microSYST

ORDER PICKING SYSTEMS


The success of microSYST for over 40 years is our pioneering spirit and the fact that our eyes are firmly fixed on the future.
Managing owner Harald Kilian

Professional pioneering spirit for order picking systems

Shining know-how for more than 20 years

Convinced by the idea microSYST develops, manufactures and sells high-quality order picking systems. With in-house ideas as well as developments the order picking systems based on the Pick-by-Light technology have been constantly improved and optimised for the use in the market.

LED stands for an environmentally conscious future

Until today that pioneer and innovation spirit is deeply rooted in the company. With a future-oriented thinking and environmental awareness, microSYST still utilises the clear benefits of LEDs: today, energy efficiency and sustainability are more important than ever and will ensure the future success of the LED technology.

Passion for technology - for the best solution

Due to the interest in technical details and the flexibility regarding individual requirements combined with convincing technology, design and quality, microSYST is able to supply high-quality LED display and order picking systems for almost all customer-specific requirements.

Certified quality management

Whether customer-specific production or the delivery of standard components – quality is the top priority for microSYST. Resulting from the own quality requirements and for the benefit of satisfied customers.

Due to the high quality standards, the integrated quality management system has been certified according to DIN EN ISO 9001 in 2014. Since then this standard is regularly checked by independent institutions and its effectiveness is confirmed.

Content

The mipick system

microSYST is developing and manufacturing order picking systems according to customer‘s requirements. We offer a suitable order picking system for every requirement, which can be flexibly and easily integrated into already existing systems such as ERP or MES systems.

From planning, development and production to installation and commissioning.
We produce your order picking system.

The system

- Modular system structure (can also be easily extended at a later date)
- Stand-alone system or connected with a higher-level customer system
- Open interface (software activation can be made by the customer)
- Customised adjustments or developments possible
- Only the delivery of the hardware possible
- mipick system „made in Germany“

The benefits of our mipick systems

Improve your picking performance

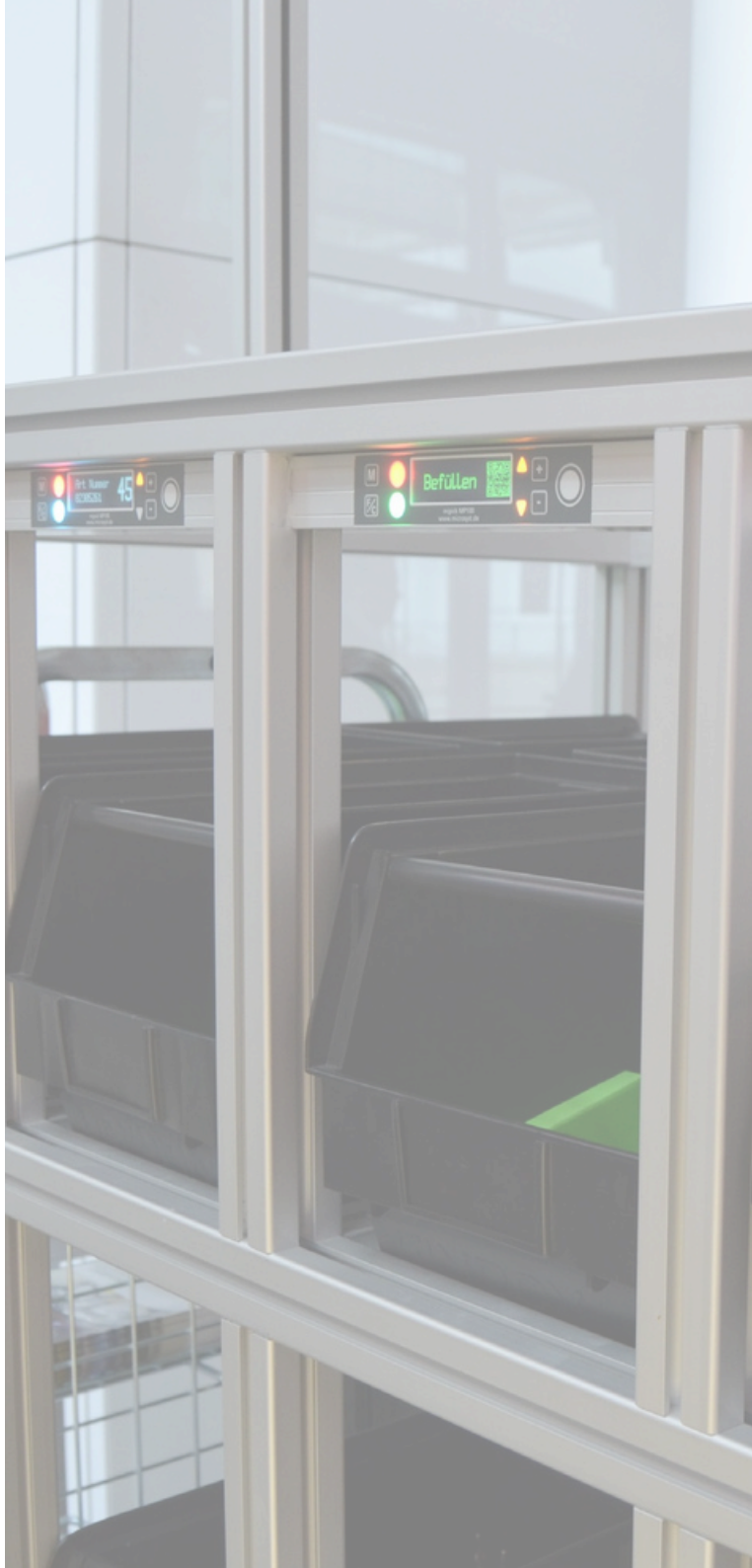
Optimise your picking ways and accelerate your picking processes - with suitable hardware and software for your mipick system .

