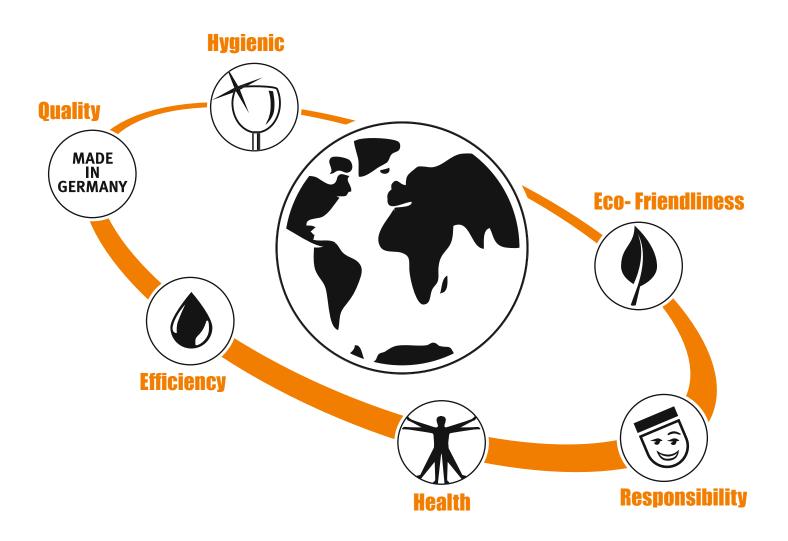


OPERATING COSTS – CHECK KNOW MORE. SAVE MORE!

SAVE MONEY. AND SAVE OUR PLANET!





OPERATING COSTS - CHECK (2)

OPERATING COSTS: WATER CONSUMPTION

Assumption: rinsing 40 glasses per hour, working time 8 hours, 30 days per month.

Basis of calculation: price of one cubic meter fresh water 2,- €, price of cubic meter sewage 2,77 € (German price index, source: Focus online 2023)

SPÜLBOY® GLASS WASHER

3-PIECE GLASS WASHING BRUSH

ELECTR. GLASS WASHING MACHINE



SPÜLBOY® glass washer combines spatially separated pre-washing and fresh water rinse systems in one device. This enables the application within one sink. At that SPÜLBOY® convinces with lowest and most efficient water consumption of 10cl per glass. A one-time initially filling is sufficient due to the continuous supply of fresh water released by each rinsing step.



Cleaning glasses with a 3-piece washing brush legally requires two sinks. The first sink is needed to pre wash the glasses with the brush. The measurement of a standard sink is $40 \text{cm} \times 30 \text{cm} \times 40 \text{cm}$ and the brush (height of the brush 25cm) has to be covered by water. This requires a volume of 41L. The water should be changed at least hourly. The second sink is to rinse the glass by fresh water. It requires a permanent circulation of fresh water to keep the water usable. This is done by a flush pipe and takes 750ml each minute.



An electrical glass washing machine is automatically filled up with water (initial filling 16L). An average wash cycle takes about 120-180 seconds. The basket of the tested device can take up 20 glasses. The tested glass washing machine takes 6L each washing cycle.

CALCULATION:

- 40 glasses x 10cl x 8h = 40L/day
- 40L + 5L initial filling = 45L
- $45L \times 30 \text{ days} = 1,110L \sim 1.11\text{m}^3/\text{month}$
- 1.11m³ x 2 € = 2.20 € (fresh water)
- 1.11m³ x 2.77 € = 2.77 € (waste water)

CALCULATION:

- Pre-wash sink: 41L x 8 = 328L/day
- Rinse sink: 750ml x 60min = 45L/h
- Rinse sink: 45L x 8 = 360L
- + approx. 40L initial filling = 400L/day
- 728L x 30 days = 21,840L ~ 21.8m³/month
- 21.8m³ x 2 € = 43.60 € (fresh water)
- 21.8m³ x 2,77 € = 60.39 € (waste water)

CALCULATION:

- 20 glasses ~ 6L x 2 = 12L for 40 glasses
- 12L x 8 = 96L/day
- 96L + 16L = 112L
- 112L x 30 days = 3,360L ~ 3.4m³/month
- 3.4m³ x 2 € = 6.80 € (fresh water)
- 3.4m³ x 2.77 € = 9.42 € (waste water)

total monthly water consumption: 1,110L total water costs per month: 4.97 €

total monthly water consumption: 21,840L total water costs per month: 103.99 €

total monthly water consumption: 3,360L Total water costs per month: 16.22 €



OPERATING COSTS - CHECK (3)

