

Specialist plant screening

The GEMÜ Service team is deployed daily to carry out maintenance and repairs to process plant on its customers' premises. Often, ideas for improving process sequences or installation are mentioned during conversations with operators on site.

These ideas are picked up at GEMÜ and developed into appropriate measures. In order to separate demand for such measures more effectively from classic service jobs, GEMÜ is now extending its service portfolio to include specialist plant screening. The aim of the new offering is to analyze existing industrial plant in order to identify potential for technical optimization and draw up specific suggestion.

The following three types of screening are planned in the expansion stage:

1. Basic plant screening

In basic plant screening, the GEMÜ Service team carries out a visual inspection of the relevant plant components. The focus here is on valves and automation components. The inspection identifies obvious wear and tear, potential leakages or mechanical problems, as well as potentially critical issues concerning the risk of contamination.

Measures for maintenance, optimization and replacements are then suggested in a report.

2. Data-based analysis

Data-based analyses use specialist instruments such as ultrasonic flowmeters and thermographic cameras. They

check the plant components, particularly valves and flow controls, as well as their performance.

A detailed technical report is then prepared, providing precise data and analyses for every component inspected. In this case too, GEMÜ makes recommendations for optimization, e.g. for valve opening degrees, optimized automation components or elastomer materials.

3. Digital analysis

GEMÜ will also offer digitalized plant screening in the future. This type of screening uses modern sensor technology and artificial intelligence to monitor plant components continuously and identify patterns that could indicate imminent failures. The following technologies are used, among others:

Remote maintenance via sensors: Modern sensor technology enables the continuous data capture of valve parameters such as flow rates, pressures, temperatures and wear.

Digital data analysis: The data is analyzed using advanced algorithms. This enables patterns to be identified that may indicate imminent valve failures, for example.

Al-assisted predictions: Artificial intelligence is used to predict future maintenance requirements or the optimal



time to replace valves. This enables companies to introduce maintenance measures at an early stage, avoiding failures.

All in all, plant screening from GEMÜ offers customers a unique opportunity to optimize their plant and maximize its long service life. The different screening levels allow customers to tailor the analysis to their own requirements.