

**INDUSTRIAL** 

### Vacuum Products



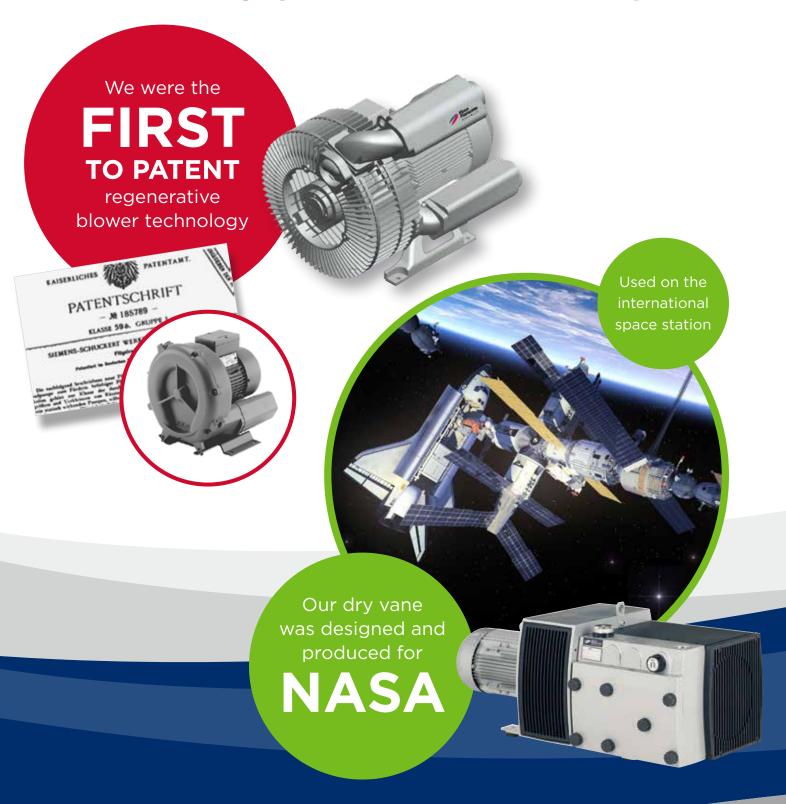
# our NETWORK?





We're Where You Need Us

# our EXPERTISE?





Liquid Ring System **RECLAIMS** 

its own water



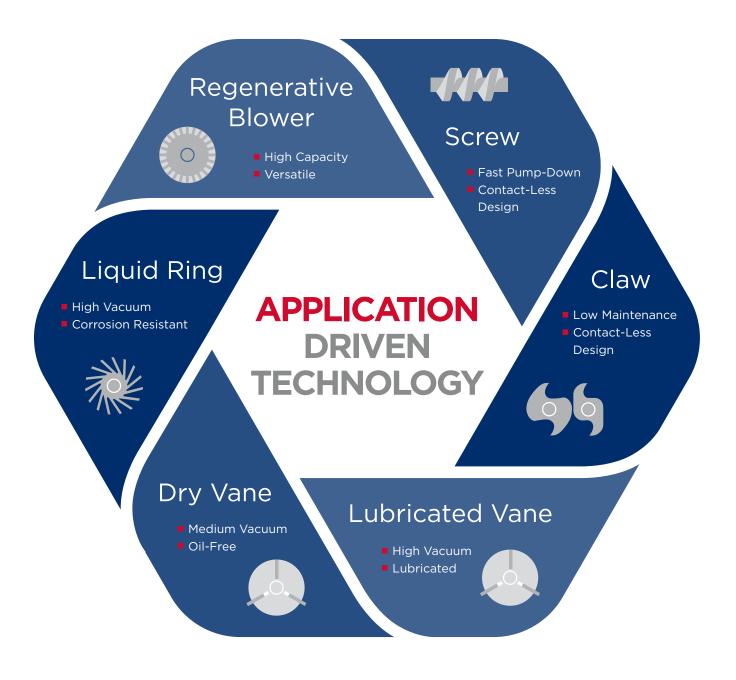
combination vac/pressure duty vane pump



We Have a Legacy of Inventing Original Solutions

## our RANGE?





Gardner Denver provides more technology styles than anyone else. This means **YOU** can tailor technologies to **YOUR** needs.

We're your first and **ONLY** call!

Did you know we operate in almost...





