

## BIOFILTER EXHAUST AIR TREATMENT

Frisch & Frost Nahrungsmittel GmbH – Hollabrunn, Austria

Industrial wastewater treatment plant





Biofilter exhaust  
air treatment,  
Industrial  
wastewater  
purification

A self-contained biofilter system for Austria's largest potato processor in Hollabrunn/Lower Austria – Frisch & Frost Nahrungsmittel GmbH was installed. As exclusive supplier, Frisch & Frost produces the famous McFries for McDonalds. The new biofilter exhaust air cleaner prevents unpleasant smell from becoming an annoyance in the neighbourhood of organic wastewater purification

plants and considerably improves the working conditions for employees. The project was commissioned in August 2003; assembly began in early October while completion was timely at the end of October 2003. The system removes odorants and pollutants from up to 10.000m<sup>3</sup> exhaust gas (biogenic breakdown products, from starch). Anorganic and organic sulphur as well as nitric compounds are

produced here, which are liable to have a strong annoying smell. The centrepiece of the system consists of two container biofilters. After the pre-separation of ammonia and sulphur compounds in a two-stage chemical air scrubber, the biofilter takes care of the microbiological breakdown of the remaining odorants in an efficient and environmentally-friendly manner.

EXHAUST AIR DATA	
Controllable exhaust air amount	4.000 to 10.000m <sup>3</sup> /h
Exhaust air temperature at exhaust points	+ 15°C to + 40°C
Number of exhaust points	11
BIOFILTER	
Number of biofilter containers	2 units
Design	self-contained, pressure-tight
Degree of efficiency	99%
MACHINERY	
Exhaust air ventilator	infinitely variable via FU
Air scrubber	two-stage, chemical
Chemical dosing station	for caustic lye or hydrogen peroxide

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