



EVO Sonic

Precise ultrasonic cleaning down to the
most difficult gaps

Ultrasonic cleaning, thorough and gentle

The cleaning of printed circuit boards, wafers, soldering frames and machine parts by immersion is an extremely powerful and gentle cleaning method. The agitation required for thorough cleaning is achieved by using ultrasound and/or Jet turbulence.

Particularly in the case of complex assemblies with difficult geometries or low standoffs as well as large quantities, EVO SONIC ultrasonic systems are able to exploit their advantages through the optimum division of process steps such as washing, rinsing and drying.



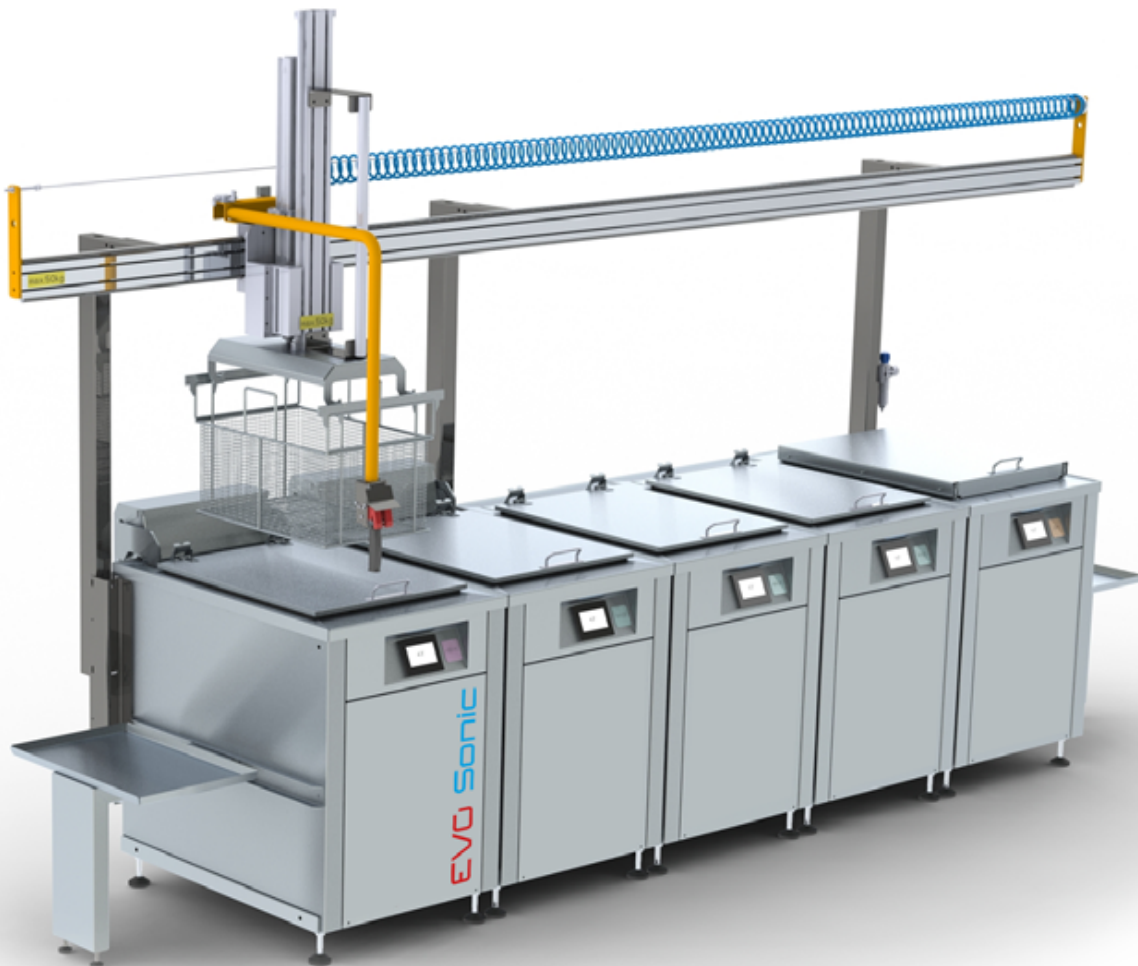
powered by



Advantages of ultrasonic cleaning

Ultrasonic cleaning offers superior advantages compared to other cleaning methods. Sometimes it is even the only practical cleaning option.

