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Spotlight Series: Mycronic MYTowers Deliver a Fully Integrated System

The Fourth Industrial Revolution has ushered in a new epoch for advanced electronics manufacturing. The essence of Manufacturing 4.0 is deeply rooted in harmonizing human expertise with technological precision.

While machines cannot supplant human experts' profound knowledge and intuition, they execute repetitive tasks with unparalleled efficiency. The synergy of machine learning and immense computational power further empowers manufacturing machinery to undertake exceptionally complex tasks.

Embracing this philosophy, Extel is at the forefront of integrating pioneering technologies which includes the latest addition of 10 new Mycronic MYTower 7+ storage solutions. This latest addition in our Manufacturing 4.0 journey for Surface Mount Assembly brings together an end-to-end solution that has revolutionized the production process, ensuring optimal resource management and consistently delivering the highest quality product outcomes. pioneering technologies which includes the latest addition of 10 new Mycronic MYTower 7+ storage solutions. This latest addition in our Manufacturing 4.0 journey for Surface Mount Assembly brings together an end-to-end solution that has revolutionized the production process, ensuring optimal resource management and consistently delivering the highest quality product outcomes.

The Need to Modernize Component Storage

Traditionally, the storage of components in the manufacturing sector relied heavily on manual systems and processes. Cupboards, shelves, and bins constituted the standard, with parts being stored until they were needed for production. In addition to the manual process, SMT production is inherently unpredictable, marked by rapidly changing build schedules, a proliferation of new materials and fluid media, and the constant integration of more advanced components for locating, kitting, mounting, and tracing. While functional, the standard component management method in the market required an upgrade with more precision, efficiency, and real-time tracking capabilities that modern manufacturing demands.

Mycronic has introduced an innovative storage solution in the Mycronic MYTower 7+. As components arrive, we unbox and scan them into the Mycronic Tower's database, directly connecting our logistics and planning functions. This integration provides real-time volume tracking, guaranteeing that we always have parts on hand and accounted for when required for new manufacturing runs.

The Intelligence and Flexibility of Mycronic MYTowers

Mycronic towers are an intelligent material-handling marvel. Think of Mycronic towers as an automated vending machine for manufacturing. Planning teams, equipped with the latest ERP (read more on our advanced Tier 1 ERP system here) and Material Resource Planning tools, can now create a 'kit' of parts tailored for specific manufacturing runs. Once we set the order, the Mycronic tower dispenses a tray on demand with the necessary components. This automation speeds up the process and reduces the chances of human error.

In addition to these benefits, there is more to consider. Mycronic towers store sensitive components in a climate-controlled environment, guaranteeing optimal conditions at all times. This meticulous attention to detail ensures the longevity and functionality of parts, further reducing the risk of production failures.

Proactive Parts Volume Management

One of the standout features of the Mycronic system is its proactive approach to parts volume management. The software that governs the Surface Mount Technology communicates directly with the tower. The tower activates when it detects that certain parts are running low. The Mycronic tower selects the required component, creates a kit, and then notifies the operator when it's time to load it into the production line machinery. This predictive approach ensures that production never halts due to a lack of components.

Why Mycronic Matters for the Future of Advanced Electronic Manufacturing

One of the keys to staying competitive in the market lies in efficiency – both in production and resource management. By reducing human intervention, we not only enhance production efficiency but also minimize the physical contamination of components. Furthermore, by investing in the latest technologies like Mycronic at Extel, we're sending a clear message that we're committed to offering our clients the best advanced electronic solutions in the market.

A Vision for the Future

Integrating Mycronic's storage solutions into Extel's manufacturing process is more than an upgrade; it's a vision of the future. A future where efficiency, precision, and quality are not just buzzwords but a tangible reality. By embracing the principles of Manufacturing 4.0 and investing in cutting-edge technologies, we're optimizing our processes and ensuring that our clients receive products of the highest caliber. The future is here, proficient, meticulous, and incredibly compelling.

Stay tuned as we discuss our end-to-end Manufacturing 4.0 solution for Surface Mount Assembly in our next Spotlight Series, including the critically intelligent software behind our recently upgraded line.
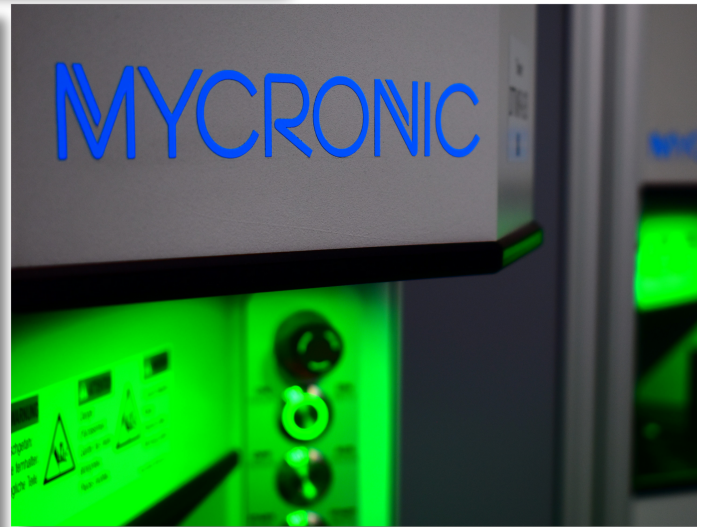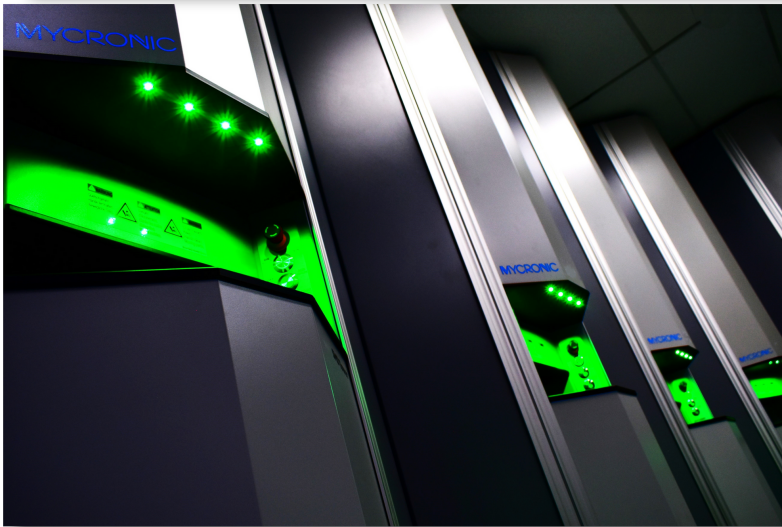
Get in Touch

Combining the latest production methodologies with over 30 years of experience, Extel Technologies can help your business design and produce electronic components that are produced efficiently and perform reliably.

If you'd like to explore more about our advanced technology and how we can assist in transforming your products, get in touch with us today.

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About Extel Technologies

Extel Technologies is a global leader in advanced electronics solutions committed to delivering innovative and comprehensive services to its valued customers worldwide. With a focus on excellence and customer satisfaction, Extel is at the forefront of driving innovation in the advanced electronics industry. Extel provides advanced electronic product design, manufacturing and lifecycle management to a diverse range of industries including Aerospace & Defence, Commercial & Industrial, Communication & Networks, Green Technology, Medical & Healthcare, Security & Safety, Transportation, Utilities and Wearable Technology.

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