

## Industrial Cleaning Machine

Used Industrial Cleaning Machine Santa Clara - Modern commercial floor scrubbers save time and are a cost efficient method of cleaning and maintaining large floor surfaces. Did you know that according to surveys, roughly ninety percent of the maintenance for flooring expenses is related to labor? 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. Commercial floor scrubbers have an automated system for dispensing their cleaning compounds more efficiently. Behind the suction nozzle on the vacuum, a squeegee attachment can be located on automatic floor scrubbers to add to their cleaning capacity. These units also have separate dispensing and collection or recovery 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. This design keeps dirty and clean water away from each other to create a more hygienic option compared to traditional mop and bucket methods. 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 style floor scrubber head is the most common type of scrubber head. 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** 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. 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** The square oscillating floor scrubber features a flat pad that scrubs the floor at high speed. 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. Vinyl tile flooring can also benefit from being cleaned with square oscillating pads. The square pads oscillate at high speeds, producing higher agitation, resulting in extra 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** 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** 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. 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** The rider units allow the operator to be seated while the machine is in operation. 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** Advancements in the

field of autonomous robotics have created a new group of floor-scrubbing machines. Robotic floor scrubbing models were created by combining robotic self-control options with automatic floor scrubbing technology. Commercial floor scrubbers are commonly found in manufacturing facilities, healthcare, retail and education centers. Some commercial robotic floor scrubbing machines are able to clean up to a 10,000-square-foot area in one hour. New technology is developing all the time and the capacity for robotic floor scrubbers will only increase. Areas of increased development are expected specifically with improved sensors and computing components. The latest advancements in mobile robotic sensors enable these floor scrubbing units to detect a wider range around 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. These machines travel in a consistent and predictable manner every time they are in operation. 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. 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** Floor scrubbing machines can find it hard to navigate around fixtures such as water fountains or corners and edges. Typically, these locations would need to be cleaned with a mop and bucket if they could not accommodate the machine. 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** Newer floor scrubbers usually include an option that allows for a pre-sweep prior to 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. 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. 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. 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** 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. 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.