

## Industrial Cleaning Machine

Used Industrial Cleaning Machine Alabama - Save hours of time by relying on commercial floor scrubbers to provide an efficient method for cleaning and maintaining floors in an efficient manner. 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. 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. 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 units also have separate dispensing and collection or recovery tanks. The dispensing tank holds the cleaning mixture and the collection tank holds the liquids and material gathered by the vacuum system. 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 main types of floor scrubber heads including cylindrical, rotary (also known as disk), and square oscillating.

#### Rotary or Disk Floor Scrubber Head

The disk or rotary model of floor scrubber head is the most popular kind. 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 type of design allows for better cleaning of irregular or uneven locations. 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. Corners and walls can be cleaned more efficiently thanks to the square head design. When used with a special stripping pad, square scrubber heads are able to strip floor finish from a floor. Vinyl tile flooring can also benefit from being cleaned with square oscillating pads. 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

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. 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

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. 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

Rider floor scrubber models enable the operator to sit down while operating the equipment. 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. 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. New technology is developing all the time and the capacity for robotic floor scrubbers will only increase. Improved computing technology and better sensors are some of the noted areas expected to become even more efficient. The latest advancements in mobile robotic sensors enable these floor scrubbing units to detect a wider range around 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. Nowadays, commercial robotic floor scrubbers can execute an accurate map 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. Robotic floor scrubbers are also designed to navigate around people and obstacles that they encounter during autonomous operation.

**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. Typically, these locations would need to be cleaned with a mop and bucket if they could not accommodate the machine. 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. 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. In the event a blockage occurs, the vacuum hose may need to be removed and cleaned. The vacuum motor may need to be blown out with compressed air to dislodge the blockage.

**Environmental Options** Some models of floor scrubbers have been designed with environmentally friendly options in mind. 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** Stripping solutions cannot be used with most floor scrubbing models as they can damage the solution dispensing system. 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.