



DEMON

STRASS I. Z. Municipal WWTP

250,000 P.E. / Q_{inlet} 30,000 m³/d

Number of DEMON Tanks:	1
Total Volume:	450 m ³
Water Depth:	3,8 m
SOTR Standard Oxygen Transfer Rate:	56,3 kgO ₂ /h
Total Airflow:	701 Nm ³ /h
Total AEROSTRIP® Diffusers:	42

The Strass WWTP in the Zillertal valley treats sewage from tourist-oriented valleys of Achental, Inntal and Zillertal (AIZ) and has been operating self-sufficiently in energy since 2005: This year, the DEMON process for treating process water was implemented here for the first time.

Thus, the pioneers from Strass succeeded in taking a significant step: The treatment plant has been producing more energy than it consumes.

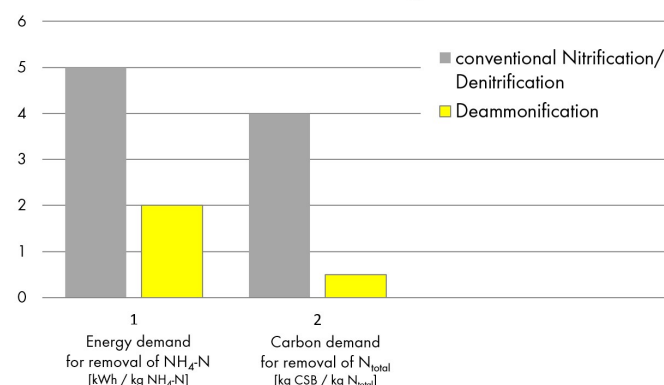
DEMON pioneer trusts in AEROSTRIP® diffusers

In the deammonification process - DEMON - only about 50% of the ammonium is oxidized to nitrite. In a second step, ammonium and nitrite are reduced to N₂ by so called "anammox" bacteria under anoxic conditions. The oxygen requirement and thus the energy consumption decreases significantly, namely to approx. 40%. Also the amount of accumulating excess sludge is only 10% of a conventional treatment using nitrification / denitrification process. Furthermore there is no need for an additional supply of carbon.

In the reddish-colored bacterial biocenosis with a slightly higher process temperature, AEROSTRIP® diffusers have once again proven to be the optimal aeration device.

As with every system change to AEROSTRIP®, the existing pipework could be used to a large extent and the cost of the conversion could be kept to a minimum.

Demand of energy and carbon



AEROSTRIP®

fine bubble diffusers by AQUACONSULT

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