- **Fast** – short circulation times
- **Efficient** – effectively cleans even the toughest dirt
- **Penetrating** – cleans all surfaces that water can reach, even complex structures with holes and channels
- **Accurate** – removes even the smallest particles down to 1 micron
- **Versatile** – tolerates a wide range of chemicals
- **Environmentally friendly** – uses energy efficient water-based process



Optimum cleanliness, reliable products

Large-volume precision cleaning must normally be carried out in several stages and automatically. A higher particle cleanliness can be achieved in multi-stage cleaning systems, as large particles do not get stuck in the last, clean stages of the cleaning process, in contrast to single-chamber cleaning systems, which give a poor cleaning result due to the accumulation of particles in the washing chamber

Dirt particles can be removed from the workpiece surface by effective cleaning techniques. Cleaning and rinsing agents are filtered, keeping the wash basin clean and minimising the consumption of liquids. Only with ultrasonic cleaning can even the smallest particles be removed, which would stick with other cleaning techniques. The actual cleaning process with washing, rinsing and drying phases is defined according to the degree of cleanliness required by the customer and the throughput requirements.

EVO SONIC systems can be operated manually or integrated fully automatically into your process environment.



Features

The switchable ultrasonic generators with 40 kHz and 132 kHz offer the possibility of a powerful and gentle ultrasonic cleaning for e.g. assemblies with low stand-off and wafers.

EVO SONIC ultrasonic cleaning systems set new standards in system design. Well thought-out details in the area of the guidance of the cleaning medium, agitation and process control ensure a flexible and energy-efficient process sequence in line with requirements.

Cleaning procedures

Processes that can be flexibly designed lead to optimum cleaning results.

U'SONIC

Cleaning module with ultrasonic agitation

SONICJET

Treatment module with unique SonicJet technology – combined performance of ultrasonic cleaning and pressure flooding

SPRAY

Oscillating spray cleaning modulesSonicJet technology – combined performance of ultrasonic cleaning and pressure flooding

JET

Washing and rinsing modules with pressure flooding

RINSE

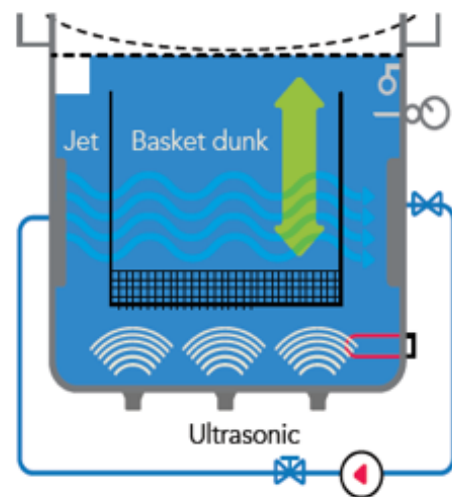
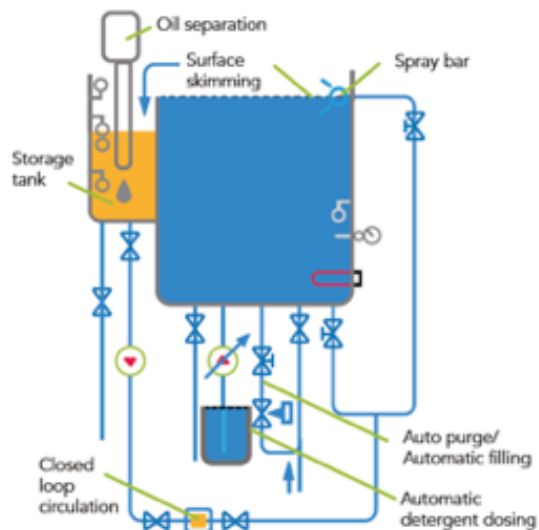
Treatment module for immersion rinsing to remove particles and detergent residues

DRY

Hot-air dryer with powerful fan and heater – for fast drying

Optionen

- Particle filtration
- Oil separation
- Filter blockage alarm
- Various buffer tanks
- Surface skimming
- Automatic water refill
- Automatic detergent dosage
- Automatic regulation of the detergent concentration
- Bath monitoring (pH value, conductivity)
- Oscillating washing basket



| TECHNICAL DATA | Versa Genius+ 50 | Versa Genius+ 120 | Versa Genius+ 180 |
|---------------------------------|-----------------------|------------------------|------------------------|
| Internal basket dimensions (mm) | W 267 × D 367 × H 206 | W 367 × D 567 × H 315 | W 430 × D 610 × H 395 |
| Load weight (kg) | 10 | 26 | 39 |
| External tank dimensions (mm) | W 549 × D 971 × H 968 | W 653 × D 1174 × H 968 | W 723 × D 1217 × H 968 |
| Filling volume (l) | 46 | 120 | 180 |
| Heating capacity (W) | 2000 | 3000 | 5000 |
| Ultrasonic power nom./peak (W) | 600 / 1200 | 1200 / 2400 | 2400 / 4800 |
| Ultrasound frequencies (kHz) | 37 / 132 | 37 / 132 | 37 / 132 |



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