

Kaarst, Germany



Rejuvenating
degraded
ecosystems

GE's wastewater technology revitalises German waterway

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Kaarst, a small community, located just west of Düsseldorf, is currently using the Nordkanal as a receiving creek for the effluent of its sewage treatment plant, before it flows to a larger body of water. It is a small artificial canal originally built by Napoleon in the early 1800s to connect Germany and The Netherlands.

Customer Challenge

Throughout the world, any areas that discharge poor quality wastewater effluent into the water supply will ultimately produce a negative impact on the environment. The existing Nordkanal wastewater treatment plant, owned and operated by Erftverband, was outdated and already operating at peak capacity. The challenge was to improve the performance of the plant to produce 'bathing water quality effluent' in order to meet the new standard for specific wastewater treatment plants in Europe and enhance the overall quality of the canal.

Solution

The Ministers of Environmental Affairs from both Germany and The Netherlands agreed that the continuous pollution of the water was detrimental to the environment and supported the improvement of the wastewater treatment plant in Kaarst. Looking for a proven technology to employ in the upgrade, Erftverband chose the ZeeWeed® membrane bioreactor (MBR) system for wastewater treatment from GE. By replacing the conventional plant with a ZeeWeed MBR, the water quality has improved consistently in the 53-kilometre Nordkanal, which is now no longer classed as 'highly polluted'. Today, a larger and more diverse population of aquatic organisms can be found in the canal. The city of Kaarst has used this opportunity to encourage more visitors and tourists to enjoy the surrounding environment, now complete with a waterfront bike trail and opportunities for canoeing and other water sports.

GE's ZeeWeed MBR technology is ecomagination certified.

For more information

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