

Vacuum and Pressure Products for Environmental Engineering







Elmo Rietschle. Leading the Field.



Why Elmo Rietschle?

We see many reasons why you should consider Elmo Rietschle for your next vacuum and pressure application:

- Our long history of product and application knowledge
- High quality reliable products
- A global service network
- Capable engineering support
- Unmatched range of vacuum and pressure technologies

We know your expectations are higher, and rightly so. At Elmo Rietschle, we pledge to provide:

- Innovative technologies
- Fair market pricing
- Competitive operating costs
- Environmental compatibility and durability
- On-time delivery
- Low maintenance costs
- Competent after-sales service

Only after all of these prerequisites and requirements have been met can you be sure that you've made the right decision.

With vacuum pumps and compressors from Elmo Rietschle, you receive more than just a first class product that precisely fits your needs, you have a proper solution. We call that...

Peace of Mind.



Vacuum and Pressure for Applications in Environmental Engineering



Suction trucks for wastewater removal

The suction pressure necessary for removing wastewater and cleaning sewer and septic networks is provided by vacuum pumps.

Digester gas compression

The pump's operating liquid cools the digester gas by absorbing the heat of compression, thus providing an almost isothermal mode of operation. The cooling function of the operating liquid simultaneously acts as a flame arrester and reduces expenditures for explosion protection. The contaminated raw gas is cleaned, partially dried, oxygenated and returned to the wastewater treatment process.

Wastewater disposal

Using central vacuum systems wastewater can be collected, drained and disposed of in complete housing areas at the same time.

Biogas production

A thorough mixing of the sludge in the sludge tanks increases the gas yield and reduces its retention time in the reactor. During the process, the gas is withdrawn from the upper part of the digestion tower, compressed and reintroduced through the nozzles at the bottom.

Wastewater purification/oxygenation of activated sludge tanks

Compressors supply the pressure required for maximum oxygen yield.

Fish pond aeration

In order to increase the water's oxygen content, air is drawn from the atmosphere and forced through an inlet into the tube aerator. It is then diffused into the water through tiny openings and then rises in fine bubbles.

Compressed air in wastewater treatment plants A thorough mixing of sludge with oxygen increases the gas yield and reduces its retention time in the tank.

Further Applications

- Evacuation systems
- Gas recirculation
- Small domestic sewage treatment systems
- Drying systems

S-Series Screw	- M-								•	•	1
C-Series Claw					•				•	•	1
V-Series Rotary Vane					•						
L-Series Liquid Ring		•	•	•	•	•	•				
G-Series Side Chann	ALC ON THE	•				•	•	•	•	•	
F-Series Radial	No.						•		•		

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F-CEVF



F-CEV-S / F-CEV-D



G-BH1



G-BH2 VELOCIS



L-BL



L-BV2

Environmental Engineering

There are many processes in environmental engineering that require vacuum or compressed air. The decision for a certain technology or possible combination is made by our application specialists in close cooperation with our customers. Many factors like operating costs, noise emission or maintenance frequency are taken into consideration and we will find the ideal solution for you. Our long tradition in this industry, our committed engineers and the unique choice of technologies at Elmo Rietschle make sure we keep our promise.



V-VC



V-VTE V-DTE





F-RER/ F-REL



G-BH7



L-BV3



L-BV5

- Aluminum cast housing and impellors
- · Cost efficient and robust
- Life-time lubricated bearings
- Process safe and resilient
- Quiet and low vibration operation



F-Series Radial

- Maintenance friendly and wear free
- Very quiet as a result of sound engineering
- Dust resistant
- UL/CSA approved

Monoblock design

High resistance to wear

pump set combinations

UL/CSA approved

ATEX approved

No sediments

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- ATEX approved
- Up to 40,000 operating hours
- 50/60 Hz voltage range motors

Excellent resistance to corrosion

Increased water carryover available

• Can also be used as closed system or in



G-Series Side Channel

L-Series Liquid Ring

V-VLT

V-DLT



V-VTA V-DTA

- Dry running or oil lubricated
- Low noise level
- Maintenance friendly
- Long up-times
- Can also be used in pump set combinations



V-Series Rotary Vane

C-DLR ZEPHYR

• Long up-times

- Maintenance friendly
- Dry running and contact free operation
- Targeted discharge of cooling air
- Process safe and resilient
- High efficiency



C-Series Claw



- Dry running and contact free operation
- Long up-times
- High water vapor tolerance
- · Short evacuation time due to high suction capacities
- Low compression temperatures



S-Series Screw



L-BV7



We are close to our customers throughout the world.





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