



# HERMANNSBURG

## Municipal WWTP

12,000 P.E. /  $Q_{\text{inlet}} 100 \text{ m}^3/\text{h}$

Number of Tanks:	2
Total Volume:	3,420 m <sup>3</sup>
Water Depth:	2.0 m; 2.7 m
SOTR Standard Oxygen Transfer Rate:	136 kg O <sub>2</sub> /h
Total Airflow:	2,168 Nm <sup>3</sup> /h
Total AEROSTRIP® Diffusers:	136

Stadtwerke Bergen GmbH operates a biological wastewater treatment plant with two separate aeration basins and an upstream anaerobic/contact basin at its Hermannsburg site (municipality of Südheide).

In 2021, the old disc diffusers of the two recirculation basins were replaced, at which a clever variant of the AEROSTRIP® diffusers was chosen.

### *AEROSTRIP® Modules: The powerful plate alternative*

Plate diffusers are characterized by good efficiency, long service life and an easy installation.

Strip diffusers have higher efficiency, the same service life, but take a little more time to install.

AEROSTRIP® Modules combine the best of both worlds. The modules are delivered to the job site pre-assembled and can be installed in a few simple steps. The air supply pipes are always sufficiently in diameter, which minimizes pressure losses.

The distances between the strip shaped diffusers create large interfaces between the rising air bubbles and the surrounding wastewater. This results in a very efficient oxygen supply.

At the Hermannsburg treatment plant an oxygen transfer test in cleanwater and in wastewater has impressively confirmed the performance of the AEROSTRIP® Modules: The guaranteed values, which were based on planing with plate diffusers, were exceeded by far. The  $\alpha$ -value of 0.87 was also in a very favorable range.

A special feature of this plant is the shallow water depth of 2.0 m in carousel 1 and 2.7 m in carousel 2. With a measured oxygen utilization (SSOTR) of more than 35 g/Nm<sup>3</sup>m<sub>id</sub> the AEROSTRIP® modules quickly pay for themselves even under these conditions.

# AEROSTRIP®

fine bubble diffusers by AQUACONSULT

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