

## Case Study

## Challenge: Efficient treatment of rinsing water in chemical production

The cleaning of hoses and mechanical equipment in chemical production regularly generates heavily contaminated rinse water. Until now, this water has been disposed of at great expense. In order to reduce costs and contribute to environmental protection at the same time, a European customer opted for internal wastewater treatment using MKR technology.

### Initial Situation

Before project implementation, all rinsing waters were sent out for external disposal. No in-house treatment was available.

The consequences: high costs and a significant environmental burden due to transport and external processing.

### Requirements

- Treatment of both acidic and alkaline rinsing waters
- Energy efficiency and compliance with BAT (Best Available Techniques) standards
- Significant reduction of environmental impact
- Seamless integration into existing workflows with high operational reliability

### Project at a Glance

**Project:**

Treatment of rinsing water

**System Technology:**

- pH-adjustment
- Bag filter with pump
- Evaporator ET 150
- Trampoil separator TB 250

**Customer:**

International industrial customer from the chemical industry

**Contractor:**

MKR Metzger GmbH  
Rappenfeldstraße 4  
86653 Monheim

**Sales Partner:**

Euromaskin



### MKR Solution

After extensive laboratory analyses, MKR designed a tailored concept:

An ET 150 atmospheric evaporator was installed with two separate feed lines – one for alkaline and one for acidic wastewater. Both streams are first combined in a pH adjustment unit, then passed through a bag filter station before entering the evaporator.

The treated distillate undergoes post-treatment in a Trampoil separator (TB 250) and is then reused in production. This creates a closed-loop system, saving costs and protecting the environment.

## Results

- Significant reduction of disposal costs
- Reuse of distillate within the production process
- Compliance with environmental regulations
- Reduced CO<sub>2</sub> footprint by avoiding external transport
- Energy-efficient solution using ET 150 evaporator technology

