Autobag®
A PRODUCT OF AUTOMATED PACKAGING SYSTEMS

CASE STUDY

Autobag® Packages Nested Products at 45 Bags Per Minute

The challenge presented to Automated Packaging Systems' Custom Engineering and Integration team was fairly straightforward. The customer wanted to place nested plastic cutlery in a bag at 45 bags per minute without the product de-nesting. Additionally, the system had to be adaptable to multiple bag a product sizes. Finally, due to the location in the facility where they wanted to package the product, the footprint of the machine had to be quite small.

The engineers at Automated selected the HS-100 Excel™ as the bagger platform that they would build the system around. They selected this bagger for its company size and the bagging speeds it could achieve. Next, the engineers designed a "sliding accumulation funnel," which allowed the product to enter the bag nested. As the funnel extracted from the bag, the product remained nested. Finally, the system was equipped with a bag-in-a-box attachment. Providing bags in a box allows for longer run times between material changeovers.

The small footprint of the system allows the operator to bag product right off the injection molder, saving material handling. The operator degates the product and drops the bundle on the slide funnel "scoop." The system recognizes product and cycles the cutlery into a bag. The bagger seals the bag and presents a new bag to be loaded. Achieving bagging speeds of 4 bags per minute allows the operator to stay ahead of the injection molder.

"The application presented some unique challenges to our team," said **Gregg Mertens, Manager of the Custom Engineering and Integration group.** "Particularly, the need for flexibility to adjust to multiple sizes and counts." Mertens went on to explain, "We knew we had something when we started testing the accumulation slide funnel. It allowed us to quickly change over product sizes and counts." The device was so successful that Automated was able to patent the design. "The bottom line…" Mertens says, is that "….the customer had some stringent requirements necessary to justify the system, and we designed to those requirements. That's what we do."