

Neo™ for industrial manufacturing

CUSTOMER STORY

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Floor-Cleaning Automation at Saint-Gobain

Avidbots Neo on the Manufacturing Floor

Saint-Gobain's Boron Nitride plant in Amherst, New York is a dynamic environment where equipment, materials and people never stand still. As one of the key facilities in the multinational material manufacturer's Ceramics division, the plant is a center for innovation, rarely missing an opportunity to streamline operations and find better ways to produce the high-performance materials used for consumer goods, construction, transportation, healthcare, infrastructure and industrial applications.

NOVA: Using Innovation to Address Production & Safety

Saint-Gobain is no stranger to finding bold solutions for common problems. As the industry evolves, the organization maintains a standing innovation arm – their NOVA group – to explore and deploy novel technologies. Working with startups and innovators, NOVA ensures Saint-Gobain constantly leverages automation and digital solutions to remain competitive and agile.

The Boron Nitride plant in Amherst was tasked with a particularly messy business challenge. The facility produces boron nitride, a heat and pressure-resistant compound with applications in everything from high-tech ceramics to nanotechnology. The problem is that, during the manufacturing process, boron nitride forms powdered coatings and slick surfaces. Not only does this create slip and fall concerns for employees, but loose powder in the air can be inhaled. To offset these potential safety issues, Saint-Gobain pulled skilled technicians daily – for up to two hours – to keep facilities clean and safe. Custodial contractors were not an option as, with chemicals and moving equipment throughout the sites, these environments are dangerous for the uninitiated. That reallocation of skilled labor, while necessary, had an adverse effect on production.



Finding Transformative Automated Technology

The plant in Amherst embraced digital technologies and strategic automation, turning to robotic solutions to address their needs. They knew it wouldn't be easy, as the plant is not a static environment. The manufacturing floor is a high traffic area, with people and forklifts always on the move. Floor plans change regularly as raw materials arrive and finished goods are prepared for shipping. They had to find a robot that could consistently clean production areas while keeping staff safe. Exploring several cleaning options, they had difficulty finding a solution that could adequately deal with a modern, dynamic manufacturing space.

They continued investigating solutions until they discovered the Avidbots Neo. Designed as an autonomous floor-scrubbing robot for high-traffic commercial and industrial spaces, Neo uses the cutting-edge Avidbots AI Platform and an industry-leading suite of sensors to safely deliver a high-quality, consistent clean with minimal human intervention. Neo is ruggedly built but surprisingly nimble, able to avoid contact with people and equipment. The proprietary Avidbots AI Platform gives the robot the ability to conduct dynamic planning and avoid obstacles while still getting the job done, no re-teaching required. The AI remaps to find alternate paths, even for large obstacles requiring significant deviations from the typical cleaning route. The Neo robots's AI and constant software updates from the Cloud mean the robot cleaner improves over time, finding the most efficient means to follow the cleaning plans.

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The Avidbots Neo autonomous floor-scrubber is being used at our facility to eliminate a non-value-added task from our production team and improve safety (as our material is lubricious and can create slippery walkways). We chose Avidbots following a successful on-site demonstration in which we were able to prove out their technology and equipment in our industrial environment. Since deploying the unit, we have received excellent customer service and quick responses from [Avidbots].”

— **Jeff Williams, Engineering Manager,
Saint-Gobain Ceramics/Boron Nitride**

Neo in Saint-Gobain Ceramics

In November 2019, Saint-Gobain piloted Neo in Amherst and, satisfied with the results, put the device into regular operation. Using metrics available through the Avidbots Command Center web-based app, personnel now ensure the robot is used to its full potential. Facilities managers immediately saw productivity gains and more internal accountability for keeping a healthy, safe workplace.

Assumed Return on Investment (ROI) for Neo in Industrial Manufacturing*

Full Burdened Cost of Hourly Wage/ Benefits for Technicians Handling Plant Cleaning:

\$40

Duration of Daily Cleaning:

2 hours

Daily Productivity Cost for Reallocating Technicians to Cleaning:

\$80

Annualized Cleaning Cost for 3 daily-shifts Operation (approximate):

\$30,000

Data shows that a single plant can recoup the cost of an Avidbots Neo within ~24 months.

Total Area Cleaned†:

1,500,000 ft²

Total Time:

204 hours

Cleaning Plans Executed:

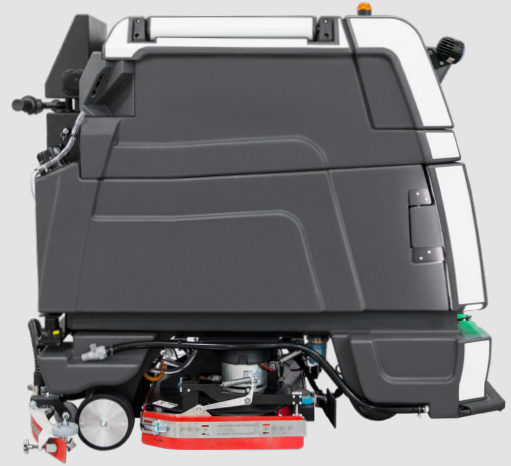
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*ROI varies by facility type and industry; values used to calculate the ROI are an estimate.

†This value represents the area cleaned within the facility, not the total square footage of the facility.

Why Avidbots?

Buying an Avidbots Neo isn't just buying a floor scrubber. It's investing in a technological future that can redefine your cleaning function, making it more productive, more cost effective and easier to run. More importantly, our robotics and AI technology open up new opportunities to make your business even more successful. We realize this isn't just about buying a product, or a technology, or even a business proposition. You want to buy into a trusted partner who can take you into the future of automated operations using cutting edge robotics. At Avidbots, we work side-by-side with our customers to earn that trust and realize all the benefits that robotics can bring them.



About us

Avidbots is a robotics company with a vision to make robots ubiquitous to unlock humanity's potential with a hyperfocus on autonomous cleaning. Our groundbreaking product, the Neo fully autonomous floor scrubbing robot, is deployed around the world and trusted by leading facilities and building service companies. Headquartered in Kitchener, ON, Canada, Avidbots is offering comprehensive service and support to customers on 5 continents.

Contact us

Learn more about Neo.



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