



# Case Study

Diversey's SWINGOBOT 2000 Offers a Sustainable, Hands-Free Cleaning Solution at Aalborg University Hospital



AALBORG UNIVERSITETSHOSPITAL  
– i gode hænder

# AALBORG UNIVERSITETSHOSPITAL

## Summary

The Aalborg University Hospital comprises a number of departments and buildings that are located across a broad area of the city. Basic floor cleaning maintenance is a constant challenge due to the logistical demands and the size of the combined surface areas of these facilities. As a result, the University Hospital began to look for a more efficient and sustainable cleaning solution to assist them with the scale of this daily task. Having been impressed by a product demonstration, the hospital decided to implement the TASKI® SWINGOBOT 2000 solution from Diversey. A hands-free robotic floor care machine, the TASKI® SWINGOBOT 2000 is engineered to increase productivity while reducing consumption of resources, including water and cleaning chemicals.



## Challenge

The Aalborg University Hospital is the largest hospital in the Northern Region of Denmark. Its facilities are located across the south and north districts of the regional Capital city of Aalborg. It comprises a number of facilities at Farsø, Hobro and Thisted, as well as a host of satellite buildings at Havrevangen, Vesterbro, Kastetvej and Nybrovej. The Hospital also has a number of departments within its scope. These include, the ear, nose and throat department, the eye and dialysis departments situated in Hjørring, in addition to the orthopaedic clinic and surgical departments situated in Hjørring and Frederikshavn respectively.

When the floor surface area of all these facilities is combined, maintaining cleanliness and hygiene around the clock - both of which are crucial for a hospital - can be a significant challenge. With approximately 6,500 employees on staff, and large numbers of patients and visitors accessing the facilities daily, there is much to consider in maintaining the required high standards of hygiene. This challenge is intensified by the wide spread geography of the Hospital's many facilities and departments.

Consequently, a decision was made to find an alternative solution to help relieve this burden, while also significantly increasing the efficiency of the Hospital's cleaning team. However, the solution the Hospital sought wasn't just driven by a need for efficiency. The University Hospital is always looking for new ways to innovate and make their operations more sustainable. Therefore, it was equally important to implement a cleaning solution that would also help the Hospital achieve this requirement.



## Solution

The Hospital's search for a more sustainable solution concluded after viewing a demonstration of the capabilities of the TASKI® SWINGOBOT 2000. Diversey's flagship, hands-free robotic floor care machine has been specifically engineered to deliver high productivity with minimal resource consumption. Morten Kristein, Senior Consultant at Aalborg University Hospital, was immediately impressed and the decision was made to invest in two of Diversey's machines to help achieve the Hospital's goals: "We decided to start using the TASKI® SWINGOBOT 2000 in 2017. It was very simple to start working with because it's so user-friendly. We use two robots, five times per week and they run about four hours each per day. We estimate that the TASKI® SWINGOBOT is cleaning about 9000m<sup>2</sup> on each shift."

The TASKI® SWINGOBOT 2000 is just one of the intelligent hands-free solutions that Diversey offers to enhance their customer's cleaning capabilities. Its innovative technology and Intelli-features - that are a staple of the TASKI® range - enable fast and efficient cleaning in a variety of sectors. The SWINGOBOTS are especially useful in a medical setting, where maintaining a high standard of hygiene is an absolute necessity.

The intuitive controls of the TASKI® SWINGOBOT 2000 make it supremely easy to operate and maintain, and it is equipped with the latest on-board telemetry system. This ensures that the software is able to communicate continuously through its sonars, lasers and other sensors which, in turn, ensure safe and efficient navigation within hospital facilities.

The Intelli-features include the IntelliDose, IntelliFlow, IntelliTrail and Aquastop solutions – all of which help to minimise unnecessary waste and improve sustainability. Once implemented, the University Hospital found that the IntelliDose system helped effectively calculate and deliver the optimum amount of chemical for the task or floor type selected. This helped to minimise chemical consumption and the possibility of human error, by removing any need for guesswork from the cleaning staff.

Similarly, the IntelliFlow automated system helped the Hospital to regulate the delivery of water based on the machine and its turning radius. Using real-time adjustments with IntelliFlow, enables the flow of cleaning solution to be modulated to help decrease water consumption and reduce tank fills, while simultaneously cutting operating costs as well.

With all the Intelli-features applied together, the Hospital was able to easily adjust consumption to match the best environmental practices, providing them with complete autonomy over how they wanted to use the machines. Because it can work autonomously, the SWINGOBOT can deliver operational cost savings of up to 70%, while consistently delivering the same excellent quality of cleaning on each and every use.



## Results

The Aalborg University Hospital has been particularly impressed with the results achieved since starting to use the TASKI® SWINGOBOT 2000. The hands-free robotic solution has helped revolutionise cleaning operations by freeing up cleaning staff to undertake other tasks around the Hospital. Productivity has been effectively streamlined, with cleaning tasks completed in more efficient timeframes than before.

Morten Kristein states: “A robot is more consistent. It maintains the same speed at all times. The impact on efficiency has been significant. Using the SWINGOBOT means we now have another member of the cleaning staff who can be assigned to other tasks. There is only an occasional check of the machine required to see if everything is running smoothly.”

The TASKI® SWINGOBOT 2000 has also been able to help the Hospital with the priority of making its cleaning operations much more sustainable. This has been achieved by implementing the range of controls they now have over their cleaning tasks.

Morten Kristein continues: “The TASKI® SWINGOBOT 2000 is far more environmentally-friendly in comparison to other machines as it uses 75% less water. I believe it is important to us as a Hospital to be investigating and investing in new technology and to become more efficient for the benefit of our staff and our patients. We find that the TASKI® SWINGOBOT 2000 is definitely a big part of achieving this vision.”

Through using the innovative Intelli-features of the TASKI® SWINGOBOT 2000 to manage and track all of their cleaning usage, the Hospital’s waste has been substantially reduced - saving both money and energy resources. It has also enabled the Hospital to focus on applying the benefits of sustainability and increased productivity elsewhere.

Senior Consultant Morten Kristein concludes: “I would definitely recommend the TASKI® SWINGOBOT 2000 to other hospitals. As soon as our budget allows we will look to expand on this solution and purchase more robots from Diversey. This will ensure that our cleaning regimes continue to become even more efficient and sustainable in the future for the benefit of the Hospital, and all of our patients and visitors.”

*“I would definitely recommend the TASKI® SWINGOBOT 2000 to other hospitals.”*

