TOPIC: ENGINEERING

TOP TRENDS IN PACKAGING

3 min read

At the recent Pack Expo in Las Vegas there were prominent themes that emerged that our team noted during the event. Here we invite you to have a brief look at our Conference Highlights Report and discover some of the top trends in packaging.

1. Robots
More specifically, the integration of servo-driven robots into packaging and conveyor systems. Industry leaders and innovators showcased how these robots are rapidly replacing traditional packaging equipment, revolutionizing the efficiency and precision of production lines. Notably, vendors unveiled cutting-edge robotic solutions capable of depalletizing open-top can trays and seamlessly transferring them to infeed variety pack packing cells. What sets these robots apart is their ability to adapt to uneven tray stacks and pallets, demonstrating a remarkable level of adaptability and intelligence. This theme underscores the pivotal role that robotics now play in streamlining packaging processes, improving overall productivity, and addressing complex challenges in the industry.

2. 3rd Party Parts

Another central theme was related third-party part manufacturers. It revolved around the significant paradigm shift in equipment maintenance and spare parts procurement. Non-original equipment manufacturer (i.e., non-OEM) companies have emerged as key players in providing comprehensive support for a wide array of spare parts, traditionally exclusively available through the OEM. Their groundbreaking approach involves on-site 3D scanning of equipment, enabling the production of complete change part kits that effectively retrofit entire equipment centers. This not only presents a cost-effective alternative to OEM parts but also extends the lifespan of components through the use of higher-grade materials designed for enhanced durability. Moreover, these retrofit capabilities empower machinery to handle diverse products, even those initially outside the scope of the equipment's original design. This theme underscores the industry's evolution toward more accessible, cost-efficient, and adaptable solutions for equipment maintenance, ultimately benefiting businesses by reducing costs and increasing equipment versatility.

3. Laser Coding

Another significant theme at the recent Pack Expo centered on the advancements in laser coding technology. Attendees witnessed the unveiling of cutting-edge CO2 lasers capable of coding various surfaces, including films, laminates, PET bottles, and inked paper and metal caps. Additionally, fiber lasers emerged as a compelling alternative to traditional inkjet date coders, particularly for cans. The benefits of these laser coding solutions were prominently discussed: while they come at a higher initial cost, they require minimal maintenance, eliminating the need for expensive consumables and making the process more sustainable. Laser coding also delivers more legible and detailed prints, enhancing product traceability. Furthermore, the ability to encode barcodes enables real-time inventory tracking for ERP systems, revolutionizing production monitoring and inventory management. This theme underscores how laser coding technology is reshaping the packaging industry by improving efficiency, sustainability, and traceability.

4. Sustainable secondary packaging

With a move towards more sustainable secondary packaging, for example, with the phasing out of plastic can rings in Canada in 2024, alternative packaging options are emerging. These include Paper Based Packaging Clips for Cans such as KeelClip, EnviroClip paperboard rings which do not use any adhesives at a lower cost, and Ecogrip for plastic bottles. These paper-based package clips and rings are made from renewable fiber, are fully recyclable, and have the benefit of providing added space for branding. The stability of these new emerging products in some cases eliminates the need for shrink-wrap which has historically been very difficult to recycle. Newly developed adhesives are also being developed to be more sustainable including hot melt and label adhesives with a higher renewable bio-based content.