

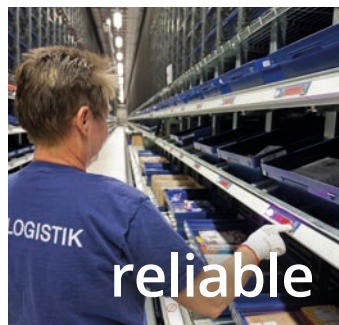


Making order picking more efficient

PickTerm
Flexible



quick



reliable



flexible

The System

KBS Industrietechnik GmbH **KBS**



■ Picking the right item with PickTerm Flexible

Is your aim to accelerate the picking process while reducing picking errors at the same time? Do you have a large number of single orders? Do you set high standards for short delivery times and customer satisfaction?

**The solution of KBS Industrieelektronik GmbH:
PickTerm Flexible – an advanced pick-by-light system**

PickTerm Flexible uses clearly visible LED shelf displays (modules) to guide the user through the picking zones to ensure that the right item is picked. No time is lost in searching for order positions or reading and processing paper pick lists.

Decades of experience have gone into developing this new system. Whether in the logistics of picking orders or in production for the supply of material, this system covers all requirements.

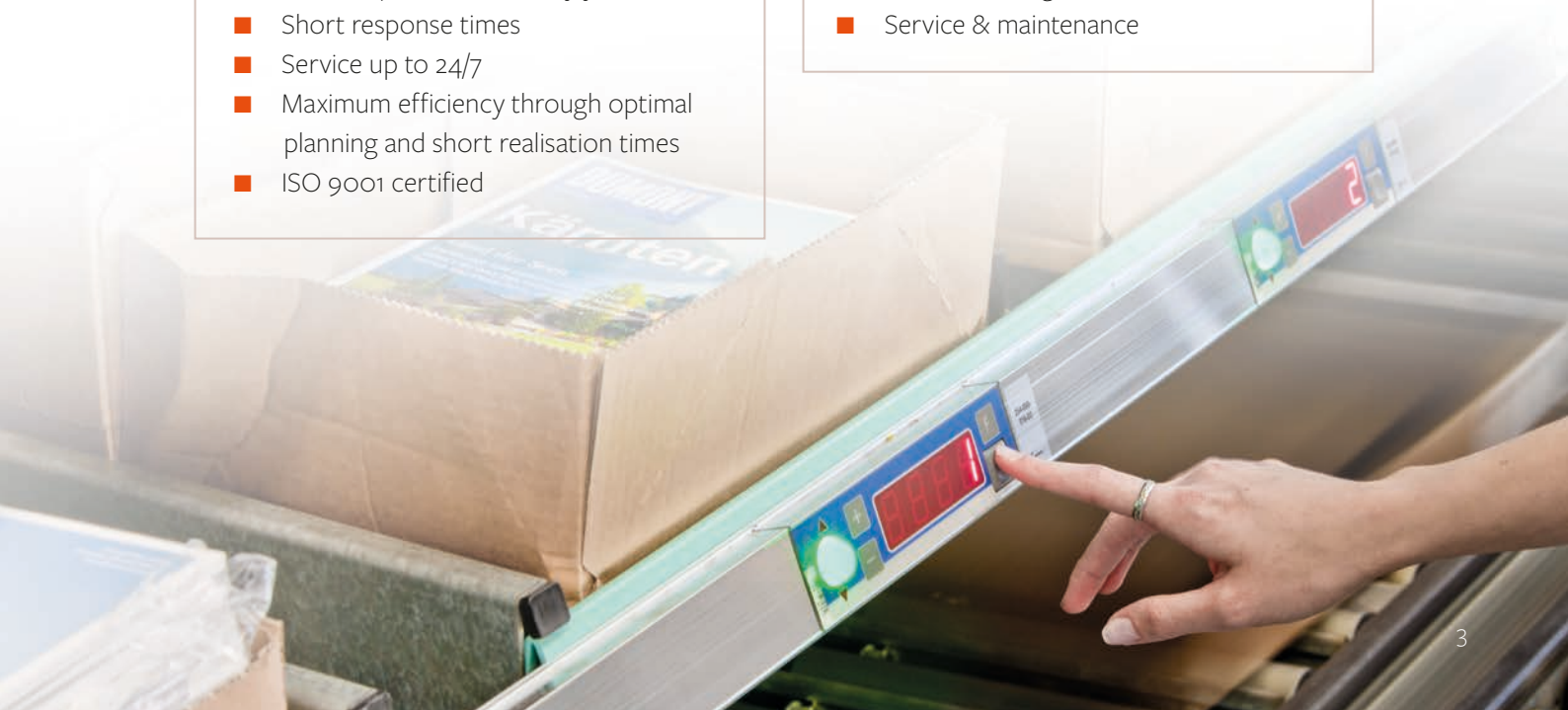
✓ Your benefits of using the pick-by-light experts

