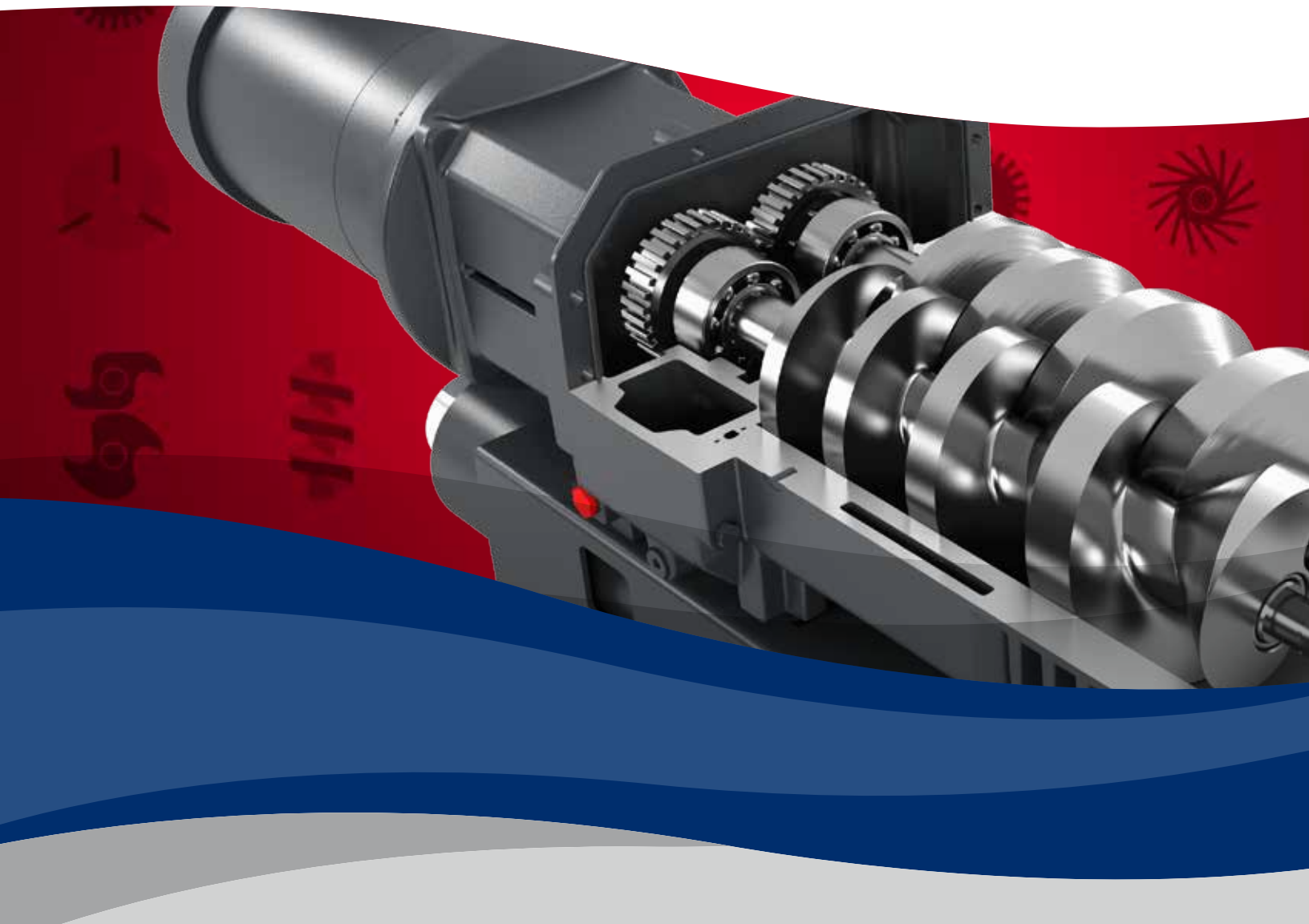


Gardner
Denver

INDUSTRIAL

Vacuum Products



Did you know about...

our NETWORK?