Reduce your error rate to get error-free order picking

Show the order pickers the right place – incorrect use will be reduced with the help of shelf and positioning displays. In addition to this, request an offer for our acknowledgment buttons which are monitoring the parts taken out.
An additional feature to optimise your process.

Your order picking system for your requirements

Upgrade your order picking system - and remain flexible! Due to the modular structure, our systems can also be customised at a later time and will be upgraded according to your requirements.



Software for order picking systems

System software

- Modular software platform for customer-specific order picking solutions
- Easy connection of additional modules
- Flexibly extensible range of features
- Different order picking types possible (e.g. parallel or sequential)
- Order picking with optimised routing (trays with information regarding the chronological order)
- Simple, flexible tray management
- Recording of numerous data and status information
- Visualisation of the system status

Data input

The order picking process starts with your customer order. Provide your data for the order picking system. The standard files are csv., .xml, .txt etc.

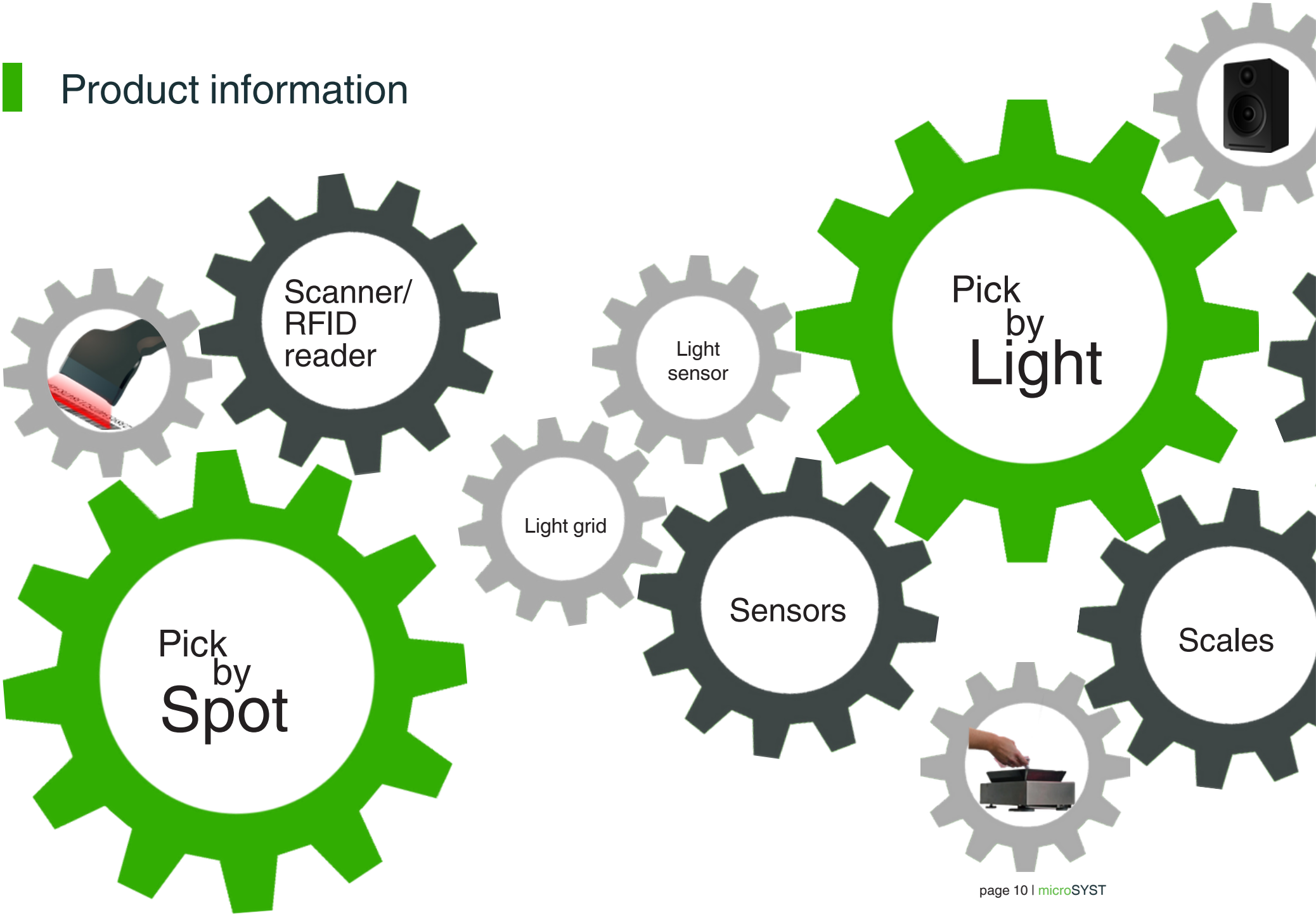
Data processing

The mipick server processes your customer data. We take care for the project engineering of your data and adjust the mipick system according to your requirements – for an optimised order picking process.

Data output

You can select between different order picking systems and components which will support you in your order picking process (see pages 10 -11)

Product information



* possible combinations on request

Pick-by-Light

Picking displays

- 7-segment or dot matrix display for displaying the pick data
- Signal lamps as warning signal and for parallel order picking (one colour per employee)
- Direction arrows e.g. for the indication of the tray level