- 40 years experience
- Turnkey system customised to your specifications
- Highest quality standards through the company's own production sites in Germany
- Guarantee of the availability of all our components for many years to come
- Short response times
- Service up to 24/7
- Maximum efficiency through optimal planning and short realisation times
- ISO 9001 certified

✓ Our services

We are there for you wherever you are in the world!

- Planning and consulting
- Project management
- Development
- Information technology
- Production
- Assembly
- Commissioning
- Service & maintenance



■ The most important areas of application for Pick-by-Light

Order picking from flow racks or shelving systems: Pick-by-Light

The “conventional” application case for pick-by-light systems: Each retrieval location in the picking zone is equipped with a pick-by-light shelf display which has at least one eye-catching lamp and one confirmation key or acknowledgement sensor.

After the order has been scanned, the respective shelf display lights up during the picking process and shows the quantity to be picked. Retrievals are logged in the host system upon confirmation, with no time wasted or other action necessary.



Pick-by-Light makes order picking
✓ error free ✓ fast and ✓ transparent



Distribution of goods sorted on shelves: Put-to-Light

Put-to-Light is the process in reverse: the item is not retrieved but put away.

With two-step picking, items need to be allocated to the individual customers or production orders from pre-picked batches. This is where a put-to-light system is useful for the sorting process. Each compartment on the shelf is equipped with a pick-by-light shelf display which has at least one eye-catching lamp and a confirmation button or acknowledgement sensor.

The order picker scans each item in the batch, and the lamp of the shelf display on the compartment shows him clearly and quickly exactly where to put it. Depositing the item is confirmed by pressing a button or, even quicker, through a sensor.



Put-to-Light ✓ accelerates the sorting process
✓ avoids items being put in the wrong place

Multi-order Picking with picking carts:

Shelves for sorting on wheels! Each picking cart is equipped with a put-to-light display which has at least one lamp and one confirmation button or acknowledgement sensor.

The picking cart also has its own power supply and a WLAN module for connection to the process control system. A screen or a display informs the order picker where to go to retrieve the item in the warehouse, naturally with the shortest possible route.

Once he arrives there the item to be picked is scanned. The lamp on the put-to-light display signals quickly and clearly exactly where to put the item on the picking cart.

Depending on the picking cart model, up to several dozen customer orders can be picked at one time. This saves a whole lot of time and effort!

Material supply in production: Pick-by-Light

Pick-by-Light is also useful in production, particularly in the context of growing product diversity. Warehouse locations are equipped with pick-by-light shelf displays directly on the assembly lines or the assembly workstation.

The display then shows the employee the right part for the task at hand depending on the stage reached in production and the specific model. To make the process even more reliable, we offer modules with integrated sensors which can detect if actions are wrong.

Pick-by-Light accelerates the process and prevents serious errors in production.



- ✓ mobile sorting shelf
- ✓ several customer orders can be picked at one time
- ✓ saves time and distance to go



- ✓ signals quick and reliable the right component part to pick
- ✓ accelerates the process
- ✓ prevents serious production errors

Areas of application

Order picking on flow racks and shelving systems, stationary goods distribution (branch distribution), assembly processes, pallet storage, refrigeration (up to -30°), incoming and outgoing goods, returns management, inventory, quality control, replenishment, special treatment areas, sorting as well as mobile applications.

■ PickTerm Flexible – simple, robust and flexible

With its functional design and the versatility of its individual shelf displays, the cutting-edge PickTerm Flexible system combines the advantages of longevity, flexibility, swiftness and reliability and combines them all into one.

Ensuring the highest standard of operating reliability - robust and reliable material

To fulfil your requirements for durability we only use premium materials for our system: Our base profiles and shelf display casings made of aluminium ensure durability. Our confirmation buttons are designed for at least 10 million picks and guarantee a long service life.



