

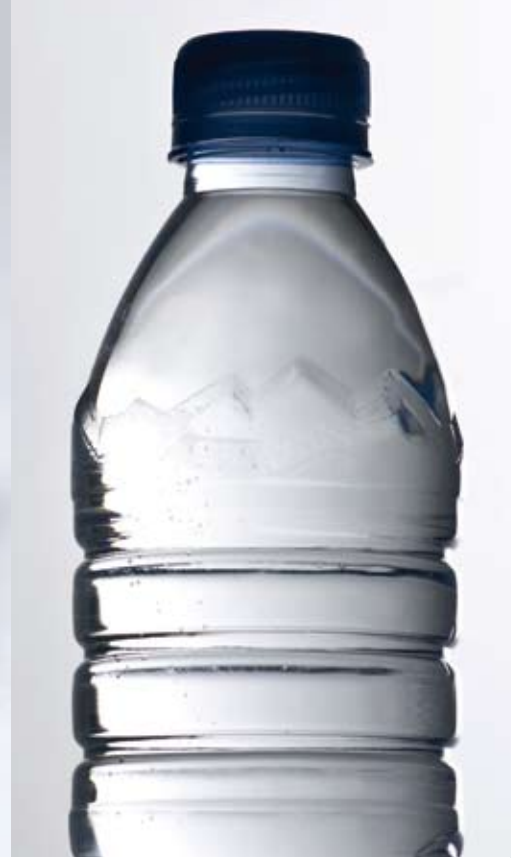


# Vacuum and Pressure Solutions for Food Packaging



**Elmo  
Rietschle**  
*A Gardner Denver Product*





Elmo Rietschle. Leading the Field.



## Why Elmo Rietschle?

From our point of view, of course, we see many reasons why you should work with our company for your vacuum and pressure application products:

- Our long history of product and application know-how
- Precise knowledge of processes in food packaging
- High quality products
- A global service network with on-site support
- Knowledgeable, personal consultation from our engineers
- Unmatched range of vacuum and pressure technologies

But that is not enough from your point of view – your expectations are higher. And rightly so. The decisions you make regarding partners with whom you want to work also depend on whether the following value-added parameters are fulfilled:

- 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 have made the right decision.

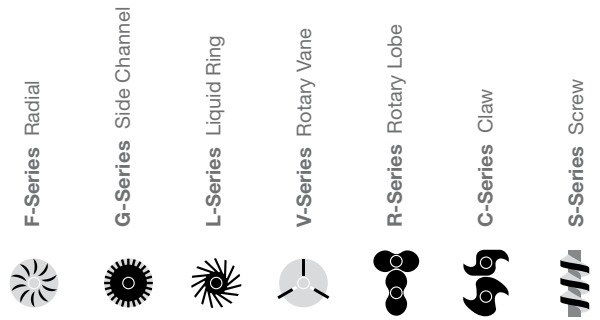
With vacuum pumps and compressors from Elmo Rietschle, you acquire more than “just” a first class product that precisely fits your needs – you have a solution. Once that is done, you do not have to worry about our pumps and compressors for the time being – we keep our promises. Take our word.

## Peace of Mind.



## Vacuum and Pressure Solutions for Food Packaging





## Filling and closing machines

When bottling drinks, cosmetics and pharmaceutical products, the recipient is frequently evacuated before being filled to ensure that the contents keep longer. Food to be canned is introduced through a tube into the chamber.

## Labelling

In the labelling of containers made of glass, plastics or metal, vacuum pumps ensure the correct positioning of the labels during the cutting-out stage.

## Degassing water

In the production of high quality drinks (mineral waters, fruit juices etc.) water must be used which was previously degassed under vacuum in suitable systems.

## Vacuum packaging

### Tray sealing machine

From stacking to evacuating and capping prefabricated trays, all processes take place under vacuum. For most applications packaging under oxygen as the protective gas is the standard method.

