

CASE STUDY

# Finnish energy company employed Sulzer Sense

Helen Ltd. was one of the first energy customers to take the Sulzer Sense condition monitoring system into use in their district cooling plant in Helsinki after it was launched in 2019. The system monitors the condition of two vertical pumps and motors.



## "The system has worked well in a challenging environment for over a year now. Its measurement results are well in line with our own measurements."

#### Ida Eskman, Design Manager of Mechanical Engineering, Helen Oy

#### The project

Helen Ltd is one of Finland's biggest energy companies. Helen provides district heating and cooling in the Helsinki region and supplies electricity to various parts of Finland. In addition to heat, cooling and electricity, Helen offers solutions for regional and renewable energy, smart buildings and electric transport. The company is developing a smarter, carbon-neutral energy system that enables everyone to produce, use and save energy with respect for the environment. Helen aims to achieve 100% carbon neutrality in energy production by 2035.

The condition monitoring system consists of one gateway designed for industrial conditions, located in the process area, and six sensors installed in the bearings of the monitored equipment. The devices are battery powered and operate in a wireless mesh network.

### The solution

The condition monitoring system was installed right after the pumps were commissioned. The assembly of the sensors was quick and effortless, with only a very short downtime, and did not require any special skills from the installer. The mobile app provided by Sulzer for the deployment of the system is straightforward and easy to use.

Sulzer Sense measures vibration and temperature every 30 minutes. Access to this information is granted only to persons authorized by the customer. The gateway is connected to the Internet / Sulzer's cloud service via a cellular connection. The monitored devices are within a radius of about five meters from each other. This allows for an excellent network and the use of a single gateway.

#### Customer benefit

- In addition to the advantages of continuous monitoring, one of the most significant benefits to the customer is the access to detailed equipment information such as spare parts lists and product documentation through the service.
  For maintenance and repair work, there is no need to look in the archive for instructions and drawings.
- Sulzer Sense is suitable for all pumps, agitators, mixers and motors regardless of the type or brand in all industries.
- The operating status of the equipment can be remotely monitored 24 hours a day, seven days a week.

Sulzer Sense can be retrofitted to different types of pumps, like in Helen's case to vertical pumps and motors.





Sulzer Sense monitors the condition of two vertical pumps and motors.

The sensors are installed in the bearings of the monitored equipment.

#### For any inquiries please contact

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