

GOOD PRACTICES IN SME

Replacing container washers



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What can be gained by replacing container washers?

Container washers use 50-60°C hot water to clean containers. This water could be heated by, e.g. a heating plant using conventional fuels (coal, natural gas, oil). Electric washers are also available. Energy efficient washers have a smaller per unit water consumption – meaning less water is used to clean each container. The savings generated by replacing a washer with a more energy efficient model will increase proportionally to the number of containers cleaned within a year and will be particularly significant in the case of electric powered appliances.



Pic. 1 metalbud: container washing system

How much can be saved annually by replacing an old washing system with an energy efficient electric washer model?

Assumption for the estimated savings:

- Temperature of the water supplied to the washer 10 °C,
- Temperature of the water used by the washer to clean containers 55 °C,
- Price of electricity 0,55 $^{PLN}/kWh$
- Amount of water used by the washer to clean a container before the modernization 7 $^{l}/UN$

Number of containers washed annually [units/year]	Washer water consumption per unit after the modernization [l/UN]				
	3,5	3,0	2,5	2,0	1,5
25 000	2 485 PLN	2 840 PLN	3 195 PLN	3 550 PLN	3 905 PLN
50 000	4 971 PLN	5 681 PLN	6 391 PLN	7 101 PLN	7 811 PLN
100 000	9 941 PLN	11 361 PLN	12 781 PLN	14 201 PLN	15 622 PLN
250 000	24 853 PLN	28 403 PLN	31 953 PLN	35 504 PLN	39 054 PLN
500 000	49 705 PLN	56 806 PLN	63 907 PLN	71 007 PLN	78 108 PLN
750 000	74 558 PLN	85 209 PLN	95 860 PLN	106 511 PLN	117 162 PLN
1 000 000	99 410 PLN	113 612 PLN	127 813 PLN	142 015 PLN	156 216 PLN
2 500 000	248 526 PLN	284 030 PLN	319 533 PLN	355 037 PLN	390 541 PLN
5 000 000	497 052 PLN	568 059 PLN	639 067 PLN	710 074 PLN	781 081 PLN
7 500 000	745 578 PLN	852 089 PLN	958 600 PLN	1 065 111 PLN	1 171 622 PLN
10 000 000	994 104 PLN	1 136 119 PLN	1 278 133 PLN	1 420 148 PLN	1 562 163 PLN

Source: KAPE