



## BLOG

# Choosing a Parts Washer That's Right for You

To meet the changing and specific needs of users, parts washers have continued to evolve. Because of this, you now have a large and varied range of products to choose from, including the option to create a customized parts washer.

Having more options available means there is a parts washer that will work perfectly for your job and your business – it just may take more research to find the right fit.

We're here to help. Here are a few important things you need to know when choosing a parts washer.

## KEY QUESTIONS

Despite the fact that the industry has expanded to accommodate many different brands and styles, parts washers can still be divided into two main segments: manual and automated (semi/full automation) cleaning. Daily, high volume cleaning or bulky, heavy parts generally points to some level of automated cleaning, while the majority of manual parts washers are used in lower volume fields like maintenance and repair.

Once you know whether you're looking for a manual or automated washer, there are a few crucial questions that will help you decide what's going to be right for your job:

- What contaminants will you be removing?
- What are the size and weight ranges of the items to be cleaned, and will these items change in the future?
- What is the average volume of parts you will be cleaning daily? Will this be increasing?
- When you say you need an item clean – what's your standard of clean?

- What environmental regulations do you need to meet?

If you're looking for an automated parts washer, what level of automation would you like?

What does your budget look like? If there's a set amount you can spend, that can factor into what your options look like.

Now that you have a better idea of the needs and requirements of your future parts washer, you can move on to choosing a parts washing style that will fit these needs best.

## MANUAL PARTS WASHER STYLES

Manual parts washers are the most common in the industry. Best suited for low-volume items, they are typically constructed of a sink on a drum or vat. These machines are ideal for smaller parts, where contaminants can be removed with a brush under low pressure.

There are a few extra features that can be incorporated into your manual parts washer. For example:

**Brush:** Brushes are a common accessory for manual parts washing and are normally used in conjunction with most manual machines. The brush removes contaminants loosened by the cleaning fluid and allows you to get into cracks and hard-to-reach places. Some brushes can even be attached to the flexible solvent hose used in many manual parts washers. There are a variety of brushes available to meet your needs.

**Soak:** This style is perfect for someone looking for a basic parts washer as it is the simplest, least aggressive cleaning action. With a soaking parts washer, you first have to determine if you want to use a solvent or an aqueous fluid (more on this later). Parts



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are cleaned by placing them in the tank, usually fully submerged. The longer the part is soaked, the more effective it becomes.

**Cleaning Fluid Movement:** Cleaning fluid with movement is more effective than without movement. By adding cleaning fluid movement, usually through an industrial grade pump, the fluid becomes more aggressive.

**Directed Stream:** If you're looking to flush parts while brushing, this cleaning action is particularly effective. Directed stream involves a low-pressure stream of solvent or heated aqueous fluid, and it's directed to a flexible hose which then can be positioned over the part to loosen any stuck-on contaminants. You can combine this cleaning action with brushing to increase its effectiveness.

**Bioremediation:** A newer technology, bioremediation is usually found only in manual parts washers. Bioremediation parts washers stand out from normal manual solvent and aqueous units in two ways: their cleaning fluid, which contains hydrocarbon digesting microbes, and the fact that the fluid is heated and continually circulated to keep it aerated. The microbes in this fluid work to remove carbon dioxide and convert greases and oils removed from the parts into water. This fluid is safe to use, and, because this solution eliminates oils and greases, it provides longer life to your fluid and reduced disposal needs.

## Ultrasonic Parts Washers

Ultrasonic parts washers are best for items that require a higher standard of cleaning. They can be used both alone or in conjunction with other cleaning methods. In operation, an attached generator creates a signal to transducers bonded to the bottom of the washer, which converts into mechanical energy. This energy forms thousands of microscopic "bubbles." As these bubbles collapse, they release tremendous energy against the objects immersed in the tank which removes the contamination and cleans the part thoroughly.

## High-Pressure Spray Parts Washers

Quick and effective cleaning is accomplished by a powerful spray of heated, water-based cleaning solution. The continuous high-pressure spray blasts away the toughest deposits without damaging precision parts. The high-pressure spray is usually around 600 Psi, which is strong enough to remove heavy contamination but not enough to damage parts.

There are two types of high-pressure spray units, one of which is manual and one of which is automated:

**Manual Cabinet Washers:** With manual cabinet washers, parts are placed inside of a cabinet behind a sealed door, and the operator views the part through a window. A high-pressure pump directs an adjustable stream of heated fluid directly at the part. Unlike closed cabinets, the operator can see the areas of contamination through a window and direct the stream at it. Recesses, blind holes, and crevices can receive the full force of the heated fluid.

**Spray Washers:** With automated spray washers, parts are put on a turntable inside of the cabinet. A heated aqueous solution is sprayed by a high-pressure pump from a number of nozzles as the turntable rotates. Once a preset time has passed, if the part is cleaned to the user's satisfaction, it is taken out. If not, simply adjust the part's position and repeat the process.

## AUTOMATED PARTS WASHER STYLES

Able to withstand more than manual parts washers, automated parts washers are intended for parts that are cleaned for more than around 45 minutes per day. Because of their time-saving ability to free up manual labor in favor of important operational tasks, automated parts washers often end up saving businesses money.



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Here are two popular styles of automated parts washers:

**Conveyorized Parts Washers:** These systems are fully automatic, use heated aqueous solution, and often consist of a conveyor which moves the item to be cleaned from one end through a tunnel and out the other end. Within the enclosed tunnel, there can be sections for washing, rinsing, drying, or any number of combinations of these stations.

**Total Immersion Cleaning System:** Normally fully automatic, these units consist of a tank, vertical lift platform, heat, and a circulating industrial grade pump. Dirty items are placed on the platform, which can then be lowered into the soak mode for a preset time, or the vertical platform agitation can be activated. At the end of the preset cycle, the cover raises, and the platform comes to the unload position, all automatically.

## CLEANING FLUIDS

Now that you've found a style of parts washer that will work best, it's time to choose a cleaning fluid. Without a cleaning fluid that meets your needs for removing contamination, your parts washer won't reach its optimum cleaning ability.

While there are numerous types of cleaning products, the two most common types are solvent and aqueous (water-based)

**Solvent:** This is the most widely used cleaning material in the repair and maintenance industries, mainly because it works quickly, removes a wide variety of contaminants, and doesn't need drying. Solvents can be used in both manual applications and full immersion units.

**Aqueous:** Aqueous solutions are used often in industrial applications and areas where the level of contamination is not as severe as repair and maintenance. These solutions must be heated to be effective, so be sure to check the compatibility of your parts washer. If you're looking for a parts washer that works well with aqueous solutions, try plastic and stainless steel.

## Looking for a Second Opinion?

Even when you have a decent idea of what you're looking for, many first-time buyers of parts washers can feel overwhelmed by the mere number of choices and finding the one that works best for them.

If you're feeling like you could use an expert's help, give us a call! We'll listen to what you're looking for in your future parts washer and help select the perfect machine to get the job done right. If we can't find the right machine for your unique needs, we'll make it ourselves.

**Contact us today to get started on finding the perfect parts washer for your business.**