



Kollmorgen helps packaging automation solutions provider meet the need for on-demand “right-sized” packaging

In recent years, e-commerce and global logistics have grown tremendously—with demand often outpacing capacity. Labor shortages, supply chain disruptions, increased competition and cries for sustainability further increase the pressure. Large retailers that ship a wide variety of products have found themselves at a crossroads: Find ways to innovate fulfillment and shipping processes or risk losing market share.

Challenge

Today's consumer expects online orders to come quickly and conveniently—with enough packaging to protect their goods, but not so much as to create unnecessary waste and emissions. On the other hand, large retailers must accommodate massive order volumes and a seemingly endless range of product sizes, all while keeping labor, material and shipping costs down.

Packsize, a global leader in packaging automation solutions, sought to help answer this need. In March 2020, the company finished a prototype of its revolutionary X5®, the world's first fully automated erected box system that delivers right-sized packaging on demand. Initial buzz was strong: Walmart expressed interest in the technology for its next-generation fulfillment centers.

This X5 evolution—dubbed the Ultra5—would have to be exceedingly reliable to meet Walmart's uptime needs at its busy, mission-critical fulfillment centers. The pressure was on to scale production quickly and efficiently. All amidst a global pandemic and exploding e-commerce demand.

“To succeed with the Ultra5, we relied on Kollmorgen to deliver 1,000 components. Kollmorgen has established itself as a trusted partner in one of our core platforms and we expect their team to be a key part of that future success.”

—Edwin Borrero
Packsize

Solution

When it came time to move to commercialization and full-scale production of the new packaging automation system, previous motion control partners fell just short of the project's demanding requirements. The search was on for a partner who could deliver both technically and with a proven supply chain and a global footprint. Kollmorgen and its Swedish-based partner SDT delivered with the industry-leading 2G Motion System.

The hallmark of the 2G Motion System is its ability to deliver unrivaled performance and torque density in a compact package. In fact, AKM2G servo motors deliver an average of 30% greater torque density than previous generations with no change in package size or mounting, allowing for a reduced machine footprint without sacrificing performance. The AKD2G drive further reduces space requirements and bill of materials thanks to a single-cable connection, dual-axis drives and optimized smart features. This is a key benefit of motion control components for packaging machinery as it allows for more compact equipment design.

What's more, the AKD2G drive enables a much easier and higher level of customization than competitive products—which ultimately allowed Packsize to enhance the Ultra5's functionality and user experience.

In addition to checking the technical boxes, Packsize chose Kollmorgen for its proven reputation—both in terms of product integrity and supply-chain reliability.

Results

Even amid COVID-induced supply-chain snags, Kollmorgen and SDT delivered over 1,000 components to enable the shipment of 200+ X5/Ultra5 packaging automation systems globally within a single year of the product's launch.

Walmart and other customers use the system to produce up to 600 custom-sized boxes per hour, each with up to 2 labels applied—the highest packaging throughput in its class. This right-sized approach to packaging contributes to lower labor and packaging costs, less waste, and fewer emissions. In fact, retailers who use the system can fit up to 33% more boxes on freight and delivery carriers.

If its retail customers are happy, so is Packsize. The company is taking advantage of continued growth and new product development opportunities—with its trusted motion partner Kollmorgen by its side.



600

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About Kollmorgen

Kollmorgen, a Regal Rexnord Brand, has more than 100 years of motion experience, proven in the industry's highest-performing, most reliable motors, drives, AGV control solutions and automation platforms. We deliver breakthrough solutions that are unmatched in performance, reliability and ease of use, giving machine builders an irrefutable marketplace advantage.