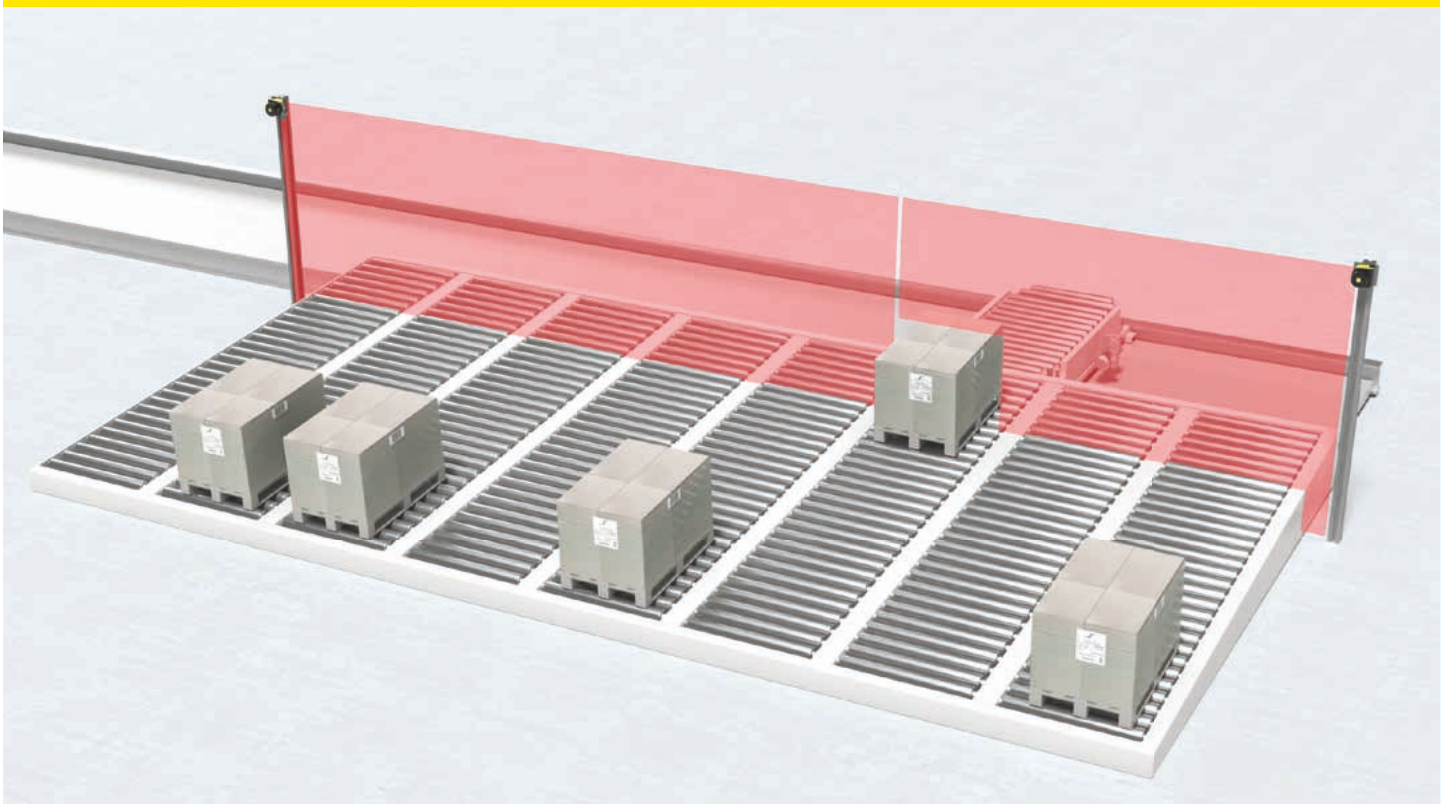


## Safety Solutions

### Access guarding on multi-track transport systems

#### Safety at Leuze



#### Efficient material flow and maximum safety

The increasing automation of machines and systems places growing demands on safety concepts. Classic concepts such as muting are often pushed to their limits here. Our innovative safety solutions guarantee gapless safety, efficient material flow and high availability of your system, even with automatic processes.

