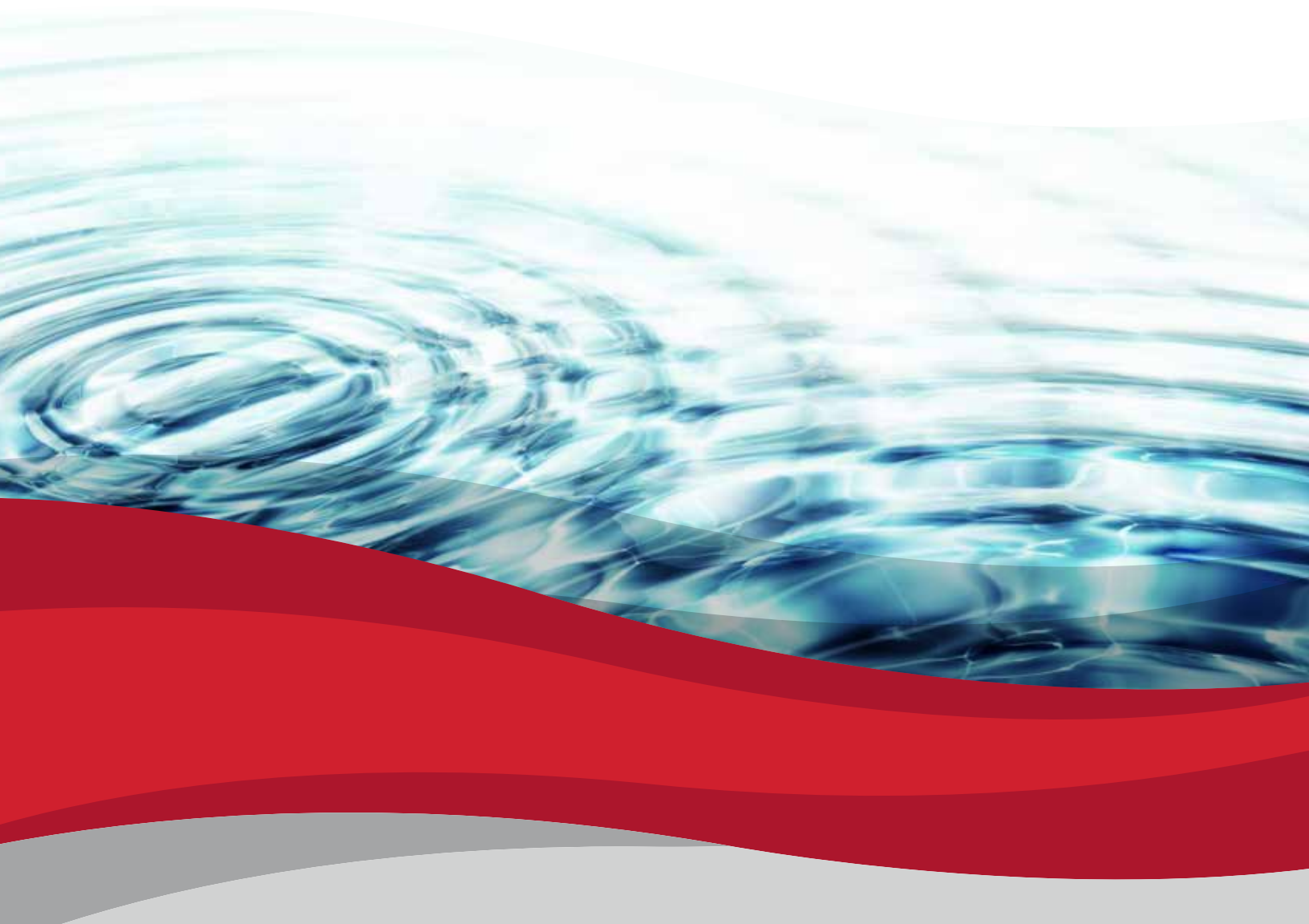




POSITIVE DISPLACEMENT BLOWERS & VACUUM PUMPS

# Water & Wastewater Treatment **Solutions**



# Water & Wastewater Treatment Solutions

Gardner Denver understands the complex needs and challenges of the water and wastewater industries and offers a unique range of bare blowers and blower packages known for their excellent performance and low maintenance.

