

## T380AMR ROBOTIC FLOOR SCRUBBER

FROM



### POWERED BY BrainOS®

# ec-H2O NanoClean® Technology

**GREEN CLEANING & SUSTAINABILITY** 



### Imagine a new cleaning process:

- Electrically converts water into an innovative cleaning solution
- Use up to 70% less water
- Reduce waste as well as costs associated with the purchasing and storing of conventional detergents
- Reduce environmental impact
- May contribute to LEED<sup>®</sup> or LEED-EBOM
- NFSI-Certified for improved floor traction and reduced the risk of slip and fall accidents
- Increase employee safety by eliminating daily floor cleaning concentrated chemicals



## **Benefits of Lithium-ion Batteries**



#### **Zero Maintenance**

• No more battery watering. No engine maintenance. No worries.



#### **Maximized Productivity**

- Long life, fast charging, longer runtimes, & opportunity charging to minimize idle time.
- · Optimize equipment uptime by spending more time cleaning and less time dealing with your power source
- · Constantly communicates data to machine, to optimize safety, performance, productivity, and longevity



#### Long Battery Life

- 2,000+ charge cycles means fewer battery replacements
- No fuel cylinder replacements



#### **Simplified Operations**

- · Opportunity charging does not reduce the life of the battery
- No complicated charging process
- Fewer battery replacements, no battery watering, lower charging costs, and minimal training required



#### **Safer Facilities**

- Improved indoor air quality due to no emissions
- Eliminates the need for flammable fuels on property
- No exposure to battery acid or off-gassing during charging



### Why Autonomous Scrubbing?

#### Water Savings

- Autonomous machines can identify the optimum amount of water required for various cleaning activities due to sophisticated sensors. They help save a lot of water by just utilizing what is necessary.
- 70% reduction in water using ECH2O technology
- 20-gallon solution tank x 14 gallons saved per day if scrubbing with only one tank of clean water
- 3,500 gallons per year or 24,500 gallons minimum lifetime saved
- · 5000 gallons of detergent-contaminated water saved from going down the drain per year

#### Lithium Ion Battery Benefits/Savings

- Intelligent battery management systems make sure that the machines only utilize the energy necessary to complete a task, therefore lowering overall energy consumption.
- · Higher efficiency and runtime leads to less frequent charging needs
- 30% power savings during charging
- · Elimination of emissions which increases indoor air quality

#### Elimination of Chemical Detergent

- · Chemical manufacturing and transportation has a very high environmental impact.
- · At \$80 to \$200 plus per case there is also a very high ROI when using ECH2O instead

#### **Reallocation of Labor**

- Labor cost to operate scrubber daily @ \$75 per day (estimate on the low end based on 2.5 hours per day cleaning)
  50 weeks = \$18,750 per year
- Life of machine = 7-10 years minimum = \$131,250 savings compared to manual scrubber

#### **Reducing Waste**

• By ensuring that consumables like pads, brushes, and cleaning agents are used to their full potential, autonomous machines help reduce waste. As a result, the frequency of replacements gets reduced and the amount of trash produced is minimized, making the whole process more sustainable.

#### MSC financial commitment



• \$21,064.84 the cost of a manually operated floor scrubber