- Our distribution network is factory-trained and certified
- Local service includes support for re-build

We're Where You Need Us

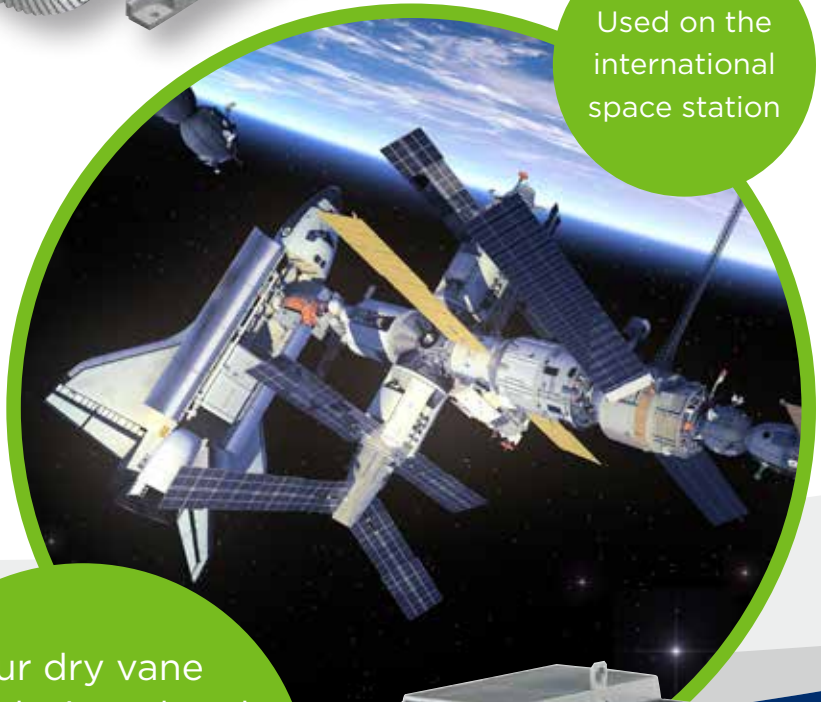
Did you know about...

our EXPERTISE?

We were the
FIRST
TO PATENT
regenerative
blower technology



Used on the
international
space station



Our dry vane
was designed and
produced for

NASA



Our
PATENTED
Liquid Ring System
RECLAIMS
its own water

We
INVENTED
THE FIRST
combination
vac/pressure duty
vane pump



Our lubricated
vane uses unique
& proprietary
alloys



We Have a Legacy of
Inventing Original Solutions

Did you know about...

our RANGE?