OPERATING COSTS: ELECTRICITY

Assumption: rinsing 40 glasses per hour, working time 8 hours, 30 days per month. Basis of calculation: price of one kilowatt hour 0,40 € (German price index 2023, source: www.verivox.de)

SPÜLBOY® GLASS WASHER

3-PIECE GLASS WASHING BRUSH

ELECTR. GLASS WASHING MACHINE



SPÜLBOY® glass washer work

- · completely without electricity
- environmental friendly
- with lowest water consumption

The effectiveness and cleaning performance is granted by the combination of fresh, cold water, our special SPÜLBOY® glass washing tabs and especially the mechanical abrasion forces of the brush at the glasses inner and outer side.



The application of a 3-piece brush requires two sinks and a continuously water supply

• needs no electricity

Cleaning by a 3-piece brush does not require any electricity but achieves a satisfying cleaning result only under a lot of effort of water and detergents. An additional cleaning step is required as the brush doesn't allows an abrasion all around the glass.



The tested glass washing machine with 6kW consumes

- 20 glasses each basket
- Operating time per day (8h): 16 wash cycles of 3min each -> 48min (0,8h)/day
- Costs per kWh: 0,40 €

CALCULATION:

- 6,000W x 0.8h = 4.800W = 4.8kWh
- 4.8kWh x 30 days = 144kWh
- 144kWh x 0.40 € = 57.60 €

monthly power consumption: 0kWh total costs for electricity per month: 0 €

monthly power consumption: 0kWh total costs for electricity per month: 0 €

monthly power consumption: 144kWh total costs for electricity per month: 57.60 €



OPERATING COSTS - CHECK (4)



OPERATING COSTS: DETERGENTS & CHEMICALS

Assumption: rinsing 40 glasses per hour, working time 8 hours.

Basis of calculation: 30 days per month. The price information is based on average values.

SPÜLBOY® GLASS WASHER

3-PIECE GLASS WASHING BRUSH

ELECTR. GLASS WASHING MACHINE



One (1) original SPÜLBOY NU® glass washing tab grants hygienic clean results for approx. 4 hours. 1 can of NU® tabs: 15,90 € (100pcs.)

CALCULATION:

- 15.90 €: 100
- 1 tab = 0.16 €
- 2 tabs at 0.16 € each = 0.32 €/day

To clean, disinfect and maintain the brushes we recommend to use our special SPÜLBOY NU® sanitizer powder (clean central brush and brush strip) at least every day. Each application needs 30g. 1 can of NU® sanitizer powder: 9.40 € (750g)

CALCULATION SANITIZER POWDER:

- 9.40 €/750g = 0.0125 €/g
- 0.0125 € x 30g = 0.38 €

SUM UP:

0.32 € (tabs) + 0.38 € (powder) = 0.70 €/day



For the cleaning procedure with a 3-piece brush a liquid glass washing chemical is usually used. To reach proper effects at least 10ml liquid should be added to 41,6L water (pre-rinse sink). 1L liquid glass washing chemical: 12.50 €.

CALCULATION:

- 12.50 €/1,000 = 0.013 €/month
- 0.013 € x 10ml = 0.13 €/dosage flushing water change 1x hourly
- 0.13 € x 8h
- Detergent costs = 1.04 €/day

It is also necessary to clean and disinfect the brush. For that we recommend to use our special NU® sanitizer at least every day:

CALCULATION SANITIZER POWDER:

- 9.40 €/750g = 0.0125 €/g
- 0.0125 € x 30g = 0.38 €

SUM UP:

1.04 € (liquid) + 0.38 € (powder) = 1.42 €/day



Electrical glass washing machines need

- rinse aid -> 10L: 50.50 € = 0.005 €/ml
- cleanser -> 10L: 42.90 € = 0.004 €/ml
- salt -> 2,000q: 3.15 € = 0.0016 €/q

The tested machine consumes

- rinse aid: 0.65ml each liter passed through
- cleanser: 0.70ml each liter passed through
- salt: 12.5g each wash cycle

The tested machine has a water passage of 6L each washing cycle.