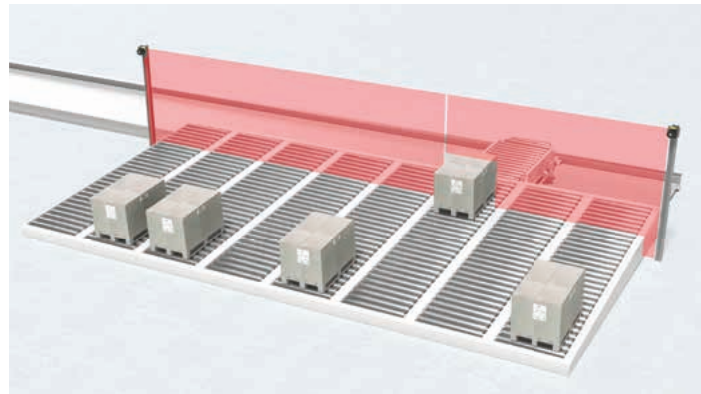
Multiple-track transport systems often span over many meters. With common safety concepts, a great deal of work is then needed to safeguard the danger zone. In practice, the lack of economical safety concepts results in compromises that demand a high level of individual responsibility and discipline by the

operating personnel. Safety-related gaps are especially likely to occur during material outfeed, e.g. alongside the active track. It would then technically be possible for the operating personnel to enter the danger zone during the transport process. If additional organizational safety measures are taken, the system capacity can thereby often be reduced as well.

Our safety solution for multiple-track transport systems is optimized especially for these application cases. With little installation effort, its innovative safety concept ensures seamless safety and a high degree of utilization of the system.

# Access guarding on multi-track transport systems

**Requirement:** Pallets are output on individual tracks that are fed via a cross conveyor. The cross conveyor and the area located behind it are to be safeguarded against entry by persons. The protection should only release the track on which the pallet is output.



**Solution:** Access guarding takes place via two vertically oriented safety laser scanners. From the system control, the safety system receives the information about the track onto which the pallet is output and adapts the protective field for the passage of the pallet accordingly. The entire process is monitored for safety.

## Working principle

Two safety laser scanners produce a vertical protective field that is installed in front of the danger zone of the transport system. For the track on which the material is to be output, a release signal is sent by the PLC just before the protective field is reached. The safety solution now releases a window of predefined size in the protective field for the desired track through which the material can be transported without interruption. All other tracks continue to be safeguarded by the protective field. After the material has passed through the opened protective field window, the protective field is again reset to its original state.

## Tailored to your needs

- Our solutions are based on qualified safety concepts which, if necessary, can also be extended or created new. Every solution is individually tailored to your system layout and includes
- All necessary hardware and software components
  - Engineering services, such as PLC programming and configuration according to project requirements
  - Start-up support
  - Validation of the safety function
  - Full documentation



## Your benefits

- Continuous monitoring of the entire transfer area for up to 10 tracks and width of up to 9 m
- Gapless safety during the transport cycles
- High reliability and availability
- Optimum protection against manipulation
- No additional trigger sensors necessary
- The pre-developed safety solution is individually adapted to your application
- Easily retrofittable



## System components and safety parameters

Safety sensors: RSL 400 safety laser scanner
System control: MSI 400 safety control
Leuze safety program
PL d in accordance with EN ISO 13849-1, SILCL 2 in accordance with IEC 62061
2-channel safety output

## Your partner for professional safety solutions

For more than 30 years, we have been supporting safety-related applications in different industries by offering a broad range of products. Our certified safety experts have extensive experience in designing safety concepts and comprehensive knowledge of the latest norms and standards. Benefit from our know-how: in projects, our expert teams accompany you from the gathering of the requirements up to the safety-related acceptance. They make sure that our solutions meet your requirements and ensure that projects run smoothly.