



AUTOMATED PICKING

**ERGONOMICS FOR IMPROVED
PERFORMANCE**





AUTOMATED PICKING: PERFORMANCE AND QUALITY CHALLENGES

Order picking is the central process in distribution centers. A more urgent need for responsiveness, the fragmentation of orders, dedicated processes for each sales channel: the need to improve productivity has intensified.

And against a background where the recruitment of teams is complex, automation has become absolutely vital, and the well-being of operators has established itself as a major concern. Picking errors can be costly for your company, both in material terms and with regard to customer satisfaction.

ACHIEVING YOUR TARGETS WITH APPROPRIATE SOLUTIONS

SAVOYE's automated picking solutions combine performance with ergonomics. Focusing on efficient ways of working, offering simple operations, minimizing the margin for error, and creating a suitable working environment are the key principles that guide us. We offer you picking solutions that combine working comfort and the quality of order picking operations with the constant aim of achieving optimum productivity.

From the simplest to the most highly automated: our solutions are tailored to your needs, your situation and your aims.

THE BENEFITS OF AUTOMATED PICKING

01

Efficiency

Less operator downtime

02

Reliability

Minimized error rate

03

Retention

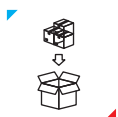
Work becomes less arduous and the working comfort of operators is improved

THE PROPOSED USE CASES



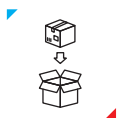
GOODS-TO-PERSON PICKING

Synchronization of parcels at operator stations with the products to be picked



PICK-THEN-PACK

The process of picking products before allocating them using units or high-speed sorters



PICK-AND-PACK

The process of person-to-goods picking by the parcel, using stations, or on a cart

X-PTS-PICK STATION



INCREASED PRODUCTIVITY AND OPTIMIZED WORKING COMFORT

With a completely operator-focused design and the versatility for different modes and activities (picking, inventory, etc.), the X-PTS Pick Station allows to reach very high speeds.

Ease of use, operational efficiency, low physical stress, maximum productivity: X-PTS Pick Station has everything it takes to be your future ally in dealing with the challenges of growth and peak activity.

ADVANTAGES OF THE X-PTS PICK STATION



Quality

By focusing the operators on picking the quantities displayed, the “1-to-1” rule (one picking location and one putting location) reduces the margin for error and maximizes the service rate.



Performance

With X-PTS Pick Station, you can achieve 300 to 700 lines per hour on average. In addition to a quick ROI, you will benefit from highly responsive order picking, to produce as close as possible to cut-off times and improve your logistics performance.



User-friendly

X-PTS Pick Station is convenient and easy to start using, so only minimal training is required. Its basic and intuitive operation makes it easy to train new employees and retain teams.



Ergonomics

Picking operations take place at hip height with the tubs tilted, so they are designed to reduce biomechanical and postural loads. This provides better working conditions for operators.

INTELIS



PICKING WITH STATIONS AND A MECHANIZED LINE

An amazingly effective conventional solution, zone-to-zone picking stations, fits into a completely mechanized process, from the forming of parcels to their sorting prior to palletization and shipping. It is based on our INTELIS plug & play conveyor system and adapts to your warehouse to create a solution that meets your needs.

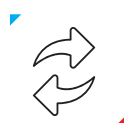
Intelligent, modular, quick to install and very energy efficient... INTELIS has many excellent features. Fully developed by SAVOYE, this range of conveyors is designed to handle light loads (up to 32 kg).

THE ADVANTAGES OF INTELIS



Plug & Play architecture

With its standard elements 100% independent each module has its own mechanical and electrical structure, and its own control unit: it is delivery ready to be installed and connected up.



Agility

The control fully decentralized and the use of own electronic cards enables it to adapt its behavior depending on the flow to be conveyed for greater fluidity and responsiveness.



Maintenance

Thanks to the limited number of parts in their design, the INTELIS modules significantly reduce the amount of space required to store spare parts.



