Washing Machine Buying Guide

Before shopping for a new washing machine, buyers will benefit from a bit of research done up front. Details on the two major types of washers will help shoppers decide between the two models. Information on wash cycles will help users of washing machines understand which settings to look for and which ones to use for which items. A note on Energy Star ratings is also made, and shopping assistance is given to help buyers find the right washing machine for them.

History of Washing Machines

Clothes were originally washed by hand in rivers and streams. People used rocks to pound out the dirt or used gritty sand to rub out the dirt. Early cleansers included soap made from the soapwort plant and lye soap made from ashes and animal fat.

As far as mechanical aids to washing clothes, the following chart summarizes the timeline of various inventions leading up to today’s washing machine.

| Year | Event |
| --- | --- |
| 1797 | The scrub board is invented |
| 1851 | American inventor James King is granted a patent for his hand-powered washing machine with drum |
| 1858 | The rotary washing machine is patented; the inventor is Hamilton Smith |
| 1876 | The Centennial International Exhibition in Philadelphia displays the Triumph Rotary Washer, invented by Margaret Colvin |
| 1893 | Maytag Corporation is founded in Iowa |
| 1907 | [Maytag](http://www.ebay.com/sch/Washing-Machines-/71256/i.html?_jid=v4-1346892720857&_catref=1&_dcat=71256&Brand=Maytag) introduces a washing machine with a wooden tub |
| 1908 | The first electric washing machine, called the Thor, is produced by the Hurley Machine Company of Chicago; inventor Alva J. Fisher is granted a patent in 1910 (information on a previous electric washer patent remains a mystery) |
| 1911 | Upton Machine Company, which manufactures wringer washers, is founded in Michigan; the company would eventually become[Whirlpool](http://www.ebay.com/sch/Washing-Machines-/71256/i.html?_jid=v4-1346892720857&_catref=1&_dcat=71256&Brand=Whirlpool) |
| 1934 | Andrew Clein of Texas opens the first laundromat |
| 1937 | The first automatic washing machine is produced by Bendix Corporation |
| 1978 | Washing machines feature microchip technology |

For over 200 years, people have strived to improve the technique of clothes washing, and the history of the washing machine is quite extensive. Through all of these developments, to this day, there are still two primary kinds of clothes washers: top loaders and front loaders.

Top Loaders vs. Front Loaders

The two most commonly available types of washing machines are top - loading and front - loading models. The following table gives a brief comparison of the features in each type.

| Features | Top Loaders | Front Loaders |
| --- | --- | --- |
| Cost | Lower | Higher |
| Noise | Louder | Quieter |
| Water use | More | Less |
| Maintenance | Less | More |
| Water leakage | Less prone | More prone |
| Special item care | More difficult | Easier |
| Wash cycle | Shorter | Longer |
| Spin cycle | Faster | Slower |
| Efficiency | Lower | Higher |

Each type of washer is discussed in further detail below.

Top-Loading Washing Machines

Machines that load from the top normally feature hinged lid at the top to cover the opening. Clothes are loaded into a perforated basket that sits inside a tub that fills with water. An agitator at the bottom moves the water and clothing throughout the length of the predetermined wash cycle. The soapy water is then drained from the tub by a spraying and spinning action, and the tub refills with clean water to begin the rinse cycle. Once the clothes are rinsed, the water is again drained from the tub, and the basket spins at a high speed, using centrifugal force to move water out through the holes in the basket and into the tub where it can be drained away.

Front-Loading Washing Machines

Front-loaders have a circular glass door (which usually contains a clear window) at the front and a horizontally oriented basket and tub. Clothes are loaded through the front of the machine, after which the door is shut. The door features a special gasket or seal to prevent leakage. When the wash cycle begins, the tub fills up with just enough water to wet the clothes, which is determined by a water-level sensor. The clothes begin turning during the filling of the tub in order to get the clothes wet faster. Then, in a similar fashion to a tumble dryer, the clothes are moved up the walls of the turning basket until they drop down because of gravity. This process is repeated over and over throughout the cycle. With less water and a more vigorous cleaning action, less detergent is needed. The aerating property of the tumbling action also requires that either a low-sudsing detergent be used or a much smaller amount of regular detergent. The rinse cycle is executed in much the same way, and the spin cycle is standard, with gravity facilitating the extraction of water.

