

## Industrial Cleaning Machine

Used Industrial Cleaning Machine California - 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. Commercial floor scrubbers are available in several automated types. Technology has advanced and commercial floor scrubbers have robotic upgrades to simplify their design. Commercial floor scrubbers have an automated system for dispensing their cleaning compounds more efficiently. 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. There are separate recovery and collection tanks situated on the machine. There are two tanks on the machine; the cleaning mixture is situated in the dispensing tank and the collection tank is where the materials collected by the vacuum accumulate. 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

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

The cylindrical floor scrubber head uses counter rotating tube style brushes that rotate at a 90 degree angle to the floor. This type of design allows for better cleaning of irregular or uneven locations. 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. 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. 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. 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. 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. 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 scrubbers offer an increased efficiency for greater areas than a walk-behind machine, while being more affordable than a rider floor scrubber. 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 technologies in the autonomous robotics field have

produced a new niche of floor-scrubbing robots. 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. 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. 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 technology will help the machine note its location in expansive environments including shopping malls, airports and convention centers. A random cleaning pattern was first established with the initial floor scrubbing models. Updated models of commercial floor scrubbing units can complete their jobs much more accurately. Newer floor scrubbing models operate in a predictable pattern to cover the floor as efficiently as possible. 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. 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** It is difficult for floor scrubbing machines to reach certain corners, edges or around water fountains or similar fixtures. 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** Advanced models feature a pre-sweep option and vacuum system to be used before the wet scrub. This feature allows for removal of debris before scrubbing without the need for a traditional broom or dry mop. 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 used to be commonplace to have the entire area first cleaned with a dry mop or broom to collect any debris or dust that might damage the unit or become lodged in the vacuum hose. If blockages in the vacuum system do occur, the vacuum hose might need to be removed to clear the blockage. 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. Some floor scrubbers are even able to clean without water and chemicals at all.

**Solution Dispensing System Maintenance and Considerations** Stripping solutions cannot be used with most floor scrubbing models as they can damage the solution dispensing system. Stripping solutions can be safely vacuumed up by the machine without causing damage. 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.