Innovative sorting technology provides an ideal solution for European post

Solystic and its customers have a long history of working together to define innovative solutions, such as letter and flat sorters, XMS mixed mail machines, restmail machines and Soly mobile robots.

This story continues today: Solystic is working on a very ambitious project that will sort all small packages destined for a specific country at a single site. The machine used is a Compact Slide TRay (CST) equipment specially designed to answer the need of several hundred thousand of small parcels per day. This sorting will be carried out on several machines in two passes. The packages will be sorted during the first pass in rolling cages and finally in bags.

A conventional system for such a huge number of outputs would have led to a massive sorting center footprint and prohibitive costs. This is why Solystic wanted to offer its customer the most compact solution possible, while relying on proven technologies.

Each sorting machine is based on a concept similar to the TOP2000, a Solystic sorting machine for flat objects that uses a carousel equipped with trays. Injection on these trays is carried out flat and the trays then tilt into an inclined position to occupy a minimum amount of space in the sorting section. The introduction of packages is mostly automated thanks to the use of picking robots.

To guarantee the very high target throughput, several high-speed machines (which can process 11,000 packets per hour) are combined in two-passes sorting, for which Solystic has long had extensive experience with many operators.

One of the challenges of these ambitious projects is the handling of rolling cages and bags between the machines and toward the final evacuation. To avoid any laborious manual handling or a complex conveyor system, Solystic deploys its mobile robot solution, Soly – a fleet of several hundred robots that, in coordination with the machines, will perform this handling automatically, which also reduces the space between the machines.

Solystic’s SOSi simulation platform was used from the beginning of the project, both for the design and sizing of the solution, and for sharing project developments with customers and between Solystic teams, on key points of the system. SOSi will continue to be used throughout the project to ensure it continues to meet customer requirements.