Panasonic CONNECT

CASE STUDY

Driving Sustainable Growth: Incap UK Expands SMT Capabilities with Strategic Investment

Client: Incap Electronics UK

Location: Newcastle-under-Lyme, UK

Challenge

Incap UK needed to modernise its SMT operations to meet increasing customer requirements across key sectors, including NHS medical devices and defence technology. The existing setup of four SMT lines limited throughput, flexibility, and efficiency. To remain competitive and scale sustainably, a major upgrade was required.

Solution

The company consolidated four SMT lines into two newly integrated ones, equipped with the latest Panasonic printers, pick-and-place machines, barcode-based scanning and upgraded software. The result is a more flexible and cost-efficient setup with significantly higher production capacity.

A Long-Term Investment in Smarter Manufacturing

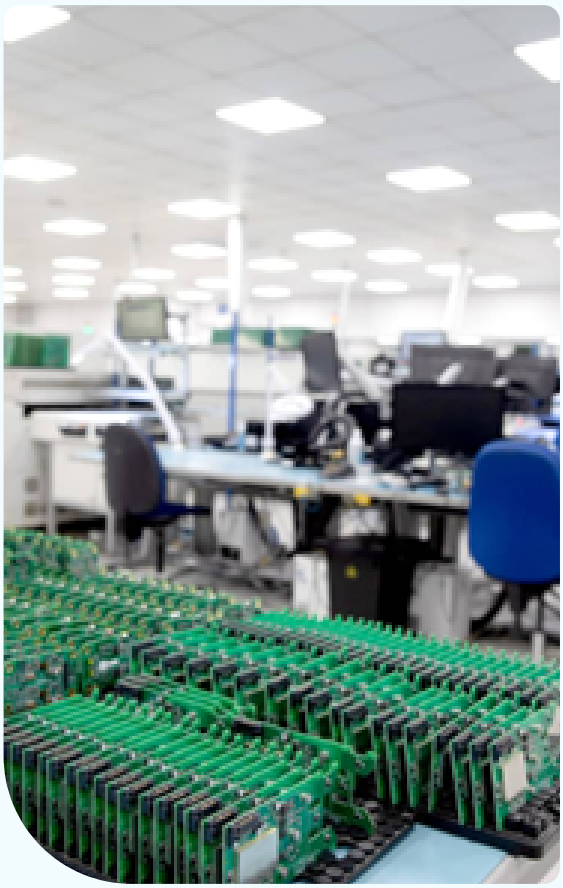
Following the success of an earlier SMT line upgrade in 2024, Incap Electronics UK has now completed the second phase of a long-term investment programme focused on enhancing throughput, production quality, and sustainability. The aim is to strengthen UK operations and support demand from high-reliability industries such as medical, defence, and industrial technologies.

As part of this phase, Incap UK has invested in advanced SMT technology to boost capacity, improve process control and reduce environmental impact. This investment supports both day-to-day production and the company's broader growth strategy.

From Four Lines to Two: Smarter, Faster, Greener

Completed in May 2025, the latest upgrade replaced four older SMT lines with two high-performance lines built around Panasonic's advanced machinery. These new lines include the NPM-GP/L high-speed screen printer and the AM100 pick-and-place machines, supported by intelligent feeders and barcode-driven production tracking. This consolidation has already increased output by over 55%.

Thanks to the improved capabilities, Incap UK can now handle larger PCB formats, support higher volumes, and manage a broader mix of assemblies with minimal changeover time. The new lines also support more sustainable operations, with improved traceability, reduced material waste, and greater energy efficiency.



Digitalisation and Real-Time Control

In addition to new hardware, the upgrade introduces smart automation and digital process management. Barcode-based scanning and machine-level data now provide real-time production visibility. Operators can respond quickly to line changes, and managers have access to actionable data for continuous improvement.

With built-in readiness for ERP integration and centralised factory control, the upgrade establishes a foundation for more connected, agile, and scalable operations. This isn't just about efficiency — it's about building a smarter, future-ready production environment.

Quality, Reliability and Local Impact

A clear outcome of the upgrade is the improvement in product quality. Early results show a 49% reduction in defect rates compared to pre-upgrade levels – a direct result of better equipment, process control and repeatability. With higher consistency and stability, Incap UK is now even better positioned to support critical sectors like the NHS and defence technology.

"This investment strengthens our ability to support current and future customer demand while also improving operational efficiency."

Jamie Maughan
Managing Director
Incap Electronics UK

Looking Ahead

The completion of this second upgrade marks an important milestone in Incap UK's efforts to build a more efficient and sustainable manufacturing operation. With faster throughput, greater flexibility, enhanced traceability, and a smaller environmental footprint, the new SMT lines show how targeted investment can improve operations – from performance on the production floor to customer satisfaction.

As Incap expands globally, the UK factory now stands out as a flagship site, demonstrating how strategic technology upgrades can modernise processes and strengthen overall manufacturing capabilities.

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