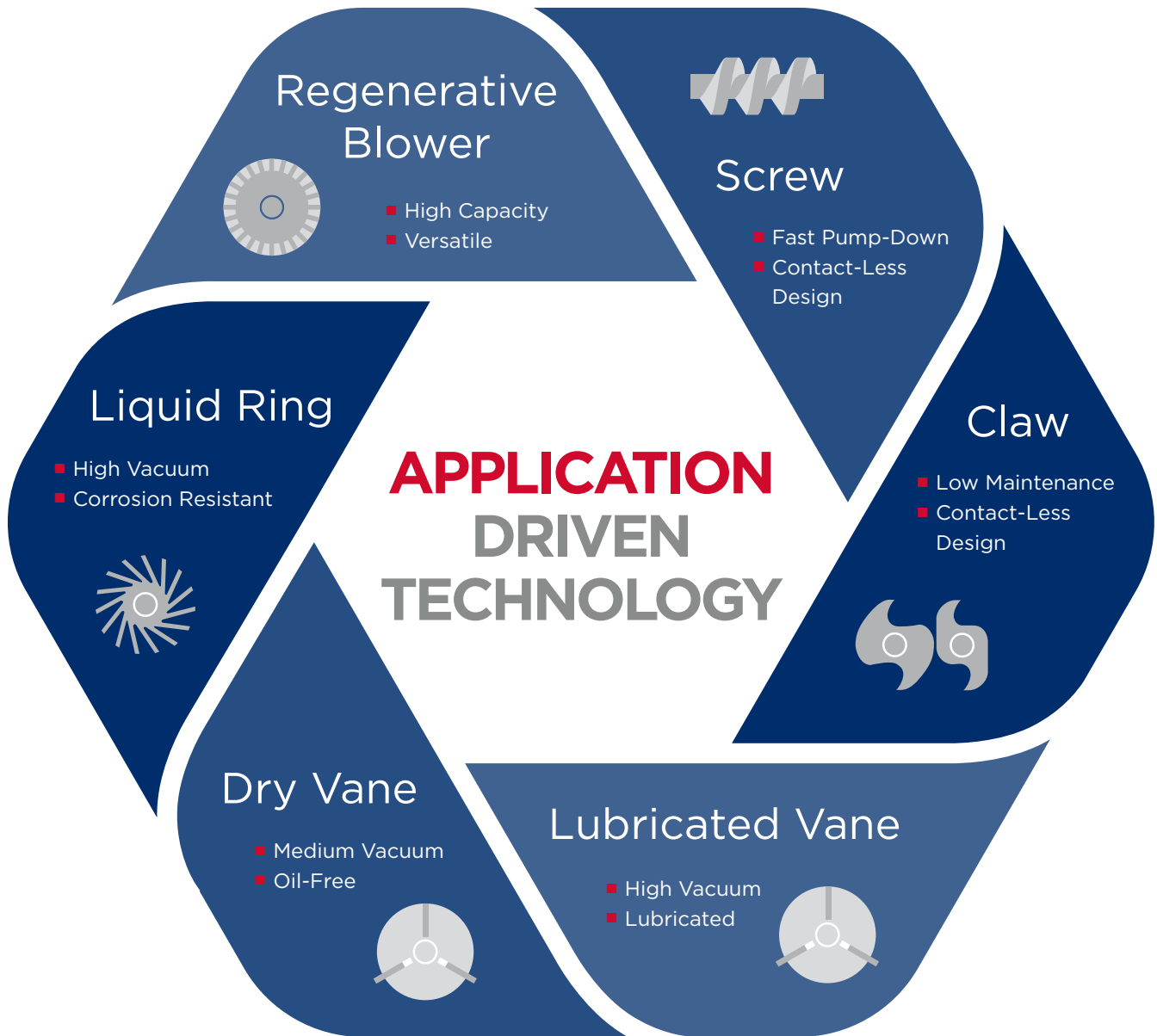
6

TECHNOLOGY
STYLES

PRECISION
OPTIONS FOR
YOUR
APPLICATION

OVER
420
MODELS





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...

EVERY INDUSTRY?

Plastics

Aerospace CNC Routers
Soil Remediation Automotive
Dental Medical Oil Separation
Printing Environmental

WoodWorking Laboratory

Packaging

Conveying

Wind Turbine Blades

Parts Drying





Food Processing

Manufacturing

Surface Suction

Agriculture

Extrusion

