



Electrovert Celebrated its 60th Anniversary in 2011

October 2011 marks Electrovert's 60th anniversary ---

Founded in 1951 in Montreal Quebec Canada, Electrovert is known globally as a premier manufacturer of wave soldering, reflow soldering, and precision cleaning equipment used in the printed circuit board assembly and semiconductor industries.



Electrovert has a long history of product and industry-wide successes. A leader in innovation and technology, Electrovert has issued over 400 patents. Many of these designs are industry

standards and have become integral to the success of the world's largest OEM and contract electronics manufacturers. Electrovert's award winning technologies include: DwellMax Plus and UltraFill nozzles for wave soldering; Intelligent Flux Control and IsoThermal Chamber Technology for reflow soldering; and Hurricane Jet and JIC spray

technology for precision cleaning. As stated by general manager, Geoff Klein, "A core competency of Electrovert has been to focus on technologies that provide process

solutions for high-end, demanding production environments."

Throughout the ever-evolving business climate of the last 60 years, the

Electrovert brand name has been, and continues to be, recognized as a global leader. All of Electrovert's wave, reflow, and precision cleaning machines are designed and built in the United States. The state-of-the-art applications and demo center, located at company headquarters in Camdenton, Missouri, includes all current models of equipment which are available for testing and demonstrations. Individuals on Electrovert's service and application support team average over 20 years of industry experience.

Speedline markets Electrovert, MPM, and Camalot products throughout the world. Headquartered in Franklin, Massachusetts, Speedline has been part of the Illinois Tool Works (NYSE: ITW) Electronic Assembly Equipment division since November 2006. ■

SPEEDLINE THANKS ALL OUR VALUED PARTNERS AND CUSTOMERS FOR YOUR CONTINUOUS SUPPORT IN 2011, AND WISHES YOU AND YOUR FAMILY A HAPPY AND PROSPEROUS NEW YEAR 2012.

AS200SS™ Stainless Steel cleaning system

As PCB designs move towards highly dense, increased complexity, and miniaturization -



manufacturers are looking for solutions to increase product throughput and reliability. Electrovert developed the Aquastorm 200SS (Stainless Steel) in-line cleaning system (AS200SS) for manufacturers requiring a solution for immediate and long term in-line cleaning requirements. The AS200SS cleaning system with dual wash, dual chemical isolation, and Torrid Zone drying is the total performance package providing fast throughput capability and optimal process flexibility.

Issues with a typical in-line cleaner:

- Removing residues under low stand-off components is challenging
- Production throughput expectations are lowered due to running at slower conveyor speeds
- Chemical fluid management to minimize

- consumption is critical
- Removal of moisture from the PCB is difficult

The AS200SS solution:

- 'Dual wash' modules.

Benefits include:

- ⇒ Electrovert's cleaning technologies deliver dynamic energy that penetrate under components
- ⇒ Significantly extend the dwell time in a heated wash
- ⇒ Increase throughput capabilities
- ⇒ Increases process flexibility with dual chemistry capability

- 'Dual chemical isolation' modules. Benefits include:

- ⇒ As more applications require chemistry to clean, the dual chemical isolation modules increases process capability
- ⇒ Chemical isolation strips chemistry from the PCB to minimize operating costs
- ⇒ Minimizes chemistry drag-out for each wash section



Dual Wash Cleaning

- 180°F capable wetted operating temperatures is standard
- Torrid Zone Drying delivers a controlled dynamic process that effectively removes moisture from the PCB
- All wetted materials used within the process area are stainless steel
- Windows®-based operating system



Torrid Zone Drying Technology

provides complete process monitoring and product traceability

Aquastorm 200SS received the *SMT* China Vision Award 2011 for Best Product in the PCB Cleaning category.

For more information on the Aquastorm 200SS, contact your nearest Speedline Technologies contacts or visit www.speedlinetech.com.

Speedline Electrovert continues to be the industry leader of innovation and provider of process solutions worldwide. ■

Service Tip : Cleaning

AS200 Sump Tank Setting Configuration

Issue : Machine able to run in Manual Mode but not in Auto Mode if Sump Tank Option is chosen.

Solution : Check the machine configuration, sump tank without the fill valve - the configuration should be set to RECYCLE, if it is a standard sump tank - set the configuration to STANDARD and if with fill valve - set to RECYCLE.

DRYER #3	NO
DRYER #4	NO
SUMP TANK	RECYCLE
SUMP TANK #2	NONE
C/I SPRAY	NO

AS200C Pressure Setting recommendation for chemistry applications

1. First set the spray bar in prewash top/bottom angles towards unload end roughly 5 degrees. Last set of sprays bars in wash should be angled towards load end roughly 5 degrees. The last set of final rinse bars should be angled toward load end again roughly 5 degrees.
2. Pressure Settings:

PWU - 50-60 psi	CIU - 20 - 35 psi
PWL - 5 - 10 psi less than upper	RU - 65-80 psi
WU - 65-80 psi	RL - 10 psi less than upper
WL - 10 psi less than upper	RHU- 80 psi
WHU - 80 psi	RHL - 15 psi less than upper
WHL - 15 psi less than upper	FRU- 40-50 psi
CIU - 20-35 psi	FRL - 40-50 psi

ABOUT SPEEDLINE TECHNOLOGIES

Speedline Technologies is the global leader in process knowledge and expertise for the PCB assembly and semiconductor industries. Based in Franklin, Massachusetts, U.S.A., the company markets five best-in-class brands — Accel microelectronics cleaning equipment; Camalot dispensing systems; Electrovert wave soldering, reflow soldering, and cleaning equipment; MPM stencil and screen printing systems; and PROTECT global services, support, and training solutions. For more information, visit us at www.speedlinetech.com.