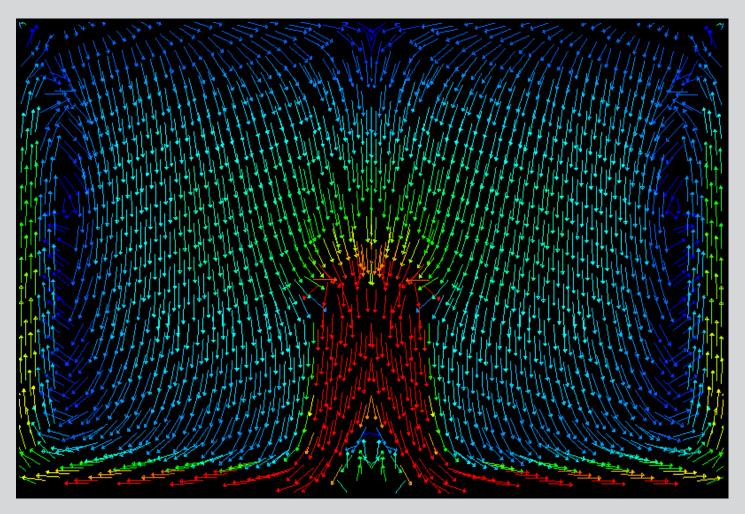
# Wastewater Treatment Solutions

Doing More With Less Through Better Technology



Computational Fluid Dynamics Model of ARI2 Impeller Mixing at 1.2 HP in 75,000 Ft<sup>3</sup> Basin (50' x 50' x 30' deep)





## **Anoxic Treatment System**

Energy Savings up to 50%

Right Mixing. Less Power.



#### Only .05 HP per 1,000 Ft<sup>3</sup>

Based on requirements for less than 10% deviation from average solids concentration



DON'T SACRIFICE YOUR PROCESS!
The durable UniFirst™ mixer + the patented ARI2 impeller = the industry's leading process efficiency

With hundreds of installations, the UniFirst™ proves to be a durable mixer drive packed with high torque in a small footprint. When coupled with the patented ARI2 anti-ragging impeller. the result is industry leading efficiency without sacrificing process.

Philadelphia Mixing Solutions, Ltd. boasts 25 years of field installations with anti-ragging impellers. The newest 4<sup>th</sup> generation ARI2 adds improved homogeneity with low shear performance.

### **ARI2** Impeller

- · Low shear performance to preserve biological activity
- Improved solids distribution and top-to-bottom uniformity Anti-ragging design

## **Aerobic Treatment System**

Energy Savings up to 30% High Efficiency. Less Work.



GET EFFICIENT PROCESS RESULTS!

The rugged Raven™ mixer + the patented GDX impeller

= the industry's ultimate aeration process

Tens of thousands of installations of the Raven<sup>™</sup>, and 60 years of field performance, confirm the rugged design of this 3<sup>rd</sup> generation mixer drive. The refined GDX anti-ragging impeller delivers the best fine bubble dispersion in the market.

For unparalleled performance in submerged turbine aeration, the patented GDX impeller combined with the Raven™ right angle drive yields the ultimate achievement in aeration and energy efficiency.

#### **GDX Impeller**

- Superior pumping action for greater in-tank flow Best fine bubble dispersion in the market
  - · Highest gas hold-up rate to promote biological activity and oxygen dispersion
  - Sized and configured to maximize oxygen transfer to meet process requirements

Anti-ragging design

### Philadelphia Mixing Solutions, Ltd.™

Philadelphia Mixing Solutions and its subsidiary, Mixing Solutions, operate one of the world's largest and most comprehensive mixing laboratories dedicated to agitation and aeration process optimization. With over 60 years experience, Philadelphia Mixing Solutions continues to be a leader and innovator in the design and manufacture of agitation and aeration equipment.

Philadelphia Mixing Solutions serves industries that value superior operational performance and reliability. Philadelphia Mixing Solutions has expanded its reach internationally to provide products, technical services and field support to customers around the world.

## Our mixing process experts can build the right solution for your unique mixing requirements to:

- Partner with you on projects to meet your unique needs
- Model mixing outcomes using the latest technology in mixing diagnostics
- Provide superior blending for reduced power consumption
- · Design equipment for mechanical reliability and operational durability
- Provide follow-up support to ensure system success for your business
- · Reduce maintenance costs and increase operating uptime
- Improve operating efficiency and finished product quality
- ISO 9001:2008





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