



Healthcare Partners with Tennant's Autonomous T7AMR



As a world leading manufacturer and innovator of cleaning solutions we have seen increasing demand in robotic adoption when it comes to facility cleaning. From autonomous guided vehicles (AGVs) which was widely used in industrial applications, to now autonomous mobile robots (AMRs); the difference between the two is that AMRs are fitted with sophisticated on-board artificial intelligence (AI) systems that enable AMRs to not only follow complex processes and make intelligent decisions about how to proceed on a task, but also to safely navigate in dynamic indoor spaces.

Adopting a robotic solution helps deliver value not only for employers and employees, but also for customers. The increasing demand for businesses to implement a robust and stringent cleaning program from a health and safety perspective is important for customers, employees and employers across all industries.



1. Increasing productivity



2. Increasing Measurability



3. Reducing Costs



4. Enhancing Customer Experience



5. Keeping Pace with Innovation

WHY ROBOTICS

Approaching a robotic floor scrubber as a 'Co-Bot', also known as a collaborative robot doesn't mean a business is replacing existing cleaning staff; rather it's about the reallocation of labour allowing custodial staff to spend more time on high-touch, high-value tasks that only humans can do. Embracing robotics can also mean staff are more engaged in their roles and eager to take on different responsibilities and expand their skillsets to include robotics training and machine management

Common operational cleaning challenges facing healthcare facilities today include;

- Protecting the Health & Safety of patients, staff & visitors
- Cleaning high traffic areas
- An over-extended cleaning team
- Enhancing facility image
- Inconsistent floor cleaning

All these pain points can be addressed through the deployment of robotic floor cleaning machines.

WHY HEALTHCARE

Cleanliness has always been essential in healthcare...

But today, with the rising risks, expectations and standards, all healthcare organizations are being impacted and recognize the critical need to adjust to heightened cleaning demands.

Facility cleaning that includes frequent and consistent floor scrubbing plays a key part in the cleaning protocols of healthcare facilities. As hospitals operate 24/7, regular cleaning of high traffic areas become an operational challenge during peak hours. With the rise of cleaning expectations, it means a growing task list to be completed each shift. Site managers and cleaning staff are then left with the dilemma of whether they should clean the floor, or focus on high touch surface areas.



Robotic floor cleaning is emerging as one means to support enhanced cleaning performance and protocols, helping healthcare organizations unlock consistent cleanliness and operational efficiencies. T7AMR Proof of clean and coverage is visible and validated in the form of Tennant customer dashboard reporting. Implementing a co-bot approach will mean that healthcare facilities can be more confident in their cleaning program; floors are consistently clean, whilst high-touch disinfection and sanitization are addressed.

PROBLEM

With hospitals known for long hallways, otherwise known as long 'dragway aisles' it means that when it comes to floor cleaning, the job can become monotonous and repetitive in nature. Staff are less engaged and areas can be missed. Instead of having the cleaning staff manage and operate a machine solely, it allows staff to focus on high touch point cleaning, such as door handles, railings etc., particularly to address the cleaning challenges due to COVID-19.

COVID-19 DRIVING LANDSCAPE SHIFTS

The NSW public health system is world-class. It is the biggest public health system in Australia with 228 public hospitals and 114,000 dedicated staff (FTE) who make up the health workforce. Each year, NSW Health cares for millions of people and oversees investment worth billions of dollars in patient care, building, equipment, technology and research. Wyong Hospital had been using the Tennant brand of equipment for several years, however with the COVID-19 pandemic heightening cleaning demands and efficiencies from a health and safety perspective, there was an opportunity to expand the fleet.

The COVID-19 pandemic is driving a landscape shift and has heightened cleaning demands and operational efficiencies from a health and safety perspective. This fundamental change has prompted some Environmental Services teams to respond to the changing needs and look to robots to help address several key challenges.

THE TENNANT SOLUTION IS DIFFERENT

Choosing a technology partner in Tennant Australia to deploy a T7AMR unit can realize a lower dollar investment versus an annual labour cost input while being able to achieve consistent cleaning results with the same if not higher quality expectation. Ensuring that the T7AMR can be seamlessly scaled across future buildings or additional wings to maximize its return on investment is also an important consideration for healthcare facilities.

Facilities are having to find efficiencies to free up and or reallocate labour for the new tasks and provide proof of cleaning. The T7AMR provides a reason-to-believe with its cloud generated reporting from detailed route heat maps generated on a daily and weekly basis.

"The T7AMR footprint was ideal for Wyong Hospital site from a safety perspective with busy corridors, receptions & common areas." AMR Specialist, Keegan Hendricks, who leads the Technical Advisory Centre (TAC) of Tennant's robotics unit and also AMR deployment training.



The T7AMR solution with advanced precision delivers consistent floor cleaning, whilst staff are able to be reallocated to support other facility needs like disinfection.

