Oxygen Transfer Technology

Efficiency by Design





OTT Membranes





MAGNUM® diffuser with FLEXSIL® membrane



At OTT, we are convinced that the performance, economics and service life of a wastewater aeration system are determined primarily by the quality of its membranes.

We therefore manufacture our membranes with strict in-process quality control, closely monitoring characteristics such as pressure drop, physical properties and bubble-pattern uniformity.

Customers use our diffuser membranes in highly diverse applications. These include conventional municipal and industrial activated basins, MBR and fixed-bed systems as well as aquaculture facilities. Accordingly, OTT membranes are available in various materials: EPDM (FLEXNORM®) and silicone (FLEXSIL®) tubular membranes as well as EPDM (FLEXNORM®) and proprietary elastomer (FLEXLON®) disc membranes.

We believe that these 3 membrane materials provide the basis for solutions for 95 % of all wastewater aeration applications. We will gladly assist you in selecting the best membrane for your specific application – i.e. the material providing the optimum balance between performance, reliability and investment cost.



OTT Membrane Materials



FLEXNORM° – the bioresistant workhorse

FLEXNORM® membranes are recommended for aeration of municipal wastewaters. They are 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[®] – efficient and durable

FLEXSIL® membranes are recommended for use with challenging wastewaters and in aeration systems designed for maximum efficiency and service life.

They are well suited for applications in deep basins, with heavily polluted wastewaters and/or at temperatures up to $140^{\circ}C$ (284°F).

This membrane is not subject to age-related stiffening and exhibits outstanding chemical resistance to a wide range of chemicals, oils and greases.

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.





OTT's **FLEXNORM**[®] and **FLEXSIL**[®] tubular membranes are available in standard versions for 63 mm (2.48") O.D. diffusers in any required length.

They are available with any desired surface printing (your corporate logo, etc.).

FLEXSIL[®] tubular membranes are also available in all colours in accordance with RAL and other colour standards.

FLEXLON[®] disc membranes are made to your specifications in the colours and with surface printing as desired.









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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