



Industry: Warehouse & Distribution
**Process-efficient access safeguarding on
a horizontal storage carousel**

Barcelona/Waldkirch, Tour Stop No 2 2010 - Safety light curtain reduces access times for picking from a horizontal storage carousel and also protects operating personnel.

Challenge: Safety

The Spanish company ET Systems Global Storage Solutions has installed a horizontal storage carousel (HOCA) for the hospital Sant Joan Despi in Barcelona. Items are kept in storage containers which circulate on a horizontal transport system. The workstations which staff uses for picking in the HOCA storage system must be safeguarded in order to prevent injury. Mechanical protective devices are unsuitable for operation for an average of approximately 300 order items per hour, and delay the removal and picking processes.

Solution: Barrier-free access monitoring with miniTwin Safety Light Curtains

The safety doors fitted on the original version of the HOCA were replaced by miniTwin safety light curtains. In the miniTwin, the sender and receiver are both located in the same stick. The protective field at safety level type 4/PL e/SIL3 has no blind zone, as two sticks are installed at 180° to each other, so that the sender and receiver modules are located opposite each other.

The miniTwins are installed horizontally at the work points, so they are protected from damage and misalignment. Rows of LEDs on the device show the operator the status of the safeguard. If someone reaches into the protective field while the container is moving, the



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HOCA stops immediately. Goods removal during picking is direct, i.e. there is no time-consuming opening and closing of a safety door. This guarantees a smooth removal and picking of items which is significantly quicker and more flexible.

Customer Benefit:

Safeguarding of workstations

Improved picking performance

Operator acceptance

The miniTwin safety light curtains enable risk-free safeguarding of HOCA workstations without any negative effects on the work process. "The lack of protective doors saves a lot of time for each pick, thus improving the picking performance of the HOCA," says Joan Ponsa, Technical Manager at ET Systems. The ergonomic solution has been well-received by the HOCA operators. "Thanks to the LEDs, they can see straight away whether the protective function of the miniTwin is active," explains Joan Ponsa at ET Systems. "The direct access to the storage containers without any barriers also removes the danger of the protective function being manually overridden."