

Villalivet Tests

# Drying laundry energy-efficiently

We all need to do laundry. Putting laundry in the machine may be pretty quick, but then there's the part when everything has to dry. It is lovely to hang laundry outdoors in the summer, to be dried by the breeze and sun, but what is the best way for the rest of the year?



PHOTO: Pexels.com

**DRYING CABINET, TUMBLE DRYER, FAN, OR DEHUMIDIFIER?**

There are many methods, but what is the best? Which goes quickest, and which is the most energy-efficient? We visited the test lab at Prodma to help get to the bottom of the question; what's the best way to dry laundry?



**TEST PRODUCT #2**  
ELECTROLUX DC3600EW  
- Evacuating drying cabinet  
- Set to maximum drying

**TEST PRODUCT #3**  
ELECTROLUX DC4600HPW  
- Heat pump drying cabinet  
- Set to maximum drying



**TEST PRODUCT #4**  
FRICO PANTHER SE09N  
- Heating fan, 9 KW three-phase  
- Set to maximum temperature

**TEST PRODUCT #1**  
CYLINDA TVP 5571X  
- Heat pump tumble dryer  
- Drying towels



**TEST PRODUCT #6**  
WOOD'S LD40  
- Dehumidifier  
- Laundry program: Laundry

**TEST PRODUCT #5**  
WOOD'S LD48PRO+  
- Dehumidifier  
- Laundry program: Laundry

| ENVIRONMENT °C | TEST PRODUCT #1 |           | TEST PRODUCT #2 |           | TEST PRODUCT #3 |           | TEST PRODUCT #4 |           | TEST PRODUCT #5 |           | TEST PRODUCT #6 |           |
|----------------|-----------------|-----------|-----------------|-----------|-----------------|-----------|-----------------|-----------|-----------------|-----------|-----------------|-----------|
|                | Energy kWh      | Time Hour | Energy kWh      | Time Hour | Energy kWh      | Time Hour | Energy kWh      | Time Hour | Energy kWh      | Time Hour | Energy kWh      | Time Hour |
| 16             | 1,54            | 3,2       | 4,60            | 3,0       | 1,76            | 3,8       | 6,90            | 3,5       | 2,64            | 6,3       | 1,08            | 6,5       |
| 25             | 1,52            | 3,4       | 4,57            | 3,0       | 1,34            | 2,9       | 6,30            | 3,0       | 2,18            | 5,0       | 1,08            | 6,0       |
| 32             | 1,45            | 3,9       | 4,55            | 4,1       | 1,43            | 2,4       | 6,80            | 4,0       | 1,79            | 4,0       | 0,76            | 4,0       |

**HOW THE TEST WAS DONE:**

4 kg of cotton towels were washed at 40° C and centrifuged at 1400 rpm, giving a residual moisture level of 60%. The towels were then placed in the test object (1) or hung evenly distributed in the test object (2/3) or on a floor-standing drying rack placed near the test object (4/5/6). The towels were judged to be dry when the residual moisture was below 1%.

**RESULTS**

In terms of energy, Wood's LD40 dehumidifier was best, with the tumble dryer and the dryer cabinet in shared second place. The tumble dryer and the dryer cabinet consumed an average of 55% more energy than the dehumidifier. Not entirely unexpected, the heating fan was the least energy-efficient.

If we compare drying time instead, the two drying cabinets end up at the top with the tumble dryer and the drying fan in shared third place.

**Top 3**



FOR THOSE WHO WANT TO SAVE ENERGY WHILE DRYING

1. Wood's LD40, dehumidifier
2. Cylinda TVP 5571X, heat pump dryer
3. Electrolux DC4600HPW, heat pump drying cabinet

FOR THOSE WHO WANT TO DRY FAST:

1. Electrolux DC4600HPW, drying cabinet
2. Electrolux DC3600EW, drying cabinet
3. Cylinda TVP 5571X, tumble dryer /Frico Panther SE09N, heating fan