- Energy-efficient rotary screw blowers
- Quiet helical tri-lobe blowers
- High performance straight-lobe blowers
- Pressure to 20 psi
- Air flow to 34,000 cfm



# Wastewater Industry Processes

## Grit Aeration

- Air is blown into the water, which creates a spiral flow of water
- Particles of a certain size drop to the bottom of the chamber, and are removed
- The wastewater is then moved onto the next process

## Channel Aeration

- Air is pumped through diffusers into tanks containing wastewater
- The diffusers create bubbles, raising the level of dissolved oxygen
- The dissolved oxygen promotes the growth of bacteria that help remove the phosphates in the water

## Aerobic Digestion

- Process of oxidizing and decomposing organic material, with the presence of oxygen
- Helps reduce mass and volume, as well as harmful micro-organisms
- The most widely used wastewater treatment process for smaller plants

## Sludge Digestion

- Digestion process with absence of oxygen
- Transforms organic material into gases, such as methane, which can then be used or sold as an energy source
- The most widely used wastewater treatment process for large plants, over 5 MGD

## Filter Backwash

- Air is used to expand the filter bed, breaking up compacted material
- Clean backwash water is pumped in, suspending the loose particles
- The suspended particles are lifted into troughs and carried away



# CycloBlower

## The Original Rotary Screw Blower

### Unique rotary screw rotor profile

- Up to 25% more efficient than straight-lobe blowers
- Virtually pulsation-free air
  - Reduce damage on downstream components
- Reduced noise levels
- Field proven for over 30 years