Scalability

Configuring the electronic card can be done at any time and all parts can be reintegrated in the case of a line reconfiguration, a site expansion or relocation.

FLEEXEE



BOOST YOUR MANUAL PICKING PERFORMANCE

FLEEXEE, SAVOYE's mobile robotic solution is a flexible and economical alternative to manual processes. It is designed for all activities where continual adaptability and flexibility are required, to keep up with a constantly-changing market and to make work less arduous for the operators.

FLEEXEE mobile robots travel completely autonomously, carrying parcels and other items across the warehouse so that operators do not need to make trips between different areas (initiation, picking, and packing), and saving them the effort of handling carts.

THE PROPOSED USE CASES

Pick&Pack multi-package preparation

Operators remain in their picking areas while the robots move around to pick the orders. The control system assigns missions to robots and operators in real time, to synchronize appointments and minimize waiting.

OTHER USE CASES

Pick then Pack, resupply and return management.

THE ADVANTAGES OF FLEEXEE



Productivity

By focusing the operators on picking the quantities displayed, the "1-to-1" rule (one picking location and one putting location) reduces the margin for error and maximizes the service rate.



Ergonomics

Because it frees the operators from handling tasks, FLEEXEE helps to reduce repetitive strain injuries.



Cost

This solution can be purchased or obtained in RaaS (Robot as a Service) mode.