Particle Analysis

Water Treatment

Biotech

Degassing

Poultry

Fish Farming

Beverage

Paper Production

Production

Did you know about our...

REGENERATIVE BLOWERS?



Advantages at a Glance

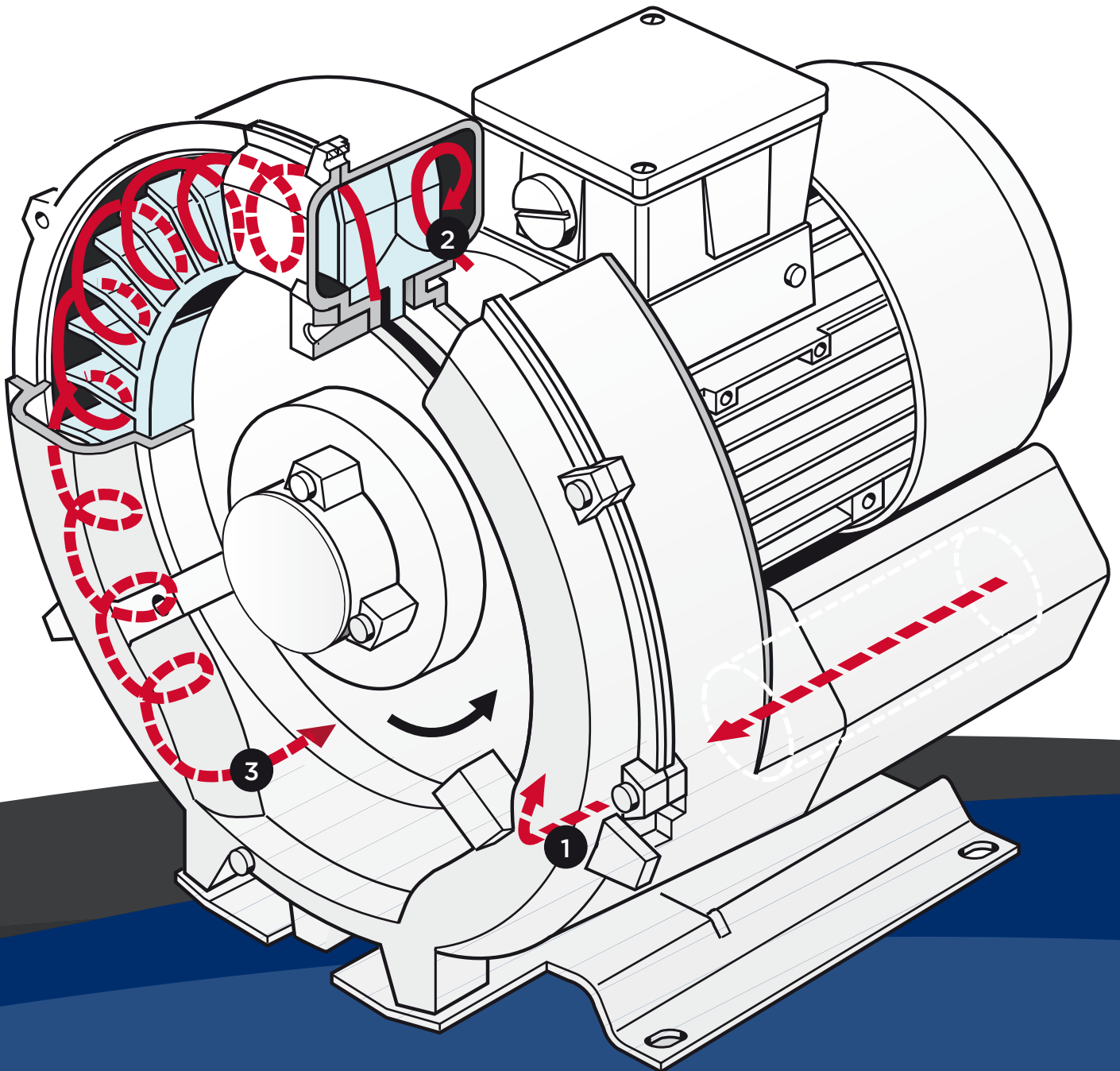
- High CFM capacities moderate pressure/vacuum
- Ideal for point of use applications
- Easy installation
- Contact-less Operation
- Tolerant to dust ingestion
- VFD Compatible
- Quiet operation
- Up to 40,000 operating hours without maintenance