- +/- keys freely evaluable e.g. for quantity correction
- Menu / function keys e.g. for menu navigation with inventory, quantity correction etc.
- Robust acknowledgment button made of metal in order to acknowledge the picking process
- Slim and robust aluminium housing with snap-in mounting
- Pick displays with an open interface for direct activation
- Optional connection of sensors such as light sensors and light grids

The benefits of our Pick-by-Light systems

Optimised picking performance

The pick quantity will be displayed – and the picker receives a clear and direct information regarding the order to be prepared.

Flexible personnel deployment due to multi-order-picking

Thanks to the multi-colour LED indicator on the pick displays, you can pick several orders parallel and optimise personnel deployment (multi-order-picking). The system is intuitive and requires only a short training period.

High-quality system with short payback time

microSYST uses robust aluminium for the processing of Pick-by-Light systems. Both the housing and the aluminium channel ensure high stability and resistance and embody a high-quality, durable system. The mipick system is maintenance-free and therefore ideal for industrial use.

Technical data

MP20

- Display type LED 7-segment, character height 14 mm, 2 numeric digits, red
- Signal lamps LED 1x red and 1x 7-coloured, LED diameter of 8 mm
- Acknowledgement button Made from metal, diameter of 18/12 mm (outside/inside) individually replaceable
- Housing Anodised aluminium
- Dimension 80 x 30 mm
- Profile depth 27 mm (mounted in the aluminium channel)

MP80

- Display type LED dot matrix, character height 14 mm, 8 alphanumeric digits, red
- Signal lamps LED 1x red and 1x 7-coloured, LED diameter of 8 mm
- Acknowledgement button Made from metal, diameter of 18/12 mm (outside/inside) individually replaceable
- Housing Anodised aluminium
- Dimension 170 x 30 mm
- Profile depth 27 mm (mounted in the aluminium channel)

