

Client: AVA Velsen
Project: Softening plant

Services: Baseline study, preparation of concept for refurbishment, tendering, assistance with contract awarding, construction assistance



General

The softening plant at the incineration plant AVA Velsen dates back to the year 1996. In view of the long period of operation, the extent of refurbishment required for the plant is not inconsiderable. A study was to be made to examine whether a refurbishment of the plant would suffice, or whether the plant would need to be replaced in its entirety.

Procedure

An examination was made of the actual state of the softening plant, recording and assessing the faults that have occurred so far. It was examined whether malfunctions could be avoided by modifying the concept, thus minimizing the amount of maintenance work.

Moreover, the condition of the individual plant components was assessed. Overall an extensive refurbishment of the plant proved to be feasible, while certain measures for optimization should be taken into consideration.

It was not deemed necessary to replace the plant completely.

Measures for refurbishment / optimization

The following measures were performed for the plant refurbishment:

- Refurbishment of brine tank
- Brine dilution and dosing by frequency-controlled pumps
- Replacement of hardness testers
- Simplification of pipe routing
- Overhaul of valves and fittings
- Replacement of measuring technology
- Adaptation of the electrical and control systems

Implementation

These measures for refurbishment and optimization were implemented at the end of 2017/beginning of 2018.