Technology	Specifications		
Regenerative Blowers	UP TO		
G Series	1,550	CFM	
	14	PSI	
	16	inHg	

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.



Did you know about our...

LUBRICATED VANE?



Technology	Specifications	
Rotary Vane Pumps V Series	UP TO 903 CFM 29.91 inHg 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!



Did you know about our...

DRY VANE?



Technology	Specifications		
Rotary Vane Pumps	UP TO		
V Series	91	CFM	
	22	PSI	
	25.5	inHg	
	112	Torr	



Dry Vane Advantages

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

Ideal For

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



Did you know about our...

CLAW?



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	UP TO		
C Series	671	CFM	<div style="width: 60%; height: 10px; background-color: #76c73a;"></div>
	32	PSI	<div style="width: 100%; height: 10px; background-color: #c00000;"></div>
	27	inHg	<div style="width: 85%; height: 10px; background-color: #00838f;"></div>

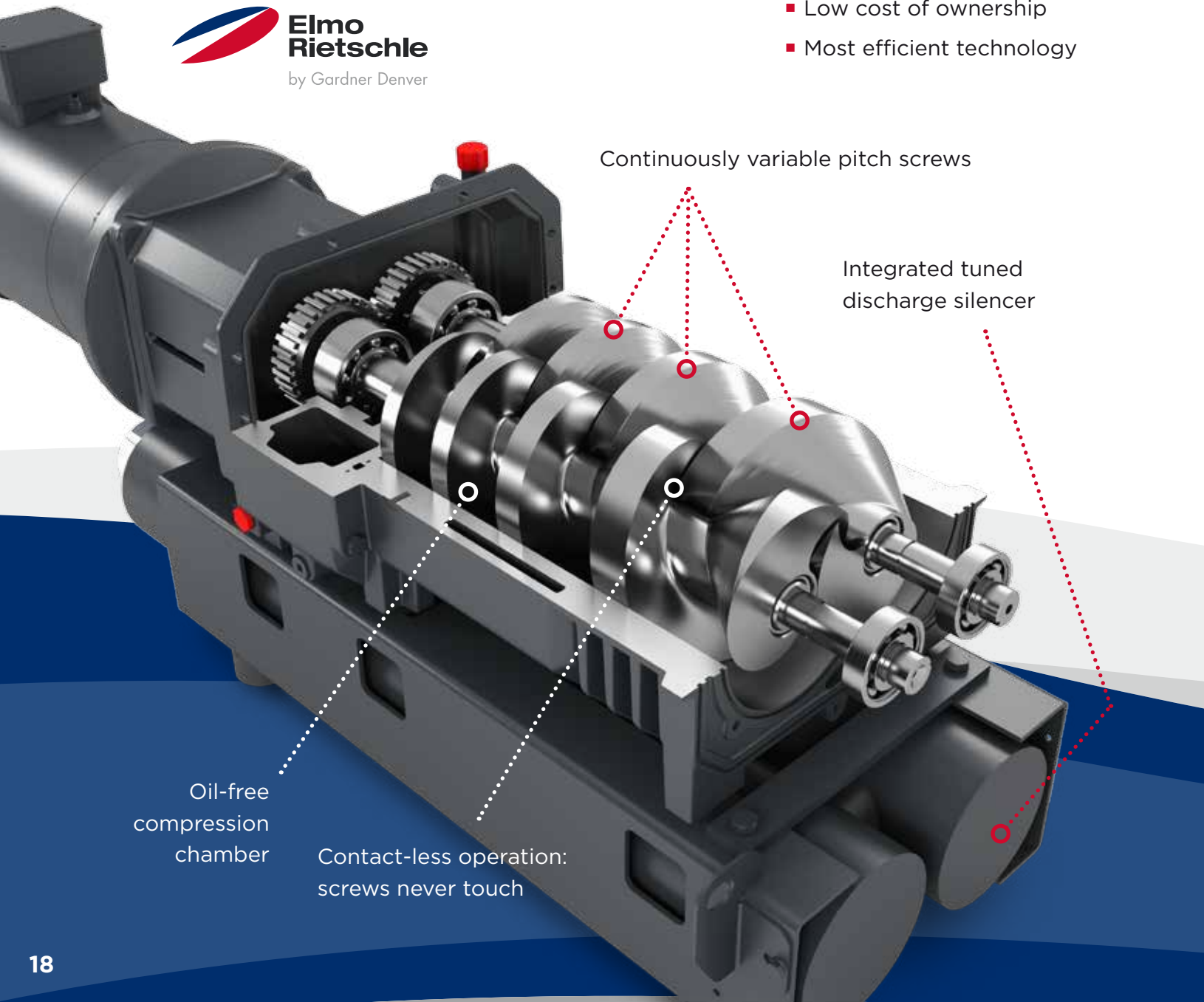


Did you know about our...

SCREW?

See why we have **Best-In-Class PERFORMANCE**

- Contact-less design
- Fast pump down-times
- Innovative screw pitch design
- Oil-free compression
- Low cost of ownership
- Most efficient technology




