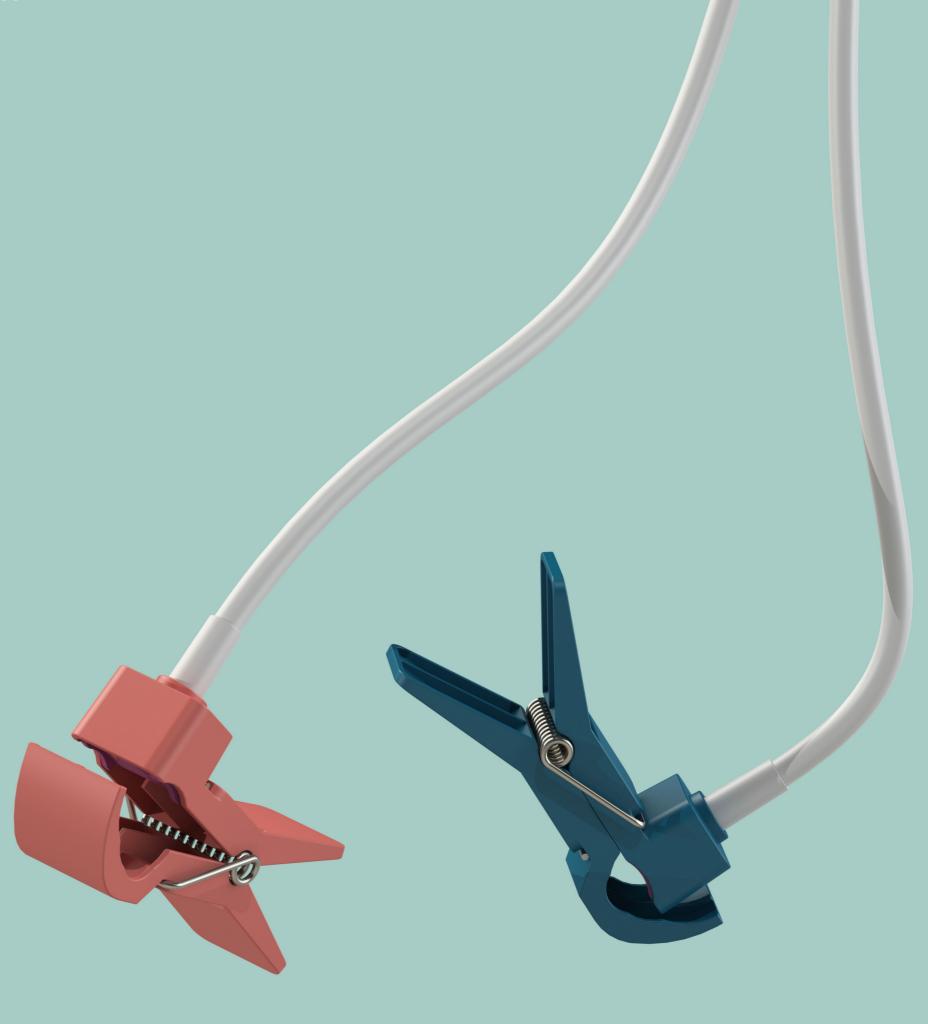
## Improving public health: an IoT solution for legionella prevention

Legionella is a serious thread to public health. For a lot of facilities, obligated water safety plans need to be executed to minimise the chances of a legionellosis outbreak. Unfortunately, these water safety plans are not always executed properly.

With the stoppage sensor of Octo Facility Management, there is an opportunity to create a difference in public health, by making it more convenient to execute these water safety plans. Tap points within these facilities need to be weekly flushed for at least two minutes to make sure there is no stagnant water in the water pipe system. The sensor registers if a tap point is used, eliminating the tap points that already have been refreshed during the week. This method can save a lot of water, time and money, and also creates

a much better overview of actual risks of legionella contamination in buildings. Subject to this graduation project was to improve the technical performance and usability of the sensor.







The new generation sensor is improved in usability, by creating a vision for the installation process and general use of the product. Guiding the user with a step-by-step guide through the installation process, the user is able to install the sensor without the help of Octo. The sensor itself is designed in a way that it is easy to install and easy to understand by colour coded clamps.

With the use of a reference sensor the sensor output can be validated to meet the legionella prevention regulations. New use of data can also initiate the discussion in how the regulations can be interpreted differently.

## Irene Verduijn

Development of an IoT sensor for legionella prevention
24-07-20
Integrated Product Design

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