



WORKSTATIONS - PICKCENTER & PICKSTATION

Two product families designed for performant operation ergonomics

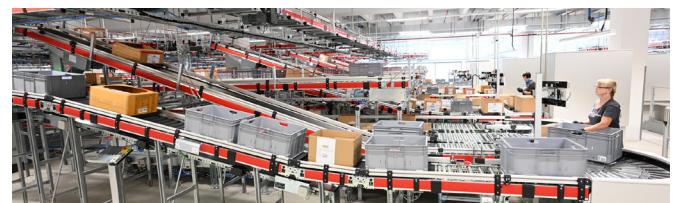
Ergonomics delivers operator performance. Workstations are designed around the human body and their movement sequences. The PickCenter One and PickCenter Multi maximize the individual person's ergonomics to execute picking operations, operators work at their own rhythm without physical or mental stress. The Pickstation series brings workstation ergonomics to Packaging, Picking and wider Value Added Services (VAS) in cost optimized modules.

Solutions close to the customer's need. Workstations are a critical interface in any fulfilment centre, where operators deal effectively with flexibility, complexity and abnormality. Ergonomics drives performance through the optimal physical environment for each person, accommodating their unique body dimensions. The two workstation families PickCenter & PickStation, embrace smooth operator practices, minimize error rates, and in general make the operator happy, resulting in the maximum performance.



PICKCENTER ONE & PICKCENTER MULTI

PickCenter are 'Operator driven environments' where the operator works to their own rhythm, they are adaptable to a person's individual dimensions, and configured to the size & weight of the products and work area environment. PickCenter One won the 'Innovationspreis Ergonomie 2019' (Innovation Prize for Ergonomics 2019), for being the ideal work environment promoting the health and wellbeing of all operators. HARM and EAWS assessments techniques confirm the PickCenter understands the human body and human movements. Ergonomics protects the safety of the operator, creating the best and most comfortable environment. This is the power where performance is born into reality.



Removing physical stress by:

- Upright posture & screen height
- Vertical arm movements limited to a 60° maximum
- Limiting back rotation (left to right) <30°
- The position of the Load carrier, Acknowledge button, and Touchscreen are within the optimized operators reach dimensions

Removing mental stress by:

- Not leaving the operator waiting between operations
- Optimized GUI and colour concept, provide clear instructions leading the operator

Height adjustable platform & 3D adjustable touchscreen

adapt the machine interface to each operator's physical size. Facilitating the optimal work environment (load carrier height, screen height) to the unique person's characteristics.

Contoured work area allows the operator to stand close to the picking area, providing enough space for all body movements with comfortable clearance for the person's feet.

Patented 'Curve' design brings the load carrier within the standard reach dimensions of the operator. Removing the need for greater: movement, leaning or twisting, which reduce physical stress.

The **Tilt function** widens the standard reach of the operator, allowing for better visibility of goods in 500mm wide load carriers, increasing the picking range at very performant rates without inducing physical stress.

An **Optimized GUI** with a specifically designed **Colour concept** eases the concentration needed for high frequency repetitive tasks, directly leading the operator and eliminating human error.

The **Target sequencer** schedules the target load carriers to match the source sequence arriving at the PickCenter One workstation. Upcoming picks are prepared in advance, ensuring a constant throughput performance.

Fast changeover times allow the operator to work at their own rhythm, when the operator is ready for the next operation the PickCenter is prepared in advance. Streamlined and smooth handling bring the capacity to recover from unplanned events and fluctuating order rates. PickCenter One achieves **1000 picks/hour** at maximum performance, rates the operator can only absorb for short durations. Sustained rates use all the ergonomic properties to comfortably achieve **600 picks/hour** consistently.



PICKCENTER MULTI

1:4, 1:6, 1:8, 1:10 source to target configurations. The operator is automatically presented with the source: Tote, Tray, or Carton. Each specific target is then illuminated, completed targets are automatically evacuated. Subdivided totes utilize 'Put-by-light' to clearly indicate the source product

PICKCENTER ONE

Source and Target totes, trays or cartons, are automatically delivered to the operator providing 1:1 picking without the operator walking. At 35kg optimized changeover times are from 1.7s (400x600mm), 1.8s (650x450mm), and 2.1s (700x500mm). An optional weigh-scale can be implemented to mitigate operator errors.

PICKSTATION

The PickStation family of workstations, consists of modular units designed on human movements when executing picking, packing and other VAS tasks. Solutions are arranged from the proven modules, providing a standard look and feel, delivering cost optimized systems, with a high priority on personal safety.

The modular concept provides the flexibility to balance the handled products with safe operator movement sequences, taking in to account the size of the work area and the additional equipment needed e.g. tables and shelving. Picking, Packing, and VAS activities are accommodated within the standard reach of the operator, for example allowing for the operator's feet, brings the operator closer to the load carriers. Tilt mechanisms bring products in wider load carriers closer to the operator and into their standard reach dimensions; for example if oversized totes or cartons (up to 850x650) are needed, the PickStation is the product of choice.

- Modules are configured to specific customer work areas, for example incorporating tables and shelving
- Suitable in chilled environments to 0°C (32°F)
- Tilt function brings wider load carriers into the standard reach dimension
- Possible to integrate weigh-scales and other ancillary equipment
- Put-to-light guides the operator error free through their operations
- Fast changeover times 1.6 – 3.2s depending on module, 4.5s with tilting
- Source load carriers are positioned automatically, targets can be manually or automatically evacuated

TOTAL COST OF OWNERSHIP

- Ergonomics makes people happy, resulting with less staff turnover and less unplanned staff absence
- 100% prewired and 100% pretested before leaving TGW, increasing quality, resulting in fast install & commissioning times
- KingDrive technology is used on both the PickStation and PickCenter, adopting its success and benefits provides operational security through high reliability and long product lifespan (>35000 hours application specific)