**Industrial Cleaning Machine**

Used Industrial Cleaning Machine Salem - 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. Large areas can be cleaned thoroughly and with less staff when commercial floor scrubbers are utilized. Commercial floor scrubbers are available in several automated types. More recently, advancements in technology have brought about robotic versions of commercial floor scrubbers. 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 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 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 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 rotary or disk model of floor scrubber head is the most common type. These models operate in a circular movement and some of their brushes or pads spin a cleaning compound into the floor prior to suction. 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. 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. 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 The square oscillating floor scrubber features a flat pad that scrubs the floor at high speed. The square design makes is 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. Vinyl tile flooring can also benefit from being cleaned with square oscillating pads. 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 Floor Scrubber Categories 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. 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. The rider models allow the operator to sit during the entire cleaning process, thus helping to reduce fatigue as they clean the floors. 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. These units were born by joining self-control robotic features with automatic floor

scrubbing options. Commercial models are suitable for education, retail, healthcare and manufacturing facilities. Certain robotic commercial units are capable of cleaning an area up to ten thousand square feet 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. Mobile robotic sensors enable today's floor scrubbers to complete a wider detection range around objects and walls. 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. However, commercial robotic floor scrubbers are now able to create an accurate plan for cleaning. Newer floor scrubbing models operate in a predictable pattern to cover the floor as efficiently as possible. 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. 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 Floor scrubbing machines can find it hard to navigate around fixtures such as water fountains or corners and edges. 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 Pre-sweeping features and vacuum systems enable newer models to complete a dry cleaning before the wet scrub option. 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 vacuums 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. 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 Certain floor scrubbing models have environmentally friendly options. There are more environmental features incorporated into certain designs including safer soaps and water-saving systems to reduce the greywater and the chemicals. Certain floor scrubbers are available to clean without any water or chemicals. 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. 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.