

Solvent cleaning in closed vacuum machine

Have you seized the benefits vs aqueous cleaning yet?

01

Cost-effectiveness



Low energy consumption

- Much less energy required to heat up solvent than water.
- No need for energy-intensive drying.

Total energy required to convert a liquid substance at room temperature (20°C) to gas

DOWPER™ MC (Perchloroethylene)	300 J/g
DOWCLENÉ™ 1601 (Modified alcohol)	488 J/g
Water	2594 J/g

Multiple times higher!



Minimal media monitoring & maintenance efforts

No additions of surfactants, emulsifiers, builders etc.



Minimal floor space

No multiple stations for cleaning, rinsing and drying.



Lower chemical consumption

Solvent can be reused and recycled.



Especially effective for high oil entry

The higher the oil input and the higher the material throughput, the more advantages solvent cleaning can offer.



Fewer bath exchanges



No waste water treatment



Shorter cleaning cycles

02

Consistent and superior cleaning results



Universal compatibility with metals



Parts come out dry



Repeatability of cleaning results



Highly effective in removing non-polar contaminations: machining oils, greases, waxes, resins



Easy penetration into tight spaces

Blind holes, through holes, welded parts thanks to good creeping capability.

Surface tension: Modified alcohols (26.1 mN/m) vs Water (72 mN/m).

03

Sustainability



**Virtually no air emissions
in closed machines¹**



**Zero water consumption
in cleaning**



Continuous solvent recovery via built-in distillation

- Long solvent lifespan.
- Less solvent waste.

	Oil content in waste stream	Cleaner residue in waste stream
Per-/Trichloroethylene	>95%	<5% ¹
Modified alcohols	>80%	<20% ¹
Water-based cleaning	50%	100% ²

04

Worker safety

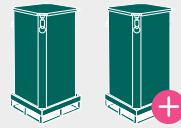


**Parts fed
automatically into
working chamber**

Minimized human contact.



**Vacuum condition
ensures
non-flammability
and no emissions**



**Availability of the
SAFE-TAINER™ System enables
emission-free and spill-free
handling of solvents**

**Solvent cleaning trusted by industries with the
most critical safety and quality requirements**



Aerospace & Defense



Automotive



Medical



Electronics

**When the required cleanliness can be achieved with
solvents, they can be the perfect choice for you.**



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1. Achievable if used in state-of-the-art technology
2. The water consumed, which is now contaminated with oil, will be disposed entirely as waste water, unless it can be recycled in appropriate facilities.