# Oxygen Transfer Technology

Efficiency by Design







# D-REX<sup>®</sup>: The Benchmark for Quality and Economy in Disc Diffusers



**D-REX**<sup>®</sup> 9" disc diffusers with 276 mm diameter offer maximum performance and durability at an attractive price.

**D-REX**<sup>®</sup> incorporates design features ensuring efficient and uniform aeration over a wide range of air througputs.

Our premium membrane materials **FLEXNORM®**, **FLEXSIL®** and **FLEXLON®** provide workhorse reliability even in demanding wastewaters.



**D-REX**<sup>®</sup> disc diffusers can be installed on round or rectangular headers. Connector options are available for installation on <sup>3</sup>/<sub>4</sub>" internal or external threading. **D-REX**<sup>®</sup> disc diffusers are 100% stainless-steel free for outstanding corrosion resistance. The customizable membrane perforation is engineered to provide a uniform and smooth bubble pattern over a broad range of air throughputs. Due to their outstanding efficiency, **D-REX**<sup>®</sup> disc diffusers can be used as a cost-efficient 1-to-1 replacement of existing conventional 12" disc diffusers.

### **D-REX° FLEXLON°**

- + Efficient, uniform aeration over a wide range of air throughputs
- + Outstanding chemical resistance
- + Excellent UV resistance
- + Extremely rugged design
- + Quick and easy installation



# **D-REX**<sup>®</sup>: The New Generation of Disc Diffusers



# Customers use our diffuser membranes in highly diverse applications:

These include conventional municipal and industrial activated basins, MBR and fixed-bed systems and even fish farms. Accordingly, OTT disc membranes are available in two different customizable materials: EPDM (FLEXNORM®), silicone (FLEXSIL®) and OTT proprietary elastomer (FLEXLON®).

#### FLEXLON° – for long disc diffuser service life

**FLEXLON®** membranes are recommended for use in aeration of industrial wastewaters and in processes with air temperatures up to 110°C (230°F).

This proprietary OTT material shows outstanding resistance to oils and greases and provides smooth and reliable operation in industrial and municipal wastewaters.

#### FLEXNORM<sup>®</sup> – the bioresistant workhorse

**FLEXNORM**<sup>®</sup> formulated with a biologically resistant plasticizer which reduces shrinkage and age-related stiffening. Their high-quality formulation ensures long service life even at air temperatures up to 80°C (176°F).





#### FLEXSIL<sup>®</sup> – Efficient and Durable

FLEXSIL<sup>®</sup> membranes are recommended for use with challenging wastewaters as well as in aeration systems requiring high efficiency and long service life. FLEXSIL<sup>®</sup> membranes are suitable for applications at high submersion depths, in heavily polluted wastewaters and at compressed air temperatures up to 140°C (284°F). Made of plasticizer-free materials of construction, they are not subject to embrittlement and are fully resistant to bioslime, a wide range of chemicals as well as oils and greases.









SSOTE and air throughput at diffuser spacing of 1  $\textsc{D-REX}^{\circledast}$  per  $m^2$ 





info@ott-group.com www.ott-group.com Our products facilitate greater sustainability in biological wastewater treatment. As a company, we are committed to conducting our operations as sustainably as possible.

From the mid-1990s onwards, numerous wastewater treatment plants have significantly reduced energy consumption by implementing our highly efficient OTT diffuser systems.

Independent studies conducted by leading institutions validate the decision of these plants to adopt our products. They not only enable sustainable energy savings but also ensure long-lasting, low-maintenance and efficient operations.

Furthermore, our plant refreshment programme, initiated in 2013, allows for the reconditioning of used membrane diffusers. We meticulously clean the carriers at our facilities, assess their condition and install new membranes and seals.

Each factory-refurbished diffuser undergoes rigorous quality and pressure loss inspections, obtaining documented QA approval before being packaged for delivery. This refurbishment process not only saves time and money at the plant but also proves more cost-effective than purchasing new Since our establishment in 1986, all our products have proudly carried the "Made in Germany" label, ensuring they are manufactured under stringent social and environmental standards.

membrane diffusers. Additionally, recycling the carriers prevents waste and reduces carbon emissions.

Our upcoming OTT recycling programme is set to further decrease carbon emissions:

We recycle used carriers on-site and manufacture new diffusers from the material, fostering a closed-loop system that significantly diminishes waste, raw material usage, and the carbon footprint of OTT products.

Renowned for their efficiency, cost-effectiveness, performance and durability, our products and plant designs remain at the forefront of the industry.

We invite you to visit us for a plant audit or join us on our website as we strive to achieve 100% sustainability.

Challenge us, and let us help you realise your projects and sustainability objectives.

### **Carbon footprint**

<u>Do please get in touch with us</u>, so that we can work together to reduce the energy consumption and carbon footprint of your diffuser system. For more detailed insights into the measures implemented by the OTT Group, have a look at our Sustainability Report.



# TRANSPARANCY EFFICIENCY REDUCTION





Member of German Water Partnership

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