How to select floor-cleaning equipment for the highest efficiency and lowest total cost to clean.

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Studies show that labor represents 90 percent or more of the total cost of floor cleaning.* This means that a cost-efficient cleaning program will employ the most productive equipment available, so that workers – the largest share of the total cost to clean – can be more productive. But what makes a floor-cleaning machine “productive,” and how do you evaluate floor-cleaning machines for productivity?

Today’s automated floor-cleaning equipment includes efficiency features that can lead to greater productivity, such as longer cleaning times between dump-and-fill cycles, faster ride-on and self-propelled equipment, wider cleaning paths, and the ability to perform multiple operations with one machine, to list just a few. Determining which floor-cleaning equipment will deliver the highest productivity per application and, in turn, decrease overall cleaning time and costs, requires careful consideration.

EQUIPMENT FEATURES THAT CONTRIBUTE TO CLEANING PRODUCTIVITY

There are many floor-cleaning machine features designed to increase worker productivity, decrease overall cleaning time and, as a result, reduce the total cost to clean. Here is an overview of equipment features available today that contribute to cleaning efficiency:

- Choice of cleaning path widths – By matching the size of the machine to exact needs, you minimize your investment while maximizing productivity. The difference in the purchase price between a 17-inch and a 20-inch walk-behind floor machine can be as little $50 to $100. The charts that follow show the time and cost savings that can be achieved by using scrubbers and vacuums with wider cleaning paths.

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Results Comparisons: 17” vs. 20” scrub path

<table>
<thead>
<tr>
<th>Scrub path</th>
<th>17”</th>
<th>20”</th>
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<tbody>
<tr>
<td>Minutes/1,000 sq. ft.</td>
<td>23</td>
<td>16</td>
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<tr>
<td>Cost to clean:</td>
<td></td>
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<tr>
<td>$5/hr</td>
<td>1.33</td>
<td>1.33</td>
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<tr>
<td>$6/hr</td>
<td>1.60</td>
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<td>$7/hr</td>
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<tr>
<td>$9/hr</td>
<td>2.82</td>
<td>2.82</td>
</tr>
<tr>
<td>$10/hr</td>
<td>3.23</td>
<td>3.23</td>
</tr>
</tbody>
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*International Sanitary Supply Association
• **Easy equipment changes** – Slide-out decks for edge cleaning and easy-to-swap brush and cylindrical decks allow your workers to clean different surfaces with one machine and spend minimal time changing out accessories, etc. Machines that offer “tools-free” maintenance allow operators to make any needed adjustments quickly and easily, as do user-friendly controls that are easy to understand and operate.

• **Onboard battery chargers** – Many battery-powered auto-scrubbers, burnishers and carpet extractors can be ordered or even come standard with onboard battery chargers. This means that operators don’t have to return a machine to a battery-charging station, but can recharge machine batteries almost anywhere. Gel-battery powered equipment offers increased safety and convenience because there is no potential for battery acid spills or noxious gas emissions during charging that can occur with conventional batteries.

• **Reduced sound levels** – Today’s low-decibel cleaning equipment, from canister vacuums with hospital-quiet operation to ride-on scrubbers with built-in sound attenuation, enables your operators to clean during business hours and without the fatigue and irritation that noise can cause.

• **Reduced water usage** – Some of today’s floor-cleaning machines are specially designed to minimize water usage, providing a big productivity boost for a modest investment. Water-saving designs increase cleaning efficiency by: 1) reducing the number of dump-and-fill cycles required to clean a particular area, which in turn increases the amount of time operators can spend productively cleaning; and 2) reducing the drying time needed before workers can return an area to service. (Some automatic scrubber and extractor models let you choose between low-moisture and deep-cleaning modes so you can increase water usage just in especially soiled areas.)

• **Larger water and solution tanks** – Equipment with higher-capacity tanks can also increase your productive cleaning time between dump-and-fill cycles. However, there is a trade-off because larger tanks usually mean larger equipment, and you will generally want to select the smallest machine suitable for your application. Small machines are more maneuverable and lighter weight, allowing operators to work faster and with less fatigue.

**RIDER OR SELF-PROPELLED EQUIPMENT – THE PRODUCTIVITY DIFFERENCE**

With ride-on scrubbers or sweeper/extractors, you can increase productivity by 400 percent compared to conventional walk-behind machines. Typically, the additional cost of a ride-on vs. a walk-behind model can be recouped from labor savings in about three months. This is due to productivity gains of as much as 64 percent for ride-on sweepers and scrubbers over walk-behind machines.
Self-propelled walk-behind equipment can increase productivity over manual “push” equipment, because the machines “assist” the operator with forward motion. Both ride-on and self-propelled equipment can reduce operator fatigue, enabling workers to get more cleaning done per shift.