Printing

**CNCRouters** 

Automotive Separation Automotive Separation Separation

Environmental

# WoodWorking



Parts Drying



Food Processing

Manufacturing

Surface Suction

Agriculture of Extrusio

ParticleAnalysis

Teath of the fight of the fight

Biotech

Degassing

Poultry

Fish Farming

Beverage Paper Production Production

# REGENERATIVE BLOWERS?



#### Advantages at a Glance

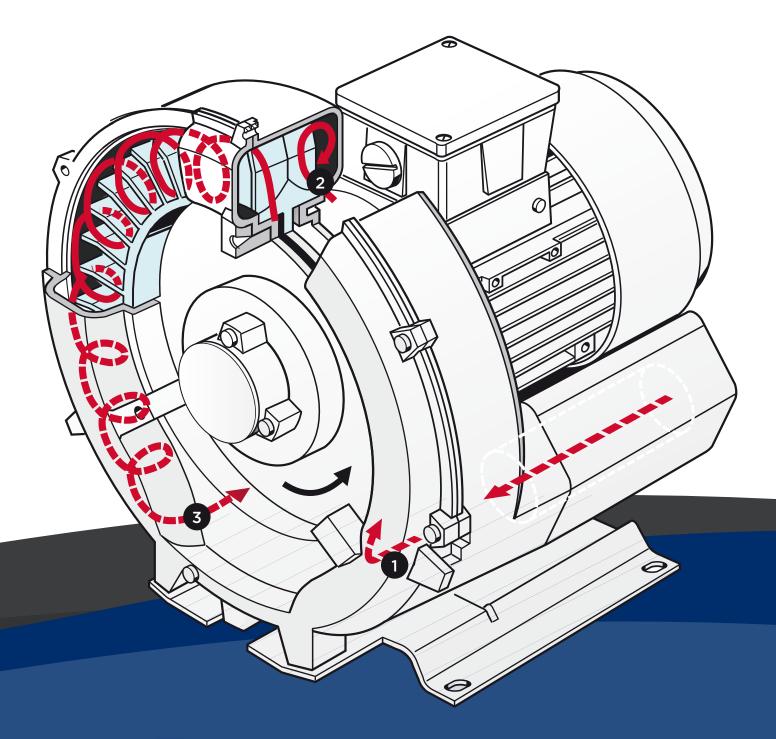
- High CFM capacities moderate pressure/vacuum
- Ideal for point of use applications
- Easy installation
- Contact-less Operation
- Tolerant to dust ingestion
- VFD Compatible
- Quiet operation
- Up to 40,000 operating hours without maintenance





#### **Operating Principle**

- 1. Gas is taken in through the inlet and enters the side channel
- 2. The rotating impeller imparts velocity energy into the gas in the direction of rotation. Centrifugal force in the impeller blades accelerates the gas outward, increasing pressure. Kinetic energy is imparted with every rotation resulting in further pressure increase.
- 3. The side channel narrows at the rotor, sweeping gas off the impeller blades and discharging it through the outlet silencer where it exits the blower.





# LUBRICATED VANE?



Technology	Specifications		
Rotary Vane Pumps V Series	UP TO 903 CFM 22 PSI 29.91 In.Hg 0.38 Torr		



#### Why Elmo Rietschle?

- Deep vacuum level
- Faster pumping speeds
- Quieter, smaller footprint
- Patented filter design
- Easier maintenance, less downtime

#### Why Aluminum Alloy?

- Proprietary material blend
- Won't delaminate or absorb oil: eliminates stuck/failed vanes
- Channels can be milled to enhance lubrication
- Incredibly durable
- Soft enough to wear if lubrication deteriorates
- Track record: years of operation
- 5 Year Warranty!





### DRY VANE?







Technology	Specifications		
	UP TO		
Rotary Vane	<b>903</b> C	CFM CFM	
Pumps	<b>22</b> P	PSI	
V Series	<b>29.91</b> Ir	In.Hg	
	<b>0.38</b> T	Torr	



- Optimized cylinder design
- Long-life graphite vanes
- Environmentally friendly
- Minimal maintenance
- Low noise level
- Compact size

- Pick n' Place
- Woodworking, CNC Routers
- Central Vacuum System





### Claw Advantages

- Contact-less design: oil-less compression
- Service intervals up to 5 years
- Environmentally friendly
- Compact footprint
- Lowest in class dBA

