



cleaning
systems
for liquids

Wastewater treatment at the disposal company

Waste disposal/recycling

CaseStudy

Construction of a new evaporator line – a new approach to waste disposal

An established waste disposal service provider based in Austria, decided to replace its existing chemical-physical treatment system with a modern evaporator plant. The aim was to modernise the company's own wastewater treatment system and make it more efficient. MKR supplied a completely new line solution for the treatment of industrial wastewater – tailor-made, compliant with regulations and future-proof.

Initial Situation

Until now, wastewater treatment has been carried out using traditional chemical-physical methods. No plant technology was available for the switch to evaporator technology. A complete system solution had to be designed, planned and installed from scratch – including all components from media handling to discharge into the sewer system.

Requirements

- Treatment of alkaline water and waste emulsions from metal processing
- Complete reconstruction of the plant technology for an evaporator line
- Safe discharge of the distillate in accordance with official regulations
- System integration for flexible feeding (IBC, suction truck)
- Automated pH control and discharge monitoring
- Discharge of the distillate in accordance with legal requirements

MKR Solution

After extensive consultations and laboratory analyses, MKR developed a customised plant concept that was precisely tailored to the companies requirements. The plant comprises:

- Receipt of liquid waste from IBC containers and by vacuum truck
 - pH adjustment for pre-treatment of acidic/alkaline media
 - Filtration and tramp oil separation for the removal of impurities
 - Distillation in the evaporator to separate water and concentrates
 - Light phase separator to ensure oil separation
 - Measurement and control technology for pH and temperature monitoring prior to discharge
- The purified distillate is discharged directly into the sewer system if all parameters are met. Automatic pH readjustment takes place if necessary.

Project at a Glance

Project:

Complete evaporator line for treating industrial wastewater – efficient, safe and compliant with regulations.

System Technology

- IBC filling station
- pH adjustment with container
- Filtration
- Tramp oil separator
- ET 250 evaporator
- Light phase separator
- Measuring and control technology for pH and temperature monitoring

Customer:

established waste disposal service provider based in Austria

Contractor:

MKR Metzger GmbH
Rappenfeldstraße 4
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Results

- Complete system setup from a single source by MKR
- Efficient treatment of industrial wastewater
- Legally compliant discharge in accordance with official regulations
- High flexibility thanks to variable acceptance systems (IBC, suction trucks)
- Automated process control for stable discharge values
- Future-proof alternative to chemical-physical treatment

