

Shopper's Guide to Clothes Washers



Washers vary somewhat according to features, though all washers get clothes clean.

Differences in energy efficiency, water use and noise level are more pronounced. Operating cost is driven by water use and the amount of water extracted impacts the cost of drying the load of laundry.

Hot water used by conventional washers can account for 26% of a home's hot water bill.

Electricity use for standard top-loading washers vary from the most efficient model at 267 kWh per year to the least efficient model at 1818 kWh per year – or roughly an annual cost range of \$26.00 to \$180.00. Up to 90% of the cost is for heating water. About 20% of washers less than 5 years old will require a repair.

Washers have an average life of 13 years and could still be living with you much longer! Therefore, the lowest cost for the features you want is not necessarily the best deal. The purchase price is only the “down payment” on your washer since you will also pay monthly installments for their maintenance and operation. Be sure to factor in the total cost of owning your washer as you shop.

Primary shopping considerations include the capacity of the washer, and settings for water temperature, water level, and spin speeds. Pre-soak and suds-saver options also save energy. Look at the drum and make sure the holes are smooth and won't accumulate lint and cause pilling. Porcelain over metal can rust if chipped and porcelain exteriors will not scratch as easily as painted finishes.

Energy Efficiency Consideration

The amount of water used is a key efficiency consideration. The most efficient (and more expensive, up front) models are front

loading and use a horizontal axis. This is because clothes are tumbled through water without requiring full immersion of the clothes, therefore using 30-60% less hot/warm water and 50-70% less energy. They also extract more moisture and reduce drying time. One vendor offers a top-loading model with a horizontal axis and has similar energy efficiency advantages and other top-loading models will likely be on the market in the next few years.

Machines built after January 2001 require a modified energy factor of 1.26 or greater for a 1.6 cubic foot capacity machine. This is a measure of the volume of clothes washed, in cubic feet, per one kilowatt hour of electricity used while taking into account the amount of moisture the dryer will need to remove. The higher the number, the greater the energy efficiency. The factor varies with capacity.

The EnergyGuide can help compare models but won't reflect your own cost if you are using energy saving features. Also, smaller capacity units are more efficient, but only when load size is appropriate for the household. The cost is based on standard cycles without the use of optional energy-saving controls. Some high-end models automatically sense load size, the dirtiness of the water, and even fabric type and adjust the water level and wash cycles accordingly.

Energy Star washers use 35 –50% less water (18-25 gal. For a full-sized washer) and more than 50% less energy per load.. Top loading washers spray clothes with repeated high pressure rinses to remove soap, rather

Star washers claim to be designed to cause less wear and tear and fewer wrinkles on clothes. Consider shopping for Energy Star models. They represent the top 25% of competing appliance types, ranked for energy efficiency – another seal of approval.

Clothes Washer Efficiency

Tub Volume	Annual Energy Consumption	
	Recommended	Best Available
1.6 – 2.0 cu. feet	315 kWh or less	176 kWh
2.1 – 2/6 cu. feet	415 kWh or less	259 kWh
2.7 – 3.7 cu. feet	520 kWh or less	282 kWh

Hot, Warm or Cold?

Wash/Rinse Setting	kWh/year
Hot/Cold	1547
Warm/Cold	825
Cold/Cold	103

Note that “cold” should be 70 degrees to make detergents more effective, so in our climate, some hot water will be blended when automatic temperature control is a feature of your machine.

(Adapted from Residential Appliances (1994), E SOURCE. Assumes typical 39 gallon model, 380 cycles/year and electrically heated water.)

Other things to ponder before you shop

What capacity will you need during the life of your machines? Partial loading is not an efficient way to use a washer and dryer, so bigger is not necessarily better...unless it's

what you need. One large load takes less energy than two small loads. However, overloading the dryer will cause uneven drying and wrinkles.

How much space do you have? Think about clearance for hoses and doors. Write your measurement here. _____**. For small spaces, stacking models and models that both wash and dry in the same machine are available. **Take a tape measure shopping.

What features do you really need? Some washers and dryers have temperature boosters, for instance. How important is it to kill “99.9%” of the types of bacteria that may be present in laundry? If it is – check out those models with sanitizing features.

Look for the best combination of performance, efficiency, convenience and price that you can afford.

Save Energy dollars with these tips

- Wash full loads.
- If a partial load is washed, set the water level appropriately.
- Use warm and cold water settings. In our climate, warm water washing is the appropriate setting unless water temperature is controlled by a thermostat so that “cold” is at 70 degrees.
- Only oily stains might require hot water washing.

- Rinses should be with cold water. There's nothing to be gained with warm or hot water.
- To extract more water and reduce drying time, use a higher rpm setting for the spin cycle or spin the load a second time, particularly for heavy loads.

More from the internet

Energy Star website www.energystar.gov

Energy Savers, Dept. of Energy
www.eren.doe.gov/consumerinfo/energy_savers/

Why buy Energy Efficiency Appliances?
DOE, EREN www.eren.doe.gov/buildings/consumer_information/index.html

Rocky Mountain Institute, Home Energy Brief
www.greendesign.net/rmi/heb

Energy Solution Resources and Links
www.energyideas.org/energy_solutions
www.appliance.com

Appliance ratings and repair history for a small fee and other free consumer advice.
www.consumerreports.org

Top Rated Energy Efficient Appliances
www.aceee.org/consumerguide

Most major brands have websites –
brandname.com