

MECHANIZING THE MOP

How modernized floor cleaning technologies are delivering powerful competitive advantages.



INTRODUCTION

A TURNING POINT IN MECHANIZED FLOOR CLEANING

Clean is more critical than ever to the success of many businesses. Yet with labor pressures continually rising, businesses are looking for innovative ways to achieve the higher cleaning standards that drive customer satisfaction and loyalty — without shrinking their bottom line. Small spaces — from the aisles of a larger retail store, to the tight spaces of a convenience store or specialty shop, to the high-traffic demands of bathrooms and breakrooms — present a particular challenge, as small-space cleaning still depends heavily on manual processes like mop-and-bucket floor cleaning. Forward-thinking retailers — from large retail chains to individual retail shops — are increasingly targeting the small-space cleaning challenge by leveraging mechanized cleaning technologies to help them drive more reliable cleaning performance, while realizing significant operational and labor efficiencies. Critically, it's not just market pressures pushing the rapid adoption of mechanized floor cleaning. Significant advances in the technologies are also making micro-scrubbers and other small, mobile automatic scrubbers more affordable and faster to implement — and easier and more cost-effective to use.

As more businesses leverage a new wave of practical, modernized floor cleaning technologies, they're not just reducing cleaning time and labor costs — they're also gaining more: more powerful cleaning capabilities, more reliable cleaning performance, and more satisfied customers and employees.

People have a heightened awareness of cleanliness, and “clean” has become the visible proxy for “healthy and safe.”^{1,2,3}

THIS WHITE PAPER WILL DIVE DEEP INTO THE WHY AND THE HOW OF THE SHIFT TO MODERNIZED FLOOR CLEANING, TO HELP YOU UNDERSTAND:

- Rising pressures that are driving rapid adoption of mechanized floor cleaning
- How new automatic scrubber technologies simplify implementation and accelerate ROI
- How to know if your business is ready for modernized floor cleaning
- Best practices for smoothly and successfully “mechanizing the mop”

CLEAN IS MORE CRITICAL THAN EVER

The concept of “clean” has always been an important foundation for businesses. Clean spaces keep customers happy and healthy, protect the brand and reputation of the business, and can even help improve productivity. But clean was cast into the spotlight as never before in 2020, as the pandemic pushed public health to the front of minds. People have a heightened awareness of cleanliness, and “clean” has become the visible proxy for “healthy and safe.”^{1,2,3}

This increased awareness and sensitivity to facility cleanliness is expected to be a long-term shift. Where consumers (and employees) traditionally assumed a basic level of safety and cleanliness in most businesses, that is no longer taken as a given. That trust is gone, replaced by what Ernst & Young calls the age of the “anxious consumer.”⁴

CLEAN EXPECTATIONS IN THE AGE OF THE ANXIOUS CONSUMER

85%
of consumers say that
**VISIBLE CLEANING
IS CRITICALLY
IMPORTANT**⁵

7 in 10
consumers say they're
**MORE AWARE OF
HYGIENE & SANITATION**
when they visit retailers⁶

1 in 4
consumers say
**CLEANING & SANITATION IS
THE TOP FACTOR**
in choosing which businesses to visit⁷

“Clean” is Now a Powerful Competitive Advantage

As consumers focus on clean, more businesses are actually gaining a powerful competitive advantage by differentiating their customer experience on the basis of exceptional, reliable, confidence-inspiring cleanliness. And it's not just hotels and hospitality businesses — it's retailers and customer-centric businesses of all types. Now is truly a unique moment for capturing this opportunity, as 3 in 4 consumers report they're changing long-held loyalties and shopping habits.⁸ By delivering these confidence-inspiring, clean experiences, businesses can drive trust and loyalty that keeps customers coming back (and telling others). Recent research indicates that cleanliness is a major concern when selecting a convenience store, ranking as the third most important factoring when choosing a pitstop.⁹

LABOR COSTS KEEP RISING

Labor has long been one of the biggest expenses in most businesses. When it comes to cleaning and facility maintenance, labor can sometimes be over half of the budget. It's likely no surprise that 78% of managers say that improving labor productivity is a key priority.¹⁰

But while labor pressure is nothing new to most businesses, these pressures are seeing acute increases. The cost to hire, train and keep employees is higher than ever — and it keeps going up:



