

## Industrial Cleaning Machine

Used Industrial Cleaning Machine Nova Scotia - Modern commercial floor scrubbers save time and are a cost efficient method of cleaning and maintaining large floor surfaces. 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. Commercial floor scrubbers are available in several automated types. Many technological advancements feature robotic upgrades to make commercial floor scrubbers more user-friendly. These machines offer an automated system for evenly dispersing the cleaning compound at regular intervals. Some automatic floor scrubbing models within a vacuum system may be fitted at the rear of the machine with a squeegee attachment behind the 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

Automatic floor scrubbers are available in three common types of floor scrubber heads: 1. Rotary, sometimes referred to as disk; 2. Cylindrical; and 3. Square oscillating.

#### 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

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. 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. The multiple brush types available make cleaning various types of flooring possible. 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

Square oscillating floor scrubbers have a flat pad which vibrates at high speed to scrub the floor. The square design makes it easier to clean close to walls and in corners. These machines can remove the floor finish when the square scrubbing heads are used in conjunction with special stripping pads. 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

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. 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. Because the operator is in a standing position, stand-on floor scrubbers also offer a better line-of-sight than both rider machines and walk-behind machines.

#### Rider Floor Scrubbers

The rider units allow the operator to be seated while the machine is in operation. 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

Technological design advancements within the field of autonomous robotics have helped to create a new army of floor-scrubbing

machines. Robotic floor scrubbing models were created by combining robotic self-control options with automatic floor scrubbing technology. Popular locations where commercial floor scrubbers are employed include retail, healthcare, education centers and in manufacturing locations. 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. The latest generation of mobile robotics sensors allow a robotic floor scrubber a longer range of detection of surrounding walls and objects. This will allow the machine to determine its exact location in larger environments, such as shopping malls, convention centers and airports. Early models of residential cleaning robots followed a random pattern when cleaning. Nowadays, commercial robotic floor scrubbers can execute an accurate map for cleaning. This allows these robots to cover the entire floor in a predictable and consistent pattern each time they operate. 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. 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** Floor scrubbing machines can find it hard to navigate around fixtures such as water fountains or corners and edges. This would normally necessitate mopping in these areas too small to fit an automatic floor scrubber. However, some manufacturers now produce floor scrubbers with oscillating brush decks which allow the scrubber to reach these difficult areas.

**Pre-Sweeping and Vacuum System Maintenance** Newer floor scrubbers usually include an option that allows for a pre-sweep prior to the wet scrub. This allows the machine to remove debris prior to scrubbing without having to employ a traditional dry mop or broom. 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. This helps to avoid a blockage in the vacuum hose or motor. 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. 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** Environmentally friendly options are also available on some floor scrubbers. Features including water-saving systems, greywater reduction and safer soaps with fewer chemicals are available on some models. 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. However, they can still be vacuumed up by the machine without damage. 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.