

4 domestic appliances



Dishwashers and washing machines account for around 16% of the total volume of water used in a typical household.

New washing machines use about half the water and energy of the average 10-year-old machine. Most new washing machines now use less than 50 litres of water per 6kg wash and the most efficient machines claim less than 40 litres for the same 6kg load. However, some washer-dryers use mains water to condense moisture which means they don't need an external vent. This can increase water consumption to between 100 and 170 litres per wash even though most machines cannot dry the whole load because of the smaller drum.

Dishwashers are also becoming more water and energy-efficient, with the most efficient machines using as little as 12 litres to wash 12 place settings.

Whilst there is still potential for technical improvement from manufacturers, the greatest savings are now to be achieved by using the appliances carefully, for example only washing full loads and not rinsing dishes before putting them in the machine.

Although it is common for washing machines and dishwashers to have half-load programmes, full loads are still far more water efficient. However, a survey by Which? revealed that a typical household clothes wash weighs around 2kg¹⁵, although most machines are now designed to be able to take 6kg¹⁶.

The price of efficiency

Being efficient with water and energy no longer carries a price premium. Whilst quality and features do vary with price, budget washing machines are available that claim less than 50 litres per wash and some of the cheapest dishwashers claim a respectable 14 litres to wash 12 place settings¹⁷.

Machine or hand wash?

Whilst few people would argue for hand washing clothes, opinions and preference vary when it comes to dishwashers. Dishwashers now use between 12 and 18 litres to wash 12 place settings and Which? estimates that washing the same crockery by hand would use 40 litres of hot water.

So if you dislike washing up then a dishwasher is easily justified, but avoid rinsing items before putting them in the machine and make sure it is full before switching it on. However, if you want to save cash and kitchen space, then careful washing up by hand using water heated by gas or solar and modest amounts of washing up liquid is probably the greenest option.

¹⁵ Which? Online product testing report, August 2000

¹⁶ www.waterwise.org

¹⁷ *The Economics of Water Efficient Products in the Household*, Environment Agency 2003.

Should I replace my machine?

The typical lifespan of both washing machines and dishwashers is about eight years. It is not normally sensible to replace a reliable machine with a new model unless you use it very often. However, since about 90 per cent of the life cycle impact of white goods is due to operation and only around 10 per cent is due to manufacture and disposal, it might be more economical and even environmentally responsible, to replace an older machine with a more efficient one rather than paying to have it repaired.

Choosing a machine

All new washing machines and dishwashers must display an energy label. The energy label allows buyers to compare the energy efficiency and water consumption of each machine. “A” rated machines are the most, and “G” rated machines the least, energy efficient. Water consumption is listed separately. These labels are a useful tool but testing by Which? has produced different results to those shown on the labels. You can keep up to date by referring to Which? magazine, which tests a new range of appliances about once a year. Which? is not able to test all machines, but you can use their results together with the energy label to help you make an informed choice.

Whilst 6kg is the standard load size, machines are now available with up to a 10kg capacity. Bigger machines generally use less water per kilogram washed but only if fully loaded.

Further information

Department of the Environment, Food and Rural Affairs (Defra): www.defra.gov.uk/environment/consumerprod/energylabels/index.htm

Which? Online: www.which.co.uk