



MEDIA FACTSHEET

JTC, WIS AND GAUSSIAN ROBOTICS COLLABORATE TO DEVELOP SINGAPORE'S FIRST FULLY AUTONOMOUS CLEANING SOLUTION

Agile and smart cleaning solution, requiring minimal human intervention only for maintenance, to be tested in industrial and commercial properties

1. Jointly developed by JTC, WIS Holdings (WIS), and Gaussian Robotics, the Scrub 50 is equipped with laser detectors, a 3D-depth camera and ultrasonic sensors, to provide truly autonomous cleaning capabilities. The commercial cleaning prototype is the first-in-Singapore to be able to autonomously navigate to its docking station where it can automatically charge its power, rinse its tank, and refill and discharge water used for cleaning. This not only greatly minimises the need for human intervention, but also allows the solution to be seamlessly integrated into the cleaning workforce.
2. The facilities management industry today faces many challenges, such as manpower constraints, a focus on more sustainable operations, rising customer expectations and increased operating costs, among others. To overcome these challenges, JTC started to transform the way it managed buildings and estates through a 3-prong approach, namely upskilling manpower, leveraging technology and streamlining processes.
3. To continue upholding building hygiene standards with a declining workforce, JTC collaborated with WIS and its technology partner Gaussian Robotics to develop the Scrub 50 through its second Open Innovation Call. Launched in 2016, the second JTC Open Innovation Call focused on sustainable and innovative solutions to enhance facilities management and maintenance, and improve occupants' comfort level and experience.
4. Besides improving manpower deployment, the smart cleaning solution can also potentially help building managers sustainably optimise the use of natural resources such as energy and water. The technology is currently test-bedded in

JTC CleanTech One, located in the CleanTech Park in Jurong Innovation District. CleanTech Park is Singapore's first eco-business park and a living lab for industries to testbed and showcase innovative and sustainable urban solutions.

5. **On the development of the Scrub 50, Mr Mark Koh, JTC's Group Director of Facilities and Estate Management said,** *"We are continually on the lookout for more innovative solutions to help us manage our buildings and estates in a more efficient and sustainable manner. Facilities cleaning is very labour intensive and tedious, but it is a key part of facilities management that directly impacts building occupants' comfort. Together with WIS and Gaussian Robotics, we are excited to not only see how the Scrub 50 can improve the efficiency of our facilities management operations, but also look at how it can free up the operations staff to focus on higher-value duties."*

6. **Mr Aloysius Chong, Director at Gaussian Robotics said,** *"The Scrub 50 was designed from the onset to break all barriers on what current robotics are limited by. Building the next generation cleaning robots not only means incorporating the latest in advanced sensor technology; it takes into account the operational requirements and difficulties faced by end users such as JTC as well as service providers such as WIS Holdings."*

7. **Mr Kelvin Lee, Chief Commercial Officer at WIS Holdings said,** *"The Scrub 50 will no doubt provide a huge boost to our operational workflow where we can now better upgrade the skillsets of our 15,000-strong workforce globally with cutting-edge technology and change the way how we perform our cleaning duties with technology-driven operational SOPs. We see the Scrub 50 to be fully integrated into our cleaning workforce, cutting away the tedious manual work and allowing our staff to better focus on more important aspects of our business such as service quality, supervision, maintenance and other cleaning tasks that currently cannot be performed by robots."*

8. The launch coincides with this year's CleanEnviro Summit Singapore, an event held in conjunction with World Cities Summit and Singapore International Water Week. Scrub 50 will be exhibited at booth L1-D14 during the event.



*JTC CleanTech One @ Jurong Innovation District
Credits: JTC*



*Scrub 50 in action at JTC CleanTech One.
Credit: WIS Holdings*

About JTC

Set up in 1968, JTC is the lead government agency responsible for the planning and development of industrial infrastructure to support and catalyse the growth of industries and enterprises in Singapore. Landmark projects by JTC include the Jurong Industrial Estate; the Jurong Island for energy and chemical industries; business and specialised parks such as the International and Changi Business Parks, Seletar Aerospace Park and Tuas Biomedical Park; a work-live-play-&-learn development called one-north; next generation districts including Jurong Innovation District and the Punggol Digital District, as well as the Jurong Rock Caverns, Southeast Asia's first commercial underground storage facility for liquid hydrocarbons. JTC also develops innovative space such as the JTC Surface Engineering Hub, JTC MedTech Hub, JTC Food Hub @ Senoko, and TimMac @ Kranji which incorporate innovative features and shared infrastructure and services to enable industrialists to start their operations quickly and enhance productivity.

For more information on JTC and its products and services, please visit www.jtc.gov.sg.

About WIS Holdings

WIS Holdings Private Limited holds and manages a portfolio of companies specialising in the provision of integrated services to clients from all sectors – including commercial, hospitality, healthcare, oil & gas and conservancy, among others. With more than 20 subsidiaries and branch offices operating in 12 cities globally, the Group delivers high-performance solutions in response to the diverse needs of all clients across Asia and beyond. As part of its regional growth strategy, WIS Holdings also invests extensively in complementary high-growth ventures such as information technology, robotics and marine services. With a Vision of “being the leading integrated services provider in Asia and beyond”, the Group strives relentlessly in pursuit of service innovation and exceptional service quality for our clients.

About Gaussian Robotics

Since 2014, Gaussian Robotics has been working with leading cleaning service providers and manufacturers to successfully develop the ECOBOT series of autonomous cleaning machines. Incorporating design-thinking principles focused on productivity and an intuitive user experience, Gaussian Robotics have been well received globally and successfully deployed in places such as Australia, China, Hong Kong, Korea, Singapore and Qatar. With a world-class engineering team from around the world situated in offices in Singapore and Shanghai, Gaussian Robotics continually seeks to push the boundaries of technology and is fast becoming the leading brand in autonomous cleaning robotics.

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