

# products **PIA** in actions

The new central warehouse of the Swedish furniture giant IKEA in Dortmund exceeds all bounds. It is as big as 25 football fields and has room to store more than 40,000 Klippan sofas.

## Key statistics for the CDC:

Total area of site	20 ha
Dimensions of the high-bay warehouse:	207 m long, 150 m wide, 24 m high
- Loading gates for lorries:	64
- Unloading gates for lorries:	61
- Sidings:	2
- Total number of pallet slots:	66,346
- Pallet slots in high-bay warehouse	50.784 on 11 or 12 levels
- Forklift trucks when complete	:230
- Automated rack serving units:	16
- Miniload storage system, 400 x 600 x 300:	14.400 slots on 20 storage levels

The Swedish company's decision to choose Dortmund had to do with its location in the heavily populated Ruhr region and the excellent transport connections offered.

In addition to this, its closeness to the markets in Belgium and the Netherlands was another important factor. The Customer Distribution Center (CDC), some parts of which are fully automated, will have a workforce of more than 500 employees when it is finally completed.

This necessitates comprehensive measures to ensure the safety of staff, because the travel paths of the rack serving units and the personnel access alleys for order picking are only the length of a pallet apart. The rack serving units move along the storage alleys at a speed of around 3 m/s.

As well as warning flags, the responsible professional association insisted on an additional optoelectronic protective system to separate the order picking alleys from the travel paths of the automated units for the entire length of the stacks.

IKEA had several alternatives to choose from, and finally decided to opt for the type 4 COMPACT safety light curtain from Leuze lumiflex.

As the length of the storage alleys was 100 metres, the protective field was divided into two systems, each with a range of 50 metres. With the help of the blanking function, shelf supports and cross struts of the shelf system are blanked out, so that the entire width of the shelf can be protected without any gaps.