

Industrial Cleaning Machine

Used Industrial Cleaning Machine Mesa - 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. It is possible to save time, money and labor when you switch to commercial floor scrubbers. There are a variety of automated commercial floor scrubbing models available on the market. Many technological advancements feature robotic upgrades to make commercial floor scrubbers more user-friendly. 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 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 rotary or disk style floor scrubber head is the most common type of scrubber head. They operate in a circular motion with one or two round brushes or pads that push a cleaning solution 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 style of brushes facilitates better cleaning for irregular or uneven surfaces. Machines utilizing a cylindrical scrubber head commonly have a collection tray located behind the scrubber head that allow for collection of larger objects such as nails and stones, eliminating the need to pick up smaller objects before cleaning. The multiple brush types available make cleaning various types of flooring possible. 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

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. 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. 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

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 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

The stand-on floor scrubber models provide better efficiency for larger spaces compared to walk-behind models and these units are more cost-efficient compared to 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. Since the operator is standing, these units provide better line-of-sight compared to walk-behind and rider models.

Rider Floor Scrubbers

Rider floor scrubbers allow for the operator to be seated on the machine while operating. 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

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. New technology is developing all the time and the capacity for robotic floor scrubbers will only increase. 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. Early models of residential cleaning robots followed a random pattern when cleaning. Nowadays, commercial robotic floor scrubbers can execute an accurate map for cleaning. Newer floor scrubbing models operate in a predictable pattern to cover the floor as efficiently as possible. Floor scrubber units clean more effectively than ever before thanks to their advanced technology. These machines are capable of safely navigating around obstacles or people while they operate autonomously.

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. 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. The collection chamber is situated in front of the vacuum system to catch loose debris and dust before these items can damage the unit. 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. 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. Safe soaps and water-saving systems work to save on both the number of chemicals used as well as the amount of greywater produced. Certain floor scrubbers are available to clean without any water or chemicals.

Solution Dispensing System Maintenance and Considerations

Damage can occur to the solution dispensing system if stripping solutions are added to traditional floor scrubbers. These solutions can be vacuumed up safely without causing damage to the machine. 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.