

BIOFILTER EXHAUST AIR TREATMENT

Purification plant of Linz AG – Linz Asten, Austria

Municipal waste water treatment plant





Biofilter exhaust
air treatment,
Municipal waste
water treatment
plant

Two modular, self-contained, pressure-tight biofilter systems with five biofilters all in all were installed for the regional sewage treatment plant of Linz AG in Linz-Asten/Upper Austria. The entire metropolitan area of Linz, as well as 39 surrounding communities, are serviced by the sewage system of Asten, which has a capacity for 950.000 population equivalents (PE). In addition, the biodegradable

wastewater of the heavy industry, as the cork plant waters from the Linz plant, of Voestalpine Stahl and DSM Chemie are also processed. Major problem factors of the installed exhaust air cleaning plant are high exhaust air temperatures and high-rate ammonia (NH₃) emissions. Thanks to the new biofilter-based exhaust air cleaning system, the neighbourhood no longer is subjected to

annoying odours from the biological, aerobic treatment stages for sewage sludge. Pollutants and odorants are removed from approx. 20.000 to 55.000 m³ of exhaust air every hour. The relatively high operating temperature in this system, which is reflected in the choice of an optimised biofilter material, merits special mention.

EXHAUST AIR DATA	
Controllable exhaust air amount	20.000 to 55.000 m ³ /h
Exhaust air temperature at exhaust points	+ 20°C to + 40°C
Number of exhaust points	5
BIOFILTER	
Number of biofilter containers	5 units
Design	self-contained, pressure-tight
Extras	connected to BMS (system control) of the treatment plant
MACHINERY	
Exhaust air ventilator	stainless steel (11 kW) with frequency converter
Technical container	3 units

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