### Forming machine

During deep drawing processes, vacuum is needed in the sealing tool and in shaping the tray. Here again, the use of oxygen is an option.

### Chamber machine

Classic initial packaging takes place in a chamber machine. All products are placed inside a bag by hand. In the next step they are manually inserted into the chamber machine and then sealed.

### Trim removal

Edge trimmings and stamping waste are collected directly from the machine by an extractor fan (with waste container) or conveyed under vacuum over longer distances through a pipeline to a central collection point.

## Food processing

### Vacuum filler

In a vacuum filling machine dough-shaped prepared foods such as meat, fish, cheese, bread, sausage etc. are separated into portions and packaged under vacuum. This improves homogeneity and avoids air inclusions. Extended shelf life and excellent colour stability are further advantages.

### Vacuum tumbler

In the vacuum tumbler, food cut into pieces such as meat, fish, salads, delicacies etc. is mixed with spices, worked and refined.

### Vacuum cutter

The vacuum cutter is particularly suitable for the production of patés. Here again, the ingredients are mixed under vacuum in order to achieve a high degree of colour stability and homogeneity.

## Other applications

- Pick + place
- Freeze drying
- Pneumatic conveying

	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
Filling and closing machines		●	●	●		●	
Labelling		●	●	●			
Degassing water			●				
Vacuum packaging							
Tray sealing machine			●	●	●	●	●
Forming machine	●	●	●	●	●	●	●
Chamber machine				●	●	●	●
Trim removal	●	●			●		
Food processing							
Vacuum filler				●		●	●
Vacuum tumbler			●	●		●	●
Vacuum cutter			●	●		●	●
Other applications		●	●	●	●	●	●
	●	●	●	●	●	●	●



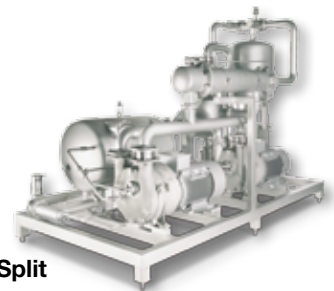
**F-CEVF**



**G-BH1**



**G-BH2  
VELOCIS**



**L-BL2 Split**



**V-VGD (also available  
for oxygen applications)**

## Food Packaging

There are many processes in food packaging 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 such as 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.

### Air cabinets

The special hygienic demands from the processed food industry can be ideally met with Elmo Rietschle air cabinets. The requirements of each individual process are fulfilled and installation and operating costs are noticeably reduced. In air cabinets of this type, the individual components (e.g. radial, side channel, rotary vane, rotary lobe, claw and screw) are matched and optimised. As stand-alone systems, they reduce pollution of the environment by dust, noise and other operating consumables to a minimum.



**R-VWP**



**C-VLR  
ZEPHYR**



**S-VSI OXY  
TWISTER**



**F-RER/F-REL**

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



**F-Series**  
Radial



**G-BH7 with FC**



**G-SAH/G-SAP**

- Wear free
- Very quiet as a result of sound engineering
- Dust resistant
- UL/CSA approved
- Up to 40,000 operating hours
- 50/60 Hz voltage range motors



**G-Series**  
Side Channel



**L-BL2 Compact**



**L-BV5**

- Excellent resistance to corrosion
- No sediments
- High resistance to wear
- Increased water carryover available
- UL/CSA approved
- 50/60 Hz voltage range motors
- Can also be used as closed system or in pump set combinations



**L-Series**  
Liquid Ring



**V-VC** (also available for oxygen applications)



**V-VTR**

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



**V-Series**  
Rotary Vane



**R-VPR**

- Robust and economical
- Dry running
- Modular design
- Process safe and resilient
- Available as single aggregate
- Comprehensive accessories
- Worldwide service
- Frequency control available



