

### GASKET SERVICE KIT

Kit includes replacement gasket parts essential for longer machine life.

### OVERHAUL SERVICE KIT

Kit includes comprehensive new wearing and gasket parts essential for longer machine life.



## GENUINE LUBRICANTS

### TO COOL

To help maintain proper operating temperatures in the Vacuum Pump.

### TO CLEAN

To migrate the particles and impurities from the Vacuum Pump into the filter for removal.

### TO SEAL

Creates a barrier between the open gaps to maintain compression.

### TO LUBRICATE

Lubricating all moving parts to limit wear and high temperatures caused by friction.

SIMPLY SCAN THE QR CODE TO ORDER:



## VACUUM PUMP LUBRICANTS

### MULTI-LUBE

**MULTI-LUBE IS A MINERAL VACUUM PUMP LUBRICANT ACCORDING TO DIN 51506; GROUP VCL.**

It has a high ageing stability with a good feature of **corrosion protection and efficient water separation.**



### SUPER-LUBE

**SUPER-LUBE IS A SYNTHETIC VACUUM PUMP LUBRICANT.**

Made of organic ester base with a very good hydrolysis stability as well as high thermal and chemical stability. **It is most suitable for high ambient temperatures.**



### ECO-LUBE

**ECO-LUBE IS A SPECIAL SYNTHETIC LUBRICANT FOR VACUUM PUMPS.**

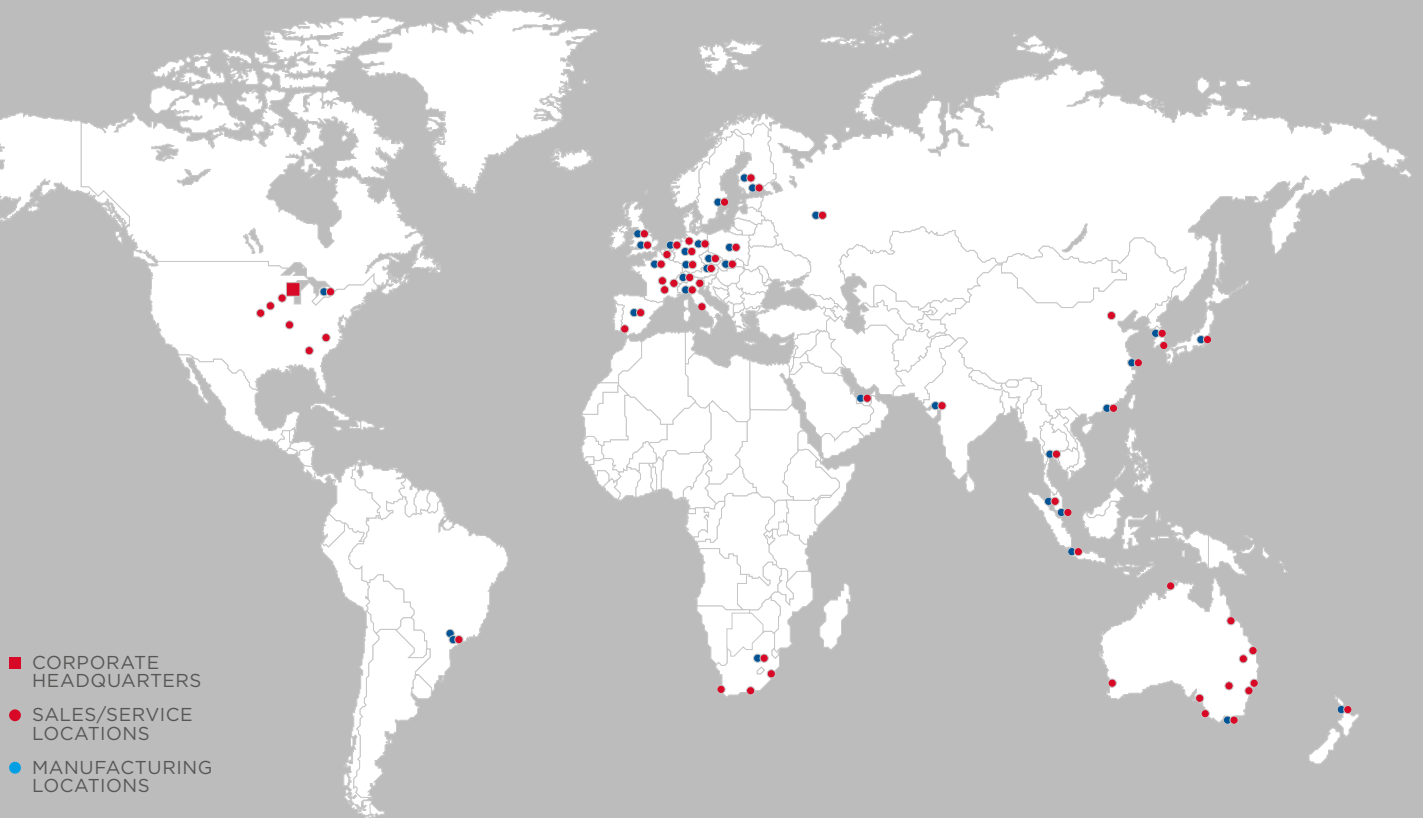
Developed from the outset for use in the food and pharmaceutical industries to fulfil the requirements as well as the definitions at FDA 21 CFR 178.3570 and USDA H-1. It is Halal and Kosher Certified.



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



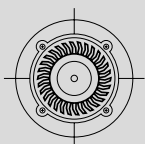
**Elmo Rietschle**<sup>®</sup>



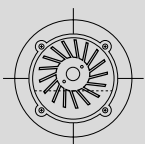
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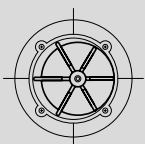
**F-SERIES**  
Radial



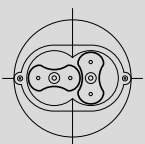
**G-SERIES**  
Side Channel



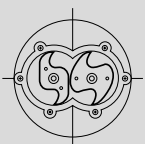
**L-SERIES**  
Liquid Ring



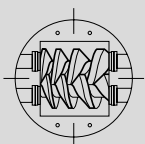
**V-SERIES**  
Rotary Vane



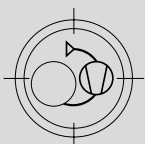
**R-SERIES**  
Rotary Lobe



**C-SERIES**  
Claw



**S-SERIES**  
Screw



**X-SERIES**  
Systems