

Aeration Membranes

Modern water and waste water technology requires aeration systems which are of ecological benefit whilst remaining economically viable. This forms the basis for efficient biological water purification.

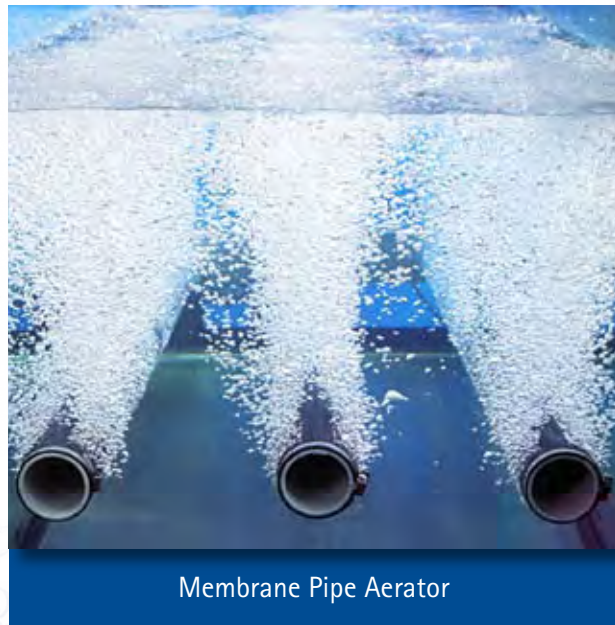
GEMGATE offer fine-bubble pipe and plate based membrane aerators that meet these requirements. The elasticity of the membrane ensures blockage-free operation due to the valve-effect of the perforation and enables intermittent operation for nitrification or upstream denitrification.

We manufacture all aeration membranes according to the individual customer requirements in various dimensions in combination with specially developed rubber mixtures (EPDM, Silicon, NBR). We supply both partial components (i.e. aeration membrane sleeves) as well as complete systems with corresponding supporting frames.

GEMTUBE and GEMDISC aeration membranes are manufactured to ensure high resistance to corrosion and long-term durability thus resulting in trouble-free and prolonged operation.

Depending on the composition of the medium intended for biological treatment, the proven qualities of EPDM are employed in both sulphur and peroxide-cured variants. Furthermore, EPDM also has microbe-resistant quality. For heavily contaminated waste water with oil, grease, petrol or aromatics, we offer the proven quality of platinum-cured Silicon. In very special cases, a specially developed NBR quality for industrial applications has also proven to be very beneficial. Detailed datasheets are available on request. Please contact our head office for further information.

We would be happy to advise you on your particular aeration application.





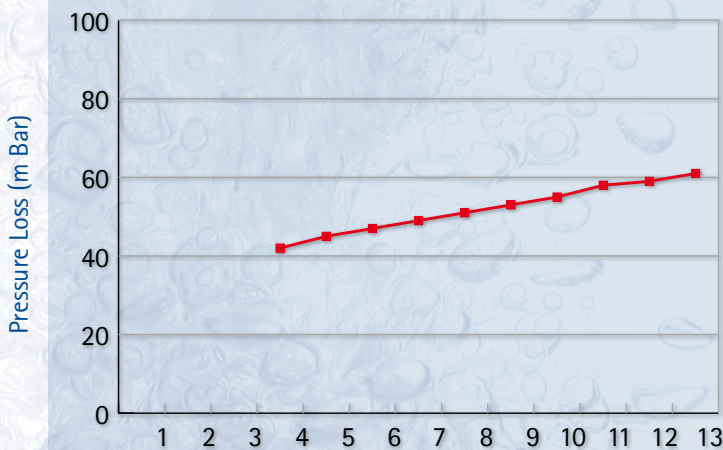
GEMDISC – Disc Diffuser / Plate Membrane Aerator

The highly developed membrane aerators are ideal for all modern water aeration processes. When used as the only aeration element in polluted water such as in waste water treatment plants without pre-cla- rification, the flat exhaust perforated surface prevents the aerator from becoming entangled in long- threaded solids. The disc sleeves are available in various perforations. The close and long-term develop- ment with renowned rubber manuf- acturers has resulted in high quality material combinations and ensuring



GEMTUBE – Membrane Pipe Aerator

Membrane Pipe Aerators are the flexible alternative to conven- tional ceramic pipe aeration systems when it comes to fine- bubble circulation or surface aeration with all the advantages of an aeration element. They are available in a wide range of lengths, diameters and material strengths as well as in various perforation sizes.



Air Volume (m³/h) per mtr. Aerator

Cost benefit by reducing energy consumption

Maximum flexibility and optimum adaption to your respective aeration requirements ensures efficient operation. The special arrangement of the air outlet (perforation) enables fine-bubble aeration and low pressure loss. This ensures high oxygen trans- fer efficiency across the entire aeration area and low energy costs.

Areas of Application

- > Municipal and Industrial Sewage Treatment Plants
- > Decentralized Sewage Treatment Systems
- > Fish-Farming
- > Aeration on Landfill Sites