Add-ons easily possible any time!

PickTerm Flexible is also future proof with its automatic Plug&Pick component identification through flexible hardware and software and open interfaces.

Your system can be extended any time by adding components such as bar code readers and connecting up conveyor systems.



Ultra simple assembly & configuration

The Snap-on system enables the shelf displays to be installed on base profiles mounted on the shelves and supplied with power and data via an integrated bus rail, with no tools being necessary at all.

The identification of the components takes place automatically without user intervention.

Greatest flexibility in the shelf display layout

Each shelf display can be exchanged while operations are still running without losing an active picking position.

Snap-On System

■ Custom-built software

With its Device Manager and its application software, KBS Industrieelektronik provides the technical basis for consistent transparency and the reliably efficient control of all operational processes involved in your picking activities. We offer you three options:

Option 1: Hardware delivery only

You create all the software yourself. We will gladly support you by providing you with the necessary documentation as a tool.

Your benefits: You will be independent of third-party software but you will need to start from scratch and will have to foot the quite considerable costs of implementation.

Option 2: PTF Device Manager

You can use our Device Manager which manages and controls all the individual components such as shelf displays and controllers. The PTF Device Manager is available for both Windows and Linux operating systems and is available in various language versions for international use. You create the application-specific software and the interface to your host system yourself.

Your benefits: As a central data interface, the PTF Device Manager manages all the components of a pick-by-light system and assigns proprietary device addresses (PTF addresses) to customer-specific storage location identifiers.

- Functions frequently required, such as zone management, quantity correction activities or zero-passage controls have already been implemented.
- Detailed data, including electricity consumption and the actual function status, can be retrieved for each component connected up for maintenance and diagnostic purposes.
- Various simulation options are available for planning systems and for prior testing of modifications or for extensions.
- Simple connection to the host systems (TCP/IP Sockets).

Option 3: Turnkey installation

KBS delivers a turnkey system to you: Along with the Device Manager, we will deliver customised application-specific software and the connection to your host system. We will carry out commissioning.

Your benefits: You benefit from decades of experience in connecting to different host systems (ERP, PPS or WMS, such as SAP, for example). We will implement your system-specific processes and functions based on a wide selection of templates which we customise to suit your requirements.

Order picking with PickTerm Flexible – Your benefit!

Reliability

Efficient order picking guarantees perfect deliveries on time – and happy customers.

Controlled and complete

Instructions to warehouse employees are given directly on site at the compartment as this is where the shelf displays are located. The order picker is guided step by step.

As the quantity of the item to be retrieved is displayed, no further confusion is possible. Picking orders are completed in full - forgotten items are a thing of the past.

Rapidity

With pick-by-light, you can raise your picking performance many times over, and the goods can be picked and put in the shipping containers. Data transparency is also enhanced through the connectivity of all processes in real time. Urgent orders can be processed more quickly with pick-by-light.

Highly flexible

Dividing up the warehouse into various zones allows a number of orders to be processed at the same time and personnel to be optimally deployed: several employees can work on one order in one zone, or an employee can work in several zones. A multi-colour eye-catching lamp also enables several people to work in the same zone.

Intuitive and efficient configuration

A newly configured system featuring the PickTerm Flexible system is basically immediately up and ready to run – all components are automatically identified and initialised.

Our WinKomm-Basis Device Manager makes everything very easy by managing and controlling the individual components of your system such as shelf displays and controllers in the background. It can detect new components in your system, for instance, or locate defective ones, if there are any.

Hands free and fast

Since employees do not have to take order papers, pick lists or other handheld devices along with them, they can concentrate fully on picking. They have both hands free and do not lose any time in looking for order positions or reading and writing documentation.

Multi-colour eye-catching lamp

The eye-catching lamp in seven colours can be used to signal various instructions or operating modes, such as inventory processes or return putaways. Processing several orders in one zone is also possible by assigning a different colour to each operator.

Snap-On System – nothing could be easier

Fast-moving items popular today may be less so tomorrow. Our pluggable Snap-on system enables you to fully reconfigure your pick-by-light system easily and quickly any time you want.



✓ Automatic self-testing

The automatic self-test of our shelf displays systematically checks on a running basis that all the individual lights are functioning smoothly and immediately reports any malfunctions to the host system. This excludes the possibility of defective visual indicators showing incorrect data.

