

## Industrial Cleaning Machine

Used Industrial Cleaning Machine Norwalk - 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. 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. These machines offer an automated system for evenly dispersing the cleaning compound at regular intervals. 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 cleaning mixture is held in the dispersing 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 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** 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. 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. It is possible to clean numerous types of flooring thanks to the variety of brush types available. Soft brushes can be utilized to clean synthetic floors, textured tile and rubber and harder bristles can be used for cleaning grouted tile, concrete and other harder surfaces.

**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. This combination additionally is helpful for cleaning vinyl tile flooring. The square pads oscillate at high speeds, producing higher agitation, resulting in extra 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** 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 mechanism can help eliminate operator fatigue by enabling the operator to work longer in comparison to manual and traditional methods.

**Stand-On Floor Scrubbers** Stand-on floor scrubbing models showcase more efficiency for cleaning larger locations in comparison to walk-behind units. These machines are more affordable than rider floor scrubber models. 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** The rider units allow the operator to be seated while the machine is in operation. 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. 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 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. 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. Areas of increased development are expected specifically with improved sensors and computing components. The latest generation of mobile robotics sensors allow a robotic floor scrubber a longer range of detection of surrounding walls and objects. This technology will help the machine note its location in expansive environments including shopping malls, airports and convention centers. Early models of residential cleaning robots followed a random pattern when cleaning. 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. 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. 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. 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. The pre-sweep brush head and collection chamber is placed in front of the vacuum system to collect dust and loose debris before it is able to reach the the vacuum system. Blockages to the vacuum hose or motor are avoided with this pre-sweep brush head and collection design. 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. Occasionally, the vacuum motor may need to be blown out with compressed air to clear away any debris.

**Environmental Options** Certain floor scrubbing models have environmentally friendly options. 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** Damage can occur to the solution dispensing system if stripping solutions are added to traditional floor scrubbers. These solutions can be vacuumed up safely without causing damage to the machine. It is wise to flush the solution system periodically with a mix of vinegar and water to remove any calcium and soap deposits that may accumulate over time.