Also consider that a 24-inch ride-on scrubber designed to clean narrower aisles and fit through a 32-inch doorway with room to spare results in a productivity increase of more than 200 percent over a walk-behind scrubber.

MULTIFUNCTION EQUIPMENT – INCREASE PRODUCTIVITY WITH MACHINES THAT PERFORM MULTIPLE OPERATIONS

- **Extractors** – Extractors that can loosen soil, apply cleaning solution, and extract soil, solution and moisture all in one cleaning pass eliminate the need for your workers to perform a variety of tasks, making carpet cleaning faster and your overall cleaning operation more productive and cost efficient. To gain even more productivity, you can select a carpet extractor that can double as a small hard-floor scrubber.

- **“Touchless” cleaning machines** – A new kind of multipurpose cleaning machine, touchless cleaning machines wash, scrub, disinfect and blow-dry surfaces and fixtures using a cold-water cleaning solution. The result is increased sanitation and faster cleaning, especially in settings requiring high levels of disinfection such as restrooms and even hospital operating rooms.

- **Sweeper/extractors** – A sweeper/extractor eliminates the need to vacuum carpets before extracting. Choose equipment that leaves floors almost dry. This reduces drying time significantly and allows you to extract whenever your floors need it. See chart.

- **Wet and dry recovery** – This is a labor-saving feature available on some tank vacuums that allows workers to recover water (from a broken pipe on the floor, for example), and then use the same vacuum to pick up dry dirt that has accumulated.

- **Burnishers** – Look for burnishers that can collect dust and burnish your floor’s surface in one pass, which will cut your total cleaning time dramatically.

OTHER EQUIPMENT CONSIDERATIONS THAT IMPACT PRODUCTIVITY

In addition to reviewing all equipment features for maximum efficiency and cost savings, you’ll want to think about these important factors, too:

- **Minimal equipment maintenance requirements** – Floor-cleaning equipment will last longer if machines are easy to clean and maintain. For example, gel-battery-powered equipment is easier to maintain than equipment using wet-acid batteries, because sealed gel batteries don’t need added water, can’t leak, and will not emit noxious fumes during charging.
• **Availability of on-site training** – To eliminate downtime in the cleaning processes, consider whether an equipment dealer would provide new equipment training.

• **Availability of equipment maintenance and repairs** – To keep equipment running – all the time – ensure that there is a source for parts and service nearby.

### JUSTIFYING YOUR HIGH-PRODUCTIVITY CLEANING EQUIPMENT PURCHASE

Once you’ve selected the floor-cleaning equipment features and performance you need – and the equipment model or models you’d like to purchase – you will likely need an economic justification before your purchase is approved. This is an area where a floor-cleaning professional, such as your JanSan supplier or equipment dealer, can and should help.

An equipment sales representative can compare your current cleaning operation with the proposed new system, calculating the time savings and increased productivity that the new equipment will yield. This can be expressed in terms of minutes and hours saved per week per exact square footage, as well as the percentage of total time savings. This analysis should figure in total labor costs, the new equipment purchase cost, and the estimated equipment maintenance costs over the life of the machine. Most importantly, your consultant should be able to tell you the total lifetime cost to clean with the new equipment. A complete productivity analysis will give you a clear picture of annual dollar savings and total savings spread out over the period it takes to pay back the investment.

Your increased cleaning efficiency makes the purchase of a new machine much more economical when you calculate the “payback” from savings in labor costs and how these savings offset the cost of purchasing the new equipment. A high return on investment and considerable savings in time and labor dollars are the things that executives look for in justifying the purchase of new equipment.

Arming your cleaning team with the most efficient and cost-effective floor-cleaning equipment will enable you and staff to win the daily battle against dirt, dust, grime and germs. It will also lead to the highest level of floor-cleaning productivity – and cost efficiency – for your business.

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**ADVANCE CLEANING SOLUTIONS FOR COMMERCIAL APPLICATIONS**

Advance automated floor-cleaning equipment is designed to increase productivity, while lowering the total cost to clean. From vacuums and carpet extractors to sweepers and ride-on scrubbers, Advance delivers efficient, easy-to-use equipment. All Advance equipment is backed by professional, local maintenance and service support. Advance cleaning experts are ready to analyze your needs and recommend the best floor-cleaning solution for you. To learn more about Advance commercial cleaning equipment or to find a dealer near you, visit [www.advance-us.com](http://www.advance-us.com) or call 800-850-5559.