+ Add-ons made simple

Your pick-by-light system grows with you. Your system can simply be extended at any time, even years later, quickly and with no trouble. The Pick-Term Flexible system is future proof through flexible hardware and software and open interfaces, and can be expanded by adding components such as bar code readers, scales, radio terminals and connecting to automatic conveyor systems.

📦 Reliable inventory

Stocks in the inventory management system are always up to date and accurate through the correction to inventories directly at the compartment and through stocktaking support.

🕒 Short training period through intuitive user guidance

A lamp lights up signalling that action required on the part of order picker – it is as easy as that! With pick-by-light, long induction phases are a thing of the past: Employees do not need any prior knowledge as the system guides them with light. This is a decisive advantage for companies which often use seasonal staff.

👍 Industrial design - robust and reliable

High quality materials, functional design and the company's own manufacturing facilities in Germany guarantee durability and the operating reliability of your pick-by-light system.

📊 Financial resources

Short amortisation period:
ROI within <1 to 3 years



Individual solutions for every application – examples

Abus doubles its picking rate with KBS's Pick-by-Light

The security specialist's strong growth prompted it to replace the paper-based picking of its 3,500 items with a cutting-edge pick-by-light system. The pick-by-light system, with its connection to the conveyor system, guides the user to the right product, speeds up the picking process and offers great ergonomic advantages.

„Thanks to the new KBS system, we were able to double our picking performance while keeping the same number of staff and working on the same surface area,” says Christian Palernio, head of logistics at ABUS GmbH.



Changes in the weekly cycle at MAN Nutzfahrzeuge GmbH – no problem with the KBS Snap-On System

The Snap-On system allows shelf displays to be mounted, disassembled and put elsewhere on the base profile which is fixed to the shelves. The individual displays are linked up to the database by the article number and not through their physical position on the shelves. Franz Blaschke, head of Control System Planning, reports on the greatest benefit: “The design of the system is easily recalibrated and improved almost every week, either due to new articles, or because of experience gathered in the context of our continuous improvement process.”



KBS's Pick-by-Light dramatically shortens the induction phase and simplifies storage at Straumann

In addition to the pick-by-light system, the dental implant manufacturer benefits from a customised storage mode. In this operating mode, the relevant compartment lights up after the item has been scanned and shows the employee the right compartment. After the item has been deposited, this action is confirmed by pressing the confirmation button and the item is logged in LVS. The intuitive pick-by-light system offers yet another advantage: “Before new employees would be trained for several weeks. Today, the pick-by-light principle is explained in five minutes, and the new staff member works as well as our experienced personnel,” says Stefan Schies, head of logistics at Straumann GmbH.



Risk of confusion prevented at Alcon by Pick-by-Light

Around 100 items in packages which look virtually the same are stored in a continuous flow rack. The risk of making a mistake with the former process of paper-based picking was very great. In order to optimise the reliability of processes in the warehouse, Alcon switched to KBS's Pick-by-Light solution and achieved zero-error picking processes while increasing the picking rate.



More than 20,000 possible combinations processed fast and accurately at Kaba

Each employee working on the locking cylinder assembly selects a prioritised production order via touch screen. The orders are then divided up into individual positions which the employee processes step by step: He is guided to the right Kanban container by the displays, retrieves the material required and carries out the assembly directly on location. This solution enabled the one piece flow principle to become reality.



MairDumont gains its independence thanks to KBS's simple system

In the past, the publishing company had to call on its previous supplier every time it wanted to change the warehouse layout. Today MairDumont operates its KBS Pick-by-Light system independently with aid of the Snap-On system.

This saves considerable time and money. “We process up to 3,500 orders with an average of 20,000 picks a day here. We would not be able to do this with any other system,” explains Andreas Bachmaier, Chief Technology Officer.



Ergonomics and comfort at C-Log through the new KBS Put-to-Light/Pick-by-Light System

On the put-to-light side, items are taken from pre-picked batches, sorted and put on shelves. The individual storage compartments are equipped with put-to-light shelf displays and an acknowledgement sensor which allows the system to check whether all items of a customer order are available. If this is the case, another pick-by-light shelf display on the other side – known as the dispatch side – lights up. The employee retrieves the items and prepares them for dispatch.