Technology Specifications

Claw
C Series

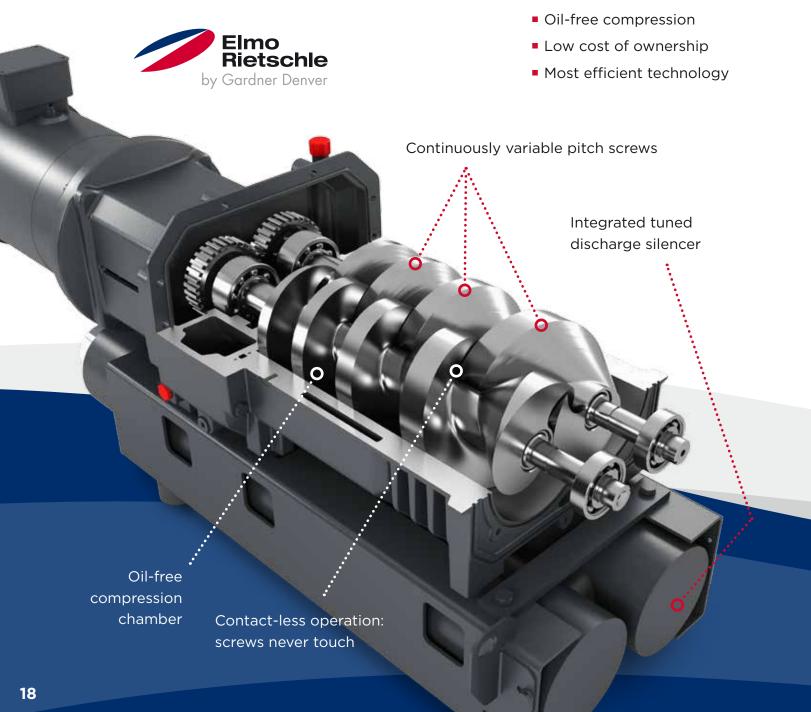
UP TO
671 CFM
32 PSI
27 In.Hg



### SCREW?

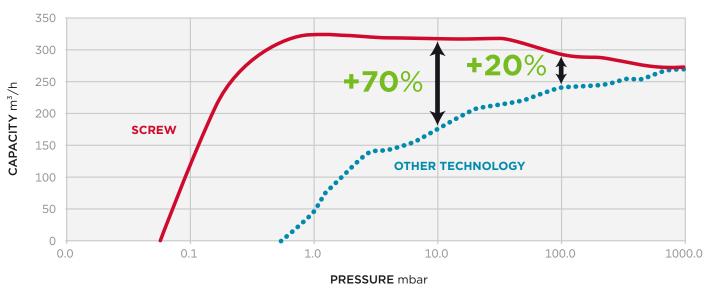


- Contact-less design
- Fast pump down-times
- Innovative screw pitch design





#### Screw vs. Alternative Technology at the same horsepower



### Up to 70% more flow during pump-down

- = FASTER pump-down
- = FASTER cycle time
- = MORE \$

FOOD PLANT PRODUCTION MANAGER

"After installing the VSI

OUR PRODUCTION

MORE THAN

DOUBLED

from 4 Packs to 9 packs per minute."

Available in Chemical Grade & Industrial Versions

# LIQUID RING?

High Water Carry-Over

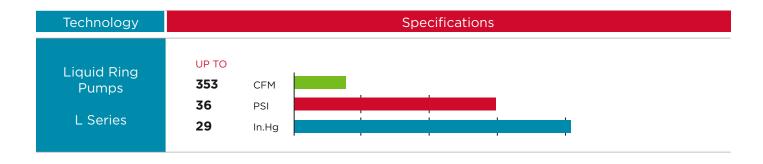
- = LOWEST in Class for Horsepower Use
- = SAVINGS

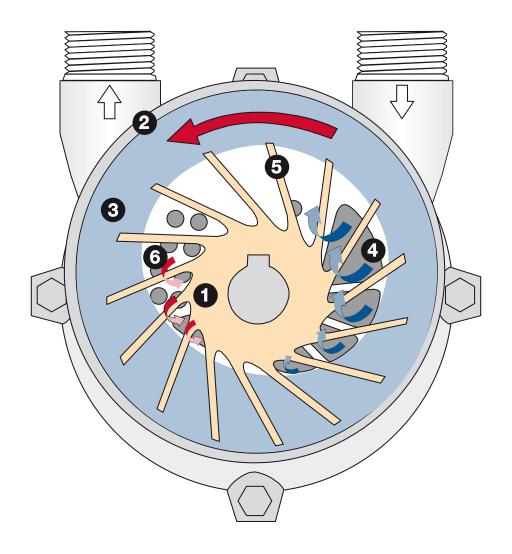


#### Small but Mighty

- Patented water reclamation system
- Unique coatings
- Stainless Steel options
- Bronze alloy impellers
- Anti-cavitation as standard







#### **Operating Principle**

- The impeller (1) is the only moving part.
- It rotates without contact inside the pump casing (2).
- A rotating liquid ring (3) seals the impeller on the front and seals its blades against one another.
- Gas flows through the inlet slot (4) into the blade cells.
- The impeller is offset within the casing. This creates variable compression chambers between the blades (5), which compresses the gas within a full revolution.
- In order to stabilize the ring, liquid is also permanently sucked into the compression chamber and is expelled (6) together with the conveyed gas.

# ENGINEERED SYSTEMS?

- We can offer system design and specification support
- In-house engineering team
- Compliant with chemical and medical grade specifications
- Meets NFPA 99 & CSA Code
- Expandable systems for future facilities growth
- System multiplexing to meet demand requirements
- Modular systems with increased handling flexibility
- Compressed air and vacuum systems are available





One Company, One Source, One Choice

Technical Expertise for You

The leader in every market we serve by continuously improving all business processes with a focus on innovation and velocity



#### Gardner Denver, Inc.

1800 Gardner Expressway Quincy, IL 62305 866-440-6241 www.elmorietschle.com





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