

Oxygen Transfer Technology

Efficiency by Design

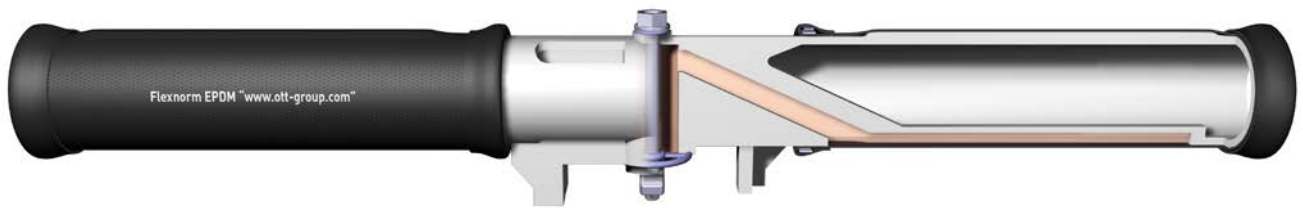


OTT GROUP



MAGNUM[®]

MAGNUM®: Patented Technology for Rapid Installation and Minimum Piping Costs



The MAGNUM® diffuser is ideal for cost-efficient realization of air supply piping and diffuser installation.

Available in overall lengths up to 2200 mm (86.61"), **MAGNUM®** provides extremely high membrane surface area in a single diffuser. The overall membrane surface area required can therefore be realized with minimum installation time and air piping costs. Like all OTT tubular diffusers, **MAGNUM®** is equipped with patented engineering features including an integrated end-to-end air channel and a wrinkle-free membrane mounting ridge.



MAGNUM® diffusers can be installed on rectangular or round headers with 30 mm or 38 mm (1.18" or 1.50") outlet openings. We offer connectors for DN 80, 100 and 125 mm (3.15", 3.94" and 4.92") diameter round headers and 80, 100 and 120 mm (3.15", 3.94" and 4.72") rectangular headers.



We offer stainless-steel-free mounting hardware for installation on **AirRex®** headers.

All mounting components are made from engineering resin PP-GF and therefore suited for operating temperatures up to 120°C (248°F) and fully resistant to formic acid.



MAGNUM® diffusers are available in lengths of 1200, 1700 and 2200 mm (47.24", 66.93" and 86.61").

Custom lengths in accordance with your exact specifications can be supplied on request.

For **MAGNUM®** Installation Video and Installation Instructions, please visit our website www.ott-group.com

OTT Membranes for MAGNUM® Diffusers

At OTT, we are convinced that the performance, cost efficiency 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 key properties including pressure drop 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 and even fish farms. Accordingly, OTT tubular membranes are available in a variety of customizable materials: EPDM (**FLEXNORM®**) and silicone (**FLEXSIL®**).



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).



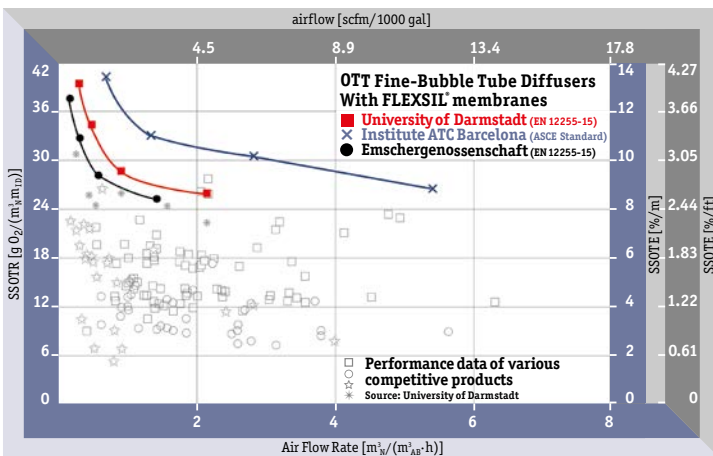
FLEXSIL® – efficient and durable

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°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.

MAGNUM® Fine-Bubble Tube Diffusers from OTT: Unsurpassed Efficiency and Quality



Oxygen transfer efficiency data from independent test institutes with full-floor coverage of basin. Complete test reports available on request.

Sustainability through efficiency

Our products facilitate greater sustainability in biological wastewater treatment. As a company, we are committed to conducting our operations as sustainably as possible.

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.

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 membrane diffusers. Additionally, recycling the carriers pre-

vents 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

Do please get in touch with us, 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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