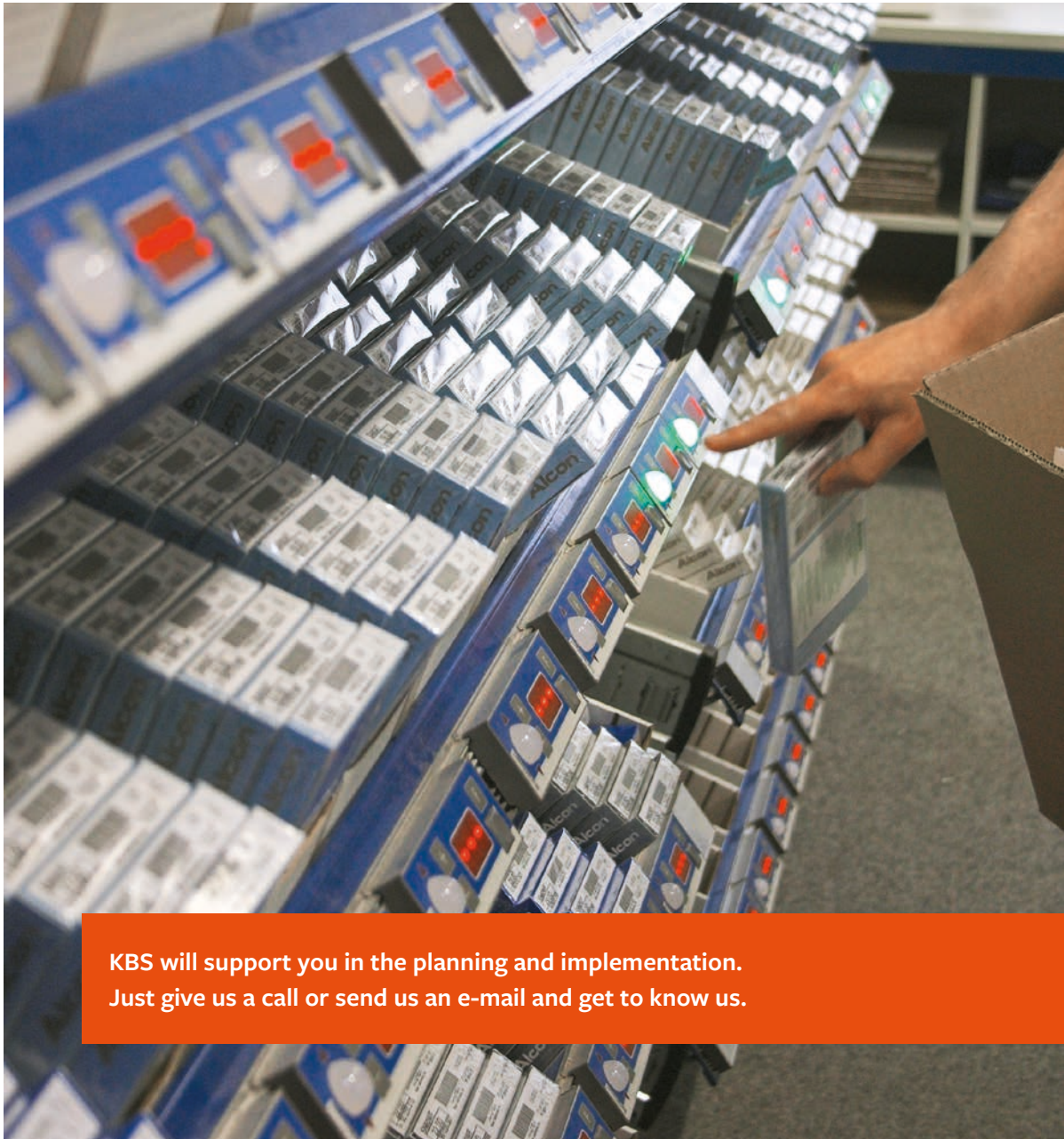


KBS System enables Sedus to achieve zero-error picking

The pick-by-light system used in U-shaped revolving chair assembly uses each employee's name to “speak” to them. This special feature is much more than just a gesture of courtesy. In combination with the green light signal, the clear text display ensures that the components used to assemble each chair individually are correctly selected in line with customer requirements. “We have achieved our goal of zero error production on our converted assembly bays,” says Ralf Scherer from Production/Logistics process optimisation.



The optimal solution for every application



**KBS will support you in the planning and implementation.
Just give us a call or send us an e-mail and get to know us.**

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