



Agility is the key to competitive service

Wilson Process Systems, based in Hastings, East Sussex, is known for its highly agile and responsive operation. Established in 1981, it employs approximately 100 personnel, specialising in sub-contract printed circuit board (PCB) assembly to clients' specifications and delivering anything from bare PCBs to fully tested, electro-mechanical assemblies, including full component procurement, using single-sided, double-sided, plated-through-hole (PTH) and multi-layer PCBs.

The company's electronics manufacturing services include oversized PCB capability, as well as automated surface mount technology and through-hole assembly, hand assembly and box build. Also available are design for manufacture, environmental testing, conformal coating, encapsulation and full test services.

Continual investment in new equipment ensures the company has sufficient capacity and appropriate technology to fulfil its increasing client demands and to maintain competitiveness in the market place. As a result, turnover has grown steadily and is now in excess of £10 million.

Surface mount success

Wilson's surface mount department has a total capacity of over 200,000 component placements per hour. It consists of two Universal Fuzion pick and place machines capable of assembling oversized PCBs, two Universal Advantis AC 30 Lightning high-speed chip placement platforms, a Universal Advantis AC 72, a Quad QSA-30s and a Quad QSP-2 pick and place machine. It also holds reflow ovens from Soltec, BTU, Speedline Electrovert and Conceptronic.

The company lays claim to being the first UK CEM to offer assembly of PCBs up to 1,300 by 500mm as a fully automated process, including the vital solder paste printing process.

This surface mount assembly equipment is complemented by an Orbotech Vantage S22 post reflow automated optical inspection system, which utilises true 3D inspection from multiple cameras and light sources and gives comprehensive defect detection of post-reflow and post-wave PCBAs.

Quality conventional assembly

A full suite of Universal automated through-hole assembly machines allows WPS to auto-insert axial, DIP and radial components. It can assemble through-hole LEDs in close packed arrays at high speed.

There are two Soltec wave soldering lines. The first is a 6622 Delta Wave, low solids, no-clean, resin, conveyerised wave soldering machine with foam fluxer and dual wave facility, capable of soldering mixed technology boards. Secondly a 6621 Prisma aqueous flux, micro-processor controlled, conveyerised wave soldering machine, after which boards can be washed in an Electrovert Aquastorm 100 washer/drier system, which cleans and dries the boards to the ultimate standard for this type of machine.

Perfect protection

WPS operates two fully automated Asymtek conformal coating lines consisting of Select Coat SL940E automated conformal coating systems and flexible infra-red (IR) convection ovens. These are the fastest, most accurate systems currently available and can apply coatings to military specification thickness.

The resin encapsulation, or potting, department is capable of encapsulating circuits in a range of polyurethane and silicone, UL and non-UL approved resins.

There is also a Weiss-Gallenkamp C600 Pro test chamber for continuous temperature cycling between -70 and 180°C with a patented psychrometric measurement system.

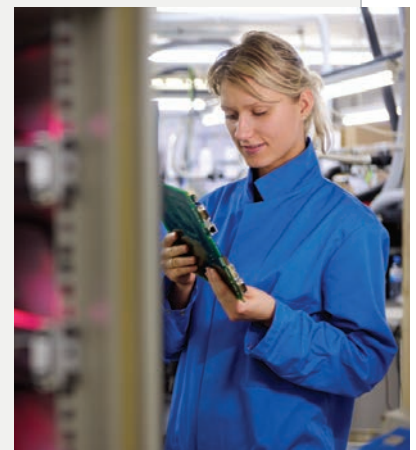
Investing in test

Equipment here comprises three Marconi Midata 5300 systems and an Aeroflex Midata automatic test equipment suite, as well as a Goepel boundary scan system, automated optical test equipment and a Vision Mantis Compact 3D inspection microscope. Any customer or product-specific testing can also be incorporated.

WPS is registered and approved to BS EN ISO 9001:2008 and employs IPC certified staff.

www.wps.co.uk

Contract electronics manufacturer, Wilson Process Systems, believes continual investment in capabilities lies at the heart of its agile and responsive operation



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