**2.4%
INCREASE**
in the overall cost of labor in
2020¹¹



Businesses in 25 states will
see **INCREASED
MINIMUM WAGE**
in 2021¹²



**NEW OVERTIME
RULES**
went into effect in 2020¹³



\$1,000
Average cost to train
a new employee¹⁴

MACHINES COMPLEMENT — NOT REPLACE — EMPLOYEES

Mechanization in any context is often thought of as a replacement for human labor. This is almost always an oversimplification at best. But in the case of modernized floor cleaning, it's a true misunderstanding of the potential value. As facility cleaning stays in the spotlight, businesses are doing more — more frequent cleaning, more deep cleaning, more detailed cleaning (wipe-downs and surface disinfection). Most of this “more” can't be mechanized. But the true operational value of mechanized floor cleaning is that it makes employees more efficient in completing routine floor cleaning — giving them more time to focus on this growing list of facility cleaning responsibilities.

ONE EMERGING SOLUTION: MECHANIZING THE MOP

We've always been looking for ways to make cleaning easier, faster and more effective. From the simple broom, which dates back to 2300 B.C., to the invention of the first mechanized "carpet sweeper" in 1858, we have continually leveraged *mechanization* to improve cleaning.¹⁵ The goal of mechanization has never been to take the human factor out of cleaning, but rather to make cleaning more efficient, so they can spend more time on other things.

Now, the humble mop and bucket are ready for a modern transformation in the evolution of cleaning — particularly when it comes to cleaning smaller spaces in retail environments, including tight aisles, small entryways and heavily trafficked restrooms and breakrooms. More and more retailers of all sizes and types are looking to "mechanize the mop," leveraging floor cleaning technologies like micro-scrubbers and small scrubbers to power greater cleaning performance in their smaller spaces and hard-to-reach areas.

Mechanized Small-Space Floor Cleaning Drives Broad Competitive Advantages

The heightened importance of facility cleanliness, along with rising labor costs, are the two main pressures driving the rapid shift to modernized small-space floor cleaning among retailers. But those that have successfully "mechanized the mop" are realizing a much broader range of business value. In other words, there's much more to mechanized scrubbers than just *faster* floor cleaning:

CLEANING PERFORMANCE	CUSTOMER SATISFACTION	BOOST EFFICIENCY	STAFF SATISFACTION
More effectively cleans and shines floors.	Ensuring consistently clean spaces to delight customers.	Enabling faster floor cleaning and clean tight spaces with ease and consistency.	Reducing the physical burden on staff and giving them more time for other responsibilities.
SAFETY	PUBLIC HEALTH	SUSTAINABILITY	RE-DEPLOY LABOR
Reducing slip-and-fall risks and staff safety risks associated with heavy mop buckets.	Ensuring more effective cleaning and reducing cross-contamination risks of dirty mop water.	Reducing water and cleaning chemical usage.	Faster cleaning means staff can spend more time on other responsibilities.

COMPETITIVE ADVANTAGES OF MODERNIZED SMALL-SPACE FLOOR CLEANING

Maximizing Cleaning Performance

Today's advanced automatic scrubber technologies are able to clean a wide range of hard surfaces, and they are designed to handle everything from light-duty applications to the most rigorous needs. Whether it's routine cleaning of the aisles of a convenience store, or more difficult cleaning demands of restrooms, or even back-of-house food service applications, automatic scrubbers combine high-pressure scrubbing with the precise use of detergents to deliver improved cleaning performance over manual mop-and-bucket floor cleaning. The i-mop® XL Plus and i-mop® XXL Plus offered by Tennant can deliver up to 90% cleaner surfaces compared to conventional mopping, as confirmed with ATP testing.¹⁶ One reason for this improved cleaning performance: mechanized floor scrubbers apply a powerful scrubbing action that cleans deep. For example, the i-mop and i-mop XXL can remove up to 4x as much soil, compared to conventional wet-mop cleaning.

Enhancing Customer Satisfaction

Let's be real: No customer wants to see a dirty mop and bucket. But today, customers increasingly do want to know that cleaning is being done and showing continuous cleaning can provide customers peace of mind. Micro-scrubbers can safely be used during business hours and are much less disruptive than mop-and-bucket cleaning. This enables businesses to show customers that they're continually cleaning and protecting the health and safety of their customers and staff.

