# LOW PRESSURE SOLUTIONS FOR SUSTAINABLE WASTEWATER AERATION

## MAKE IT BECKER.

Advanced Aeration Ltd. is a sub-division of Bio-Bubble Technologies Ltd. The Bio-Bubble prototype was first developed in 1989 by environmental engineers and scientists, who were passionate about creating more efficient and eco-friendly wastewater treatment solutions. This first plant was installed on the Isle of Wight and is still processing waste today. Throughout its growth, the business has remained committed to sustainability, continuously improving its technologies - whilst still choosing BECKER as a trusted partner for aeration.

## **ABOUT ADVANCED AERATION**

Advanced Aeration Ltd. is a pioneering company in the field of wastewater treatment, dedicated to providing innovative and sustainable solutions.

Their cutting-edge technologies focus on enhancing the efficiency and effectiveness of wastewater and sludge treatment processes.

By integrating advanced aeration techniques, they significantly reduce energy consumption and greenhouse gas emissions, making the Bio-Bubble systems environmentally friendly and cost-effective.

The company's commitment to sustainability is evident in their efforts to minimize sludge production, promote water reuse, and use eco-friendly materials. Advanced Aeration Ltd. serves a diverse range of markets, offering tailored solutions that meet the unique needs of each client.

Advanced Aeration Ltd. is not only transforming wastewater treatment but also fostering a culture of sustainability and environmental stewardship. Their innovative approach and dedication to excellence make them a true leader in the industry, driving positive change for both a cleaner and greener future.



Bio-Bubble Technologies Ltd. specialise in advanced wastewater and sewage treatment solutions.

- Municipal Solutions: Full-scale installations for cities and towns, focusing on reducing energy consumption and carbon emissions.
- Commercial and Industrial
  Solutions: Customized systems for
  businesses and industries, ensuring
  efficient and environmentally
  friendly wastewater treatment.
- **Domestic Solutions:** Smaller-scale systems for homes, providing high-quality and virtually odourless wastewater treatment.
- Advanced Aeration Process: An award-winning process that combines wastewater and sludge treatment within a single reactor, known for its low carbon footprint and high efficiency.

#### **COMPANY DETAILS**



COMPANY: Advanced Aeration Ltd COUNTRY: United Kingdom INDUSTRY: Environmental WEBSITE: www.bio-bubble.com

Advanced Aeration's solutions are recognised for their reliability, low sludge production, and ability to handle high organic and hydraulic loads without compromising effluent quality.

The company has received numerous awards for its innovative solutions and contributions to environmental sustainability, solidifying its reputation as a leader in the industry.



Photographed: BECKER DT compressors housed in soundproof enclosures





#### ADRESSING KEY CONCERNS

Advanced Aeration Ltd. address several key problems for it's customers:

**Environmental Compliance:** Ensures that wastewater treatment meets stringent environmental regulations, reducing the risk of fines and legal issues.

**Operational Efficiency:** Enhances the efficiency of wastewater treatment processes, leading to lower operational costs and energy consumption.

**Sludge Management:** Reduces the volume of sludge produced, minimizing disposal costs and environmental impact.

**Space Constraints:** Provides compact treatment solutions that are ideal for areas with limited space.

**Odour Control:** Implements technologies that significantly reduce or eliminate unpleasant odours associated with wastewater treatment.

**Scalability:** Offers scalable solutions that can be adapted to the changing needs of municipalities, industries, and residential areas.

**Water Reuse:** Facilitates the reuse of treated water for various purposes, promoting water conservation and sustainability.

These solutions help customers achieve more sustainable, cost-effective, and compliant wastewater management.

## $\begin{array}{c} \bigcirc \\ \bigcirc \end{array}$ THE BECKER SOLUTION

Advanced Aeration Ltd. has used Becker compressors for waste water aeration since 1989.

Becker compressors are the optimal solution for their systems, available in a range of sizes to suit small-to-medium sized treatment tanks.

Our DT series compressors are dry-running displacement pumps. These low-pressure devices are suitable for operation on a continuous duty basis, at any pressure level from open flow to +1.0 bar.

Utilising self-lubricating, graphite composite vanes, minimal maintenance is also required - making them a cost-effective solution for plants in the environmental sector.

## BENEFITS

- Continuous duty rated
- Long vane life
- Quiet operation
- Minimal maintenance
- Improved ergonomic situation for operators
- Modular and compact design for easy machine integration



BECKER DT 4.4 & DT 4.25 models



CKER

compressors, oil-free

"We have been using Becker Compressors for many years and the experience has been outstanding. The compressors are incredibly reliable and efficient. The customer service team is always responsive and helpful, ensuring that any issues are promptly addressed. We highly recommend Becker Compressors for their top-notch quality and excellent support"

Alison Connor, Advanced Aeration Ltd.

WOULD YOU LIKE TO FIND YOU WHAT BECKER COULD DO FOR YOU IN THE ENVIRONMENTAL SECTOR?

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