Sindico Ltd

AEROSTRIP® Systems

fine bubble diffusers

Key features & benefits

- Standard oxygen transfer efficiency up to 60% at 20 ft SWD
- Proven service life of more than 15 years
- More than 20:1 turndown ratio (0.3 – 7.0 scfm/ft²)

How we create value

- Energy savings pay back your investment in 2-10 years
- Nitrogen removal enhanced due to the ability of AEROSTRIP diffusers to provide oxygen over a wide range of process loading
- Designs provided by Ovivo's industry-leading biological process team

AEROSTRIP ® Systems

Our technical edge – your economic advantage

The unique, flexible strip design of the AEROSTRIP diffuser was developed in 1995. With the first U.S. installation in 2000, customers from coast to coast have benefited from the resulting energy savings, wide-range turndown capability and long membrane life of the AEROSTRIP diffusers.

Why are AEROSTRIP diffusers so efficient?

Because size matters! – small bubbles have a large surface area per volume of air available for oxygen transfer. The larger surface area and the excellent distribution improve oxygen transfer compared to all other diffusers. Lower air flow rates are thus required for the same amount of oxygen transferred. The manufacturing process allows high efficiency to be maintained over a wide range of flux rates in actual waste water. This results in significant energy savings as your plant responds to diurnal, seasonal, and start-up loads.

Does the efficiency decrease with time?

Oxygen transfer efficiency tests after 4, 5 and 8 years prove that the efficiency remains practically unchanged. From the tests it can be concluded that with proper care and maintenance you should expect the reduction in oxygen transfer efficiency to be no more than 5% after 8 years.

What life span do the AEROSTRIP diffusers have?

AEROSTRIP diffusers have an expected life span of 15 years. Better lifetimes have been recorded in some plants.

What makes AEROSTRIP diffusers cost effective?

AEROSTRIP diffusers use 10-50% less energy per pound of BOD and NH3-N removed than other fine bubble diffusers – capital costs for AEROSTRIP diffusers are typically recovered in 2 to 10 years.

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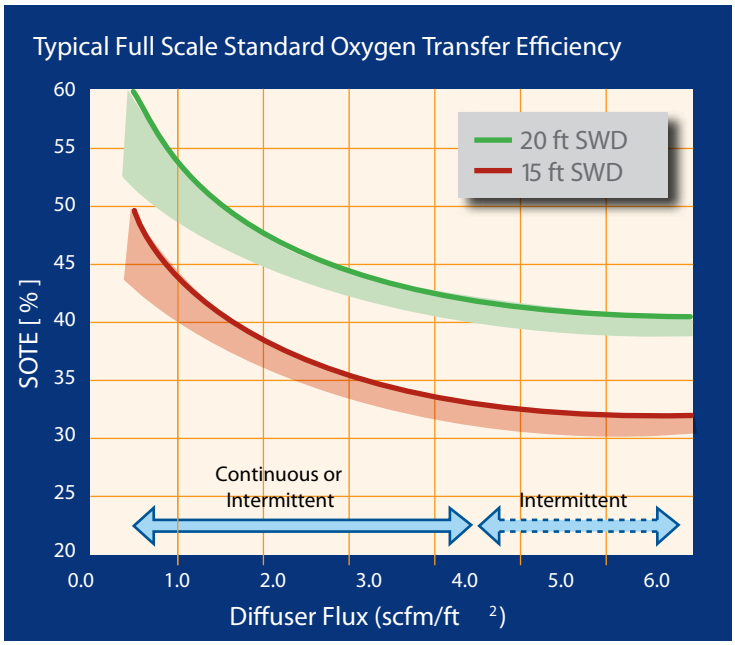
Why do the AEROSTRIP® diffusers have these outstanding properties?



SAE 8-11 lb O_2/HP-hr Typical
(considering blower efficiency of 70%)

Material

The membrane of AEROSTRIP® diffusers is made of polyurethane and contains no softeners. The membrane is thus more stable and its mechanical properties change very slowly. The mechanical stability of polyurethane membranes is superior to the stability of EPDM and silicone based membranes.

Shape

The strip shape allows installation in any tank geometry and sizes at up to 100% floor coverage.

Research and Development

The intensive R&D work, combined with extensive experience result in the outstanding performance and properties of AEROSTRIP® diffusers confirmed by authorities and independent institutions worldwide.

