

Elevating Standards, Maximizing Efficiency.

EcoCvertex

The EcoCvertex is a state-of-the-art aqueous-based cleaning system designed to elevate industrial cleaning standards while maximizing operational efficiency.



Rising cleanliness requirements, increasing process complexity, and limited production space are driving demand for flexible and compact parts cleaning systems with stable, reproducible processes.

The EcoCvertex meets these challenges with a system design featuring an upright cylindrical third tank for fine cleaning and optimized fluid management. All cleaning processes – including spray cleaning, high-power injection flood washing and ultrasonic cleaning – are already enabled with the three-tank configuration. An optional fourth flood tank provides additional flexibility for different component materials, for example enabling spot-free rinsing with deionized water or the application of corrosion protection. Despite its compact footprint, the system ensures good maintenance accessibility. Advanced filtration and integrated oil separation guarantee long bath life and minimize cross-contamination.

State-of-the-art PLC control with an intuitive HMI enables precise process configuration, monitoring, and reliable operation.

- + Superior cleaning performance:**
Designed for achieving stringent cleanliness requirements in terms of Gravimetry and particle sizes
- + Modern and compact footprint:**
Space-efficient with improved processes and functionality
- + Optimized fluid management:**
Reduced cross-contamination, improved oil separation and effective filtration
- + Cost and energy efficiency:**
Low energy and water consumption for reduced operating costs
- + High uptime:**
Reliable performance with minimal downtime
- + Maintenance-friendly design:**
Easy to service and maintain



FEATURES AND BENEFITS

- 3-Tank System: Default configuration supported by hot air and vacuum drying for optimal cleaning and drying
- Upright Cylindrical 3rd Flood Tank: Designed for efficient fluid management and optional fine cleaning applications
- Standard option of 4th Flood Tank for enhanced versatility and performance
- Flexible working chamber sizes tailored to specific customer requirements
- Uniform cleaning: complete 360-degree rotation or Oscillation or indexing movements of the part baskets
- Manual and Automatic Loading: Shuttle type manual slide conveyor as Standard; Optional Automatic Loading conveyor for higher throughput and less operator fatigue
- Advanced Filtration: Two combi-housings per tank for superior filtration efficiency; closed-loop filtration with high-power injection flood washing (IFW) and double filtration during tank filling and emptying; Housings compatible to accommodate High Performance Filter Element (HPFE)
- Efficient Oil Management: Integrated oil separator with fin inserts to enhance oil separation

- Resource Monitoring: Optionally track energy, water, and compressed air usage to ensure operational sustainability
- Durable Construction: All media-contact parts made from high-grade SS 304 for extended reliability
- Advanced Controls: Latest PLC Control with customizable process programming and Interactive HMI for visual representation with real-time process monitoring

PROCESSES

- **Injection Flood Washing (IFW):** High-flow washing for complex geometries and critical cleanliness requirements
- **Spray Cleaning:** Effective for efficient rinsing
- **Ultrasonic Cleaning:** Ideal to remove sticky contamination from accessible areas. Different options to select suitable power (Watts/liter) and Frequency (kHz)
- **Pulsated Pressure Cleaning** (optional): enhanced cleaning performance in demanding applications, e.g. complex geometries, blind holes, etc.
- **Drying:** Hot air drying with filtered air for standard applications or vacuum drying for complete dryness, even of complex parts.

TECHNICAL DATA	
System dimensions	EcoCvertex
Width	3,800 mm (3-tank), 4,500 (3-tank with PPC). 4,800 mm (4-tank)
Depth	2,000 mm (without conveyor)
Height	2,570 mm (without exhaust blower)
Loading height	830 mm (automatic), 880 mm (manual)
Weight, approx.	4,000 kg
Basket data	
Option 1 (LxWxH)	770 x 480 x 300 mm
Option 2 (LxWxH)	670 x 480 x 400 mm
Batches	
Batch weight, max.	150 kg
Throughput, approx.	5–8 batches/h
Total load	
According to equipment	60 kW 3 x 400 V / 50 Hz
Washing, rinsing	70–80 °C
Filling capacity of standard system	
With 3 flood tanks, approx.	1,840 l
With 4 flood tanks, approx.	2,390 l



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