GOODS-TO-PERSON:

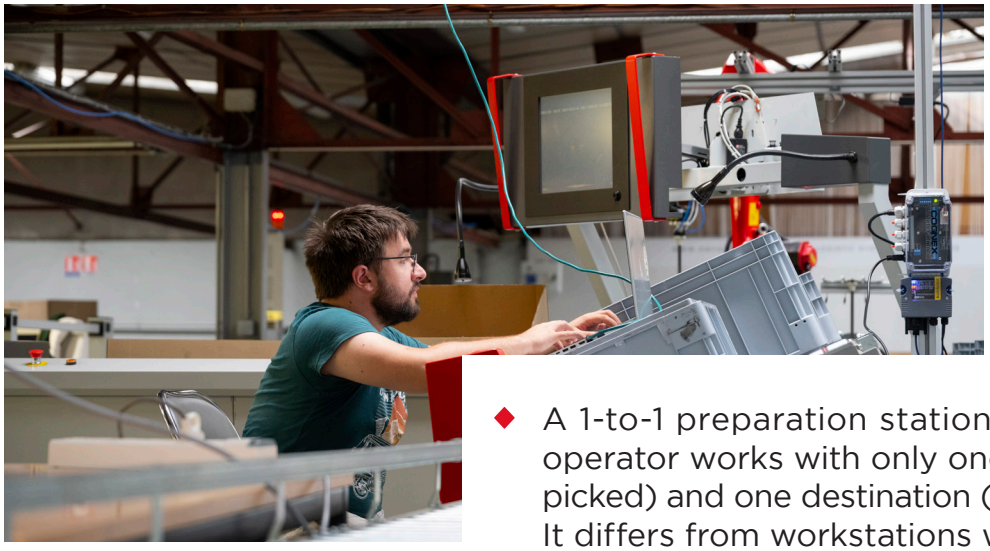
RECONCILING PERFORMANCE AND WORKING COMFORT WITH 1-TO-1 PREPARATION STATIONS

Increasingly popular, automated goods-to-person order preparation solutions are rapidly being deployed to warehouses. While they clearly reduce arduousness, especially in terms of distances traveled and the associated handling, the investment required by these types of systems is also accompanied by high expectations in terms of ROI, performance and working comfort.

At the core of these automated systems is the preparation station on which the operator works. A truly strategic space in the preparation process, its design must offer the best compromise between performance and ergonomics. To maximize personal comfort, the Goods-To-Person station must favor correct and efficient postures, while reducing the effect of stresses generating arduousness.

This is particularly the case for order picking stations in 1-to-1 mode, which embody the optimum in terms of ergonomics, performance and quality of preparation.

WHAT IS A 1-TO-1 PREPARATION STATION?



- A 1-to-1 preparation station is a workstation where the operator works with only one source (the products to be picked) and one destination (the,package to be prepared). It differs from workstations where the operator works on several carriers, source and/ or destination, at the same time.

- **THE MAJOR ADVANTAGES?**

Ergonomics, performance and preparation quality.

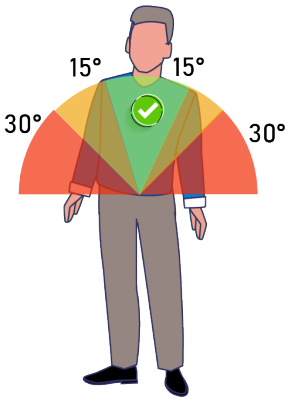
1/ ERGONOMICS

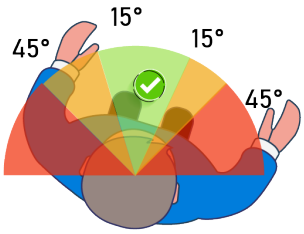
- The logistics sector is strongly impacted by issues related to musculoskeletal disorders. A study by the French health insurance on this subject indicates that 95% of occupational diseases in this sector are related to MSDs, whose annual financial impact is estimated at 73 million for companies. 860,000 work days are lost, 70% of which are related to back pain. (Source : https://www.ameli.fr/) These figures clearly demonstrate the human and economic stakes behind the simple concept of ergonomics.

