

Treatment of circulation water

Fiera di Primiero, Italy

Customer District heating plant A.C.S.M. Teleriscaldamento SpA

System Partial flow filtration system and dosing technology for the treatment of circulation water in a district heating network

Technical specifications

Capacity: 1 x 16.5 MW biomass heating boiler and 1 x 7.5 MW oil boiler

System content: 1,200 m³

Loop: 46 km

Consumers: 1007

Year of construction of the district heating network: 2010

Problem

The transfer stations had to be permanently cleaned because of deposits or replaced due to corrosion.

Initial results

Handling and controlling the system is very easy.

After 6 months of operation about 50 % less repairs were carried out. The analyses prior to operation and after 6 months of operation confirm the improved quality of the circulation water.

As the values have been validated, a partial flow filtration by Grünbeck was also installed in the second district heating plant operated by A.C.S.M in 2020.



System

Partial flow treatment of circulation water of a district heating network by means of filtration and softening, dosing system with pH monitoring for an optimum adjustment of the pH value

- 1 Partial flow filter system
GENO-VARIO 3000-HP
 - Max. system pressure 13 bar
 - Filtration capacity approx. 3 m³/h
 - Max. water temperature 80 °C
- 1 Dosing system GENODOS-GP
- 1 pH measurement to monitor the pH value in the circulation water

Grünbeck's services

Process design, engineering, manufacturing, start-up, semi-annual analysis, check and maintenance