WTP MELBOURNE

Municipal WWTP

700,000 P.E. / Q_{inlet} 140,000 m³/d

Number of Tanks:	**4**
Plant Capacity:	**140 ML/d**
Immersion Depth:	**5.32 m**
SOTR Standard Oxygen Transfer Rate:	**7,660 kg O_2/h**
Air flow:	**76,640 Nm³/h**
Total AEROSTRIP® Diffusers:	**1,712**

Melbourne owes its first sewage treatment plant, dating back to 1897, to the gold fever: Located at the *Werribee Farm*, the sewage was initially drained on paddocks; ~ 1935 the first lagoons started operation. Today one of the most environmentally friendly sewage treatment plants in Australia can be found at this location: "Western Treatment Plant", which produces class A recycled water.

MELBOURNE'S WESTERN TREATMENT PLANT SELECTS HIGH EFFICIENT AEROSTRIP® DIFFUSERS

AEROSTRIP® diffusers use a unique polyurethane membrane, which achieves an air bubble size of only 1 mm. Thus, the introduced atmospheric oxygen is used to the maximum, which leads to up to 45% less air and energy requirements compared to conventional diffusers.

The special polyurethane mixture contains no plasticizers or fillers: These are typical for EPDM diffusers, which become brittle within a few years.

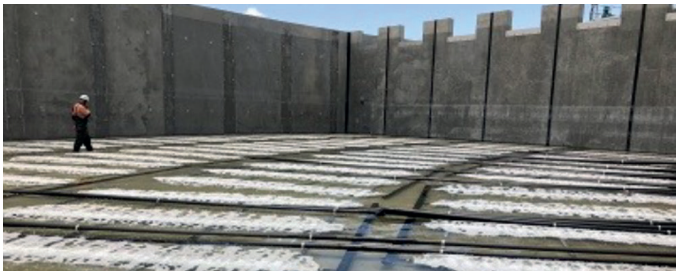
The elastic strength of AEROSTRIP® membranes is also much higher than of silicone.

The Western Treatment Plant has benefited from these properties since 2018.

The local AEROSTRIP® partner was awarded the contract for aeration technology of the new biological stage (140 ML/d), which features a modern treatment process for nitrogen removal at low oxygen demand:

In total, 1,712 AEROSTRIP®s type Q4 are installed in four new aeration tanks.

The performance of AEROSTRIP® diffusers has been confirmed by independent experts by running several oxygen transfer tests at the manufacturer's test facility.



AEROSTRIP®

fine bubble diffusers by AQUACONSULT

www.aerostrip.at