

Insider Info



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Textile Care Solutions
with Michael “Stucky” Szczotka

Wet Cleaning or Dry Cleaning? A Head-to-Head Cost Comparison

If your dry cleaning machine is aging out and you're on the fence about whether to invest in a new one versus a wet cleaning system, read on for a head-to-head cost comparison. In this column, we investigate operational expenses of both options, including labor, utility costs and disposal fees, as well as purchase price and installation costs. When the numbers are crunched, there's a clear winner — wet cleaning — a technology that can also help you grow wash/dry/fold (WDF) for more revenue and profit.

WDF is an easy revenue stream to adopt as long as you have the washing and drying capacity for it. It can fall right into your current route pickup and delivery program as well. The problem is that most dry cleaners are limited on washers and dryers.

So, when faced with the dilemma of adding a wet cleaning system or dry cleaning machine, the wet cleaning system comes out on top for more than just cost savings. It wins because it not only allows you to process dry-clean only garments using water, it also gives you the capacity you need to process and grow residential WDF.

Let's get into the numbers ...

Initial Investment

First, let's evaluate the initial cost of each system. This is the amount required to purchase new alternative-solvent dry cleaning machines versus similarly sized Poseidon wet cleaning systems. See the cost breakdown in side bar. When the numbers are crunched, there's a \$60,000-\$64,000 cost differential in favor of wet cleaning. And that's just the beginning ...

Additional Capital Expenditures

Sometimes there are additional costs associated with operating a new dry cleaning machine, including upgrading boilers, chillers, air compressors and electrical. If you have to upgrade any of these because of your new dry cleaning machine, you'll spend considerably more. Whereas, if you go with a wet cleaning system, you won't.

For example, a customer of mine recently replaced a 50-pound capacity perc dry cleaning machine with an 80-pound capacity alternative solvent dry cleaning machine at \$100,000 list price. To get it installed, we had to replace existing doors in the plant and remove equipment and the slick rail. We also had to upgrade the plant's electrical.

By comparison, an 80-pound capacity wet cleaning system, which operates on two 15-amp breakers, doesn't require anything extra. So, if you add a wet cleaning system, you'll likely not have to purchase or upgrade anything else. The new wet cleaning system also helped increase WDF revenue from current customers — adding to the profits.

Yet another high-end cleaner was operating two dry cleaning machines. When one was aging out, they brought in wet cleaning. Now, they do more WDF using the wet cleaning machines. They grew that revenue stream so much, they've since added more wet cleaning machines and a flatwork ironer, which allows them to iron sheets, duvets, drapes and table linens.

Installation Costs & Hassles

Now, consider the installation process for both machines. When you get into larger capacities, installation can get tricky. Let's say you are installing that 80-pound capacity dry cleaning machine. Because of

its large footprint, it won't fit through a 42-inch door opening. But an 80-pound capacity Poseidon wet cleaning system will ...

Recently, we installed an 80-pound capacity dry cleaning machine for a customer. Because it would not fit through the doorway, we had to replace the original with a roll-up door and upgrade the electrical at a considerable cost.

If that customer had gone with an 80-pound capacity wet cleaning system instead, it would have fit through the door and eliminated the need to stop production and replace the door.

Initial Investment Wet Cleaning vs. Dry Cleaning

	60lb. Capacity	
	Poseidon Wet Cleaning System	Alternative Solvent Dry Cleaning Machine
List Price	\$37,191	\$90,400
Freight	\$825	\$2,065
Chemistry Pump/Solvent	\$1,300	\$5,000+
Basic Install	\$2,500	\$5,400
Total	41,816	\$102,865

**Wet Cleaning Saves
\$61,049**

	80lb. Capacity	
	Poseidon Wet Cleaning System	Alternative Solvent Dry Cleaning Machine
List Price	\$48,295	\$102,900
Freight	\$950	\$2,255
Chemistry Pump/Solvent	\$1,300	\$6,250+
Basic Install	\$2,700	\$6,000
Total	\$53,245	\$117,405

**Wet Cleaning Saves
\$64,160**

Operational Costs

We know now that the minimal initial investment of a 60-pound capacity dry cleaning is at least \$60,000 greater than that of a similarly sized wet cleaning system. We also know other capital expenditures and upgrades are also part of the installation and operational equation. Now, let's compare labor, chemistry/solvent, regulatory/licensing fees and utility costs.

Chemistry

Initial start-up costs for chemistry for a 60-pound capacity wet cleaning machine is around \$1,300. It's \$5,000 or more for a 60-pound capacity dry cleaning machine. From there on, there is not a huge difference.

Advantage? Wet cleaning.

