Speedline

Electronic Assembly Equipment

ITW

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.

Electrovert® VectraElite™

Wave Soldering System

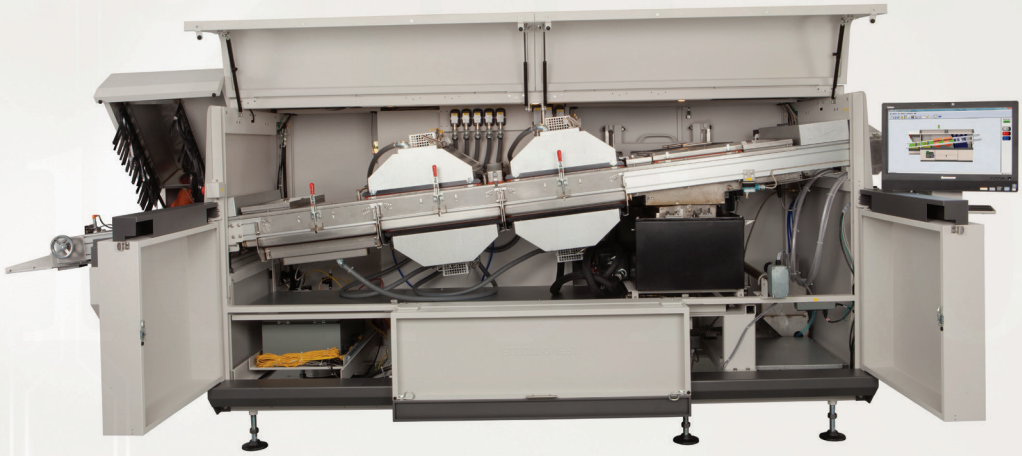
Technology + Performance + Reliability

Electrovert VectraElite

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.

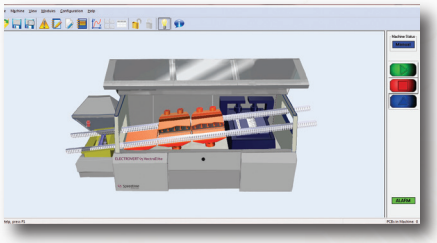


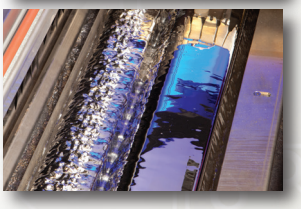
Accuracy, Repeatability, and Process Flexibility

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

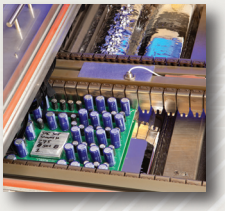
- The VectraElite wave soldering system was originally launched in 2005 and continues to be the market leader in delivering the most advanced wave soldering technologies at the lowest cost of ownership possible.
- Process control, process capability, and process flexibility are all competitive advantages 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

Made In The U.S.A.
Speedline Technologies Electrovert





VectraElite Features and Options:



DwellMax Plus

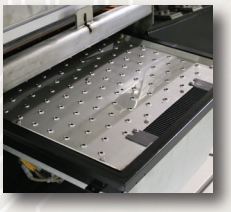
Lead Free Applications

- 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 (avalable in single head, dual head and OA types)
- ServoSonic ultrasonic type spray fluxer



IsoThermal Convection Preheat (ICP)

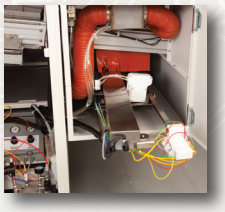
Preheat

- 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

Rolled out Solder pot

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 N_2 soldering applications, the available features include:
  - N_2 boundary soldering (inerts at the waves)
  - Short N_2 tunnel (inerts the entire solder module area and wave)
  - Full N_2 tunnel (inerts all preheat sections, the entire solder module and at the waves)



Full access to all modules

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

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.

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		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		S (ServoSpray/ServoSonic)
		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 Certified and Listed for Factory Automation Equipment		S
	CE	CE Certification		O
Country of Origin	Made in USA	Factory based R&D, Software Engineering, and Applications Support		Camdenton, MO USA

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

Process Knowledge and Support

At Speedline Technologies, 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.

ABOUT SPEEDLINE

Speedline is a member of ITW EAE, a division of Illinois Tools Works, Inc. (NYSE: ITW). They are the global leader in process knowledge, services and manufacturing of capital equipment used in the printed circuit board assembly and semiconductor industries. Speedline markets best-in-class brands including: CAMALOT dispensing systems; ELECTROVERT wave soldering, reflow soldering and curing, and cleaning equipment; and MPM stencil printing systems. For more information visit www.itweae.com.

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Electronic Assembly Equipment ITW