

How to Select Industrial Floor-Care Equipment for Increased Productivity and Performance

By John Lee
Industrial Vertical Market Manager
Nilfisk-Advance



Smaller rider scrubbers are ideal for cleaning confined areas where their maneuverability reduces the amount of hand labor.

A clean working environment helps promote worker safety, productivity and product quality. That's why the floor-cleaning equipment you select for your facility is nearly as important as the manufacturing or material handling equipment you select. In addition, the cleanliness of your plant, warehouse or machine shop conveys a quality image that carries over into higher employee morale and positive reactions from visiting customers and vendors. In short, keeping the workplace clean adds real value to virtually any enterprise.

Just about every facility will require a combination of floor-care equipment from brooms to vacuum cleaners to walk-behind scrubbers or rider sweepers. Getting the right mix of equipment is a matter of assessing your specific cleaning needs. Some of the factors that affect this decision include:

- *The size of dirt and debris particles generated*
- *The amount of dirt and debris generated*
- *The character of the dirt (fibrous, oily, dusty, wet)*
- *The type of surface (tile, bare concrete, coated concrete, outdoor, etc.)*
- *The number of personnel involved in cleaning activities*
- *A definition of what constitutes "clean" for your facility*

On this last point, "clean" can mean anything from getting rid of chunks of dirt on the floor to creating a shiny, scuff-free surface. Your facility's cleanliness goal will be a factor in your equipment choice. For example, if "clean" means getting rid of forklift tire marks and other stains in addition to dust and debris, then your cleaning process will have to include scrubbing as well as sweeping.

Sweep or Scrub?

After assessing the size and amount of dirt and debris to be removed, the primary decision to be made is "sweep vs. scrub." This decision is not always straightforward. For example, if the material to be cleaned is mostly fine dust, it would seem that a sweeper would be the ideal tool to remove it. But the best way to handle dust is to "add water," which eliminates your dust problem; this means a scrubber may actually be the better equipment choice. However, if it is not dust and primarily debris, then handling it dry is often the best approach as adding water will only add to the mess. If your final expectation is a squeaky clean result, then you will definitely need to scrub as well.





Walk-behind scrubbers are well suited to smaller facilities with a need for scrubbing and light debris pickup.

“You should purchase the smallest walk-behind or ride-on equipment that will allow you to complete your active sweeping or scrubbing in no more than two to three hours.”

Sweepers are ideal for bulky debris such as wood chips, metal shavings (swarf), paper and fibrous materials. Scrubbers are suitable for light, dusty debris on all types of hard floors – especially dirty or oily surfaces. In many instances, you may need to sweep first and then scrub. This requires either two separate machines or one combination machine. However, combination sweeper/scrubbers, due to their dual function, sometimes have limited hopper and tank capacities, which can reduce productivity in the long run. More time spent dumping hoppers and refilling solution tanks on combination machines can mean less active cleaning time.

On the other hand, in smaller facilities where only one person is doing the cleaning, a combination sweeper/scrubber is often a good choice. By selecting a machine that can perform multiple functions, managers not only reduce the significant initial price tag of purchasing multiple machines for a building, but they also reduce the overall maintenance and operating costs. Each cleaning machine requires separate operator training, storage space and ongoing maintenance, including costly parts replacement. By allowing staff to use the same machine for any hard floor-scrubbing job, costs are reduced and productivity is increased.

Walk or Ride?

When you consider that 90 percent of the cost of cleaning is labor, the additional cost of a ride-on machine can likely be recouped from labor savings in about three months. This is because ride-on sweepers and scrubbers offer productivity gains of as much as 64 percent over walk-behind machines. In addition, ride-on equipment is easier on your personnel, allowing them to do more with less fatigue. Today's ride-on machines are compact enough to get into narrow spaces, and many are nimble enough to turn within their own length. By making more passes in a given time and significantly reducing worker fatigue, ride-ons provide a big productivity boost for a modest investment. Further, operator comfort is an important feature for ride-on equipment. Machines should have enough space within the rider compartment for operators to comfortably sit, while still providing sufficient room to reach hand and/or foot controls. Equipment should also provide a clear line of sight to enable complete visibility for optimal safety during cleaning.

Equipment Sizing

Selecting the appropriate sized equipment requires careful investigation of the areas to be cleaned. To make a choice, you should assess the following:

- **Minimum aisle width**
- **Type of aisle – dead end or open end**
- **Total square footage of cleanable area**
- **Narrowest doorway the machine must pass through for cleaning or dumping**





For facilities that require both sweeping and scrubbing, sweeper-scrubbers combine two cleaning functions into one machine.

"It's important to assign responsibility for maintenance and upkeep to one person."

