

Industrial Cleaning Machine

Used Industrial Cleaning Machine Phoenix - Commercial floor scrubbers provide an efficient, cost-effective and fast way to clean floor surfaces and are used for regular maintenance. Labor expenses make up about 90% of total expenses when it comes to maintaining floors. 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. Many technological advancements feature robotic upgrades to make commercial floor scrubbers more user-friendly. 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. The dispensing tank holds the cleaning mixture and the collection tank holds the liquids and material gathered by the vacuum system. This design keeps dirty and clean water away from each other to create a more hygienic option compared to traditional mop and bucket methods. 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

Automatic floor scrubbers are available in three common types of floor scrubber heads: 1. Rotary, sometimes referred to as disk; 2. Cylindrical; and 3. Square oscillating.

Rotary or Disk Floor Scrubber Head

The rotary or disk model of floor scrubber head is the most common type. They use a circular motion with one or two round pads or brushes to push a cleaning compound 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. 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

There is a flat pad on square oscillating floor scrubbing models that vibrate at high speed to clean the floor. Corners and walls can be cleaned more efficiently thanks to the square head design. 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

Walk-Behind Floor Scrubbers

Walk behind floor scrubbers are equipped with a forward assist mechanism that gently propels the machine forward when the feature is enabled by the operator. This forward assist feature helps the operator continue working for extended periods of time, helping to prevent fatigue by increasing efficiency compared to manual models.

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. Because the operator is in a standing position, stand-on floor scrubbers also offer a better line-of-sight than both rider machines and walk-behind machines.

Rider Floor Scrubbers

Rider floor scrubber models enable the operator to sit down while operating the equipment. The rider models allow the operator to sit during the entire cleaning process, thus helping to reduce fatigue as they clean the floors. This design facilitates up to sixty-five percent more efficiency in comparison to the walk-behind models and allows large areas of the floor to be covered more efficiently.

Technological design advancements within the field of autonomous robotics have helped to create a new army of floor-scrubbing

machines. Robotic floor scrubbing models were created by combining robotic self-control options with automatic floor scrubbing technology. Popular locations where commercial floor scrubbers are employed include retail, healthcare, education centers and in manufacturing locations. Certain robotic commercial units are capable of cleaning an area up to ten thousand square feet in one hour. With continuous development in robotic technology, the advancement of robotic floor scrubbers will intensify over the years. Increased development projections include advanced sensors and computing mechanisms. The latest generation of mobile robotics sensors allow a robotic floor scrubber a longer range of detection of surrounding walls and objects. This will allow the machine to determine its exact location in larger environments, such as shopping malls, convention centers and airports. The first models of residential cleaning machines operated in a random cleaning pattern. Updated models of commercial floor scrubbing units can complete their jobs much more accurately. 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. Special sensors help the robotic floor scrubbers navigate around obstacles and people when they encounter any while operating autonomously.

Additional Floor Scrubber Options and Considerations

Hard to Reach Areas Floor scrubbing machines can find it hard to navigate around fixtures such as water fountains or corners and edges. 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 Advanced models feature a pre-sweep option and vacuum system to be used before the wet scrub. These upgrades increase efficiency and cleanliness by allowing the operator to do everything with the machine. Loose items and dust are collected by the pre-sweep brush head and placed into the collection chamber located in front of the vacuums 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. Similar to residential vacuum systems, if a blockage happens, the vacuum hose may need to be removed to clear the area. The vacuum motor may need to be blown out with compressed air to dislodge the blockage.

Environmental Options Certain floor scrubbing models have environmentally friendly options. There are more environmental features incorporated into certain designs including safer soaps and water-saving systems to reduce the greywater and the chemicals. Some floor scrubbers are even able to clean without water and chemicals at all.

Solution Dispensing System Maintenance and Considerations Damage can occur to the solution dispensing system if stripping solutions are added to traditional floor scrubbers. 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.