

Industrial Cleaning Machine

Used Industrial Cleaning Machine Spokane - Commercial floor scrubbers provide an efficient, cost-effective and fast way to clean floor surfaces and are used for regular maintenance. 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. 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. 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 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 rotary or disk style floor scrubber head is the most common type of scrubber head. 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 A cylindrical floor scrubber model relies on counter-rotating tube brushes which rotate at a ninety-degree to the floor. These allow for better cleaning of uneven or irregular 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. Different brush styles make it easy to clean a wide variety of floor surfaces. 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 There is a flat pad on square oscillating floor scrubbing models that vibrate at high speed to clean the floor. 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. They also work well for cleaning vinyl tile floors. 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 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 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. 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. 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. 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 technologies in the autonomous robotics field have produced a new niche of floor-scrubbing robots. 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. Certain robotic commercial units are capable of cleaning an area up to ten thousand square feet 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. Areas of increased development are expected specifically with improved sensors and computing components. The latest generation of mobile robotics sensors allow a robotic floor scrubber a longer range of detection of surrounding walls and objects. This technology will help the machine note its location in expansive environments including shopping malls, airports and convention centers. The first models of residential cleaning machines operated in a random cleaning pattern. Nowadays, commercial robotic floor scrubbers can execute an accurate map for cleaning. These machines travel in a consistent and predictable manner every time they are in operation. 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. 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 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 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. There are more environmental features incorporated into certain designs including safer soaps and water-saving systems to reduce the greywater and the chemicals. 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. These solutions can be vacuumed up safely without causing damage to the machine. 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.