



VERONA

Municipal WWTP

410.000 P.E

Verona is the capital of the Italian province of the same name in the northeast of the country and is famous as the setting for „Romeo and Juliet.“ Its historic center along the Adige River has been a UNESCO World Heritage Site for many years. Less known is the fact that the city’s wastewater treatment plant has been considered one of the most energy-efficient facilities in Italy since 2006.

NUMBER OF TANKS	6
WATER DEPTH	4.08 m
SOTR (Standard Oxygen Transfer Rate)	max. 3,338 kg O ² /h
TOTAL AIRFLOW	max. 40,000 Nm ³ /h
TOTAL AEROSTRIP® DIFFUSERS	1,065

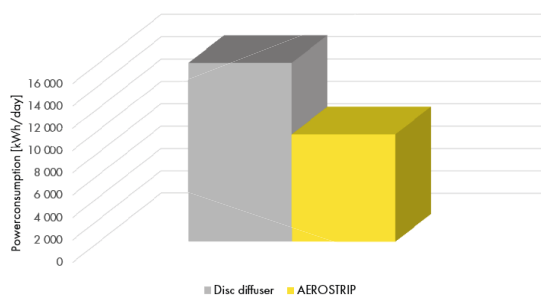
40% ENERGY SAVINGS THANKS TO AEROSTRIP®

In 2006, the city administration of Verona decided to replace the previously installed disc aeration system with the significantly more efficient AEROSTRIP® strip diffusers due to high energy costs.

This decision was made after the administration conducted a detailed analysis of the operating costs and found that the existing system no longer met the requirements for energy efficiency and cost savings. At that time, a total of 872 AEROSTRIP® diffusers were installed across five tanks in the plant to ensure optimal oxygen supply and thereby improve cleaning performance.

Thanks to this measure, energy consumption for aeration was reduced by around 40%, representing a significant saving. With electricity costs of 12 cents per kWh, this reduction translated into annual savings of approximately 280,000 EUR, which not only significantly lowered the city’s operating costs but also led to a rapid return on investment. Impressed by these results, the operator once again chose

VERONA CITY WWTP
Energy consumption before and after installation of AEROSTRIP® diffusers



AEROSTRIP® strip diffusers during the latest expansion of the plant in 2019.

An additional 184 of these efficient fine bubble diffusers were installed in Tank No. 6. The city’s satisfaction with the AEROSTRIP® aeration system remains undiminished after 18 years, reinforcing the soundness of their original decision.

AEROSTRIP®

fine bubble diffusers by AQUACONSULT