

## Industrial Cleaning Machine

Used Industrial Cleaning Machine Fresno - Commercial floor scrubbers provide an efficient, cost-effective and fast way to clean floor surfaces and are used for regular maintenance. 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. Commercial floor scrubbers are available in several automated types. More recently, advancements in technology have brought about robotic versions of commercial floor scrubbers. 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 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 design keeps dirty and clean water away from each other to create a more hygienic option compared to traditional mop and bucket methods. 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

A cylindrical floor scrubber model relies on counter-rotating tube brushes which rotate at a ninety-degree to the floor. This style of brushes facilitates better cleaning for irregular or uneven 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. 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. This square design enables faster and easier cleaning for corners and walls. Square scrubbing heads can be used with a specific stripping pad to take the floor finish away. 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

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 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. Stand-on units provide the operator with a better view compared to rider models and walk-behind machines.

#### Rider Floor Scrubbers

Rider floor scrubber models enable the operator to sit down while operating the equipment. 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

Advancements in the field of

autonomous robotics have created a new group of floor-scrubbing machines. These robotic floor scrubbers were generated by merging the features of automatic floor scrubbers with robotic features of self-control operations without an operator. 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. Increased development projections include advanced sensors and computing mechanisms. 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. 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. Typically, these locations would need to be cleaned with a mop and bucket if they could not accommodate the machine. 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. These upgrades increase efficiency and cleanliness by allowing the operator to do everything with the machine. 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 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. 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** Some models of floor scrubbers have been designed with environmentally friendly options in mind. Safe soaps and water-saving systems work to save on both the number of chemicals used as well as the amount of greywater produced. 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 recommended maintenance to use a vinegar and water mixture to periodically flush out the solution system to remove any soap or calcium deposits.