

**PAPERLESS
PICKING SYSTEMS**



FAST PICKING SATISFIED CUSTOMERS

Short warehouse access times and reliable supply quality.

SSI SCHÄFER PEEM Pick by Light is a semi-automatic, paperless picking system. The Pick by Light conveying system together applied with material flow control system Convey 2005 enables you to optimize processes and reduce logistics costs. The software parameters can be easily customized to reflect individual requirements. It can be used together with SSI SCHÄFER PEEM software systems and Convey 2005, or as a separate control system for picking within an existing warehouse management system.

SSI SCHÄFER PEEM Pick by Light can be integrated into existing and future picking processes and strategies.

PICK BY LIGHT / MULTI LIGHT CAN BE USED IN THE FOLLOWING WAREHOUSE AREAS:

- ▶ Dynamic flow racks
- ▶ Static racks
- ▶ Pallet racks



▲ Pick by Light picking location
▼ Multi Light



BENEFITS

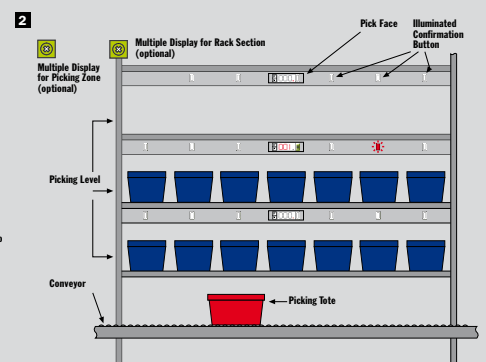
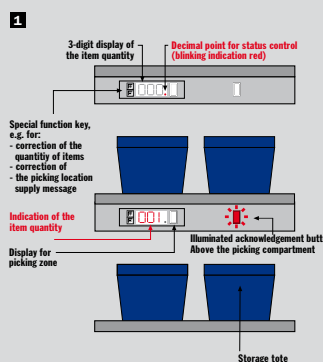
- ▶ Easy handling
- ▶ Flexible online order processing
- ▶ Precise online stock management
- ▶ Short picking distances
- ▶ Paperless picking
- ▶ Maximum supply reliability
- ▶ Secure operator guidance
- ▶ Inventory function for stock control
- ▶ Maximum availability thanks to hardware self-check
- ▶ Enhanced performance thanks to Pick by Light in connection with conveying system and material flow control
- ▶ Transparent order tracking
- ▶ Simple maintenance
- ▶ System operation after only a short training period

1) Easy, secure operation thanks to anti-reflective displays.

2) Multi Light system: One Pick Face can be used to operate up to 250 picking compartments.

SYSTEM STRUCTURE

The difference between the SSI SCHÄFER PEEM Pick by Light system and the Multi Light system lies in the number of Pick Faces (quantity displays). While the traditional Pick by Light has a separate display for each compartment, the more economical Multi Light system uses only one Pick Face for several compartments. Under these compartments there is an illuminated button to indicate the pick location and confirm picking. The Multi Light system achieves optimum results with slow moving articles, while the Pick by Light system is the ideal solution for articles with a higher turnover.



PICK BY LIGHT

A Pick by Light system consists of the following components:

- ▶ Control computer with interface to the superior system (Host, WMS etc.)
- ▶ Line Controller (quantity depends on system size)
- ▶ One Pick Face each per storage location.

A Pick Face consists of a display and operation unit where the picker sees the required picking quantity and confirms it after picking by pressing the confirmation button.

Two buttons for quantity correction enable the picker to increase or reduce the displayed quantities during picking according to the indications contained in the order.

- ▶ There are three options of the Pick Face – green, red and with bicolored acknowledge button. The bicolored variant serves to process
- ▶ two picking orders simultaneously by one picker
- ▶ two picking orders by two pickers in parallel.
- ▶ A blinking dot on the status display indicates an automatic self-check of keys, display and eye-catching LEDs.
- ▶ Future extensions with additional Pick Faces can be made easily.
- ▶ Several picking locations can also be displayed in parallel.



▲ Pick by Light

▼ Pick by Voice System

Multi Light ▲



MULTI LIGHT

Unlike Pick by Light, the Multi Light system only requires one Pick Face to display the quantity of a number of storage locations and channels. Illuminated Multi Light compartment displays and confirmation buttons are installed at the shelves.

- ▶ The three-digit 7-segment display on the Pick Face shows the quantity to be picked.
- ▶ The illuminated compartment display/acknowledge button lights up and clearly indicates the picking position to the picker.
- ▶ One Pick Face can be used to operate up to 250 picking compartments.
- ▶ Multi Light as well as Pick by Light can be supplied with red, green or bicolored acknowledge button. Inventory count (according to Host order) can be carried out directly on the Pick Face.
- ▶ The following picking location of complex picking stations can be displayed to reduce the walking distance of the picker.

PICK BY VOICE SYSTEM

Pick by Voice, a further development of radio frequency picking, offers a completely voice-based interaction between picker and system; thus the picker's eyes and hands are free for picking.

- ▶ Online operation in direct interaction with the warehouse management system
- ▶ Easy customization and operation
- ▶ Completely voice-controlled guidance
- ▶ Individual number of pickers
- ▶ Combination of barcode scanner and screen input possible
- ▶ Up to 20% performance increase as compared to radio frequency

RADIO FREQUENCY

Paperless picking in large-scale warehouses with high product variety – simple, fast and reliable by means of radio frequency terminals. This can be done either by hand-held terminals or by stationary stacker terminals on the basis of spread spectrum technology.

Possible fields of the applications are:

- ▶ Registration of incoming goods
- ▶ Picking (man to goods)
- ▶ Inventory
- ▶ Transports by stacker
- ▶ Load check
- ▶ Batch tracing support

OPTIONS

ADDITIONAL LAMPS

In complex picking areas additional lamps can be mounted to indicate target aisles or blocks. Thanks to these indications the pickers can immediately locate the next active aisle or block within an aisle from a distance.

INTERFACES / ACTIVATION

The following activation options are supported:

- ▶ **RS485 interface** to activate Pick Faces and Multi Light directly. In this case the software processing and monitoring is carried out entirely on the superior system (warehouse management, material flow system, PLC etc.)
- ▶ **Ethernet interface** through the Line Controllers with integrated monitoring of Pick Faces and Multi Lights
- ▶ **PC interface** through the established communication methods ODBC (database to database) or TCP/IP. This interface transmits orders from the superior warehouse management system or ERP system to the PC, where picking zones

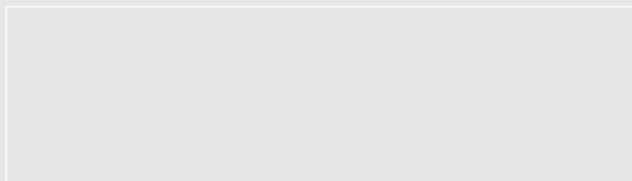
are monitored and orders are processed. After confirmation feedback messages, possibly with quantity corrections, are returned. The Pick Faces are controlled by means of an RS485 interface.

- ▶ **Warehouse management** In combination with the Pick by Light system it is possible to manage the entire warehouse. The system can be applied independently or together with a superior system.



Pick Face: Grid distance for mechanical and electric mounting on the rack ≥ 150 mm Excellent stability thanks to APS plastic casings and aluminium profile bars.





SSI Schäfer Peem GmbH
Fischeraustraße 27
A-8051 Graz
Tel. +43/316/6096-0
Fax +43/316/6096-457
sales@ssi-schaefer-peem.com
www.ssi-schaefer.com