

Industrial Cleaning Machine

Used Industrial Cleaning Machine Nebraska - Commercial floor scrubbers provide an efficient, cost-effective and fast way to clean floor surfaces and are used for regular maintenance. Labor expenses make up about 90% of total expenses when it comes to maintaining floors. Commercial floor scrubbers provide a way to clean large areas quicker and with fewer workers. 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. Floor scrubbers are equipped with an automated system which dispenses a cleaning compound. 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. This design keeps dirty and clean water away from each other to create a more hygienic option compared to traditional mop and bucket methods. First, the automatic scrubber dispenses the cleaning solution and the scrubbing system is activated to loosen stains and dirt which are next suctioned into the collection tank of the machine when it passes over a location.

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 model of floor scrubber head is the most common type. 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. 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. It is possible to clean numerous types of flooring thanks to the variety of brush types available. A softer brush can be used to clean rubber, textured tile and synthetic floors while a stiffer brush can be used for rough surfaces such as concrete and grouted tile.

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. The square design makes it easier to clean close to walls and in corners. Square scrubbing heads can be used with a specific stripping pad to take the floor finish away. They also work well for cleaning vinyl tile floors. Due to the high-speed oscillation, the square pads deliver more agitation and floor cleaning power. Cleaning grouted tile is much easier when these oscillating pads are utilized.

Floor Scrubber Categories

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. Stand-on floor scrubbers have greater maneuverability and are usually more compact than a rider machine, enabling it to fit into locations that a rider unit would have a difficult time accessing. 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 a 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. 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. 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 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. Early models of residential cleaning robots followed a random pattern when cleaning. Updated models of commercial floor scrubbing units can complete their jobs much more accurately. These machines travel in a consistent and predictable manner every time they are in operation. 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. 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

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. This feature allows for removal of debris before scrubbing without the need for a traditional broom or dry mop. 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. 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

Environmentally friendly options are also available on some floor scrubbers. There are more environmental features incorporated into certain designs including safer soaps and water-saving systems to reduce the greywater and the chemicals. 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 are not compatible with most floor scrubbers as they can cause damage to the solution dispensing system. Stripping solutions can be safely vacuumed up by the machine without causing damage. The solution system should be periodically flushed with a water and vinegar mixture to clean the system of any soap and calcium deposits that can accumulate in the solution system.