

Danish robot automates COVID-19 testing

June 18, 2020 | News

flowbot ONE robot significantly reduces the laboratories time in detecting COVID-19 results in patient samples by minimising the risk of human error and contagion in the process



A Danish pipetting robot is automating COVID testing processes in hospitals around Europe. The robot, called flow bot ONE, significantly reduces the time it takes for laboratories to produce results for patients to tell them whether they are infected with COVID-19.

A unique liquid-handling robot from Denmark is now speeding up the great task of analysing COVID tests. Every day thousands of tests for Covid-19 are now being prepared for analysis by the sophisticated flow bot ONE from Flow Robotics. Robot technology minimises the risk of human error and contagion in the process, and it reduces the physically demanding pipetting tasks for laboratory personnel around the world.

Eight Danish hospitals have chosen the Danish invention, which is also being used by their partners DTU and Novo Nordisk. A German laboratory which had actually purchased the Danish robot to test for salmonella in food is now also using flowbot ONE when samples from German patients need to be analysed. Orders for the Danish liquid-handling robots have also come from Sweden, Poland, Russia, the Netherlands and Australia. The company claims that this innovation can trump the other players on the international market in terms of usability, price and delivery time. In just three weeks, Flow Robotics can manufacture, supply and install 12 robots ready for use.

The flowbot ONE robot enters the process right after inoculation and automates the whole task of preparing samples for analysis, which is about mixing liquids and chemicals.

At Herlev Hospital, molecular biologist Martin Friis now works side by side with the Danish flowbot ONE robot: "The robot pipettes the live virus, and it can pipette several samples at once, so we are now saving a lot of repetitive work and reducing the risk of accidents. We already keep ourselves safe, but it is still good for us to have less contact with the live virus thanks to the robot. The risk of pipetting errors is also eliminated as a result of automation because the robot follows a pattern and avoids mistakes. All in all, this lowers the stress level for us on many fronts, so we have less hassle in our work and minimise potential errors," he says.