Continuously variable pitch screws

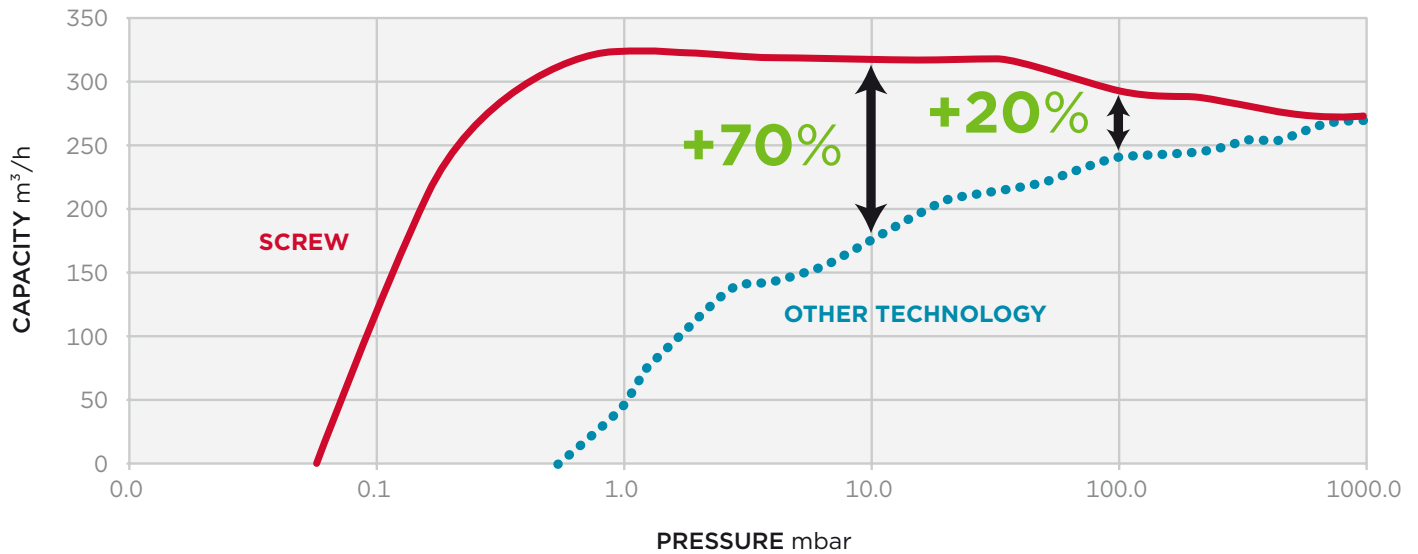
Integrated tuned discharge silencer

Oil-free compression chamber

Contact-less operation: screws never touch

Technology	Specifications
Screw Pumps S Series	<p style="color: red; margin: 0;">UP TO</p> <p style="margin: 0;">212 CFM</p> <p style="margin: 0;">29.917 inHg</p> <p style="margin: 0;">0.075 Torr</p> 

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

Did you know about our...

LIQUID RING?

High Water Carry-Over

= **LOWEST** in Class for Horsepower Use

= **SAVINGS**

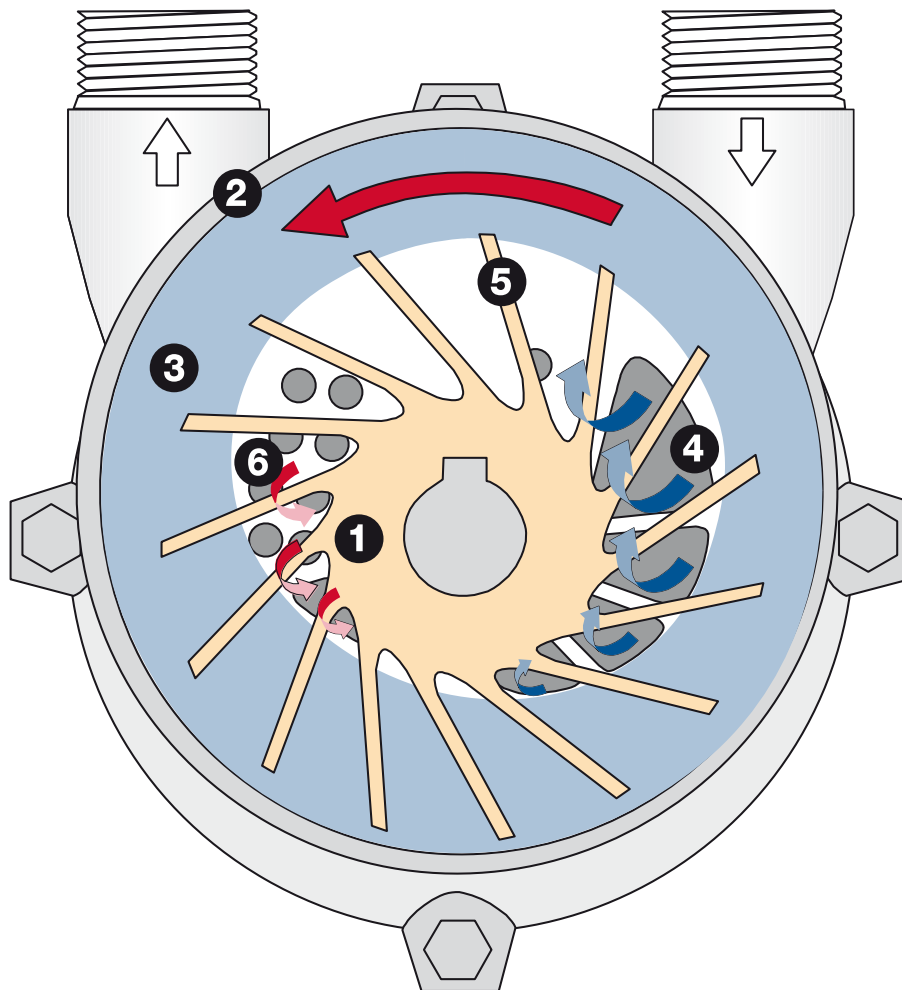


Small but Mighty



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

Technology	Specifications		
Liquid Ring Pumps L Series	UP TO		
	353	CFM	
	36	PSI	
	29	inHg	



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.

Did you know about our...

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®**

Gardner Denver, Inc.

1800 Gardner Expressway
Quincy, IL 62305
866-249-2275
www.elmorietschle.com



©2016 Gardner Denver, Inc. Printed in U.S.A.
VAC-IND-PROD 2nd Ed. 10/16