MP100

- Display type OLED dot matrix 128 x 32 pixel, character height up to approx. 14 mm up to 80 digits (4x20 characters), yellow
- Signal lamps LED 1x red and 1x 7-coloured, LED diameter of 8 mm
- Acknowledgement button Made from metal, diameter of 18/12 mm (outside/inside) individually replaceable
- Housing Anodised aluminium
- Dimension 140 x 30 mm
- Profile depth 27 mm (mounted in the aluminium channel)

Pick-by-Spot

Light Position System

- Positioning lasers or spots with flexible beam direction
- Precise, adjustable focusing even at various distances (depending on technology and type)
- Space-saving mounting with lugs
- Modular system structure and various sizes

The benefits of our light positioning displays

Light positioning displays for any application

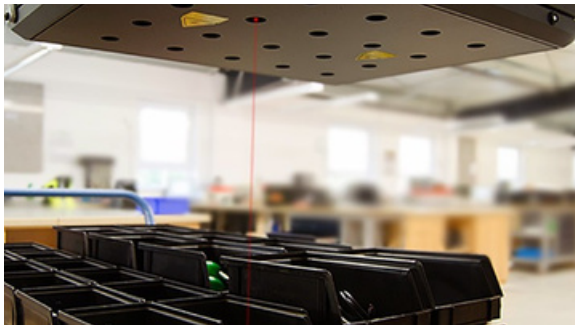
Wether high-bay rackings, pallet storage locations or container systems – the light positioning displays can be mounted with lugs and also flexibly adjusted due to the variable direction of the spotlights.

Reduction of order picking errors

The goods as well as the places to be picked will be marked clearly with integrated lasers and spotlights – and order picking errors will be prevented.

Hands free during picking due to automatic acknowledgement

In combination with sensors such as light barriers, distance meters or scales you will be able to automate the acknowledgement process – for a fast and safe order picking process!



Technical data

mipick LPOS Laser

- Light source Laser beam / focus adjustable
- Display colour red, other colours upon request
- Quantity / specification any number of lasers / laser class 1 (<0,4mW), also laser class 2 (<1 mW) possible
- Operation voltage 230 VAC / 50 Hz, 110 VAC / 60 Hz or 24 VDC ±20 %
- Power consumption approx. 0,15 W / laser + approx. 3,0 W for the control electronics
- Operating temperature 0...+50 °C
- Protection class depending on the version, up to IP54 possible

mipick LPOS LED spots

- Light source LED spot/focus adjustable
- Display colour red, green, white, blue, other colours upon request
- Quantity / specification any number of LED spots
- Operation voltage 230 VAC / 50 Hz, 110 VAC / 60 Hz or 24 VDC ±20 %
- Power consumption approx. 4,0 up to 6,0 W/ spot depending on the colour + approx. 3,0 W for the control electronics
- Operating temperature 0...+50 °C
- Protection class depending on the version, up to IP54 possible

Pick-by-Scan

Order picking with barcode

- Mobile hand scanner for paperless picking
- Integrated touch display with details of the customer order
- Transmission of shortages and acknowledgement of order picking processes
- 1D or 2D barcode scanners
- Easy system connection, e.g. via Bluetooth or WI-FI

The benefits of our Pick-by-Scan systems

Reduction of picking errors

The positions to be picked will be determined and identified with scanners – order picking errors will be reduced!

Reduction of picking times due to paperless order picking

By the use of scanners the order picking process will be paperless and the picking times will be significantly reduced.

A durable system

microSYST focuses on offering high-quality and robust Pick-by-Scan systems – for operation in industrial applications, also in dusty picking environments.

Options – Controller box

Controllers serve as an interface between the control computer and the picking displays.
They pass on information coming from the control computer to the compartment displays.

