

Guidelines for Frontrunner Public Procurers

Dishwashers

Updated: June 2018



Why follow Topten criteria?

- Topten.eu Pro (www.topten.eu/professional) is a European web portal helping buyers, professionals, public procurers and large buyers to find **the most energy efficient products available in Europe**. The products are selected and updated continuously, according to their high energy and environmental performances, independently from the manufacturers.
- All dishwashers displayed on www.topten.eu meet the criteria contained in these guidelines. Procurers can therefore use the website to check the availability and assortment of products currently on the market, which meet the **Topten selection criteria**.
- Topten.eu Pro links to national partners Topten Pro websites and is developed under the Topten Act project, supported by the European Union through Horizon 2020 programme.

How much can you save?

The category dishwashers, listed on www.topten.eu, includes freestanding and built-in models, with different number of place settings. Considering the following assumptions, it is possible to achieve the savings indicated in the next table.

- Assumptions
- Life time expectation: 15 years
 - Water cost: 2,6 €/m³
 - Electricity cost: 0,20 €/kWh

	Topten model	Inefficient model	Topten model	Inefficient model
Type of installation / capacity	Freestanding / 13 place settings	Freestanding / 12 place settings	Built-in / 13 place settings	Built-in / 13 place settings
Energy class / drying class	A+++ / A	A+ / A	A+++ / A	A+ / A
Electricity consumption	211 kWh/year	290 kWh/year	155 kWh/year	295 kWh/year
Water consumption	2100 l/year	3080 l/year	2464 l/year	3640 l/year
Use cost (electricity and water in 15 years)	715 €	990 €	561 €	1027 €
Savings in 15 years	27% energy + 31% water / unit 275 €/unit (energy + water)		47% energy + 32% water / unit 466 €/unit (energy + water)	

Topten models can consume about 47% less energy and 32% less water compared to inefficient models and can reach around 470€ /unit in energy and water savings over their lifetime.

Procurement criteria

The following criteria can be inserted directly into tendering documents. The Topten selection criteria and the product lists are updated regularly. The newest versions are always available at www.topten.eu/pro.

SUBJECT: HIGHLY ENERGY-EFFICIENT DISHWASHERS

TECHNICAL SPECIFICATIONS

1. Energy class

Dishwashers must have energy efficiency class A+++, according to European Energy Label.

2. Drying class

Models must have drying class A, according to European Energy Label.

3. Annual water consumption

The maximum annual water consumption is 2800 litres per year.

4. Valve of water/flood protection

Models must have a valve to prevent flooding.

5. Hot water supply

Dishwashers must be ready to be directly connected to hot water (unless water is heated with electrical resistance heating).

Verification 1-5

Bidders must supply a declaration regarding their product's energy and drying efficiency class and water consumption, supported by technical data and results from tests carried out in accordance with Commission regulation No. 1059/2010, based on the measurement standard EN 50242:2016 or equivalent, or a relevant third-party certification/Type I eco-label attesting to compliance. Bidders must provide a declaration regarding the existence of a valve for water/ flood protection and for the capacity of the product to be connected to a hot water supply if necessary.

NOTES ON IMPLEMENTATION

According to EU Regulation No. 1016/2010 some household dishwashers cannot be placed on the market



Currently

Minimum energy class A+	capacity ≥ 8 place settings
Minimum drying class A	capacity ≥ 8 place settings
Minimum drying class B	capacity ≤ 7 place settings

To increase savings and reduce environmental impact, procurers should evaluate life cycle costs when tendering for dishwashers. Thus, it is advisable to include in the tender a costing exercise - even if simple - for the product life cycle costs.

Example of a breakdown costs table, to be filled in by bidders:

	Information details	Different unit costs in € (excluding tax)	Total cost in € (excluding tax)
Delivery			
Installation			
Use*	Annual energy consumption, in kWh/year, x n ^o units Annual water consumption, in l/year, x n ^o units	Electricity cost**: 0,20 €/kWh Water cost**: 2,6 €/m ³	
Maintenance			
Recycling and disposal			

* Example of how use costs can be determined. In the EU regulation the annual energy consumption calculation considers 280 cleaning cycles, the left-on and off-mode consumption.

** This figure is just an example. The procurer can use the average electricity price paid during the last 2 or 3 years, and also include subscription fee and taxes.

Advice and support

If you would like further assistance in using the information presented here in your own procurement actions or more information on Topten Pro contact your national Topten team (find it on Topten.eu).

The European Commission's [Green Public Procurement](#) website contains valuable legal and practical guidance together with procurement criteria for a range of commonly procured products and services.