

## Industrial Cleaning Machine

Used Industrial Cleaning Machine Oakland - 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. 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. 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. The dispensing tank holds the cleaning mixture and the collection tank holds the liquids and material gathered by the vacuum system. 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 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 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. 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 Rotating at a 90-degree angle to the floor, the cylindrical floor scrubber model features counter-rotating tube designed brushes to facilitate cleaning. 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. This square design enables faster and easier cleaning for corners and walls. 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. They do very well when cleaning grouted tile.

### Floor Scrubber Categories

Four main categories comprise the floor scrubber family including Stand-on, Walk-behind, Robotic and Rider models.

#### Walk-Behind Floor Scrubbers

There is a forward assist feature on walk-behind floor scrubbing models that helps to propel the unit forward when the operator enables this mechanism. 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 scrubbing models showcase more efficiency for cleaning larger locations in comparison to walk-behind units. These machines are more affordable than rider floor scrubber models. 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. 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

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. 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. As exciting new developments in robotic continue to develop, it is expected that the capability of robotic floor scrubbers will increase over time. Increased development projections include advanced sensors and computing mechanisms. Mobile robotic sensors enable today's floor scrubbers to complete a wider detection range around objects and walls. This will enable the unit to be precise when determining its particular location in large locations including airports, convention centers and shopping malls. 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. 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. Special sensors help the robotic floor scrubbers navigate around obstacles and people when they encounter any while operating 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. This allows the machine to remove debris prior to scrubbing without having to employ a traditional dry mop or broom. The pre-sweep brush head and collection chamber is placed in front of the vacuum system to collect dust and loose debris before it is able to reach the the vacuum system. 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. If blockages in the vacuum system do occur, the vacuum hose might need to be removed to clear the blockage. In some cases, the vacuum motor might need to be blown out using compressed air.

**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. Certain floor scrubbers are available to clean without any water or chemicals.

**Solution Dispensing System Maintenance and Considerations** Stripping solutions are not compatible with most floor scrubbers as they can cause damage to the solution dispensing system. 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.