

Industrial Cleaning Machine

Used Industrial Cleaning Machine Minnesota - 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. Technology has advanced and commercial floor scrubbers have robotic upgrades to simplify their design. These machines offer an automated system for evenly dispersing the cleaning compound at regular intervals. Behind the suction nozzle on the vacuum, a squeegee attachment can be located on automatic floor scrubbers to add to their cleaning capacity. These units also have separate dispensing and collection or recovery tanks. The cleaning mixture is held in the dispersing tank while the collection tank is home to the material gathered by the vacuum and the liquids accumulated there. 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

Automatic floor scrubbers are available in three common types of floor scrubber heads:

1. Rotary, sometimes referred to as disk;
2. Cylindrical;
3. 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

A cylindrical floor scrubber model relies on counter-rotating tube brushes which rotate at a ninety-degree 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. It is possible to clean numerous types of flooring thanks to the variety of brush types available. 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.

Vinyl tile flooring can also benefit from being cleaned with square oscillating pads. Due to the high-speed oscillation, the square pads deliver more agitation and floor cleaning power. These square pads are useful for 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

The walk-behind floor scrubber units have a forward assist feature that softly propels the machine forward when the operator enables this item. 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. 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

Rider floor scrubber models enable the operator to sit down while operating the equipment. They work in much the same way as the stand-on floor scrubbers but require even less effort because of the ability to sit comfortably, reducing fatigue. 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

Advancements in the field of autonomous robotics have created a new group of floor-scrubbing

machines. Robotic floor scrubbing models were created by combining robotic self-control options with automatic floor scrubbing technology. Commercial models are suitable for education, retail, healthcare and manufacturing facilities. Some models of commercial floor scrubbers can efficiently clean up to 10,000 square-feet in sixty minutes. 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. The latest advancements in mobile robotic sensors enable these floor scrubbing units to detect a wider range around walls and objects. This will allow the machine to determine its exact location in larger environments, such as shopping malls, convention centers and airports. The first models of residential cleaning machines operated in a random cleaning pattern. 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

Many floor scrubbers are unable to reach edges, corners or under or around fixtures such as water fountains. 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. These upgrades increase efficiency and cleanliness by allowing the operator to do everything with the machine. 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. Blockages to the vacuum hose or motor are avoided with this pre-sweep brush head and collection design. 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. 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. 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. 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.