

River cruiser „Scenic Emerald“

BIOLOGICAL BMA MEMBRANE PLANT WITH
SICLARO FILTRATION TECHNOLOGY

Task

MARTIN Systems AG has been contracted to install the complete wastewater system from vacuum toilets to the discharge of the wastewater treatment plant.

Ship Details

The river cruiser has a length of 135 m and is 11.4 m wide. It is supposed to shuttle between Amsterdam and Budapest with more than 200 passengers onboard on the rivers Rhine, Main and Danube.

Wastewater Management

The river cruiser was equipped with a BMA plant. The plants consist of an activation reactor as well as individually configurable filtration cells with siClaro filter technology. As the filters may be operated independent from each other, full redundancy is reached. The pre-treatment step consists of a fine screen as well as a grease separator. The plant works fully automated.



Treatment Capacity

Population Equivalent (PE)	220
Raw sewage input (m ³ /d)	41,3
BOD ₅ inlet (kg/d)	39,6
Installed membrane surface	400
Tank volume (m ³)	22



Final Effluent Quality

The final effluent quality exceeds all requirements given by the IMO (International Maritime Organisation), the German "Seeberufsgenossenschaft" and the Germanischer Lloyd. The following table shows the outstanding purification performances of wastewater treatment plants manufactured by MARTIN Systems.