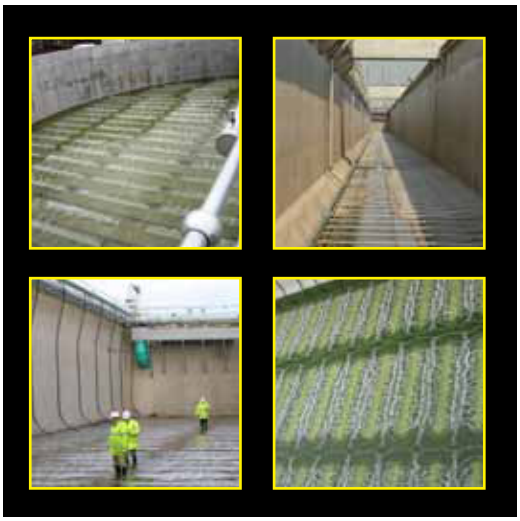
How about AEROSTRIP® diffuser installation?

AEROSTRIP® diffusers can be mounted directly on the tank floor, therefore eliminating the accumulation of deposits from beneath the diffusers and maximizing process volume and oxygen transfer efficiency.

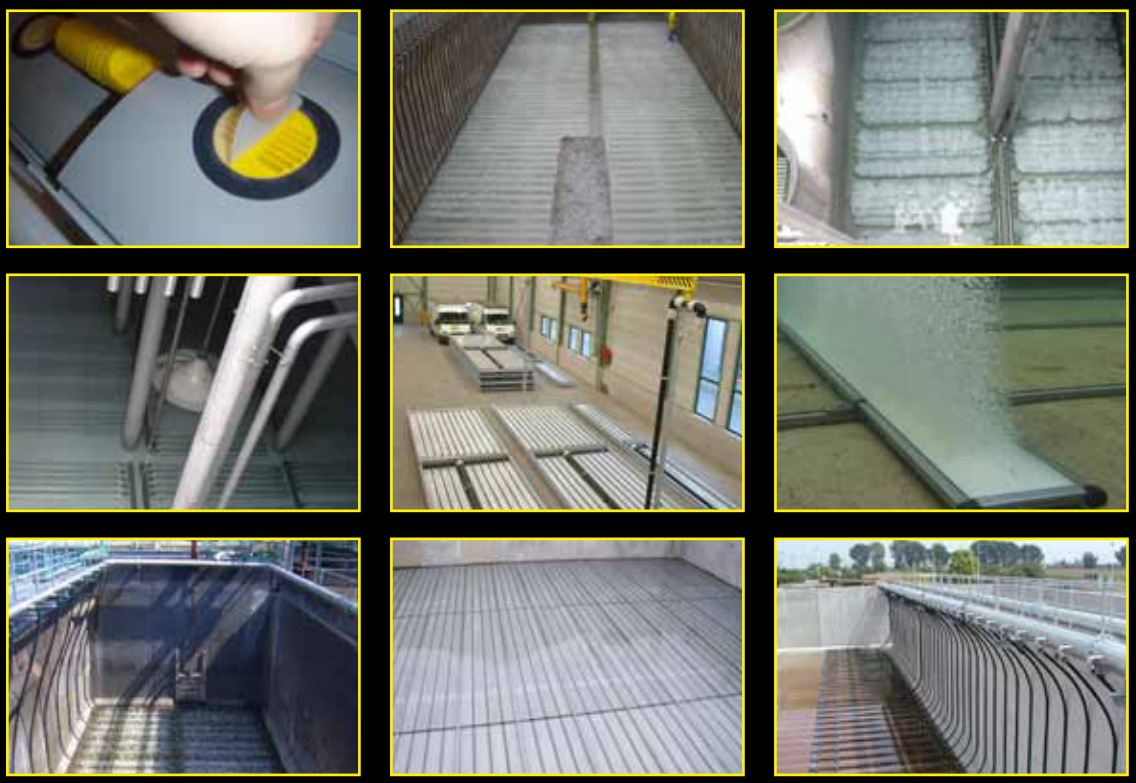
Simple support plates are used for tanks with sloped or uneven bottoms to adjust the AEROSTRIP® diffusers to a common level.

The AEROSTRIP® diffuser is available in different lengths to accommodate various layouts.

The flexible design of the air distribution system allows particular site requirements to be engineered in accordance with project specifications.



AEROSTRIP ® diffusers are saving energy in 1,000 wastewater treatment plants all over the world today.



What's your ROI?

Information about Sindico and the entire product and service range is also available at www.sindico.co.nz