There are systems that can both wash and dry clothes in one machine. They use more energy but take up less space, and so again, they are more common in Europe. No matter which type of washing machine is used, the cycles are essentially the same.

Washing Machine Cycles

No matter which type of washing machine is used, the cleaning action is basically performed in three steps: washing, rinsing, and spinning.

Washing

The wash cycle can be run using hot, warm, or cold water. Most wash cycles last anywhere from four to 15 minutes, depending on the settings. Many environmentalists choose to run cold cycles every time, although this does cut the cleaning action of detergent as well as reduce disinfecting action. Modern machines offer several different types of cycles, examples of which are described in the table below.

| Wash Cycle | Properties | Best For |
| --- | --- | --- |
| Heavy duty | Features a longer cycle, extra soaking time, and/or more vigorous agitation | Diapers; towels; jeans; throw rugs; filthy clothes, such as those worn by farmers, auto mechanics, athletes, or children |
| Regular | Vigorous wash and spin cycles | Cottons, cotton blends, synthetics, most everyday clothes and linens |
| Permanent press | Vigorous wash cycle and gentle spin cycle; clothes are left damper at the end of the spin cycle to prevent wrinkling | Permanent-press fabrics, usually synthetic or synthetic-blend shirts and slacks |
| Delicate | Gentle wash and spin cycles, possibly a soaking cycle | Intimates and lingerie, swimsuits, washable silk and wool |
| Hand wash | Gentle wash and spin cycles, with even more soaking and less swishing or tumbling than the Delicate cycle | Vintage garments, embellished pieces, hand-knit or -crocheted items |
| Sanitary | Superhot water and steam are used to eliminate bacteria and allergens | Diapers, work clothes, clothes worn by those who suffer from allergies |
| Light wash | Features a short wash cycle | Rush jobs, clothes that need freshening but are not dirty per se |
| Rinse and spin | No wash cycle | Items that have been hand laundered, clothes that have gotten wet but not dirty |

Overall, the trick is to find a machine that offers cycles that wash clothes thoroughly and remove stains, yet do not damage fibers and wear out clothing.

Rinsing

Rinse cycles are designed to use a low amount of water in order to conserve resources, but some homeowners find that they experience subsequent skin irritation or a residue left on the clothes. Many machines feature an Extra Rinse option; people who own washers without this feature can manually restart the rinse cycle for a second rinse, although this takes longer and uses more energy than a rinse cycle that uses more water in the first place.

Spinning

The spinning process removes excess water from the clean clothes before they are transferred to a clothesline or dryer. Without spinning, a clothesline would hardly hold the weight of a full load of sopping wet clothes, not to mention that drying time would be greatly increased. Putting wet clothes into a hot dryer creates steam, and again, the clothes will take much longer to dry, only instead of merely waiting time as with a clothesline, the consumer is spending extra money and wasting energy. Therefore, a washer with an effective spin cycle is important.

Energy Star Compliance and NSF Certification

Two features worth looking into on washing machine purchases are the Energy Star rating and the NSF certification. Energy Star indicates an appliance that uses considerably less energy than what is required by federal standards, and the NSF certification verifies that allergies and/or germs will be removed in a wash cycle.

