

## Industrial Cleaning Machine

Used Industrial Cleaning Machine South Carolina - Save hours of time by relying on commercial floor scrubbers to provide an efficient method for cleaning and maintaining floors in an efficient manner. Labor expenses make up about 90% of total expenses when it comes to maintaining floors. It is possible to save time, money and labor when you switch to commercial floor scrubbers. There are a variety of automated commercial floor scrubbing models available on the market. Technology has advanced and commercial floor scrubbers have robotic upgrades to simplify their design. These machines offer an automated system for evenly dispersing the cleaning compound at regular intervals. In addition, automatic floor scrubbers include a vacuum system and are usually fitted with a squeegee attachment located at the back of the machine, behind the vacuum's suction nozzle. There are separate recovery and collection tanks situated on the machine. There are two tanks on the machine; the cleaning mixture is situated in the dispersing tank and the collection tank is where the materials collected by the vacuum accumulate. This ensures that the clean water and dirty water are kept separate which makes floor scrubbers a more hygienic alternative to traditional cleaning methods such as a mop and bucket. The automatic scrubber initially dispenses the cleaning compound via the dispensing tank. Next, the scrubbing system pushes this solution into the floor to loosen marks, stains and dirt which become suctioned back into the collection tank as the machine makes a pass.

**Automatic Floor Scrubber Head Types**

There are three main types of floor scrubber heads including cylindrical, rotary (also known as disk), and square oscillating.

**Rotary or Disk Floor Scrubber Head**

The disk or rotary model of floor scrubber head is the most popular kind. They operate in a circular motion with one or two round brushes or pads that push a cleaning solution into the floor.

**Cylindrical Floor Scrubber Head**

A cylindrical floor scrubber model relies on counter-rotating tube brushes which rotate at a ninety-degree to the floor. This style of brushes facilitates better cleaning for irregular or uneven surfaces. The cylindrical floor scrubbing machines often have a collection tray found behind the scrubber head to enable easier pickup of small items such as pebbles or nails. The multiple brush types available make cleaning various types of flooring possible. Different brush styles make cleaning easier. Rubber, synthetic floors and textured tile surfaces respond well to soft bristles and concrete or grouted tile surfaces rely on harder brushes.

**Square Oscillating Floor Scrubber Head**

There is a flat pad on square oscillating floor scrubbing models that vibrate at high speed to clean the floor. The square design makes it easier to clean close to walls and in corners. When used with a special stripping pad, square scrubber heads are able to strip floor finish from a floor. Vinyl tile flooring can also benefit from being cleaned with square oscillating pads. Because the square pad oscillates at very high speed, they apply more agitation to the floor resulting in more cleaning power. These square pads are useful for cleaning grouted tile.

**Floor Scrubber Categories**

There are four categories of floor scrubbers: Robotic, Rider, Stand-on and Walk-behind.

**Walk-Behind Floor Scrubbers**

The walk-behind floor scrubber units have a forward assist feature that softly propels the machine forward when the operator enables this item. The forward assist helps curb fatigue of the operator which allows the operator to continue for a longer period of time, reducing fatigue and greatly increasing efficiency when compared to traditional manual methods.

**Stand-On Floor Scrubbers**

Stand-on floor scrubbers offer an increased efficiency for greater areas than a walk-behind machine, while being more affordable than a rider floor scrubber. These machines are also typically smaller than a rider machine so can fit into areas a rider floor scrubber could not and have increased maneuverability. Since the operator is standing, these units provide better line-of-sight compared to walk-behind and rider models.

**Rider Floor Scrubbers**

The rider units allow the operator to be seated while the machine is in operation. They work in much the same way as the stand-on floor scrubbers but require even less effort because of the ability to sit comfortably, reducing fatigue. This translates to an greater ability to cover very large areas quickly, offering approximately 65 percent greater efficiency than a walk-behind floor scrubber.

**Robotic Floor Scrubbers**

Advancements in technologies in the autonomous robotics field have

produced a new niche of floor-scrubbing robots. Robotic floor scrubbing models were created by combining robotic self-control options with automatic floor scrubbing technology. Commercial floor scrubbers are commonly found in manufacturing facilities, healthcare, retail and education centers. Certain robotic commercial units are capable of cleaning an area up to ten thousand square feet in one hour. As exciting new developments in robotic continue to develop, it is expected that the capability of robotic floor scrubbers will increase over time. Areas of increased development are expected specifically with improved sensors and computing components. Mobile robotic sensors enable today's floor scrubbers to complete a wider detection range around objects and walls. This technology will help the machine note its location in expansive environments including shopping malls, airports and convention centers. The first models of residential cleaning machines operated in a random cleaning pattern. However, commercial robotic floor scrubbers are now able to create an accurate plan for cleaning. This allows these robots to cover the entire floor in a predictable and consistent pattern each time they operate. Because of these advancing capabilities which allow these robotic floor scrubbers to know precisely where they have already cleaned and what areas they must still clean, they miss very few, if any, areas of the floor. These machines are capable of safely navigating around obstacles or people while they operate autonomously.

**Additional Floor Scrubber Options and Considerations**

**Hard to Reach Areas**

Many floor scrubbers are unable to reach edges, corners or under or around fixtures such as water fountains. This would normally necessitate mopping in these areas too small to fit an automatic floor scrubber. Some floor scrubbing manufacturers have created oscillating brushes that enable the machine to access tricky locations.

**Pre-Sweeping and Vacuum System Maintenance**

Newer floor scrubbers usually include an option that allows for a pre-sweep prior to the wet scrub. These upgrades increase efficiency and cleanliness by allowing the operator to do everything with the machine. The pre-sweep brush head and collection chamber is placed in front of the vacuum system to collect dust and loose debris before it is able to reach the the vacuum system. This design helps to avoid any blockages occurring in the motor or vacuum hose. It was previously necessary to sweep with a broom or dry mop to dispose of debris and dust that might clog the vacuum hose or accumulate in the vacuum motor and negatively affect performance. If blockages in the vacuum system do occur, the vacuum hose might need to be removed to clear the blockage. The vacuum motor may need to be blown out with compressed air to dislodge the blockage.

**Environmental Options**

Environmentally friendly options are also available on some floor scrubbers. There are more environmental features incorporated into certain designs including safer soaps and water-saving systems to reduce the greywater and the chemicals. Certain floor scrubbers are available to clean without any water or chemicals.

**Solution Dispensing System Maintenance and Considerations**

Stripping solutions are not compatible with most floor scrubbers as they can cause damage to the solution dispensing system. However, they can still be vacuumed up by the machine without damage. The solution system should be periodically flushed with a water and vinegar mixture to clean the system of any soap and calcium deposits that can accumulate in the solution system.