Boosting Labor Efficiency

While actual efficiencies depend on the specifics of the space being cleaned, studies have found that floor scrubbers can deliver a dramatic boost in cleaning efficiency when compared to mop-and-bucket cleaning. Studies have found that cleaning with an automatic scrubber can be up to 6-8x faster than manual mop cleaning.¹⁷

Re-Allocating Labor

With employees spending significantly less time juggling the mop and bucket, the ultimate outcome is not a reduction in staff — after all, most retailers, convenience stores and restaurants have plenty of work to go around. Rather, businesses can re-deploy staff to spend more time on other responsibilities. That may mean focusing on more intensive cleaning tasks like surface wipe-downs and disinfection — or it may mean freeing-up employees to spend more time delivering great service to customers.

Improving Safety

The typical slip-and-fall injury costs employers \$40,000 — and more than half of slip, trip and fall injuries stem from a problem with the walking surface.¹⁸ Micro-scrubbers can immediately and significantly mitigate this risk — to employees and customers — through nearly 100% water recovery and vastly faster drying times. In short, an automatic scrubber does not leave large swaths of wet, slippery floors like mop -and- bucket cleaning. Additionally, employees can reduce risk of injury by not having to manage a heavy mop bucket.

Protecting Public Health

Basic, routine floor cleaning can play a big role in creating healthy, safe spaces and mitigating public health risks in a business. Critically, automatic scrubbers offer a powerful advantage in this regard: By cleaning with significantly cleaner water, they vastly reduce the cross-contamination risks that come as pathogens accumulate in dirty mop bucket water. Furthermore, automatic scrubbers enable more precise use of cleaning agents that require specific dilutions to be effective.

Sustainability Savings

With more precise chemical dilution and high-pressure scrubbing capabilities, automatic scrubbers effectively clean floors using less water and less cleaning products. Today's micro-scrubbers are impressively energy-efficient, as well. Many use sophisticated Lithium-ion battery technology that eliminates reliance on nonrenewable energy sources, maintains indoor air quality, and reduces the staff safety risks and time costs associated with traditional battery maintenance. Finally, the nearly 100% water recovery helps to mitigate chemical fumes and odors and support better air quality.

Enhancing Staff Satisfaction & Retention

It's not just customer satisfaction that benefits from modernized floor cleaning — staff satisfaction also logically increases. Micro-scrubbers significantly reduce the physical burden of floor cleaning, allowing workers to stand upright and clean with the push of a button. Workers also appreciate that micro-scrubbers empower them to do a more consistent and thorough job. Taken together, this helps businesses fight high turnover costs and retain their employees.

Mechanized floor scrubbers apply a powerful scrubbing action that cleans deep.

NEW ADVANCES STREAMLINE THE PATH TO MECHANIZED FLOOR CLEANING

The majority of the advantages of mechanized floor cleaning detailed in the previous section are not new. What is new are the advances in micro-scrubber technologies that are eliminating the three common barriers that have kept businesses from adopting these valuable tools:

Simple Usability & Easy Training

Ease-of-use has also always been a key concern. Mop and bucket cleaning is typically viewed as extremely simple. Yet in reality, science demonstrates that there is plenty of risk and room for error in manual floor cleaning. In contrast, today's micro-scrubbers are engineered from the ground up to combine the convenience and ease of a mop and bucket, with the cleaning power of an automatic scrubber. These tools make it much easier to clean compared to mop-and-bucket approaches — inherently reducing dirty-water risks, ensuring proper cleaning agent dilution, speeding drying times, addressing operator ergonomics, etc. Though they use sophisticated technologies, micro-scrubbers are now the simpler, easier route to reliable floor cleaning.

Reliable Uptime & Self-Service Maintenance

Today's floor scrubbers are built to be incredibly reliable and easy to maintain — built to continuously and dependably tackle a specific application — whether that's a heavy-duty need or lighter-duty cleaning. The same straightforward, operator-first design that makes this new wave of scrubbers easy to use, also enables simple, self-service maintenance. They're built to make it quick and easy for staff to troubleshoot and maintain, without needing to call in OEM service support. This self-service further optimizes uptime and reliability, reduces service costs and lowers the overall cost to clean.

