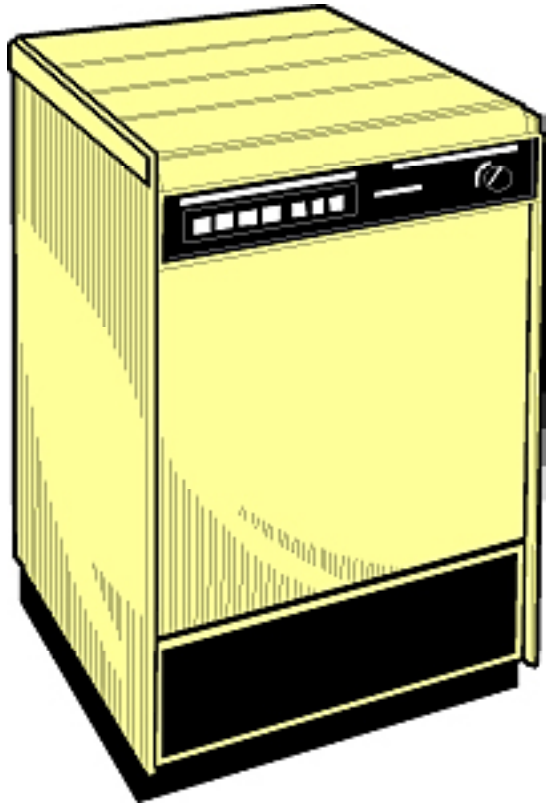


Shopper's Guide to Dishwashers



Dishwashers have gotten quieter and more energy efficient over the years, about 50% more efficient than those going back 25 years. Most of the energy used by a dishwasher is for heating the water. The circulation pump and dryer account for the rest. Energy efficient models use less water.

When you're shopping for a dishwasher, performance, dependability, energy efficiency and convenience are key considerations...along with the price. Dishwashers have an average life of 13 years, so the long term operating cost should be included in your decision.

Energy efficiency gains for new dishwashers are largely due to improved spray arms and filtering systems that provide better movement and wash action, resulting in decreased water use.

Before you shop

Will changes in your household affect your dishwashing needs: people, physical needs, home based vs. outside eating and entertaining?

If you've got items that don't fit well in your current washer, take a sampling with you when you shop and test different models. Most standard built-in models fit into 24 inch wide areas. Take a tape measure shopping if you have other space needs to work around.

Consider these features

An internal water heater booster can save 20% on water heating costs by allowing you to turn your water heater to 120 degrees F.



This should be hot enough to remove most greasy foods. A thermostatic setting that is only used when needed is an even more energy efficient way to go than the pre-set booster.

The "No-heat" or "energy saver" option takes longer, but dries the dishes just as well by circulating air with fans. This feature is required on new models and is worth using.

The wash system

Look for wash arms and towers that provide good coverage without sacrificing space. Look at the size and number of holes in the spray arms. Smaller holes can create a finer, more vigorous spray for greater scrubbing action. A quality filtering system prevents food from being re-deposited on your dishes. All water should at least filter through a very fine mesh. Some filter a second time, for even greater effectiveness. Another option uses a food disposer with blades for chopping food into tiny particles that are then removed with the drain water. Find out what's involved for routine cleaning and maintenance.

Soil-sensing dishwashers

Forty percent of the models use sensors to sense how dirty dishes are, and then automatically set the length of cycles and the temperature needed to clean your dishes. Additionally, soil-sensing dishwashers will "limit" water used according to the job to be done – and if dishes are very dirty, this feature significantly increases water and energy use. Consumer Reports finds that these sensors do not noticeably clean any better than models without sensors. Read the EnergyGuide section for warnings associated with using the Guide and the Energy Star designation.

Water use

Most models use 4 ½ to 10 gallons per normal cycle. Since about 80% of the energy cost is associated with water use, it's the largest single long term cost component. Compare models with this

factor in mind. A metered approach to judging water levels is more efficient than a timer. Find out how much water is used for particular cycles, as machines vary considerably.

Sound dampening

Sound dampening is most effective when the entire tub is insulated. Materials used for the tub liner may also help.

Dependability

According to Consumer Reports, almost 20% of dishwashers will need some repair in their first five years, so check out the warranty. Where major components are located near the front, a shorter service call is possible. A stainless steel tub lining can last forever, whereas plastic ones can discolor or crack, though even these tubs often come with a long warranty. The simplest pump and motor design may be better.

Also look at the material used to cover the racks. Nylon is considered more durable than vinyl. Look for thick, ball shaped tips on the tines to help protect these racks and better cushion your dishes.

Federal efficiency standards

The minimum energy efficiency standard for standard sized dishwashers is 700 kWh/year, using electric water heating. The base model has an Energy Factor of 0.46 and is based on 322 wash cycles per year with full loads, using the normal setting and clean dishes.

A word to the wise...

The EnergyGuide takes the Federal standards and compares energy use of similar models. Be aware that the number won't tell the full tale. Your energy use can vary substantially depending on the setting options you use most and the condition of the dishes you usually wash.

****Models with soil sensors can use much more water and therefore energy than the EnergyGuide will show. Conversely, those models without sensors can appear to be less energy efficient, since water use does not vary according to the cleanliness of dishes. So use the EnergyGuide only as one source of information. Know how the dishwasher is controlling water use and the condition of dishes your dishwasher will clean, to get a better idea of real-world energy performance.**

Energy Star +/-

Given problems described above, some models may not really be "Energy Stars," so, Buyer Beware. Energy Star dishwashers exceed the federal minimum energy use standards by at least 15% and have an Energy Factor of 0.58 or greater. Given clean dishes, the Energy Star models use 555 kWh or less annually. The most efficient model uses 277 kWh/year.

Energy-saving tips

- The energy savings of new models may be lost if you pre-rinse dishes. Soak or rinse with cold water, in cases of burned-on or dried-on food. Most newer models require only that food be scraped off and liquids emptied.
- Load dishes according to the manufacturer's instructions and allow for proper water circulation.

- Don't use the "rinse hold" cycle for just a few dishes since it uses 3–7 gallons of water each time you use it.
- Wash only full loads.
- Use the air-dry feature. If your washer doesn't have this, stop the machine before the drying cycle begins, open the doors and pull out the racks to let the dishes air-dry.
- Use "light wash" or "energy saving" wash cycles whenever possible. This saves on hot water and the dishwasher operates for a shorter time.
- Check drains and filters to make sure they are not clogged with food.
- Because dishwashers produce moisture that causes refrigerators and freezers to use more energy, try to locate your dishwasher away from those appliances.

More from the internet

- www.aceee.org/consumerguide (Top Rated Energy Efficient Appliances)
- 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
- For appliance ratings and repair history for a small fee and other free consumer advice: www.consumerreports.org
- Check "brandname".com, too.