Controller

- Controller box with power supply and data interface
- Data input via e.g. Ethernet TCP/IP
- Several controller boxes can be connected in parallel
- 2 display lines for each controller box
- Up to 50 displays and sensors per line (= 100 displays per controller)
- Bus length up to 50 meters per line (= 100 m per controller)
- Total bus length of up to 500 meters possible with intermediate supply
- Powder-coated steel housing or alternatively plastic housing (without integrated power supply); Housing for wall mounting

Metal housing
300 x 300 x 120 mm
(W x H x D)

Plastic housing
180 x 180 x 60 mm
(W x H x D)

Options - Scanner

Scanner

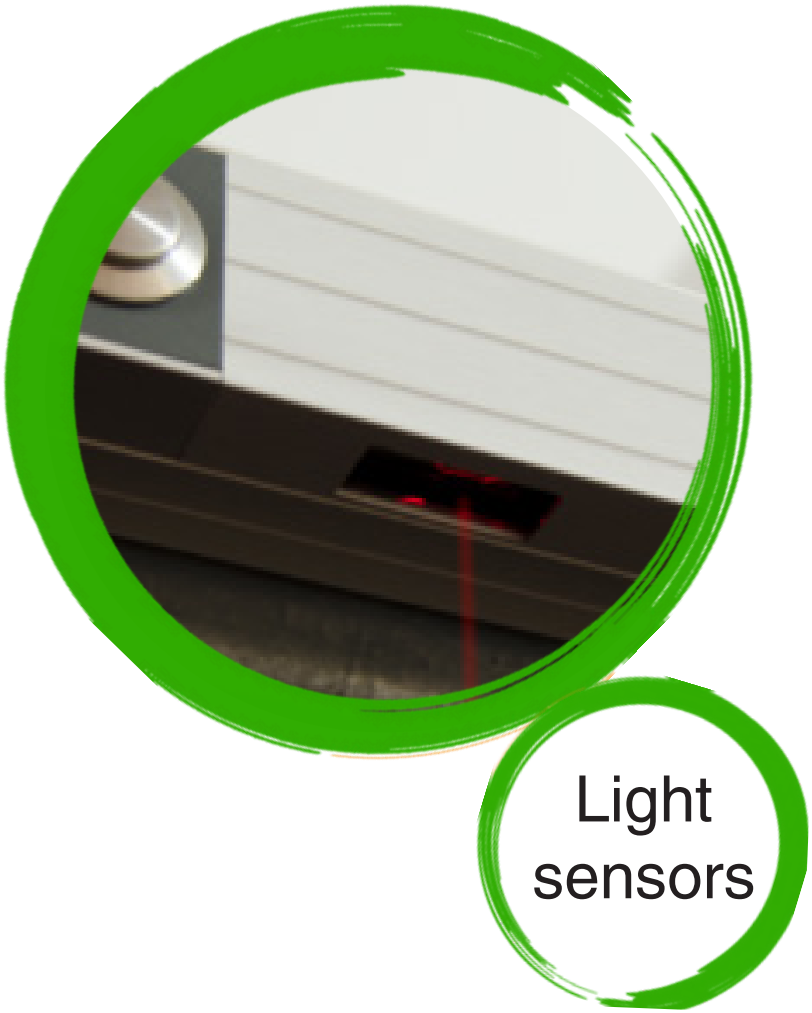
- Mobile hand scanner for paperless picking
- Integrated touch display with details of the customer order
- Transmission of shortages and acknowledgement of order picking processes
- 1D or 2D barcode scanners
- Easy system connection, e.g. via Bluetooth or WI-FI

Scanner

Options - Sensors

Light sensors

- Functioning: automatic acknowledgement and partial monitoring of the parts taken and collected by using a light beam
- Easy mounting directly in the installation channel
- Can also be retrofitted



The benefits of light sensors

Speed up your picking process

By using light sensors picking processes will be automatically recognised and acknowledged – and the picking process will be speeded up due to the automatic acknowledgement.

Reduce your error rate to get a zero-error-picking

The use of light grids guarantees stock reliability and reduces picking errors – up to a zero-error-picking.

