

Industrial Cleaning Machine

Used Industrial Cleaning Machine North Dakota - 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. 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. 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. There are two tanks on the machine; the cleaning mixture is situated in the dispersing tank and the collection tank is where the materials collected by the vacuum accumulate. Having separation between dirty water and clean water creates a more sanitary cleaning option. The automatic scrubber operates by first dispensing the cleaning compound from the dispensing tank, then using the scrubbing system, to push the cleaning compound into the floor surface and loosen dirt, stains and marks which are then quickly suctioned into the machine's collection tank as the unit makes its pass over an area.

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 disk or rotary model of floor scrubber head is the most popular kind. 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. 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. 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. Corners and walls can be cleaned more efficiently thanks to the square head design. 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. The square pads oscillate at high speeds, producing higher agitation, resulting in extra 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 have greater maneuverability are usually more compact than a rider machine, enabling it to fit into locations that a rider unit would have a difficult time accessing. Stand-on units provide the operator with a better view compared to rider models and walk-behind machines.

Rider Floor Scrubbers

Rider floor scrubbers allow for the operator to be seated on the machine while operating. 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. These models are more efficient compared to the walk-behind units, offering 65% more efficiency, enabling larger areas of the floor to be cleaned with ease.

Robotic Floor Scrubbers

Advancements in technologies in the autonomous robotics field have produced a new niche of floor-

scrubbing robots. Robotic floor scrubbing models were created by combining robotic self-control options with automatic floor scrubbing technology. Commercial floor scrubbers are commonly found in manufacturing facilities, healthcare, retail and education centers. Some models of commercial floor scrubbers can efficiently clean up to 10,000 square-feet in sixty minutes. 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. Mobile robotic sensors enable today's floor scrubbers to complete a wider detection range around objects and walls. This will allow the machine to determine its exact location in larger environments, such as shopping malls, convention centers and airports. A random cleaning pattern was first established with the initial floor scrubbing models. However, commercial robotic floor scrubbers are now able to create an accurate plan for cleaning. 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. 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

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. 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. Similar to residential vacuum systems, if a blockage happens, the vacuum hose may need to be removed to clear the area. Occasionally, the vacuum motor may need to be blown out with compressed air to clear away any debris.

Environmental Options

Certain floor scrubbing models have environmentally friendly options. Safe soaps and water-saving systems work to save on both the number of chemicals used as well as the amount of greywater produced. 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. It is recommended maintenance to use a vinegar and water mixture to periodically flush out the solution system to remove any soap or calcium deposits.