

MEDIA RELEASE

ESCATEC pushes new boundaries in micro-electronics with UV enhanced die bonder technology

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Electronics manufacturing services (EMS) provider ESCATEC has successfully integrated a UV light feature to its die bonder, significantly enhancing the precision and efficiency of the micro-assembly processes. This latest innovation underscores ESCATEC's commitment to pioneering sophisticated technologies that advance the electronics manufacturing industry.

The team at ESCATEC Switzerland have built a customized UV-curing system with two 365nm light sources on the die bond head of their Tresky T6000 fully automatic machine. This solution enables ESCATEC to achieve exact positioning of components and direct snap-curing required during the passive alignment process. The enhancement accelerates and improves the process of adhesive curing during the pick-and-place operations, streamlines the manufacturing process overall and boosts the accuracy of component placement, which is critical for the assembly of complex electronic parts.

Micro-assembly processes traditionally face challenges such as achieving high precision and managing adhesive curing times effectively. The UV light feature directly addresses these issues by significantly reducing the time required for the adhesive to set, which in turn, speeds up the entire assembly process.

The integration of UV light technology into ESCATEC's die bonding process brings several benefits to clients:

- Increased Precision: The precise control over UV exposure ensures accurate placement and bonding of components, crucial to produce high-quality electronic devices.
- Quality Improvement: Improved bonding techniques increase the durability and reliability of the finished products, meeting the high standards required in the electronics industry.
- New possibilities: There are some chips that need to vibrate, such as piezos, which means they must 'float' in the air, which makes this process perfectly suitable.



This technology holds vast potential for various applications across multiple sectors, including medical devices, automotive electronics, and industrial electronics. Each of these industries benefit from increased precision and reliability in component manufacturing, which is now achievable with ESCATEC's UV-enhanced die bonder.

"This integrated UV light into our die bonder is a game changer for micro-electronics assembly," said Wolfgang Plank, Head of the MOEMS Department at ESCATEC Switzerland. "This innovation is a testament to our commitment to leading the way in micro-assembly technology and our continuous effort to meet and exceed our clients' expectations."

We invite industry professionals and potential customers to witness firsthand the capabilities of our new technology. For more information or to arrange a demonstration, please contact us.

The introduction of the UV light feature by ESCATEC represents a significant leap forward in micro-assembly technology, reinforcing the company's role as an innovator in the electronics manufacturing industry. We are excited about the new possibilities this technology opens for current and future applications.

ESCATEC offers a complete and integrated value chain of EMS services, from D&D to product certification to mass manufacturing and after-sales services, ranging across electronics, electro-mechanical, MOEMS, box build, and plastic moulding.

Further enquiries or requests for interviews / photos / comments, etc., can be directed to Mr. Rajeshpal Singh, Corporate Marketing & Communications Manager, at rajeshpal.singh@escatec.com, Tel: +604 6113 456.

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