

AEROSTRIP® Diffusers

Oxygen Transfer Testing - Case Histories

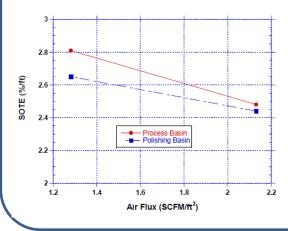
AEROSTRIP® fine bubble diffusers were installed in the <u>Simi Valley</u>, <u>CA</u> facility in 2004 as part of an upgrade to add nitrification and denitrification.

Shortly after installation, both field (in wastewater) and clean water oxygen transfer testing were performed by a well-known independent authority. During the test, the plant was treating approximately 9 MGD of domestic wastewater at approximately a 9 day MCRT.









The results of the testing indicated high oxygen transfer efficiencies at the operating flux rates. Because AEROSTRIP® diffusers operate at flux rates down to 0.3 scfm/ft², clean water oxygen transfer rates of 3%/ft SWD or more are well-documented. Alpha values of AEROSTRIP® diffusers are equal to or greater than other fine bubble diffusers.

Several **AEROSTRIP**® diffusers were removed from the **Gratz, Austria** wastewater treatment plant and tested after 8 years of continuous service. At flux rates of less than 3 scfm/ft² (representing our typical design range), **virtually no degradation of SOTE was observed**. Pressure drop across the membrane was also measured. Results ranged from 0.2-0.6 psig, far less than design values, over the range of flux rates tested.

