

# ALAC

AUTOMATED  
LAVATORY  
CLEANING



REMOVE STAINS ON  
TOILET SEAT COVER



DRYING OF TOILET  
TOILET SEAT COVER



LIFTING OF  
TOILET SEAT COVER



REMOVE STAINS  
ON THE INSIDE OF  
TOILET BOWL RIM



REMOVE INTERNAL  
TOILET BOWL STAINS

**The Automated Lavatory Cleaning (ALAC)** is a cleaning robot prototype designed to automate the traditional toilet bowl cleaning processes, providing companies with an efficient and intelligent cleaning solution. By leveraging on advanced robotics and automation technologies, the ALAC prototype comes equipped with a unique semi-autonomous “five-in-one” feature allowing operators to select the tasks to execute.

## BENEFITS

- ✓ Reduce labour-intensive and physical tasks for cleaning crew, allowing them to take on higher-value tasks such as overseeing and managing the operations of the ALAC prototype
- ✓ Improve overall efficiency of toilet cleaning and maintenance
- ✓ Assist cleaning crew in maintaining toilets' cleanliness on a regular basis, reducing the need for extensive and time-consuming cleaning routines, and allowing the toilets to remain hygienic and in optimal condition for users



## INTENDED LONG-TERM POSITIVE IMPACT

The introduction of the ALAC prototype seeks to impact the environmental service sector in the following areas:

### 1. Improved Recruitment:

With cleaning crew being able to take on higher-value tasks, companies can look to attract a more diverse and younger workforce, ensuring the long-term sustainability of the industry.

### 2. Enhanced Efficiency:

The automated cleaning process looks to improve the efficiency of toilet cleaning and maintenance for the industry, leading to higher user satisfaction.

### 3. Extended Workforce Longevity:

By reducing the physical workload, the ALAC prototype enables older employees to continue working in the industry for a longer period of time, preserving valuable experience and knowledge that can be passed down to the younger workforce.

### 4. Continuous Learning and Upskilling:

The ALAC prototype allows cleaning crew to gain new knowledge by learning about robotics and automation innovation. Cleaning crew will be able to take on higher-value tasks, as well as move into supervisory roles as they guide new crew on the functionality, operation and maintenance of the ALAC prototype.

