

## Industrial Cleaning Machine

Used Industrial Cleaning Machine Massachusetts - Modern commercial floor scrubbers save time and are a cost efficient method of cleaning and maintaining large floor surfaces. 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. These units also have separate dispensing and collection or recovery 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. 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 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. These models operate in a circular movement and some of their brushes or pads spin a cleaning compound into the floor prior to suction. 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. Machines utilizing a cylindrical scrubber head commonly have a collection tray located behind the scrubber head that allow for collection of larger objects such as nails and stones, eliminating the need to pick up smaller objects before cleaning. Different brush styles make it easy to clean a wide variety of floor surfaces. 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. This square design enables faster and easier cleaning for corners and walls. These machines can remove the floor finish when the square scrubbing heads are used in conjunction with special stripping pads. Vinyl tile flooring can also benefit from being cleaned with square oscillating pads. Due to the high-speed oscillation, the square pads deliver more agitation and floor cleaning power. Cleaning grouted tile is much easier when these oscillating pads are utilized. Floor Scrubber Categories Four main categories comprise the floor scrubber family including Stand-on, Walk-behind, Robotic and Rider models. 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. 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 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 scrubbers allow for the operator to be seated on the machine while operating. 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. 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. Popular locations where commercial floor scrubbers are employed include retail, healthcare, education centers and in manufacturing locations. Some commercial robotic floor scrubbing machines are able to clean up to a 10,000-square-foot area 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 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. 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** 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** Newer floor scrubbers usually include an option that allows for a pre-sweep prior to the wet scrub. 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. 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** Environmentally friendly options are also available on some floor scrubbers. Features including water-saving systems, greywater reduction and safer soaps with fewer chemicals are available on some models. 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.