

## Industrial Cleaning Machine

Used Industrial Cleaning Machine Thousand Oaks - Modern commercial floor scrubbers save time and are a cost efficient method of cleaning and maintaining large floor surfaces. Labor expenses make up about 90% of total expenses when it comes to maintaining floors. It is possible to save time, money and labor when you switch to commercial floor scrubbers. Commercial floor scrubbers are available in several automated types. More recently, advancements in technology have brought about robotic versions of commercial floor scrubbers. 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. There are separate recovery and collection tanks situated on the machine. The dispensing tank holds the cleaning mixture and the collection tank holds the liquids and material gathered by the vacuum system. 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 initially dispenses the cleaning compound via the dispensing tank. Next, the scrubbing system pushes this solution into the floor to loosen marks, stains and dirt which become suctioned back into the collection tank as the machine makes a pass.

### 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 disk or rotary model of floor scrubber head is the most popular kind. 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. This style of brushes facilitates better cleaning for irregular or uneven 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. It is possible to clean numerous types of flooring thanks to the variety of brush types available. 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

The square oscillating floor scrubber features a flat pad that scrubs the floor at high speed. The square design makes it easier to clean close to walls and in corners. When used with a special stripping pad, square scrubber heads are able to strip floor finish from a floor. 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

Walk behind floor scrubbers are equipped with a forward assist mechanism that gently propels the machine forward when the feature is enabled by the operator. The forward assist helps curb fatigue of the operator which allows the operator to continue for a longer period of time, reducing fatigue and greatly increasing efficiency when compared to traditional manual 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. Stand-on floor scrubbers offer increased maneuvering capacity and are smaller than rider models, making them capable of accessing more locations. Stand-on units provide the operator with a better view compared to rider models and walk-behind machines.

#### 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 design facilitates up to sixty-five percent more efficiency in comparison to the walk-behind models and allows large areas of the floor to be covered more efficiently.

#### 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. With continuous development in robotic technology, the advancement of robotic floor scrubbers will intensify over the years. Improved computing technology and better sensors are some of the noted areas expected to become even more efficient. 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. Early models of residential cleaning robots followed a random pattern when cleaning. However, commercial robotic floor scrubbers are now able to create an accurate plan for cleaning. Newer floor scrubbing models operate in a predictable pattern to cover the floor as efficiently as possible. 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

It is difficult for floor scrubbing machines to reach certain corners, edges or around water fountains or similar fixtures. This normally translates to certain locations requiring to be cleaned in traditional methods. 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. This allows the machine to remove debris prior to scrubbing without having to employ a traditional dry mop or broom. Loose items and dust are collected by the pre-sweep brush head and placed into the collection chamber located in front of the vacuum system. Blockages to the vacuum hose or motor are avoided with this pre-sweep brush head and collection design. 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. In the event a blockage occurs, the vacuum hose may need to be removed and cleaned. 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. 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. 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.