

Neo™ for warehouse & logistics

CUSTOMER STORY

Avidbots®

CHRISTIE
LITES

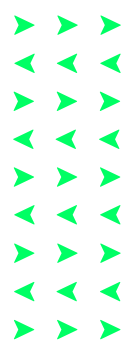


Avidbots®



Contents

- 03 Introduction
- 04 Warehouse Management is Hard
- 05 Technology is a Key Ingredient for Success
- 08 Neo Robotic Floor Scrubbers Improve Quality, Productivity, and Safety
- 09 With Neo Safety is Built-in
- 10 The Benefits of Robotic Floor Cleaning Go Beyond ROI
- 11 Technology is Changing the Nature of Jobs – Not Replacing Jobs



The rapid growth of e-commerce and expansion of global sourcing, together with growing expectations of near-instant delivery, have created unprecedented demands on supply chains. To respond, warehouse and logistics managers must focus on productivity and efficiency improvements across their operations – including material handling, packaging, and even facilities management activities such as cleaning.



Warehouse Management is Hard More and More Managers are Turning to Automation

WAREHOUSE FACILITY CHALLENGES:

- Growing demand for increased efficiency, quality and measurable results.
- Limited management time for workload planning, supervision and reporting.
- Difficulty recruiting and retaining custodial workers.
- Increasing labor cost, sickness, absence and turnover.
- Stringent health and safety regulations.

NEO FLOOR-SCRUBBING ROBOTS CAN:

- Improve the quality, consistency and efficiency of warehouse cleaning.
- Boost productivity while reducing operating costs.
- Minimize labor demands and worker fatigue.
- Improve ROI with clear performance reporting and measurable results.
- Support a safer working environment for employees.

With an acute shortage of qualified workers in the logistics and supply chain industry, hiring personnel to keep up with demand is no longer a viable option. For warehousing operations, automation and robots are the new solution to productivity, quality and cost pressures.

In fact, this shift to automation and robotics has already begun. Warehouses across all industries and models have adopted automation at an unprecedented pace over the past five to ten years. According to a recent Warehousing and Logistics Robots Report from Tractica, the number of robots deployed in warehouses and manufacturing facilities will reach 620,000 by 2021, up from 40,000 in 2016. The 2019 Material Handling Industry Annual Report indicates that robotics and automation have the greatest potential to disrupt supply chain practices, even more so than other innovative technologies such as the industrial internet of things (IIoT) and artificial intelligence (AI).

The rise of automation in logistics and warehouse facilities has helped companies improve productivity and reduce costs, making their operations faster and more reliable. Automation and robotics have also allowed these companies to address the chronic shortage of supply chain talent by repurposing workers to focus on activities and decisions that are more valuable and complex. In fact, leading supply chain and 3PL managers across the globe have realized greater efficiency and productivity by deploying Avidbots Neo autonomous floor-scrubbing robots in their cleaning operations.



Technology is a Key Ingredient for Success

For Christie Lites – a leading supplier of lighting equipment for television, theater, and trade shows – the key ingredients for success are flawless logistics, teamwork and creativity – all supported by the latest, most appropriate technologies. This applies not only to the operational functions of the warehouse, but also to the facilities and maintenance functions. To this end, executives and personnel at Christie Lites are always looking for ways to improve operational efficiency, and when a company executive saw Neo in action at a major airport, they immediately recognized its potential to increase productivity in their warehouse cleaning operations.





Christie Lites is the largest privately-owned equipment rental company in North America, with 13 locations across Canada, the US, and the UK.

Christie Lites recently doubled the size of their Las Vegas warehouse, from 80,000 ft² to 160,000 ft², making their legacy, walk-behind floor cleaner even less attractive from a cost and efficiency standpoint.

Christie Lites recently doubled the size of their Las Vegas warehouse, from 80,000 ft² to 160,000 ft², making their legacy, walk-behind floor cleaner even less attractive from a cost and efficiency standpoint. Naturally, more space means more personnel are needed, but hiring qualified workers is one of the biggest challenges currently facing the supply chain industry. Add to this their desire to extend operating hours while reducing the need for long employee shifts – which have detrimental effects on employee well-being, such as fatigue and injury, not to mention morale – and it became evident that it was time to look at automating some of their facilities management functions.