  When properly applied in the design of goods-to-person preparation stations, ergonomics contributes greatly to working comfort and therefore to the overall productivity of operations. This is particularly the case of the Savoye X-PTS Pick Station, which has been designed in collaboration with specialist firms, in compliance with the principles of ergonomics and motor skills. **Respecting the guidelines in this area, its design serves to validate the basic ergomotor principles:**

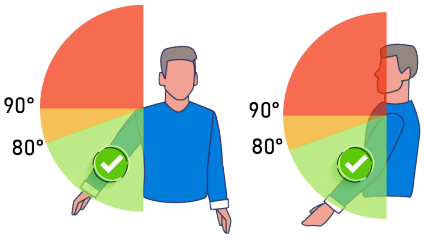
- Position centered in relation to the work action
- Positioning and keeping the back straight
- Work in the ideal area for the upper limbs, with the arms flat against the trunk and movements between the hip and the heart.
- Respect for picking and handling comfort zones and angles

TRUNK

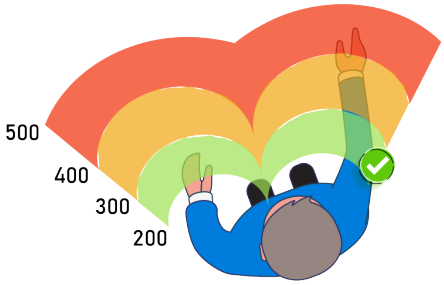




SHOULDER



WAITING DISTANCE



Tilting of containers: this system reduces the stresses on the shoulders and on the bust. The operator does not need to bend over to pick or place the products. Movements are thus restricted to the order picker's comfort zone.

Capacitive confirm button: a simple touch validates the operation. Positioned at hip height, the effort is minimal.

Screen: positioned in the field of vision and containing only the information essential to the preparation: the operator does not need to raise their head or make neck movements to access the information. The height and depth of this HMI can be adapted to the operator.

2/ PERFORMANCE

- The very principle of the Goods-To-Person system is to free the operator from travel within the warehouse by bringing him the products to be prepared. On a station arranged in 1-to-1 mode, the operator focuses only on picking: he/ she is therefore more efficient, avoids the risk of error and can accomplish more missions than in conventional manual mode (up to 720 line items/hour).

3/ QUALITY

- A 1-to-1 Goods-To-Person station is also very relevant to picking quality. Positioned in front of the pick and place area, the operator cannot be misled since the product and its destination are obvious. Only the quantity, clearly displayed on the screen of the goods-to-person station, remains under the vigilance of the order picker, who only has to focus on the number requested. Preparation quality is therefore guaranteed by a decrease in the operator's mental load.

TESTIMONIALS:

"The Savoye solution not only offers significant time savings for the operator, who is now free from all his/her travels, but also optimizes the storage area and improves quality when preparing our customers' orders"

Bruno DELRUE,
Managing Director MDS

"The installation of the X-PTS solution has allowed us to transform the workstations, bring social changes and develop new promising activities"

Nathanel SLAMA,
Logistics Director OPHTALMIC

"The ergonomic workstations were developed with our partner Savoye, but also with our in-house teams, to be as efficient and as unrestrictive as possible"

Grégoire KOUDRINE,
Supply Chain Director
MANUTAN Group

SAVOYE
REACH WHAT MATTERS

SAVOYE:
BEST IN CLASS AUTOMATION FOR YOUR LOGISTICS AND SUPPLY CHAIN NEEDS

ADVANCED TECHNOLOGIES

Order preparation of light loads
X-PTS Goods-to-Person solution, smart conveyors, high-speed sorting systems, robotics

Automation of shipping packaging
JIVARO, e-JIVARO, PAC 600, lidding, cardboard wedging

Automated storage of heavy loads
MAGMATIC

ADVANCED SOFTWARE

Warehouse management and flows control
OMS, WMS, WCS, TMS, EDI