Water

Water usage can vary. On the dry cleaning side, when a chiller is utilized to recycle water through a dry cleaning machine, very little water is used. But a chiller costs between \$15,000 and \$45,000. The other way to cool a dry cleaning machine is through the use of a cooling/water tower. These are located on the roof, so they can lose some water through evaporation, and at certain times of the year, can't be utilized because of high temperatures and extremely high humidity levels. When this happens, plants rely on city water to cool the dry cleaning machines.

In general, a 60-pound capacity wet cleaning machine uses 40 gallons of water per load, and over the course of a year, would go through as much water as a dry cleaning machine hooked to a water tower. A dry cleaning machine hooked to a chiller is most water efficient. The only problem is that this scenario requires a costly initial investment.

Electricity

When it comes to electricity, wet cleaning wins. This is because a dry cleaning machine requires 60-90 amps to operate, whereas a wet cleaning system requires just two 15 amps.

Natural Gas

Natural gas usage follows suit. The boiler needed to operate a dry cleaning machine uses 670,000 BTUs, which dwarfs the wet cleaning requirement of 118,000 BTUs. Plus, a boiler will run until all plant production is completed for the day. A wet cleaning system dryer operates in 15-20 minute increments a dozen times a day. Again, wet cleaning wins.

Labor

When compared, labor costs are very similar in both dry cleaning and wet cleaning. Spotting likely involves less time on the wet cleaning side because 90 percent of stains are water-soluble. They come out when they are wet cleaned. And as long as the wet cleaning machine is partnered with a properly programmed dryer (so items come out of the dryer at the proper moisture levels) finishing time is about the same as that of dry cleaned garments.

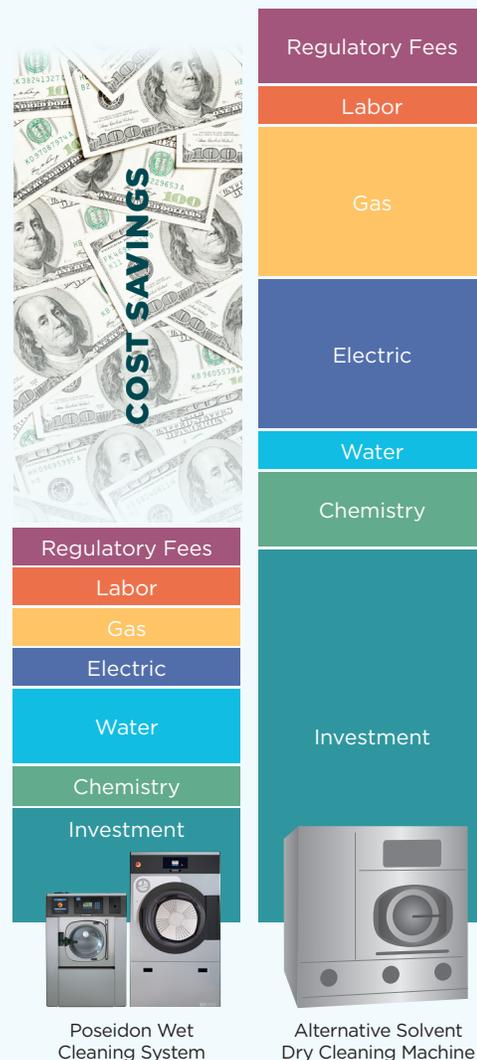
Without a controlled drying process, wet cleaned items might take more labor time to finish. For these reasons, labor costs are a draw.

Regulatory & Waste Disposal Fees

Finally, regulatory fees and waste disposal costs are not uniform across the country because each state has its own set of laws. But you can be sure there are never disposal or regulatory costs for wet cleaning.

Dry cleaning is another story. Michigan dry cleaners, for example, are inspected annually and licensed through the Environmental Great Lakes and Energy (EGLE). They are charged a fee based on the size of the dry cleaning machines in their plants. Additionally, still-bottom-solvent wastes must be picked up and disposed of, which costs hundreds per drum.

Operational Cost Savings Wet Cleaning vs. Dry Cleaning



I recently had a customer dish out \$1,130 for a 35-gallon drum for a still-bottom/water separator, as well as a 35-gallon drum for filters.

Wet Cleaning — Half of the Cost of Dry Cleaning

At the end of the day — when all factors are considered — wet cleaning costs are thousands less than those of dry cleaning. The other benefit? A new wet cleaning system will allow you to expand and grow WDF.

My recommendation? Make wet cleaning a larger part of your plant's production for less than half the cost of dry cleaning, 50 percent more throughput, and the ability to significantly grow WDF business and revenue. Instead of replacing an aging dry cleaning machine, install the wet cleaning set for huge savings.

Michael "Stucky" Szczotka, owner of Eagle Star Equipment, in Troy, Mich., is a textile care, dry cleaning and wet cleaning expert with more than 45 years of hands-on industry operations experience. He is a frequent contributor to industry journals and associations.