**R-Series**  
Rotary Lobe



**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



**S-VSI**  
TWISTER

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

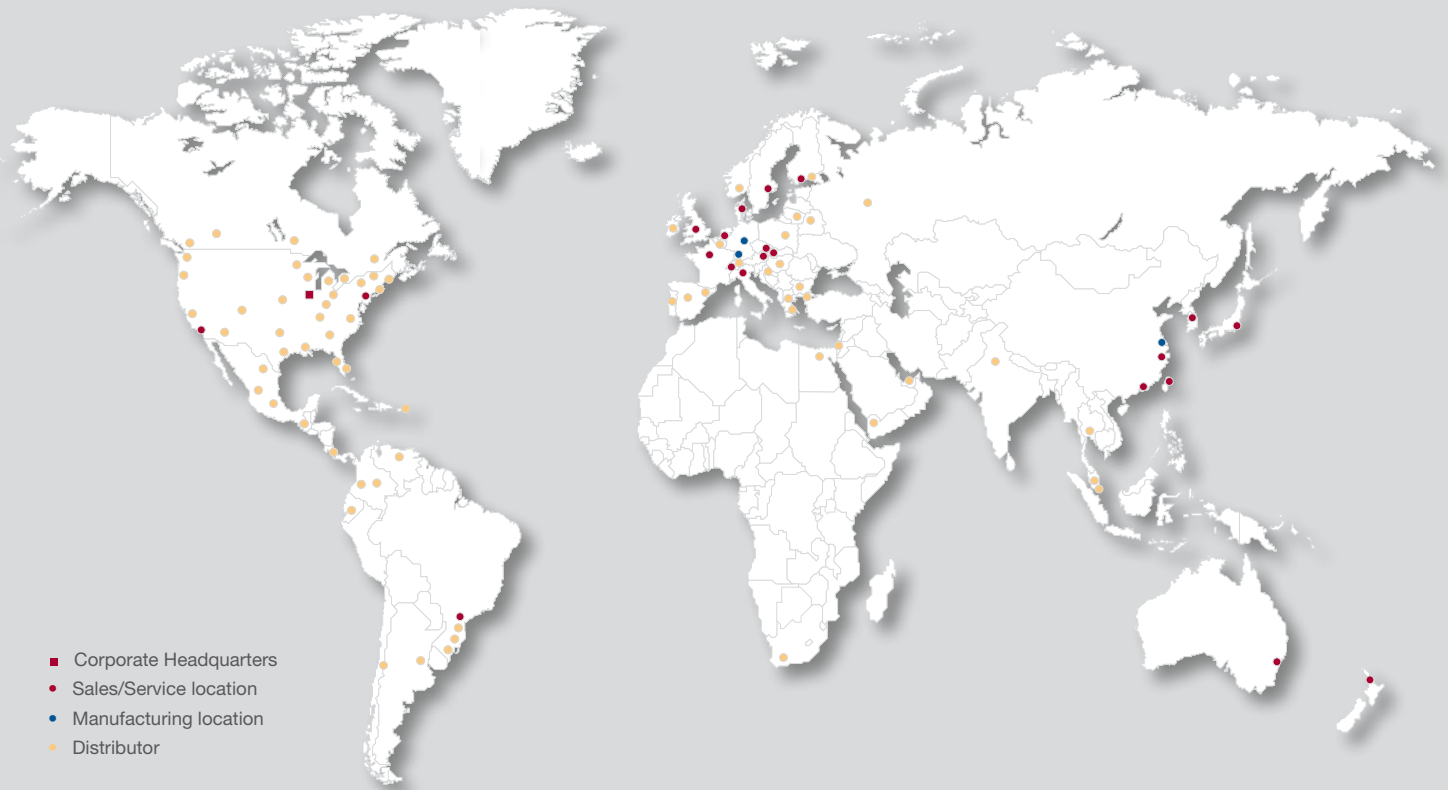


**S-Series**  
Screw



**Elmo  
Rietschle**  
*A Gardner Denver Product*

We are at home throughout the world – and near you. Our service personnel speak your language. Take our word.



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**Gardner  
Denver**

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