Value at Every Price Point

Cost can be a barrier to adopting modern cleaning technologies — not because these machines are costly, but rather because the point of comparison is a \$50 mop and bucket. But today, there are micro-scrubbers available to fit most needs and price points — from budget-conscious and light-duty cleaning solutions, to scrubbers that can tackle more heavy-duty, rigorous cleaning demands. The initial investment may be greater than a mop and bucket, but the growing range of modernized, automatic floor cleaning technologies enables businesses to choose the right tool for their needs — and begin realizing the diverse return on their investment.

HOW TO KNOW IF YOUR BUSINESS IS READY FOR MECHANIZED FLOOR CLEANING

More and more businesses are adopting mechanized floor cleaning technologies and rapidly gaining competitive advantages in their customer experience and operations. So, how can you decide if now is the right time for your business to “mechanize the mop?” The first step is to consider your overall strategic priorities. What are your biggest goals for the next year — or next five years? Modernized floor cleaning may help you achieve these goals:

ENHANCING CUSTOMER EXPERIENCE/SATISFACTION	IMPROVING LABOR/OPERATIONAL EFFICIENCY
Mechanized floor cleaning can rapidly increase your floor-cleaning performance, helping you grab customer attention and stand out from the crowd with consistently clean, sparkling floors and drive customer confidence in the health and safety of your business.	Modernized floor cleaning can enable your employees to clean more efficiently, reducing the labor cost of floor cleaning — and enabling you to re-deploy staff hours to other tasks to boost efficiency.
PROTECTING SAFE & HEALTHY SPACES	INCREASING STAFF SATISFACTION & RETENTION
Modernized floor cleaning immediately elevates the cleanliness and safety of your facilities by ensuring 100% clean-water cleaning, offering proper dilution of cleaning agents and dramatically mitigating slip-and-fall risks.	Mechanized floor cleaning reduces the physical burdens of cleaning floors, while giving staff time back for other tasks. This helps drive higher job satisfaction and retention — powering better staff productivity as well as helping eliminate staff turnover.

TIPS FOR SUCCESS

Advanced automatic scrubber technologies are easier to deploy and use than ever, making implementation of these tools a much lighter lift for small retail businesses. These tips and key areas of focus can help you drive a faster, smoother and more successful deployment of modernized floor cleaning in your business:

1. Choose the Right Model

It's important to consider the relative advantages of different models of implementing floor cleaning machines. In general, there are three options for your floor care program:

- **Self or In-House Cleaning:** Purchase equipment and supplies; hire labor.
- **Outsourced Cleaning:** Buy “the result” through use of hired cleaning contractors.
- **Hybrid Cleaning:** Purchase equipment and supplies; outsource labor.

2. Right Product/Equipment

With the wider range of floor scrubbing technologies available today, it's important to carefully select the right tools — and partner with the right manufacturer.

- **Application:** Choose a product that fits the specific use case(s) in your business.
- **Expected Lifespan:** Choose a product that aligns with your expected lifespan — how long you want to use the machine to fully realize ROI.
- **Align Price & Value:** Price is an essential factor, but make sure you choose a product whose overall value (ease of use, reliability, durability, vendor support, etc.) matches its price point.

3. Focus on Prevention & First Impressions

You know first impressions are critical — and 95% of consumers say that great cleanliness can turn a good business into a great business.¹⁹ Clean, shining floors are the literal foundation of those positive first impressions. To support your regular floor cleaning program, consider these tips:

- By placing mats in the entryways, you can reduce dirt by 80-90%.²⁰
- Small, maneuverable scrubbers and vacuums should be used to prevent dirt from being tracked further into your business.

4. Consider Spill Management

Routine floor cleaning is essential, but spills present acute challenges. Risk increases, and image suffers when spills are left to sit.

- Put in place a spill management process to increase safety for your customers and employees.
- Utilize small, micro-scrubbers for quick cleaning and water pick-up, leaving the area dry and immediately ready for customer use.

5. Staff Training

Today's micro-scrubbers are easier than ever to learn and use. But allocating proper time for staff training is still the most essential component of ensuring you realize all the benefits from more effective and efficient mechanized floor cleaning.