Light grids

- Functioning: light grids for nearly a complete monitoring of the parts taken and collected from a box
- Installation mostly on additional devices
- Can also be retrofitted (depending on the system)
- Optical and acoustic signals regarding errors, if required

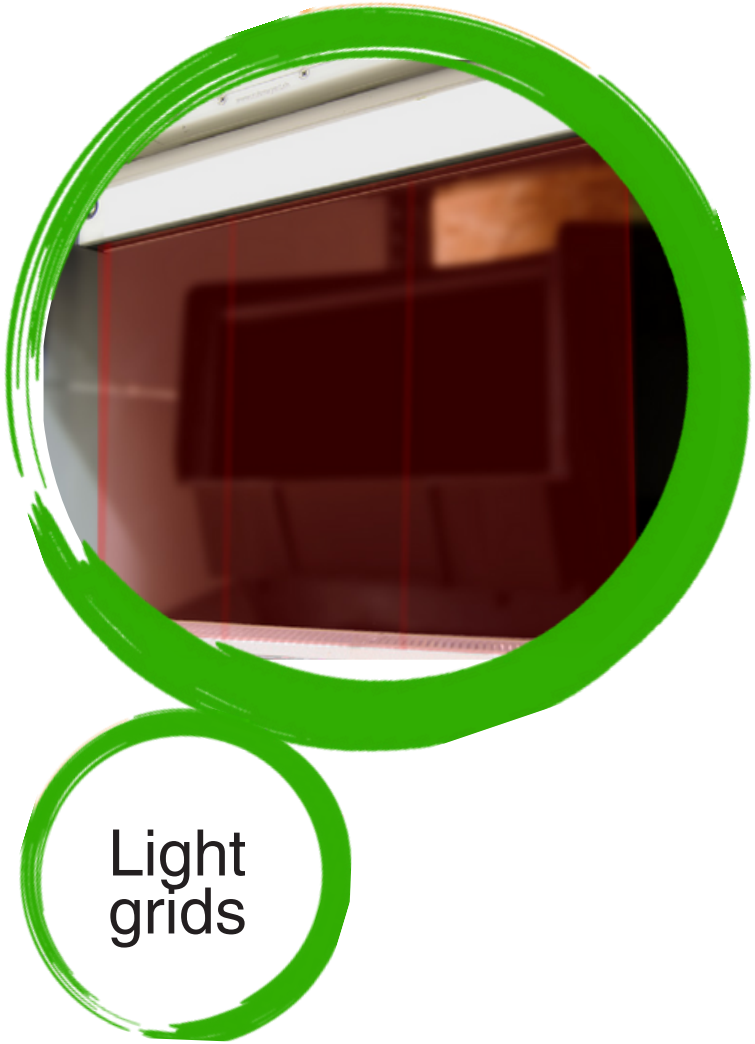
The benefits of light grids

Improve your pick performance

The light grid records automatically the articles taken and collected in the grid area and acknowledges the picking process – for easy and fast picking processes due to hands free during the order picking

Avoid mistakes in order picking by a nearly complete monitoring of the parts taken

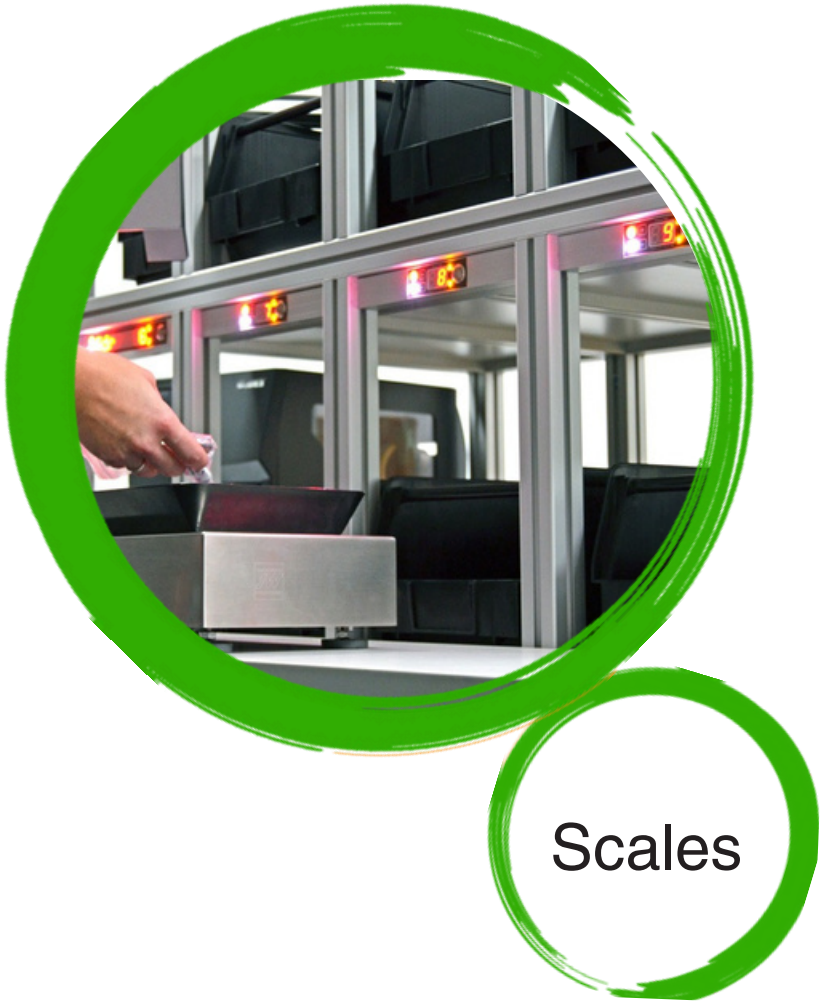
If the picker uses a wrong box, an error will be displayed and transmitted to the mipick system. Each collecting and taking of articles will be registered and controlled in the system due to the complete monitoring of the parts taken.