The company already had experience with automation, using automated forklifts and racking/palletizing equipment in storage and retrieval operations. But Neo would be the first piece of fully automated equipment in their operations. One key thing they wanted in a floor-scrubbing robot was that it be thoughtfully designed from the ground up – not a “retrofitted Roomba.” As a purpose-built, floor-cleaning robot – not a retrofitted ride-on or walk-behind floor scrubber – Avidbots Neo fit the bill. Christie Lites contacted Avidbots, and the process of implementing the Neo robotic floor scrubber at their Las Vegas warehouse began.

As a purpose-built, floor cleaning robot – not a retrofitted ride-on or walk-behind floor-scrubber – Avidbots Neo fit the bill.

Christie Lites contacted Avidbots, and the process of implementing the Neo robotic floor scrubber at their Las Vegas warehouse began.



Neo Robotic Floor Scrubbers Improve Quality, Productivity and Safety

Christie Lites operates differently than traditional warehouses and distribution centers – every piece of equipment that is rented out is also returned, making their logistics even more complex than the typical one-way flow of goods in a traditional warehouse. As a result, the operation requires significant “flex space” to accommodate both inbound and outbound equipment. It’s also very rare that the warehouse is empty for cleaning – there are no slow periods when you’re servicing the showbusiness industry.

To meet the need for flexibility in cleaning operations, Neo’s intuitive touchscreen controls allow Christie Lites to choose between using the autonomous cleaning mode or doing what Dan Souwand, Vice President of Equipment, Systems and Warehousing, calls “guerilla cleaning,” or opportunistic cleaning. That is, when an area is available, facilities personnel can manually send Neo to that area to clean. And for unique cases such as Christie Lites’s, where products move around the warehouse from day-to-day and even hour-to-hour, Neo’s ability to scan its environment and update the cleaning path accordingly ensures maximum cleaning productivity and quality. Between regular, autonomous cleaning and “guerilla cleaning” sessions, Neo cleans every part of the warehouse one to two times per week.

In the Las Vegas warehouse, the number of workstations and amount of product to navigate is tremendous, not to mention both human and forklift traffic that must be avoided. With the ability to designate no-go zones (where the robot should not clean) and slow down zones (where the robot should reduce speed and proceed), Christie Lites found that Neo is perfectly designed to handle this set of challenges. Neo is safe to operate around sensitive equipment and storage materials, with the ability to detect objects as low as 16 cm (6.3 inches) from the floor. Rubber front and side safety bumpers help prevent damage if a bump or impact does occur. All of these features allow Neo to work in the challenging environment of a warehouse without compromising speed and efficiency, and, most importantly, without compromising safety.



With Neo, Safety is Built-in

Alongside a sophisticated sensor array that enables Neo to detect and navigate around obstacles or automatically pause operation, additional safety features protect people and property at your premises. They include:

Emergency Stop button

A physical button on the rear of the robot can be quickly activated by an operator. This immediately pauses Neo's operation. The operator can then investigate and resolve the issue before continuing the cleaning operation.



Safety bumpers

Front and side safety bumper switches detect if Neo touches a fixed obstacle, such as a wall or other object. At this point, an emergency stop is triggered, and operation pauses immediately.

Electronic brake

To prevent damage to Neo or other property, the robot remains partially powered down until a human operator confirms that it is safe to continue cleaning.

The Benefits of Robotic Floor Cleaning Go Beyond ROI

Regardless of the industry or application, the decision to automate a process or task is always scrutinized through the lens of cost or more specifically, return on investment (ROI). This was the case with Christie Lites's decision to use a robotic floor scrubber. Although the company sees the value in technology investments, they have to make financial sense as well.

After calculating the ROI they would get by implementing Neo, it was clear that automating the floor scrubbing part of their operation made financial sense. Another benefit of deploying Neo was that Avidbots' Command Center provides data on every clean, by every robot, in every sector; measuring and tracking key performance indicators (KPIs), such as cleaning productivity and water consumption, became a simple task – something they couldn't get from their legacy, walk-behind floor scrubber.

