

GF Piping Systems

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Paul Gerhardt Foundation  
Protestant Hospital, Lutherstadt-Wittenberg

PAUL GERHARDT STIFT

Hycleen Automation  
System guarantees  
the quality of  
drinking water

Reference

# Hycleen Automation System guarantees the quality of the hospital's drinking water

The Paul Gerhardt Foundation Protestant Hospital in Lutherstadt-Wittenberg is a tertiary care facility with around 335 beds that provides medical and nursing care to patients. It decided to invest in the future by optimizing the hot water production and circulation installation. Thanks to the Hycleen Automation System, it was possible to upgrade the installation without a problem, despite the lack of as-built documentation.

## Project background

As well as guaranteed drinking water hygiene, energy efficiency and the requirement heightened by the Drinking Water Ordinance to document (temperature) measurements are extremely important factors for those at the Paul Gerhard Foundation responsible for the drinking water installation. The idea was to keep the pipework network largely intact and make it hydraulically balanced, which had not been the case until then. Due to the size of the network, however, this presented a major challenge.

## Chosen technical solution

Forty six circulation controllers and two masters are used in the installation. This equipment guarantees the reliable operation the installation needs to ensure a largely homogenous flow of water, optimum distribution of the thermal energy (at temperatures of 55 to 60 degrees) and documentation of the measurements as required. The interfaces for REST-API and BACnet IP are contained in the hardware and are easy to activate. This allows the Hycleen Automation System to be seamlessly integrated into the existing building control system from Siemens in this case too.

## Accomplished improvements

The system guarantees that the entire drinking water (hot) network is hydraulically balanced, ensures a hygienically impeccable condition and optimizes the energy demand. As a result, flushing applications and the circulation control function are bundled in one central system. Another crucial advantage is that, looking ahead, the digitally controlled valves can be retrofitted into the legs of the cold water pipes without a problem if required. The constant monitoring of the limit temperatures and the automatic cleaning process further enhance operational reliability and prevent reconstruction costs occurring in the future. This also saves on additional legionella tests and expensive hazard analyses.

## Customer benefits of the Hycleen Automation System

- The Hycleen Automation System hydraulically balances the drinking water (hot) network, ensures regular flushing and optimizes the energy demand
- Installation can be retrofitted without a problem, despite the lack of as-built documentation
- Detailed temperature monitoring and recording, even in the riser zones



The retrofitted Hycleen Automation System guarantees reliable drinking water management at consistent temperatures above 55°C and a hydraulically balanced installation.



The integrated sanitary technology is easy to operate from the Hycleen Automation Master control unit. The panel is connected to controllers, which precisely control the individual valves and sensors.