THERMATEL®

APPLICATION CASE STUDY

Magnetrol®

Lakehaven Utility District

FINELINE INSTRUMENT

Customer Case Study: Thermal Dispersion Technology Helps Utility Meet Federal Environmental and Health Regulations

Many water quality plants are using flow controls to help achieve critical operational goals. This recent case study shows how thermal mass flow meters can help your plant ensure compliance with stringent government regulations.

The Challenge

Instrumentation plays a pivotal role in meeting regulations set forth by the Environmental Protection Agency, Department of Ecology and the Department of Health. To ensure compliance with these types of regulations, the Lakehaven Utility District in Washington realized that it needed reliable flow meters for some of its most difficult applications – the air and gas flow lines serving its aeration basins and anaerobic digesters.

The Solution

Thermal dispersion flow meters are well accepted in the municipal industry to provide reliable flow measurement at low flows and low pressures. That's why the District turned to the Magnetrol® Thermatel® Model TA2 for its ease of use and ability to handle these difficult applications.

The Results

Adding THERMATEL Model TA2 in the aeration lines maintained a minimum flow rate to prevent the diffusers from getting plugged, while also being used in conjunction with dissolved oxygen (DO) probes to provide sufficient flow to meet the oxygen demands in the basin. On the digester gas lines, the units measured the amount of methane going to fuel the boiler to generate hot water/steam for the plant, as well as the excess methane going to flare.

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