But, the financial analysis was just one piece of the decision. Christie Lites recognizes that their warehouses are the company's face to the clients. Clients visit the warehouses to pick up and return lighting equipment. Having an organized and clean warehouse is not only beneficial for safety and efficiency, but it's also a key part of the company's marketing strategy.

An App Fit for a Fleet of Autonomous Robots

Thanks to the ease of implementation and the improvements they've seen in quality, productivity and cost with Neo, Christie Lites plans to deploy more Neo robots in the near future. Fortunately, Avidbots' Command Center online app makes it easy to monitor and manage one, two, or an entire fleet of Neo robots, all in one location or deployed across a network of locations globally.

The Command Center also provides in-depth performance reports, so facilities managers can track and optimize cleaning performance. Users can also manage cleaning maps and plans remotely via the Command Center, to adjust for changing floor layouts or cleaning requirements.

“

When the CEO of a production company comes in (to one of our warehouses) and sees the level of professionalism, including cleanliness, they're more likely to want to work with us over our competitors.”

– **Dan Souwand, Vice President of Equipment |
Systems and Warehousing**



Technology is Changing the Nature of Jobs – Not Replacing Jobs

Once Neo was delivered, Avidbots personnel made a visit to the Las Vegas warehouse to deploy the robot and map the facility. The Christie Lites personnel responsible for Neo's operation were also trained, and within a week, Neo was doing its job. Souwand says the company was impressed with how fast the process was from purchase to implementation.

When asked how the staff at Christie Lites received Neo, Souwand said, "Terry (the cleaner who primarily uses Neo) has a new piece of technology that's made his job easier." The employees recognize that technology is changing the nature of jobs rather than replacing jobs. Neo has eliminated the need to have one person focused solely on floor cleaning. By employing Neo, Terry's productivity has increased significantly – now he can focus on other areas or more important cleaning and maintenance projects.

Souwand also says that adding Neo to their operation has improved worker morale. Christie Lites's staff take pride in their work areas, and they're now keeping their areas even more clean and tidy so Neo can do its job better.

Neo Robotic Floor Scrubbers: The Next Step in Warehouse Automation

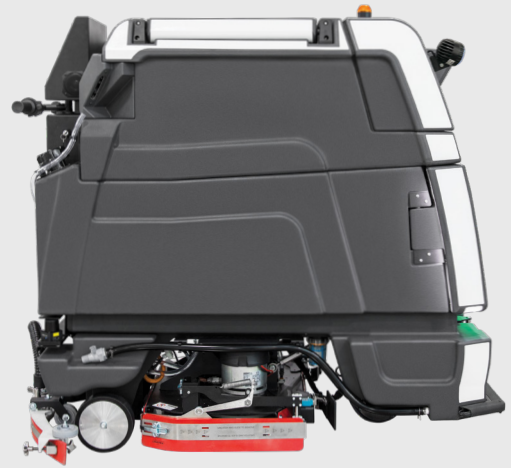
Regardless of the task involved, automation can, and is, transforming warehouse operations. Robots improve efficiency, increase productivity, ensure consistent quality and alleviate the health and safety concerns that plague traditional workers in jobs that require heavy, repetitious work. What automated forklifts and automated storage and retrieval systems have done for supply chain operations, Neo is doing for facilities management functions in these same warehouses.

For Christie Lites, deploying a robotic floor scrubber has not only increased the cleaning team's productivity and made their jobs easier, it serves as a day-to-day example of how the company values and embraces technology to improve the customer experience.



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.

 sales@avidbots.com

 [+1.855.928.4326](tel:+18559284326)

 avidbots.com



Avidbots Corp
45 Washburn Drive
Kitchener, ON N2R 1S1
Canada

Avidbots Chicago
5400 Newport Drive STE 7
Rolling Meadows, IL 60008
United States of America

Avidbots®

BR-CHR-04068020

©2023 Avidbots Corp. All rights reserved. "Avidbots", "Neo", "Command Center" and their respective logos are trademarks of Avidbots Corp.

