

The robots Soly™ on La Poste – PIAC Roissy Charles de Gaulle airport

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Since the spring, it is real ballet that takes place 20 hours a day on an international airport site of La Poste at Roissy: more than 40 mobile robots Soly™ Move transport bulky objects, mainly parcel bags (but also packages and letter boxes), between the arrival areas of planes (import) and trucks (export) and processing sites (opening of bags, customs, etc.). The 600 objects per hour handled by Soly™ weigh up to 50 kg. Soly™ handling over several kilometers per day, 20 hours per day in an area of 14,000 m².

To design and validate the configuration of the solution, SOLYSTIC has made use of its simulation platform SOSi™ in collaboration with its client La Poste.

The versatility of the Soly™ Move solution has enabled La Poste to avoid installing bulky conveyors that would be obstacles to the movement of vehicles around the site. Soly™ Move complies with the site's traffic rules: the mobile robots know how to stop to let pallet trucks pass at crossroads.

SOLYSTIC has designed and realized automated interfaces with classic conveyors that allow loading and unloading the Soly™ Move without even having to stop them. Particular care has been taken to these interfaces to take into account the varied morphology of the bags. The Soly™ Move process is manual when the robot operates in complete safety and ergonomics with the operators.



To ensure their autonomy, SOLYSTIC has designed a charging /changing station for their batteries: when the battery falls below a charge threshold, the robot Soly™ goes to the station where a robotic arm exchanges the empty battery for a recharged one. In order to guarantee the best availability at the best cost for its customer, SOLYSTIC has chosen to provide two batteries per robot rather than doubling the robot fleet.

Depending on the future load for the site, the fleet of Soly™ Move can be increased up to more than 70 robots, all the more easily as robots are rented.

SOLYSTIC ensures the curative and preventive maintenance of the site and the hotline support.

SOLYSTIC's range of solutions Soly™ also includes:

- Soly™ Sequencer: the store delivery for retailers and the delivery preparation which discharge drivers of a tiring and time-consuming operation. They can be more efficiently to their delivery tour,
- Soly™ Sort: the parcel sorting in bags, cartons and / or containers whose management is automated in the distribution centers,
- Soly™ Cart: the moving of karts/rolling cages.

All Soly™ solutions are patent pending.