





## **Guidelines for Topten Public Procurers**

# **Tumble Driers**

Steffen Hepp, June 2021



### Why follow Topten criteria?

- Topten.eu/pro (www.topten.eu/pro) 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.
- The Topten criteria below can be inserted directly into tendering documents.
- All tumble driers displayed on <u>www.topten.eu</u> 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 for Tumble Driers.
- Topten.eu/pro links to national partners Topten Pro websites and was developed under the Topten Act project, supported by the European Union through Horizon 2020 programme.

### How much can you save?

The category tumble driers, listed on www.topten.eu, includes vented, condenser, and heat pump driers.

Considering the following assumptions, it is possible to achieve the savings indicated in the next table.

<sup>-</sup> Lifetime expectation: 15 years

Assumptions  $\prec$  Drying Cycles per year: 160 (single-family house)

□ Electricity cost: 0.20 €/kWh

	Topten model	Inefficient model
Capacity	8 kg	8 kg
Energy class	A+++	В
Electricity consumption	179 kWh / year	559 kWh / year
<b>Use cost</b> (electricity in 15 years)	537 €	1,677 €
Savings in 15 years	68% energy / unit ⇔ 1,140 € / unit	







Topten models can consume about 68% less energy compared to inefficient models. Over the product lifetime of 15 years this would result in saving of approx.  $1,140 \in$  / unit in energy costs – which, depending on the exact model, can be a multiple of the actual purchase price of the tumbler.

Differences in electricity consumption between inefficient and Topten models rise as the net capacity grows, leading to higher energy savings and consequently greater money savings.

The energy consumption is calculated assuming 160 drying cycles per year, including a mix of full load and half load cycles.

### **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 <u>www.topten.eu/pro</u>.

#### SUBJECT: HIGHLY ENERGY-EFFICIENT TUMBLE DRIERS

#### **TECHNICAL SPECIFICATIONS**

#### Energy class according to EU energy label

- Residential driers:
  - Energy efficiency class A+++ according to the EU energy label
  - $\circ$  Condensation efficiency class A according to the EU energy label
- Semi-professional driers:
  - Energy efficiency class A++ or A+++ according to the EU energy label
  - $\circ$  Condensation efficiency class A according to the EU energy label
- Professional driers: Heat pump driers. For professional driers, there is no EU energy label.

#### Verification

Bidders must supply the energy label and technical data according to EU Regulations No. 392/2012 and No. 932/2012.







#### Additional Information

ЕПЕКС У ЦА енергия - еvеруета С (А	Commission Delegated Regulation nº 392/2012		
<u>1   </u>	Energy efficiency class	Energy efficiency index	
A++ A+	A+++	EEI < 24	
A B C	A++	24 ≤ EEI < 32	
D	A+	32 ≤ EEI < 42	
ENERGIA · ЕНЕРГИЯ · ENEPГЕІА ENERGIJA · ENERGY · ENERGIE ENERGI	A	42 ≤ EEI < 65	
	В	65 ≤ EEI < 76	
XYZ Y,Z XX   min/cycle* Y,Z XX   b b b<	Ç	<del>76 ≤ EEI &lt; 85</del>	
	₽	<del>EEI ≥ 85</del>	
ciklu - cyclus - cykl - ciclu program - torkomgång 382/2012	Note: The lower the value, the better the efficiency of the device		

The least energy efficient classes D and C have been banned from European markets, as of Nov 1<sup>st</sup> 2013 and Nov 1<sup>st</sup> 2015 respectively.

At the same time, condensation classes E, F, and G have been banned from the market. The condensation efficiency indicates the percentage of humidity that is condensated and collected by the drier. A condensation efficiency of 80 means that 20% of the humidity is released to the laundry room. Too much room humidity can cause damages to buildings.

Condensation Class	Condensation efficiency (C)	
А	C > 90	
В	80 ≤ C ≤ 90	
С	70 < C ≤ 80	
D	60 < C ≤ 70	
E	<del>50 &lt; C ≤ 60</del>	
F	<del>50 &lt; C ≤ 40</del>	
G	<del>C ≤ 40</del>	







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

	Information details	Different unit costs in € (excluding tax)	Total cost in € (excluding tax)
Delivery			
Installation			
Use*	Annual energy consumption, in kWh/year, x nº units	Electricity cost**: 0,20 €/kWh	
Maintenance			
Recycling and disposal			

#### Table 1: Example of a breakdown costs table, to be filled in by bidders

\* Example of how use costs can be determined. In the EU regulation the annual energy consumption calculation considers 160 drying cycles for a single-family household.

\*\* 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 <u>Topten Pro</u> contact your national Topten team (find it on Topten.eu). The European Commission's <u>Green Public Procurement</u> website contains valuable legal and practical guidance together with procurement criteria for a range of commonly procured products and services.



The elaboration of these procurement guidelines has been supported by funding from WWF Switzerland. The sole responsibility for the content of the Topten procurement guidelines lies with the authors.



Topten ACT has received funding from the <u>European Union's Horizon 2020 research and innovation programme</u> under grant agreement nº649647. The sole responsibility for the content of the Topten Pro procurement guidelines lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither EASME, nor European Commission and project partners are responsible for any use that may be made of the information contained therein.