



FlagShip Facility Services takes flight with robotic floor scrubbers

BACKGROUND

To help regain traveler confidence post-pandemic, airports needed to enhance cleaning procedures. More than ever before, travelers expect a level of sanitation that requires frequent cleaning of high-touch areas along with specialized cleaning knowledge. The public now recognizes that cleaning involves much more than routine janitorial duties. That means airports -- and the building service contractors that clean them -- must not only increase visible cleaning efforts but also use data to verify cleaning performance.

CHALLENGE

[FlagShip Facility Services](#) is a leading facilities management company that cleans 19 million square feet of space in airports located in Tampa, San Jose, Salt Lake City and other major cities every day. Since the pandemic, clients are asking FlagShip's cleaning teams to do more than ever before. However, labor challenges, including absenteeism and skill set, make it difficult. In addition, FlagShip needed a way to verify areas had been cleaned and do it in a cost-effective way. FlagShip was ready to automate floor cleaning.

SOLUTION

For many years, FlagShip Services has considered using autonomous cleaning machines but wanted to ensure the technology was the right fit for the busy airport areas. When leadership learned about the partnership between Tennant and Brain Corp, both leaders in their respective industries, they took action.

FlagShip purchased a fleet of [Tennant T7AMR robotic floor scrubbers](#) and was impressed by the scrubbers' ease of operation and the ability to provide accurate and consistent cleaning performance. Tennant's



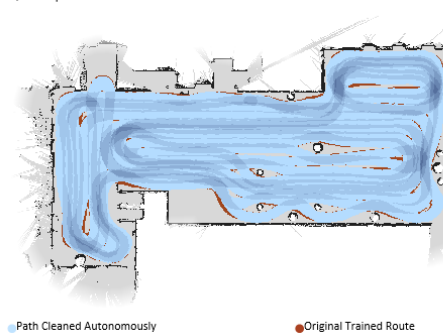
machines, powered by BrainOS® artificial intelligence, allowed Flagship to track cloud-based key performance indicators and receive real-time notifications.

Flagship worked with Tennant to ensure employees were trained and confident in how to use the new robotic cleaning equipment. The machines were up and running within days. FlagShip quickly identified "co-bot" operators and created cleaning programs that optimized cleaning high-touch surfaces.

"Managers and floor techs are incredibly invested in our robotic cleaning machines," said Kevin Barton, FlagShip's Vice President of Operations. "Staff engagement has been wonderful. They're asking great questions and looking for ways to make the scrubbers as efficient as possible."

Coverage Map 4

| | |
|-------------------------------|-------------------------------|
| Route Start Time | Route End Time |
| Mon Nov 16, 2020 11:59 PM EST | Tue Nov 17, 2020 12:21 AM EST |
| Coverage | Route Label |
| 9,255 Sq ft | 5A |





RESULTS

FlagShip Services has seen remarkable results with the T7AMR scrubbers. In 2021 alone, FlagShip reallocated 15,000+ employee hours by using robotic cleaning machines. In one airport, robots are cleaning more than 115,000 square feet in a six-hour period each night, giving employees valuable time to focus on detailed cleaning activities.

"The autonomous floor scrubbers allow cleaning staff to be more focused on high-touch surfaces, deep sanitizing and traveler experience," said Don Toole, Senior Vice President of Sales and Marketing at FlagShip. "We use this technology so that airport employees have more time to use their skills on other important responsibilities and cleaning as a whole can happen more efficiently."

What's more, performance metrics allow FlagShip to validate cleaning and share results. Cloud-based data tracking provides up-to-the-minute reports on the quality and consistency of the robots' cleaning performance. This allows operators to track when and to what extent different cleaning routes have been covered. The data keeps staff informed and ensures every floor surface is regularly cleaned.

"When travelers see a BrainOS®-powered floor scrubber scoot by as they walk to their gates, they can be confident that the airport prioritizes their health," Toole said. "Visibility around cleaning efforts was never a high consideration in the past, but today it's a critical step in earning back travelers' confidence. Consumers are now more sensitive to the fact that cleanliness goes beyond aesthetics."

Lastly, co-bot operators are able to learn new skills and technology, increasing overall employee satisfaction.

FlagShip strives to deliver a higher standard of customer service and the T7AMR robotic floor scrubber allows its cleaning teams to do just that. Thanks to the excellent results they saw early on, FlagShip is now running robotic floor scrubbers at ten airports throughout the U.S. and it's paying off. Tampa International Airport (TPA) has consistently been a winner of ACI World's Airport Service Quality (ASQ) awards and multiple FlagShip facilities also enjoy rankings in the top 10 of J.D. Power's 2023 North America Airport Satisfaction Study.

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Senior Vice President of Sales and Marketing at FlagShip