Options - Scales

Scales

- High-quality scales for industrial applications
- Easy integration into the mipick system
- Automatic calculation of the article weight in order to verify the quantity to be picked
- 100% control of the picking process for stock reliability



The benefits of scales

Improvement of the picking process

By the integration of a scale into your mipick system the system will automatically determine and acknowledge the quantity taken – for a faster picking process!

System monitoring and stock reliability

The scale will transmit detailed information regarding the quantity of the picked positions to the mipick system – and guarantees the system monitoring.

Short amortisation periods

One scale for your goods to be picked – use the scale in your mipick system for different orders and save high investment costs.

Options – Printers, signal devices, visualisation

Printers

- Connection of (label) printers
- Printing of shipping labels or information regarding picked goods
- Easy integration into the mipick system

Signal devices

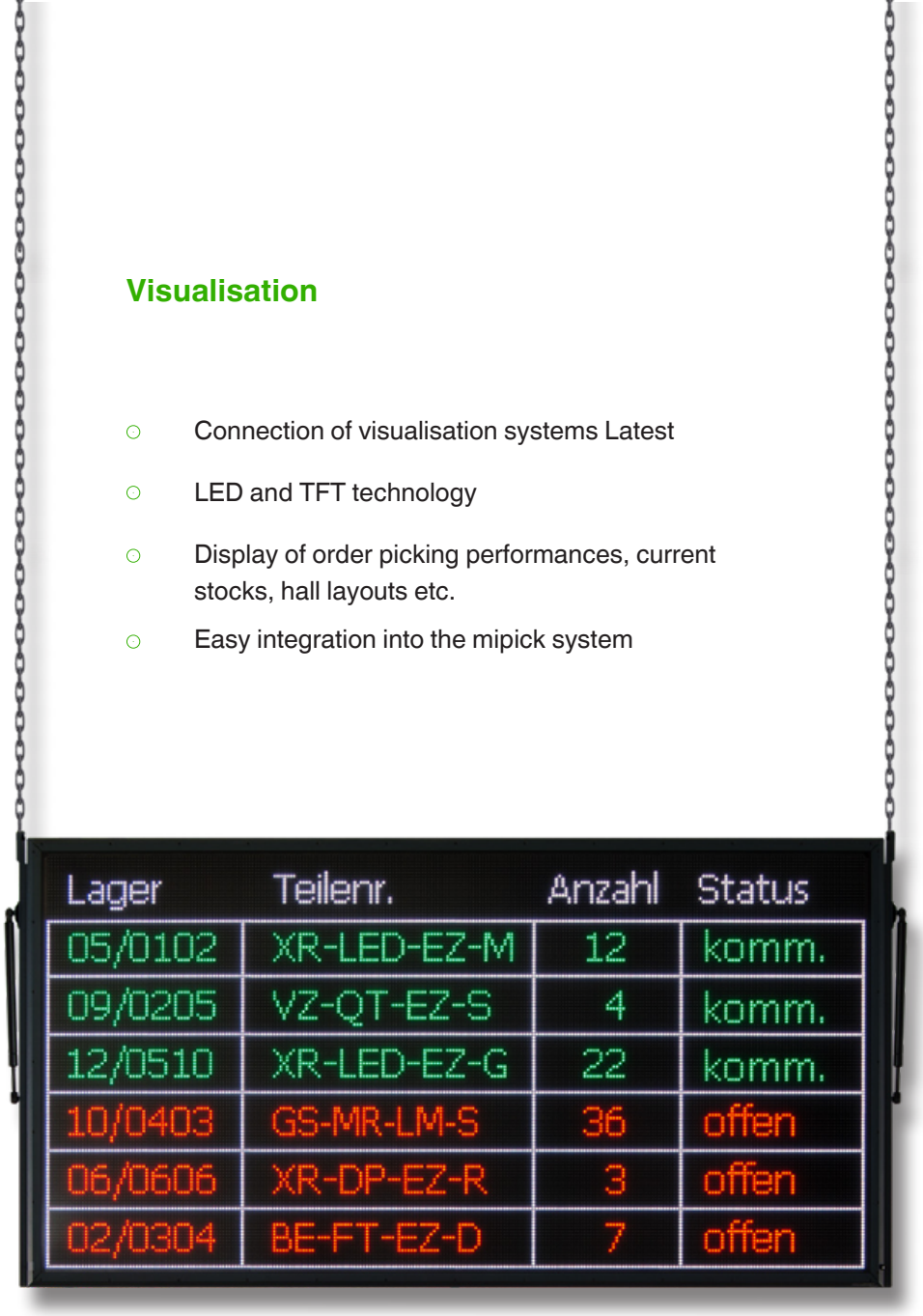
- Connection of signal devices such as loudspeakers or warning lights
- Used for warning messages or for system errors
- Easy integration into the mipick system