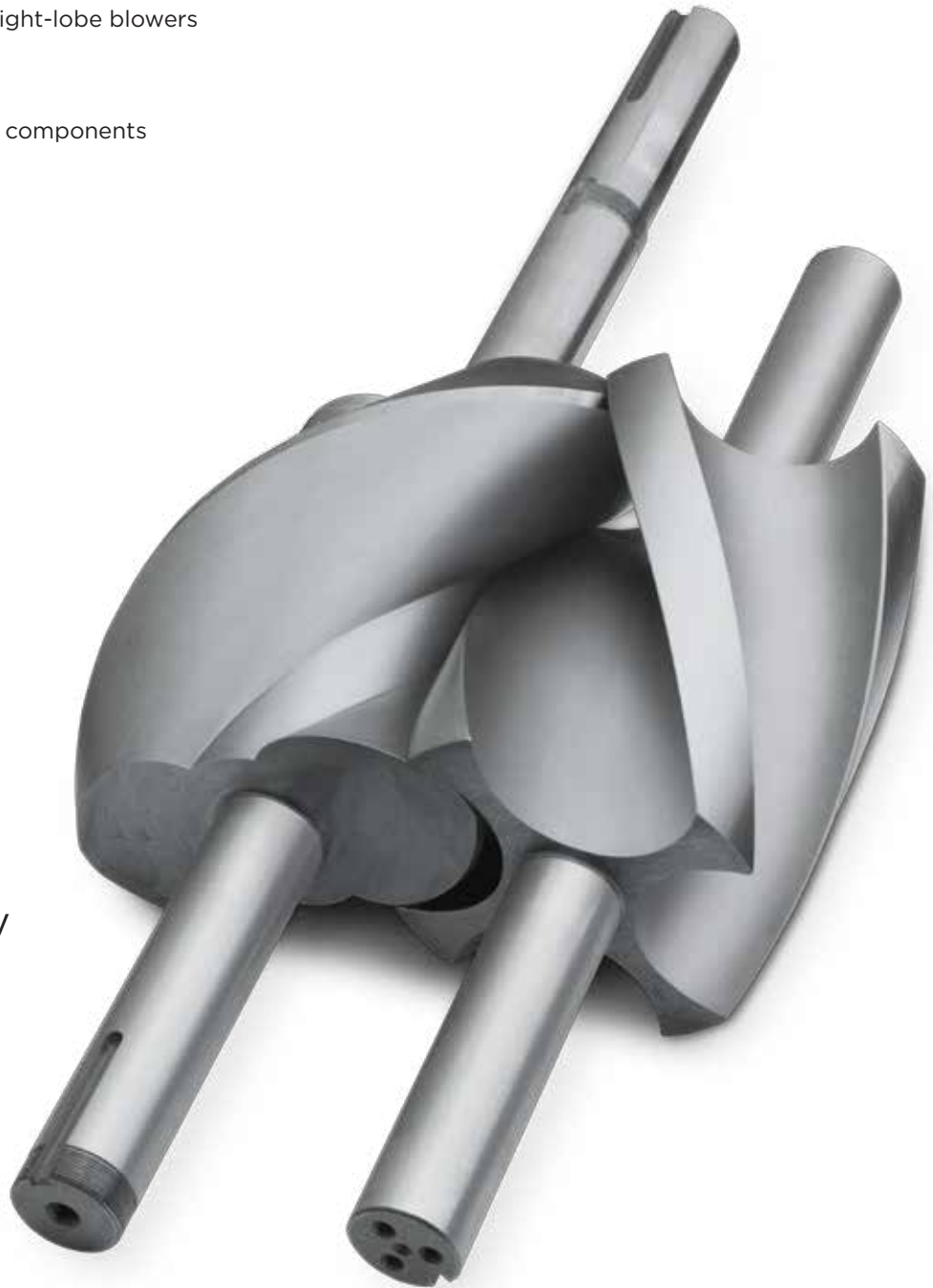
### CYCLOBLOWER PROVIDES

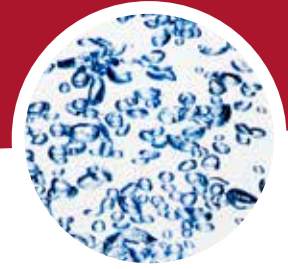
5 Gear Sizes

Pressure to 20 psig

Vacuum to 24" Hg dry

Flow to 6700 cfm





All CycloBlowers are fitted with proprietary bearing isolator seals. Our unique design developed in partnership with Inpro/Seal offers outstanding performance and longevity.



Inpro Seals



To learn more about the CycloBlower, scan the QR code or visit:

<http://www.gardnerdenverproducts.com/blowers/cycloblower>

# IQ Blower Package



- Enclosed package comes standard with AirSmart controller
- Optional VFD can be controlled by dissolved oxygen sensor
- Can communicate with various plant control systems including SCADA
- Robust blower base and enclosure platform promotes plug-and-play installation, no need for a special foundation
- Can be placed inside or outside with or without a shelter





## IQ PROVIDES

Flows to 1400 cfm

Pressure to 15 psig

Vacuum to 17" Hg



To learn more about the IQ Blower Package,  
scan the QR code or visit:

<http://www.iqblower.com>

# HeliFlow

Innovative by Design



## HELIFLOW PROVIDES

3 Gear Sizes

Pressure to 15 psig

Vacuum to 17" Hg





### Innovative, Award-Winning Design

- Solid helical tri-lobe rotors
- Specially designed inlet and discharge porting
- Reduced pulsation and noise levels, up to 7 dBA when compared to straight-lobe blowers
- Robust oversize bearings increase overhung load capacity by as much as 65%
- Piston ring seals provide efficient sealing for both air and oil

To learn more about the HeliFlow,  
scan the QR code or visit:

<http://www.gardnerdenverproducts.com/blowers/heliflow>



# Legend

## SUTORBILT LEGEND PROVIDES

- 2-8" Gear Sizes
- Flows to 2.745 cfm
- Pressure to 15 psig
- Vacuum to 16" Hg

## Tried & Trusted for Over 30 Years

- Available dual splash lube
- Optional Q-cylinder for quiet operation
- Universal flex-mount design provides maximum installation versatility
- Low up front cost
- Thousands of units in operation



To learn more about Sutorbilt blowers,  
scan the QR code or visit:

<http://www.gardnerdenverproducts.com/blowers/sutorbilt>



# 4500, 4800, 8000

## SUTORBILT 4500, 4800, 8000 PROVIDES

- 6-22" Gear Sizes
- Flows to 34,000 cfm
- Pressure to 18 psig
- Vacuum to 16" Hg

- Force Feed lubrication available
- Optional Q-cylinder for quiet operation
- One piece steel shafts with dynamically balanced rotors



## Quality Promise

- Gardner Denver industrial blowers are manufactured under rigid ISO 9001 quality standards
- All models are thoroughly tested to meet the highest performance standards for unequalled service life under the most severe operating conditions



## Distribution & Service Network

Gardner Denver is proud to offer the most extensive and qualified distributor network available. Local Distributors offer 24-hour service and technical support for all your needs.

## Genuine Gardner Denver Parts & Lubricants

- Maintain the Gardner Denver performance advantage and reliability with Genuine GD Replacement Parts available through authorized sales and service representatives
- Protect your Gardner Denver investment with AEON® PD, the only lubricant specially formulated for all blowers in any environment
  - Now available:
    - >> AEON PD-XD (extreme duty)
    - >> Designed specifically for high ambient and high discharge temperature applications
  - Also available:
    - >> AEON PD (standard applications)
    - >> AEON PD-FG (food grade)



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