

## Industrial Cleaning Machine

Used Industrial Cleaning Machine Delaware - Modern commercial floor scrubbers save time and are a cost efficient method of cleaning and maintaining large floor surfaces. Surveys reveal that labor expenses account for approximately 90% of the overall expense to maintain large floors surfaces. 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. 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. This ensures that the clean water and dirty water are kept separate which makes floor scrubbers a more hygienic alternative to traditional cleaning methods such as a mop and bucket. 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** 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. The cylindrical floor scrubbing machines often have a collection tray found behind the scrubber head to enable easier pickup of small items such as pebbles or nails. Different brush styles make it easy to clean a wide variety of floor surfaces. 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** 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. Square scrubbing heads can be used with a specific stripping pad to take the floor finish away.

They also work well for cleaning vinyl tile floors. The square pads oscillate at high speeds, producing higher agitation, resulting in extra 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** The walk-behind floor scrubber units have a forward assist feature that softly propels the machine forward when the operator enables this item. 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.

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. 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. 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. 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. The first models of residential cleaning machines operated in a random cleaning pattern. Updated models of commercial floor scrubbing units can complete their jobs much more accurately. This allows these robots to cover the entire floor in a predictable and consistent pattern each time they operate. Floor scrubber units clean more effectively than ever before thanks to their advanced technology. 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. This normally translates to certain locations requiring to be cleaned in traditional methods. 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

Advanced models feature a pre-sweep option and vacuum system to be used before the wet scrub. This allows the machine to remove debris prior to scrubbing without having to employ a traditional dry mop or broom. The collection chamber is situated in front of the vacuum system to catch loose debris and dust before these items can damage the unit. 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

Certain floor scrubbing models have environmentally friendly options. 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

Damage can occur to the solution dispensing system if stripping solutions are added to traditional floor scrubbers. However, they can still be vacuumed up by the machine without 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.