Periphery

- Connection of a customer’s periphery (e.g. engraving machine)
- Easy integration into the mipick system

Visualisation

- Connection of visualisation systems Latest
- LED and TFT technology
- Display of order picking performances, current stocks, hall layouts etc.
- Easy integration into the mipick system



mipick – Pick-by-Light order picking systems
Customised solutions

We produce your mipick system!

- Manufactured according to your requirements and processes
- Customer-specific development and manufacturing
- Can be easily integrated into already existing systems
- Latest technologies
- Customised product upgrades available
- Planning, development, production, installation, commissioning and support from one source

Some references from microSYST:

- BMW
- Grammer
- IKEA
- Soennecken
- MAN
- dm-Markt

Order picking systems by microSYST successstories

Paperless order picking solutions regarding warehouse

Customer-specific requirements

- Indication of the picking position as well as quantity at the supply racks
- Securing and tracking of approx. 500 components
- A robust, long-lasting and maintenance-free version

Implementation according to customer's requirements

- On-site installation and commissioning of the entire system
- Monitoring of the parts which are taken out from the picking positions through light grids
- Recording of order picking processes
- Integration into the already existing production system

Customer benefits

- Order picking errors of almost 0%
- A faster order picking process which means a fast production process
- Quality assurance through the transparency of the order picking process
- Maintenance-free operation


mipick MP
16
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Paperless order picking solutions regarding the warehouse

Customer-specific requirements

- Indication of the picking position as well as quantity in an order picking warehouse
- Integration into the warehouse management system of the customer
- Equipment of approx. 1.200 storage positions
- A robust, long-lasting and maintenance-free version

Implementation according to customer's requirements

- Analysis and design together with the customer
- On-site installation and commissioning of the entire system
- Support of the warehouse operation during the start-up of the system
- Long-term support through remote maintenance and a service contract

Customer benefits

- A sustained acceleration of the order picking process
- Significant reduction of order picking errors
- Maintenance-free operation

Paperless order picking solutions regarding logistics

Customer-specific requirements

- Replacing a Pick-by-Voice system by a Pick-by-Light system
- More than 2.800 pick displays for over 20.000 different articles
- Additional display of packaging units as text information
- Integration into an already existing control system

Implementation according to customer's requirements

- Development of a new display type according to customer-specific requirements
- Complete pre-assembly of all partial units before the delivery
- Refitting in selected areas during normal operation
- Coordination of the entire project by general contractors

Customer benefits

- Increase of the order picking performance by 12 %
- Order picking error rates of <0,1 %
- Improvement of working conditions
- Maintenance-free operation

Success

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