This information assists in selecting the proper size and capacity machine for the application that will provide the optimal balance of purchase cost and productivity. Oftentimes, the most optimal solution is not the smallest size machine that could realistically complete the cleaning, but rather a machine where the cleaning path and capacity makes the most sense for the space being cleaned. For instance, being able to clean aisles in just two passes instead of three saves significant labor time and cleaning costs.

In many instances, you may need a ride-on sweeper or scrubber for large open areas and a smaller walk-behind sweeper or scrubber for narrow aisles or to get in around and between individual workstations.

Type of Floor Surface

Most sweepers and scrubbers are intended to work on any hard floor surface, but for best results, the style of brushes, brooms or squeegees you select should be matched to your specific surface and the dirt or debris to be removed. For example, some brooms are designed to sweep up fine dust from smooth floors. Wire-reinforced brooms do a more aggressive job of cleaning and are ideal for bulkier debris on unsealed concrete floors. There are even grit-impregnated brooms and brushes for heavy-duty cleaning on rough surfaces.

Scrubbers used on smooth, sealed surfaces are usually equipped with soft gum rubber squeegees that do an excellent job recovering the cleaning water and liberated dirt, leaving the floor ready for immediate use. However, used on rough floors, a gum rubber squeegee can wear too quickly, so synthetic squeegee blades are recommended and should be specified in the purchase process. The synthetic blades are not as flexible as gum rubber, but they last longer and also perform better over time in greasy and oily environments.

Other features to look for:

1. Ease of Use – A key feature to look for in floor-cleaning equipment is ease of use – especially if the equipment is going to be used by more than one operator. Are the controls easy to understand? Can the equipment be used with minimal training? Is the equipment designed to enable operators to handle minor equipment problems? For instance, a sweeper with a main broom that can be easily removed without tools will allow operators to disentangle the tape, cords, packing material, etc., that can get wrapped around the broom and reduce its sweeping ability. Unless these materials can be easily and quickly removed, cleaning productivity will suffer.

2. Water Usage/Tank Capacity – Choose scrubbers that offer reduced water/detergent use and large solution tank capacities in proportion to their size. These features will not only lower operating costs and help the environment by reducing the volume of your waste stream, they will also improve your cleaning productivity. Be sure to choose equipment that will not only save water and detergent, but also provide enough cleaning power to get your floors clean.



INDUSTRIAL-STRENGTH CLEANING SOLUTIONS

Advance floor cleaning equipment increases your productivity and uptime, while simplifying your cleaning process. From walk-behind sweepers to rider scrubbers and sweeper-scrubbers for both indoor and outdoor use, all Advance equipment is easy to operate and designed to reduce your labor costs. Local Advance dealers help analyze your cleaning needs to match the right equipment to your cleaning demands. Plus, local dealers are your resource for training, service and maintenance. To learn more about how Advance industrial products can simplify your cleaning process and to find your local Advance dealer, visit www.advance-us.com or call 800-214-7700.

3. Operator Visibility – Another consideration is whether the equipment gives the operator a clear view of the area to be cleaned – for both safety and cleaning performance reasons. While many sweepers have hoppers that can be raised 60 inches to dump directly into a dumpster, it is important to have a sweeper that allows the operator a clear view of the dumping without having to lean their head outside of the machine. Whenever the operator has to lean outside of the machine, there is a danger of striking their head on a nearby rack or piece of equipment. Choose units with offset hoppers that allow the operator to sit straight and look forward during both dumping and sweeping operations.

Maintaining Your Equipment

When there are multiple users of a piece of equipment, it's important to assign responsibility for maintenance and upkeep to one person. If no one takes ownership of the unit, maintenance will often be neglected and lead to machine failures. Look for manufacturers that offer preventive maintenance programs for your floor-care equipment as a way to ensure high machine availability.

Conclusion

Because 90 percent of the cost of cleaning is labor, you will want to select floor-cleaning equipment that provides the highest productivity as well as the best cleaning performance. A reputable local equipment dealer will be able to help you choose the floor-cleaning equipment that is right for your application. Your local dealer or sales representative will complete a site survey of your facility and make an informed recommendation based on your needs. A dealer or sales representative can also facilitate an on-site demonstration of recommended equipment. Working with your dealer, you can make sure your operators are trained and preventive maintenance programs are put in place to protect your investment for years to come.



14600 21st Avenue North
Plymouth, MN 55447-3408
www.advance-us.com
Phone 800-214-7700
Fax 800-989-6566

240 Superior Boulevard
Mississauga, Ontario, Canada L5T 2L2
www.nilfisk-advance.ca
Phone 800-668-8400
Fax 800-263-5111