SCREEN
Information and picking instruction display

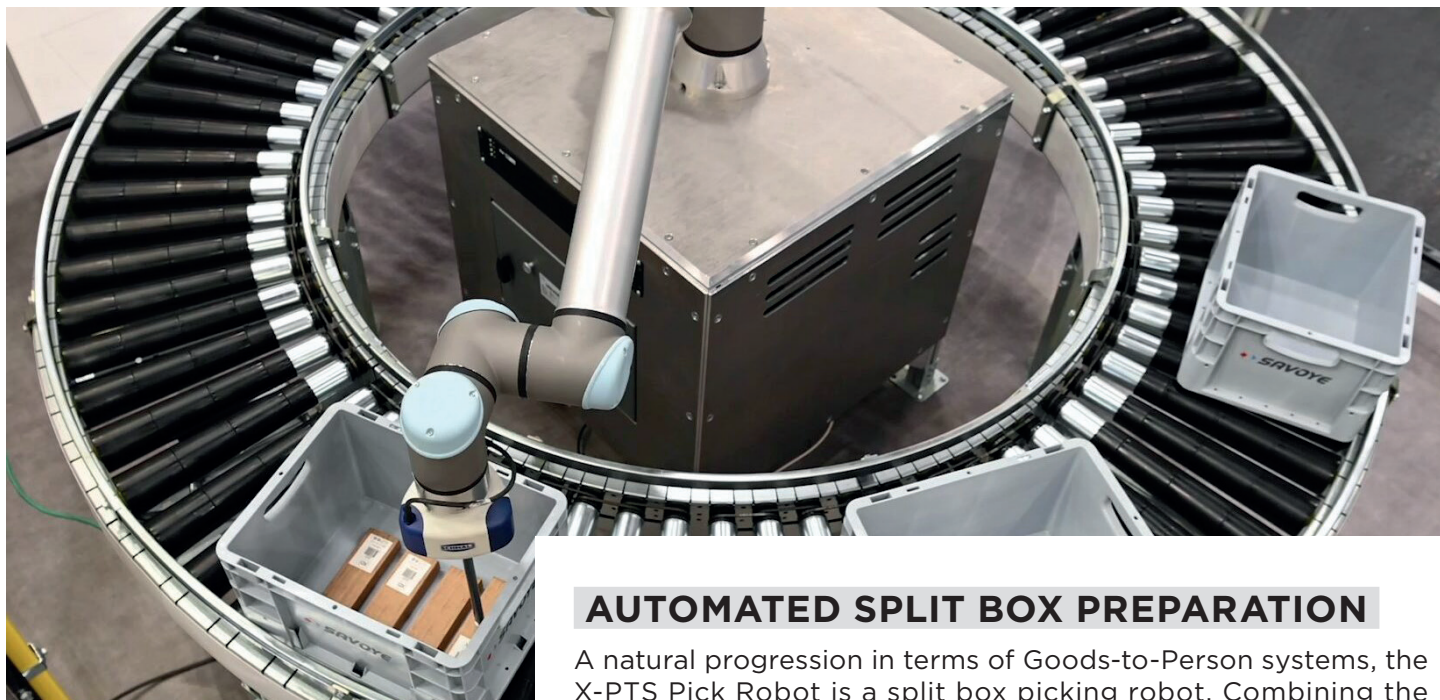
LED
Put to Light

BATTERY
Shelf autonomy

FLEEXEE

- 2 horizontal lidars
- 2 vertical lidars
- 2 powered wheels
- Gyroscopic sensor
- Odometric sensor
- Automatic docking technologies for battery charging

X-PTS-PICK ROBOT



THE ADVANTAGES OF THE X-PTS PICK ROBOT



Performance
Up to 750 cycles
per hour



Adaptability
Can be integrated into
a goods-to-person system,
either in a new project or
for an upgrade



Versatility
Suitable for all sectors
and for a wide range
of product types

AUTOMATED SPLIT BOX PREPARATION

A natural progression in terms of Goods-to-Person systems, the X-PTS Pick Robot is a split box picking robot. Combining the latest robotic gripping and vision technologies, it automatically identifies, picks and places items using its embedded AI. This gives you a fully automated order picking solution, for around-the-clock operation. It can also recognize up to 90% of your product catalog.

ARTIFICIAL INTELLIGENCE

This equipment, which requires no human intervention, can either replace or complement a picking station. Based on the latest 3D vision and Machine Learning technologies, its object detection and recognition skills grow a little more with each operation.

PICK AND DROP

This is the most common use case. The robot picks the product from a product storage bin and drops it into a shipping bin or package. Efficient and ideal for single-item or two-stage order picking, around 90% of items are eligible for this process.

PICK AND PLACE

The robot packs the products in an accurate and optimal manner. This feature is essential in certain situations: reducing as much as possible any empty space in the packages, packing several products precisely in a packet, optimizing requirements internal to the logistics processes, such as stock densification. 80% of items are eligible for this operating mode.

PICKING TOOLS

THE ADVANTAGES OF PICKING TOOLS



Ergonomics

Fewer repetitive strain injuries and better operator comfort



Breadth

Extended functional coverage



Adaptability

Phenomenal implementation speed



SMART UNITS FOR EFFICIENT PICKING

Efficient order picking requires smart, user-friendly tools to make your order picking and sorting tasks more reliable and to increase your efficiency by guiding operations with lights. SAVOYE picking tools are equipped with LED technology and illuminated displays, to simplify picking operations while helping to reduce error rates.

For all your manual picking processes, we offer you an additional range of picking tools: pick-to-light and put-to-light strips, picking cart, allocation units, voice-operated systems, mobile solutions, etc. They adapt to your uses and business flows to improve the efficiency of your logistics.



HIGH-SPEED SORTERS

QUICK ALLOCATION OF ALL YOUR PRODUCTS AND PACKAGES

Particularly suited for mail sorting applications and distribution to points of sale, the high-speed sorters are renowned for their performance and capacity. SAVOYE works with third-party partners to offer you Bomb bay, Push tray, Tilt tray, Cross belt, etc. sorters, depending on your needs and your type of products.



ADVANCED TECHNOLOGIES

- Automated picking
- Automated storage
- Automated packaging
- Micro-fulfillment centers

ADVANCED SOFTWARE

- Warehouse Management System
- Transportation Management System
- Order Management System
- Warehouse Control System