- Build staff buy-in by communicating the “what's in it for me” around easier, faster cleaning and reduced physical burden/risk.
- Thoroughly train staff on “right way” use of micro-scrubbers, leveraging job aids like wall charts and videos.
- Build a successful on-boarding program and frequently retrain to support cleaning compliance.

KEEPING PACE IN THE “NEW NORMAL”

Keeping up with “what’s new” has always been the name of the game for business. Whether it’s new trends, new customer expectations or needs or new technologies, you keep customers coming back by convincing them that you’ll be one step ahead in delivering what they want (even before they know they want it). But the biggest trend today has nothing to do with what’s on the shelves or what’s on the menu — it’s the experience you deliver. This trend has been dramatically amplified in the COVID19 world. More than ever, customers are judging their entire experience based on first impressions of the appearance and cleanliness of your spaces.

Fortunately, these rising expectations are perfectly timed with a new generation of simple-to-use and cost-effective cleaning technologies — like small, agile, micro-scrubbing machines. Just as the vacuum cleaner transformed the cleaning of carpeted surfaces, increasing adoption of automatic scrubbers is now transforming hard-floor cleaning in the small, tight spaces of retailers of all sizes — from big-box retailers, to convenience stores and specialty shops.

But today, businesses have an opportunity to get ahead of this wave and drive powerful competitive advantages. By leveraging modernized floor cleaning technologies, businesses can rapidly create a customer experience that stands out from the crowd, earning invaluable customer trust and loyalty and driving measurable business value on the top line. Just as critically, deploying these simple tools can rapidly power operational efficiency, productivity and staff satisfaction that drives the bottom line of your success.



READY TO MODERNIZE YOUR SMALL-SPACE CLEANING?

For more information or to find out if micro-scrubber machines may be right for you, visit us at [Tennantco.com](https://www.tennantco.com) or call us at 800.540.1399.

NOTES:

¹<https://www.deloittedigital.com/content/dam/deloittedigital/us/documents/offerings/offering-20200626-safety-cleanliness-covid.pdf>

²https://www.ey.com/en_gl/consumer-products-retail/how-to-serve-the-anxious-consumer-after-covid-19

³<https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/survey-us-consumer-sentiment-during-the-coronavirus-crisis>

⁴https://www.ey.com/en_gl/consumer-products-retail/how-to-serve-the-anxious-consumer-after-covid-19

⁵<https://www.deloittedigital.com/content/dam/deloittedigital/us/documents/offerings/offering-20200626-safety-cleanliness-covid.pdf>

⁶https://www.ey.com/en_gl/consumer-products-retail/how-to-serve-the-anxious-consumer-after-covid-19

⁷<https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/survey-us-consumer-sentiment-during-the-coronavirus-crisis>

⁸<https://www.mckinsey.com/~/media/mckinsey/industries/retail/our%20insights/how%20covid%2019%20is%20changing%20consumer%20behavior%20now%20and%20forever/how-covid-19-is-changing-consumer-behavior-now-and-forever.pdf>

⁹<https://www.gasbuddy.com/newsroom/pressrelease/957?fv=1>

¹⁰<https://www.cmonline.com/articles/survey-says>

¹¹U.S. Bureau of Labor Statistics

¹²Wolters Kluwer Legal & Regulatory U.S.

¹³U.S. Department of Labor

¹⁴Bizlibrary.com

¹⁵<https://www.popularmechanics.com/technology/gadgets/a20973/history-of-the-vacuum-cleaner/>

¹⁶ATP (Adenosine Tri-Phosphate) is the name of an energy molecule that is an indicator of biological contamination invisible to the naked eye. Detection of ATP is recognized as the most reliable quantitative monitoring and inspection method to measure the effectiveness of cleaning procedures.

¹⁷Time to clean 100 m² (≈ 1,100 sq ft) based on ISSA 612 Cleaning Times Calculator

¹⁸https://www.cdc.gov/homeandrecreationalafety/falls/data/index.html?CDC_AA_refVal=https%3A%2F%2F--90www.cdc.gov%2Fhomeandrecreationalafety%2Ffalls%2Ffallcost.html

¹⁹<https://facilityexecutive.com/2017/11/business-cleanliness-matters-to-consumers/>

²⁰<https://www.cleanlink.com/sm/article/Proper-Matting-Keeps-Entryways-Clean--13381>