CALCULATION RINSE AID:

- 0.65ml x 6L = 3.9ml each wash cycle
- 3.9ml x 0.005 € = 0.020 €
- 0.020 x 16 = 0.32 €/day rinse aid

CALCULATION CLEANSER:

- 0.70ml x 6L = 4.2ml each wash cycle
- 4.2ml x 0.004 € = 0.017 €
- 0.017 € x 16 = 0.27 €/day cleanser

CALCULATION SALT:

- 3.15 €/2,000g = 0.0016 €/g
- 0.0016 € x 12.5 x 16 = 0.32 €/day salt

0.32 € (rinse aid) + 0.27 € (cleanser)

+ 0.32 € (salt)

total costs for detergents & chemicals per month: 21 €

total costs for detergents & chemicals per month: 42.60 €

total costs for detergents & chemicals per month: 27.30 €



OPERATING COSTS - CHECK (5)

SPÜLBOY® GLASS WASHER

3-PIECE GLASS WASHING BRUSH

ELECTR. GLASS WASHING MACHINE





3-PIECE GLASS WASHING BRUSH

NEW PURCHASE EVERY 2 MONTHS



INVEST The price information is based on average values.

CALCULATION:

• SPÜLBOY®: 139 €

installation: 0 €

• total costs: 139 €

SPÜLBOY® GLASS WASHER ASSUMPTION: SERVICE PERIOD 3 YEARS

CALCULATION:

- 3-piece brush 3 x 25cm: 9.50 €
- installation: 0 €
- total costs: 9.50 €
- 9.50 € x 6/12 months = 4.75 €/month

investment per month: 4.75 €

TESTED ELECTR. GLASS WASHING MACHINE ASSUMPTION: SERVICE PERIOD 5 YEARS

CALCULATION:

- glass washing machine: 2,980 €
- installation, setting, instruction: approx. 320 €
- delivery (if necessary) approx. 50 € (not taken into account)
- total costs: 3,300 €
- 3,300 €/60 months = 55 €/month

investment per month: 55 €

investment per month: 3.86 €

• 139 €/36 months = 3.86 €/month

REPLACEMENTS & MAINTENANCE

CALCULATION:

- 2x brush head: 9.60 €
- 1x middle brush: 14.70 €
- 1x brush strip: 18 €
- external service fees: 0 €
- 42.30 €/12 months = 3.53 €/month

costs per month replacements & maintenance: 3.53 €

monthly investment: 3.86 € monthly costs for maintenance: 3.53 €

total costs per month: 7.39 €

CALCULATION:

- external service fees: 0 €
- total costs: 0 €

costs per month replacements & maintenance: 0 €

monthly investment: 4.75 € monthly costs for maintenance: 0 €

total costs per month: 4.75 €

CALCULATION:

- · according to manufacture minimum twice a year maintenance service by external professionals: approx. 150 €
- plus extraordinary repairs (not taken into account)
- total costs: 300 € net
- 300 €/12 months = 25 €/month

costs per month

replacements & maintenance: 25 €

monthly investment: 55 € monthly costs for maintenance: 25 €

total costs per month: 80 €

^{*} The price information is based on average values.



OPERATING COSTS 6 SAVED AT A GLANCE!

CLEAR ADVANTAGE FOR SPÜLBOY®

SPÜLBOY® GLASS WASHER

3-PIECE GLASS WASHING BRUSH

ELECTR. GLASS WASHING MACHINE



- Operating costs I:
 Water consumption: 5.29 €/month
- Operating costs II:
 Electricity: 0 €/Monat
- Operating costs III:

Detergents & Chemicals: 21 €/month

• Operating costs IV: Investment: 3.68 €/month Maintenance: 3.53 €/month

Total monthly costs:





Operating costs I:

Water consumption: 103.99 €/month

Operating costs II:

Electricity: 0 €/month

Operating costs III:

Detergents & Chemicals: 42.60 €/month

Operating costs IV:

Investment: 4.75 €/month Maintenance: 0 €/month

Total monthly costs:





Operating costs I:

Water consumption: 16.22 €/month

Operating costs II:

Electricity: 57.60 €/month

Operating costs III:

Detergents & Chemicals: 27.30 €/month

Operating costs IV:

Investment: 55 €/month Maintenance: 25 €/month

Total monthly costs:

(181.12€)

THINK NEW.
CLEAN GREEN!

