Case Study · Frese FLOWGUARD & Naestved District Heating Company



Frese and Naestved DHC in Denmark are heading into the future of IoT with Frese FLOWGUARD. 200 district heating customers in Naestved now have Frese FLOWGUARDS in their homes.

Frese's IoT journey

"It all started when Naestved District Heating Company came to us with a very specific request. They needed a battery operated valve solution, which would allow them to monitor, operate and shut down the flow to individual heating units remotely," says Martin Overbjerg, Business Development Manager, District Energy, Frese.

This launched Frese's IoT journey, and the company's first IoT product can now be found in the homes of 200 district heating customers in Naestved.

Close collaboration

Frese FLOWGUARD is a battery operated IoT valve system that lets you monitor pressure and temperature and also limit or shut down the flow to the individual heating unit.

"It allows us to isolate a specific unit from our network, and that was what we wanted. We are very pleased with our collaboration with Frese in the development of Frese FLOWGUARD. They have been very attentive to our wishes, " says Customer Service Manager Arne Ulstrup from Naestved DHC.

Naestved DHC needed a valve, which could easily be retrofitted into the company's existing heating units. This task was accomplished in close cooperation with their supplier, Gemina Termix. Jacob Soendergaard, service technician at Naestved DHC, explains: "The units have been quite easy to install, epecially after we discovered how much we could prepare in our own workshop."

Wireless via Sigfox

Frese FLOWGUARD stands out from the crowd because it can be monitored and operated remotely via the web based Frese FLOWCLOUD[®]. So Naestved DHC no longer needs so send out a technician to deal with everyday operations.

Because Frese FLOWGUARD is battery operated, it functions independently from the customer's existing electrical installations. It communicates with the dashboard via the Sigfox network, which requires very little power. The estimated battery life is 10 years.

High expectations

Naestved DHC has already installed 200 units, and is about to start analyzing all the new data. Customer Service Manager Arne Ulstrup has high expectations.

"We have bought 200 units so far, and when we see that they deliver what we need, we will consider expanding the project to other parts of the city. We see this as an investment in the future. It shows promise financially as well."