Energy Star Washing Machines

The Energy Star rating process for consumer products is the brainchild of two U.S. government agencies: the Environmental Protection Agency (EPA) and the Department of Energy. Since 1992, this standard has been applied to all sorts of home appliances and adopted by several other countries. Products that earn the Energy Star label must achieve a certain percentage of improvement over the federal standards for energy efficiency. Washing machines have been rated since 1997. Clothes washers that are [certified by Energy Star](http://www.ebay.com/sch/Washing-Machines-/71256/i.html?_jid=v4-1346892720857&_catref=1&_dcat=71256&Energy%2520Star=Compliant&rt=nc) generally use 20 to 30 percent less energy and 35 to 50 percent less water than standard washing machines. For more information, please visit the U.S. government’s Energy Star website and click on the four tabs presented to read all about energy-efficient washers

Conclusion

Washing machines are essential appliances in modern life. Keeping clothes clean is essential to personal hygiene and one’s overall image. Buying a washer that does its job efficiently while minimizing its draw on precious resources and protecting clothes is a worthwhile investment of time and money. The main decision for buyers is whether to buy a top-loading or front-loading model; each has pros and cons, so the choice really depends on the individual and his or her circumstances. Energy Star and NSF certifications are the next important choices. Specific wash, rinse, and spin cycle settings may be of concern to those who have special requirements, such as daily loads of diapers or a large quantity of antique clothing. Once these decisions have been made, shoppers will have no trouble finding the ideal washing machine to suit all of their laundry needs.

**Before You Shop**

**Measure your space, weigh your options.**

**Width:**Keep in mind that washers and dryers need one inch of space on either side for air circulation.

**Depth:** Add six inches of space for door clearance, dryer vents and hookups.

**Height:** Top loaders need an added 20 inches of above-machine clearance for the door.

If space is at a premium, consider going vertical. There are many viable compact laundry centers. And don’t forget that some front-loading washers and dryers may be stacked for space savings.

**Explore Your Options**

 **Benefits of Top-Loaders:**

•No bending or kneeling

•Largest capacity

•Traditional look

**Benefits of Front-Loaders:**

•Additional storage space underneath the machine if placed on a pedestal

•Optional steam sanitation feature for a deeper clean

•Special cycles that allow a load to be washed and dried in the same machine

**Things to Consider**

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**TUB CAPACITY.**

This term refers to the inside wash tub and is measured in cubic feet. A large capacity washer lessens laundry loads, which is perfect for growing families and those who wash bulky items at home. For reference, a 4.5 cu. ft. washer fits 25-50 bath towels. As a rule, it’s usually best to choose the largest capacity your space will allow.

**LAUNDRY HABITS.**

Are you guilty of washing a load and letting it sit? You might want to look for Wash Now, Dry Later capabilities. Do you wear fabrics that require lots of TLC? Insist on a Delicate cycle to avoid hand washing.

Today’s washing machine features take the hassle out of special cleaning challenges. Additional features to consider: add a garment, quick wash, delayed wash, sanitation, steam cleaning and advanced cleaning technology that automatically releases oxygen based cleansers to brighten without bleach.

**NOISE.**

A quiet machine is essential if it’s to be placed near a living area or bedroom. Check the machine’s specifications for vibration reduction and look for added insulation and improved suspension for quiet operation.

**SAVINGS.**

Most washers on the market are already Energy Star® qualified, but it pays to check the washer’s performance according to the Consortium for Energy Efficiency or the CEE. The CEE denotes tiers based on a machine’s Modified Energy Factor and Water factors. The more efficient the unit and the less water it uses, the higher its tier.

High Efficiency or HE washers are Energy Star® qualified and have higher spin speeds to remove more water from laundry, reducing dry time.

You may pay a little more up front for washers with outstanding ratings, but you’ll offset that cost over the life of your washer by conserving energy and water. For example, some washers save up to 7,000 gallons of water each year. That’s enough for 3,000 showers. A worthy trade, no?

**FASHION OR FUNCTION.**

Finally, consider a matching set. It’s not only aesthetically pleasing, your washer and dryer are actually engineered to work together. Factors like spin speed mean reduced drying time and your matching dryer will feature special cycles and sensors to accommodate the function, ensuring clothes are never over-dried, making them last longer for additional monetary savings.