

Industrial Cleaning Machine

Used Industrial Cleaning Machine Surprise - Save hours of time by relying on commercial floor scrubbers to provide an efficient method for cleaning and maintaining floors in an efficient manner. Did you know that according to surveys, roughly ninety percent of the maintenance for flooring expenses is related to labor? Commercial floor scrubbers provide a way to clean large areas quicker and with fewer workers. 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. Floor scrubbers are equipped with an automated system which dispenses a cleaning compound. Some automatic floor scrubbing models within a vacuum system may be fitted at the rear of the machine with a squeegee attachment behind the suction nozzle. These units also have separate dispensing and collection or recovery tanks. 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 operates by first dispensing the cleaning compound from the dispensing tank, then using the scrubbing system, to push the cleaning compound into the floor surface and loosen dirt, stains and marks which are then quickly suctioned into the machine's collection tank as the unit makes its pass over an area.

Automatic Floor Scrubber Head Types

There are three basic types of floor scrubber heads, square oscillating, cylindrical and rotary which are often called "discs".

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

Rotating at a 90-degree angle to the floor, the cylindrical floor scrubber model features counter-rotating tube designed brushes to facilitate cleaning. These allow for better cleaning of uneven or irregular 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. A softer brush can be used to clean rubber, textured tile and synthetic floors while a stiffer brush can be used for rough surfaces such as concrete and grouted tile.

Square Oscillating Floor Scrubber Head

The square oscillating floor scrubber features a flat pad that scrubs the floor at high speed. The square design makes it easier to clean close to walls and in corners. These machines can remove the floor finish when the square scrubbing heads are used in conjunction with special stripping pads. They also work well for cleaning vinyl tile floors. Due to the high-speed oscillation, the square pads deliver more agitation and floor cleaning power. These square pads are useful for cleaning grouted tile.

Floor Scrubber Categories

Four main categories comprise the floor scrubber family including Stand-on, Walk-behind, Robotic and Rider models.

Walk-Behind Floor Scrubbers

There is a forward assist feature on walk-behind floor scrubbing models that helps to propel the unit forward when the operator enables this mechanism. The forward assist mechanism can help eliminate operator fatigue by enabling the operator to work longer in comparison to manual and traditional methods.

Stand-On Floor Scrubbers

The stand-on floor scrubber models provide better efficiency for larger spaces compared to walk-behind models and these units are more cost-efficient compared to 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. These machines clean in a similar manner and reduce operator fatigue due to their comfortable seating. These models are more efficient compared to the walk-behind units, offering 65% more efficiency, enabling larger areas of the floor to be cleaned with ease.

Robotic Floor Scrubbers

Advancements in the field of autonomous robotics have created a new group of floor-scrubbing machines. These units were

born by joining self-control robotic features with automatic floor scrubbing options. 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. New technology is developing all the time and the capacity for robotic floor scrubbers will only increase. Improved computing technology and better sensors are some of the noted areas expected to become even more efficient. Mobile robotic sensors enable today's floor scrubbers to complete a wider detection range around objects and walls. This will enable the unit to be precise when determining its particular location in large locations including airports, convention centers and shopping malls. A random cleaning pattern was first established with the initial floor scrubbing models. Updated models of commercial floor scrubbing units can complete their jobs much more accurately. Newer floor scrubbing models operate in a predictable pattern to cover the floor as efficiently as possible. Very few locations (if any) on the floor are missed due to this advanced technology that communicates exactly where the machine has already cleaned and which areas are still outstanding. Robotic floor scrubbers are also designed to navigate around people and obstacles that they encounter during autonomous operation.

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 normally translates to certain locations requiring to be cleaned in traditional methods. However, some manufacturers now produce floor scrubbers with oscillating brush decks which allow the scrubber to reach these difficult areas.

Pre-Sweeping and Vacuum System Maintenance

Pre-sweeping features and vacuum systems enable newer models to complete a dry cleaning before the wet scrub option. This feature allows for removal of debris before scrubbing without the need for a traditional broom or dry mop. The collection chamber is situated in front of the vacuum system to catch loose debris and dust before these items can damage the unit. 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. In the event a blockage occurs, the vacuum hose may need to be removed and cleaned. Occasionally, the vacuum motor may need to be blown out with compressed air to clear away any debris.

Environmental Options

Some models of floor scrubbers have been designed with environmentally friendly options in mind. Safe soaps and water-saving systems work to save on both the number of chemicals used as well as the amount of greywater produced. Some floor scrubbers are even able to clean without water and chemicals at all.

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. These solutions can be vacuumed up safely without causing damage to the machine. 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.