

## Industrial Cleaning Machine

Used Industrial Cleaning Machine Idaho - 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. Large areas can be cleaned thoroughly and with less staff when commercial floor scrubbers are utilized. 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. Commercial floor scrubbers have an automated system for dispensing their cleaning compounds more efficiently. 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 cleaning mixture is held in the dispensing tank while the collection tank is home to the material gathered by the vacuum and the liquids accumulated there. 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 style floor scrubber head is the most common type of scrubber head. 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** The cylindrical floor scrubber head uses counter rotating tube style brushes that rotate at a 90 degree angle to the floor. These allow for better cleaning of uneven or irregular 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. 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** Square oscillating floor scrubbers have a flat pad which vibrates at high speed to scrub the floor. The square design makes it easier to clean close to walls and in corners. Square scrubbing heads can be used with a specific stripping pad to take the floor finish away. This combination additionally is helpful for cleaning vinyl tile flooring. 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** 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 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. Stand-on floor scrubbers have greater maneuverability are usually more compact than a rider machine, enabling it to fit into locations that a rider unit would have a difficult time accessing. 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** 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. Some models of commercial floor scrubbers can efficiently clean up to 10,000 square-feet in sixty minutes. With continuous development in robotic technology, the advancement of robotic floor scrubbers will intensify over the years. Improved computing technology and better sensors are some of the noted areas expected to become even more efficient. 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. 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. 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** 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. There are oscillating brush decks available for certain floor scrubbing models to help them deal with hard-to-reach 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 helps to avoid a blockage in the vacuum hose or motor. 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. In some cases, the vacuum motor might need to be blown out using compressed air.

**Environmental Options** Some models of floor scrubbers have been designed with environmentally friendly options in mind. There are more environmental features incorporated into certain designs including safer soaps and water-saving systems to reduce the greywater and the chemicals. There are some floor scrubbers on the market with the capacity to clean with zero chemicals or water.

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