

## WWTP Buchenhofen

### MESSNER® Aeration Panel COMPACT

The new compact panel from RMU reliably and efficiently supplies oxygen to the Buchenhofen wastewater treatment plant in Wuppertal, Germany.

With a capacity of 600,000 PE, the Wuppertal Buchenhofen large-scale wastewater treatment plant is the largest and, with a history of more than one hundred years, also the oldest wastewater treatment plant of the Wupperverband.



#### Initial situation:

In 2012, the management of the large wastewater treatment plant decided to significantly reduce the electrical power consumption for aeration of the aeration basins. Ideally, this measure was also to be financed by charging back the wastewater levy already paid. For this purpose, it was necessary to achieve a further reduction of the already exemplary effluent values.

#### Measures:

After a detailed examination and public tender, the existing aeration system of all six activated sludge lines was replaced in 2015 by the new aerator from RUDOLF MESSNER UMWELTTECHNIK AG, the MESSNER® Aeration Panel COMPACT. This new aerator type is characterized by a slimmer design (dimension: 0.5 m x 2 m) and an active membrane area of one square meter (see photo). A total of just under 3,000 m<sup>2</sup> of aeration area was installed.

#### Result / Benefit:

In addition to consistently high operational reliability without malfunctions, annual energy savings of more than 600,000 kWh have been achieved. The expected service life of the MESSNER Plate Aerator® is 15 to 20 years. In addition, due to the high oxygen input capacity and the associated reduced effluent values, the realized measure could be set off against the wastewater tax already paid. Thus, the retrofit has already paid off for the Wupperverband in several ways.