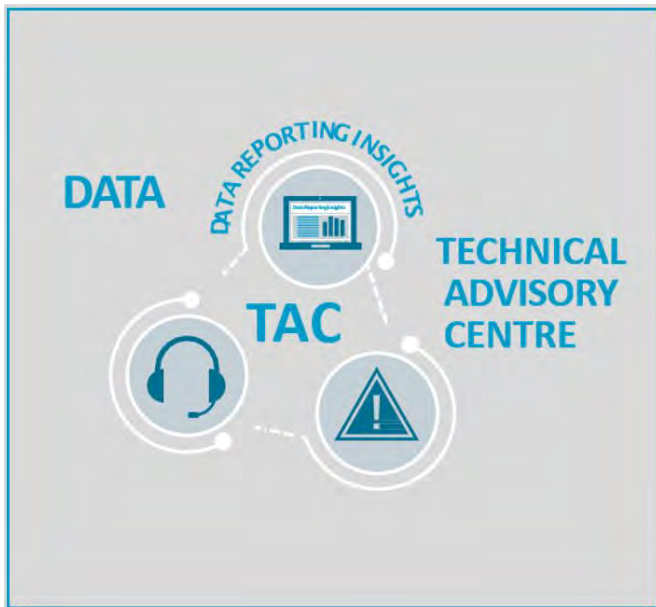
CASE STUDY - T7AMR



Long hallway cleaning with the T7AMR solution - which can operate remotely at night, and therefore provide value to cleaning teams on rotation.



TENNANT CUSTOMER CARE & DEDICATED AMR SUPPORT

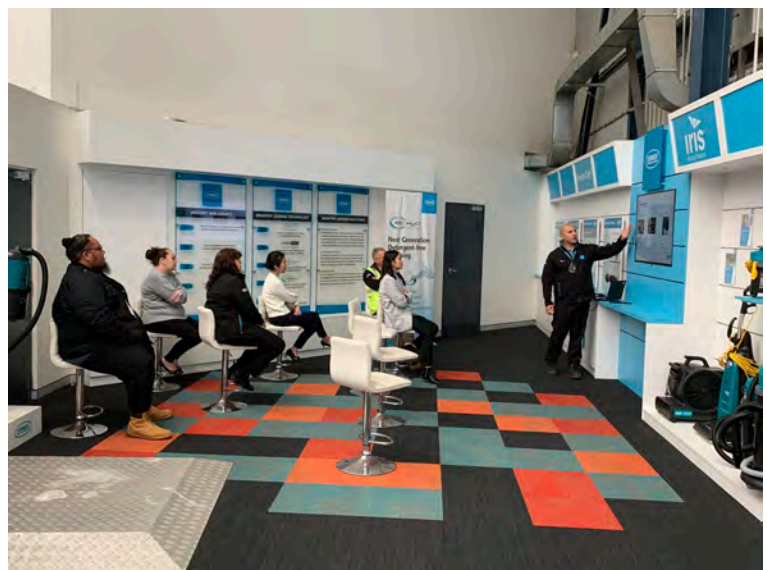


The Tennant 'Care for Customer' system ensures Tennant provides an unparalleled customer experience across the entire Tennant journey. Part of the T7AMR customer value proposition is dedicated service support and that's why we implemented our Technical Advisory Centre (TAC) in 2020.

Each and every Tennant AMR delivered is provided with full TAC support which means pre and post deployment with comprehensive on-site operator training on how best to setup and utilise the T7AMR as well as continued assistance with reporting and analysis. A dedicated TAC manager oversees all Tennant AMR customers to ensure every part of their robotic journey with Tennant is supported - from setting up the machine to deliver optimal performance, to on-going support and troubleshooting when required.

Tennant Australia works closely with our Global Product Management Team in North America and continuously look to bring new and innovative products into the Australia and New Zealand marketplace. One of our major focus points for 2021 and beyond has been the expansion of our AMR family to ensure we have a suite of robotic [cleaning] solutions suitable for different customer needs, applications, and environments. Our dedicated robotics team is passionate about our customer's robotic journey and strive to ensure the Tennant customer experience is fully supported.

Tennant Company has deployed more than 5,000 autonomous floor scrubbers and currently has three robots in their line, including the T380AMR, the T7AMR and the recently launched T16AMR. With these three models, Tennant has a robotic cleaning solution for customers of all sizes. The robots have a variety of modes, but most operators opt to teach the machine themselves by driving the robot on the desired route, and then repeated autonomously.



TAC Training - a dedicated TAC manager oversees all Tennant AMR customers to ensure every part of their robotic journey with Tennant is supported.

TENNANT'S COMPANY CELEBRATION OF 150 YEARS

One hundred and fifty years ago, Tennant Company founder George Tennant started his business on the banks of the Mississippi River in Minneapolis, Minnesota. Like many others, he chose the location to power his sawmill, milling and planing timber to help build the young and growing city.

Over the years, Tennant's business grew and changed as company leaders made investments in innovation and focused on solving problems for customers. Innovation is at the core of Tennant's success, from the early days when the company recognized the potential of mechanizing the laborious task of maintaining its wooden floors. The company moved from making floors to providing floor care solutions—introducing ground-breaking products to improve cleaning processes, provide safer and more comfortable equipment for operators, and make cleaning more sustainable.



The latest advancement in this proud tradition is the first-to-perform robotic floor scrubber. Tennant's entry into the world of robotics shows that the 150-year-old company is still very much focused on the future—and looking forward to another 150 years of industry firsts.

A century and a half of innovation. Of involvement in communities. Of partnership with customers. As Tennant Company celebrates one hundred and fifty years, a new global headquarters campus is opening in Eden Prairie, Minnesota. The property is less than 20 miles from the Mississippi River where George Tennant started his business—as is fitting for a company that is grounded in deep traditions, inventing its future, and making its mark as an industry leader.