

Electrovert

Electronic Assembly Equipment

TW EAE

VectraElite™ Wave Soldering System



The Electrovert VectraElite is an ideal wave soldering solution for medium-to-high mass board assemblies in a soldering environment that requires fast changeover, process flexibility, and system reliability.

Technology + Performance + Reliability



Electrovert

VectraElite

The VectraElite is an advanced highly engineered wave soldering system that delivers the required accuracy, repeatability, and process flexibility for demanding production environments.

The VectraElite combines proven core subsystem technology and new advanced performance leading technologies designed for lead-free alloys.



Accuracy, Repeatability and Process Flexibility

The VectraElite provides the technologies necessary to achieve zero-defect process at the lowest cost of ownership.

- The VectraElite wave soldering system was originally launched in 2005 and continue to be the market leader in delivering the most advanced wave soldering technologies at the lowest cost of ownership possible.
- Process control, process capability, and process flexibility are all competitive advantages to Electrovert wave soldering.
- All-in-one touchscreen PC with Windows 7 based operating system. The PC is mounted on an articulating arm.
- Intuitive graphical user interface that makes set-up and operation easy.
- Data logging of all critical machine parameters and trending are standard in the machine software.
- The ethernet based I/O system is common across all Electrovert wave, reflow and cleaning products (commonality of spare parts).
- The VectraElite is UL Certified and Listed for Factory Automation as standard.
- All Electrovert systems are made in the USA.



Electrovert VectraElite

Features and Options:



DwellMax Plus

Lead Free Applications

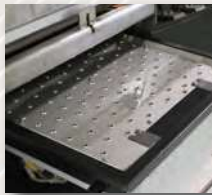
- All Electrovert waves are lead free qualified and optimized as standard
- Solder nozzle features like the DwellMax Plus™ and DwellMax Ultra™ deliver exceptional soldering performance for demanding processes and applications



Optional Dual Head ServoJet

Fluxer Types

- ServoSpray spray fluxer (single head or dual head)
- ServoJet jetted spray fluxer (available in single head, dual head and OA types)
- ServoSonic ultrasonic type spray fluxer



IsoThermal Convection Preheat (ICP)

Preheat

- Preheater accessibility is quick and easy from the front of the machine
- The IsoThermal convection preheat utilizes heat on intake technology. The heating uniformity is very effective and efficient across the entire heating area
- See the specifications section for the comprehensive list of features



Solder Module

- All Electrovert wave systems have a lifetime warranty on the solder pot casting (applies to original owner)
- See the specifications section for the comprehensive list of features for every soldering process and application
- For N2 soldering applications, the available features include:
 - N2 boundary soldering (inerts at the waves)
 - Short N2 tunnel (inerts the entire solder module area and wave)
 - Full N2 tunnel (inerts all preheat sections, the entire solder module and at the waves)



Rollled out Solder pot

Accessibility

- Lift up hoods with gas shocks and hinged swing-out panels provide unobstructed access to the front of the machine
- Integrated step across front of machine provides exceptional accessibility for process set-up



Full access to all modules

Conveyor

- Single continuous finger type conveyor through the entire length of machine
- No limitation on board length (min and max)
- Robust conveyor design capable of 100 lbs (43.4 kg) evenly distributed throughout the conveyor length



View from front with all doors and hoods open.



VECTRAELITE SPECIFICATIONS

		Feature	VectraElite (VC-3)		
Process	Alloy Type	Lead Free (Qualified and Optimized)	S		
	Process Width	Maximum PCB Width	S	18" (457 mm)	
			O	20" (508 mm)	
Physical Characteristics	Machine Length	Length of machine with rail guides (Load/Unload)	S	163.8" (4.16 m)	
			O	177.5" (4.5 m)	
	Conveyor	Maximum Load Weight		100 lb (45 kg)	
		Motorized Width		O	
Preheat	Preheat Type	IR Platen	S/O		
		IsoThermal Forced Convection	S/O		
		Fast Response IR	O		
	Preheat Length	Bottom	S	(Qty. 2) at 4' (1.2 m)	
			O	(Qty. 3) at 6' (1.8 m)	
Top		O	(Qty. 2) at 4' (1.2 m)		
Solder	Soldering Environment	Environment	S	Air	
			O	N ₂	
	Main Wave	UltraFill Air		O	
	Dual/Wide Wave	Chip Wave		O	
		DwellMax Plus		O	
		DwellMax Ultra		O	
	Nozzle Material	Melonite Coated, Stainless Steel		S	
		Titanium		O	
	N ₂ Soldering	UltraFill N ₂ (Boundary Type)		O	
		Short Tunnel (Inerts entire solder pot area)		O	
		Full Tunnel (Inerts entire solder pot and ALL preheat areas) (Compatible with IR in #3 bottom position)		O	
Wave	Wave Height	S	12.7 mm		
		O	Up to 25 mm		
	ExactaWave (Automatic wave height control)		O		
Casting	Lifetime Warranty on Solder Pot Casting		S		
HMP	High Melting Point Capability (Special Warranty Applies)		RFQ		
Fluxer	Fluxer Types and Options	ServoSpray		S	
		ServoJet		O	
		OA ServoJet		O	
		ServoSonic		O	
		Flux Spray Start/Delay (ServoSpray/ServoSonic)		S	
		Selective Fluxing (includes flux spray start/delay)	OA Servojet		O
			High speed Servojet		S
		Dual Flux Tank / Single Flux Head		O	
		Dual Flux Head / Dual Flux Tank		O	
Teflon Coated Flux Tank		O			
Operating System	Software and Controls	Windows 7 PC Based Software		S	
		Ethernet Based I/O		S	
	UL	UL Listed for Factory Automation Equipment		S	
	CE	CE Certification		O	
Country of Origin	Made in USA	Factory based R&D and Software Engineering, and Applications Support		Camdenton, MO USA	

O = Optional; S = Standard; RFQ = Request Factory Quote



Process Knowledge and Support

At ITW EAE, we deliver world-class products, performance, and unparalleled service and support programs. With the VectraElite comes the proficiency of our Electrovert process experts that allows us to solve real-world applications issues. *Knowledge in Process* for superior performance.

ITW EAE is a division of Illinois Tool Works, Inc. It is a consolidation of all of its Electronic Assembly Equipment and Thermal Processing Technology. The group includes world-class products from MPM, Camalot, Electrovert (Speedline), Vitronics Soltec and Despatch.