

## **Industrial Cleaning Machine**

Used Industrial Cleaning Machine Montana - 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. Large areas can be cleaned thoroughly and with less staff when commercial floor scrubbers are utilized. Commercial floor scrubbers are available in several automated types. Many technological advancements feature robotic upgrades to make commercial floor scrubbers more user-friendly. Commercial floor scrubbers have an automated system for dispensing their cleaning compounds more efficiently. 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 machines feature separate recovery or collection tanks. The dispensing tank holds the cleaning mixture and the collection tank holds the liquids and material gathered by the vacuum system. Having separation between dirty water and clean water creates a more sanitary cleaning option. First, the automatic scrubber dispenses the cleaning solution and the scrubbing system is activated to loosen stains and dirt which are next suctioned into the collection tank of the machine when it passes over a location. 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 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. This style of brushes facilitates better cleaning for irregular or uneven surfaces. Scrubbers relying on a cylindrical head typically have a collection unit found behind the scrubber head that allows for bigger items including stones and nails to be collected to eliminate having to sweep the floor before cleaning. It is possible to clean numerous types of flooring thanks to the variety of brush types available. 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 Square oscillating floor scrubbers have a flat pad which vibrates at high speed to scrub the floor. The square design makes is 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. They also work well for cleaning vinyl tile floors. Because the square pad oscillates at very high speed, they apply more agitation to the floor resulting in more cleaning power. They do very well when cleaning grouted tile. Floor Scrubber Categories There are four categories of floor scrubbers: Robotic, Rider, Stand-on and Walk-behind. 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. 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. Stand-on floor scrubbers offer increased maneuvering capacity and are smaller than rider models, making them capable of accessing more locations. Stand-on units provide the operator with a better view compared to rider models 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 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 Technological design advancements within the field of autonomous robotics have helped to create a new army of floor-scrubbing machines. These robotic floor scrubbers were generated by merging the features of automatic floor scrubbers with robotic features of self-control operations without an operator.

Commercial models are suitable for education, retail, healthcare and manufacturing facilities. 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 will allow the machine to determine its exact location in larger environments, such as shopping malls, convention centers and airports. A random cleaning pattern was first established with the initial floor scrubbing models. However, commercial robotic floor scrubbers are now able to create an accurate plan for cleaning. Newer floor scrubbing models operate in a predictable pattern to cover the floor as efficiently as possible. 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 It is difficult for floor scrubbing machines to reach certain corners, edges or around water fountains or similar fixtures. 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 Pre-sweeping features and vacuum systems enable newer models to complete a dry cleaning before the wet scrub option. This allows the machine to remove debris prior to scrubbing without having to employ a traditional dry mop or broom. 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. Previously, the cleaning crew was required to dry mop or sweep the location before employing the floor scrubber to collect any dust and debris that might harm the machine. 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 Certain floor scrubbing models have environmentally friendly options. Safe soaps and water-saving systems work to save on both the number of chemicals used as well as the amount of greywater produced. There are some floor scrubbers on the market with the capacity to clean with zero chemicals or water. 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. Stripping solutions can be safely vacuumed up by the machine without causing 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.