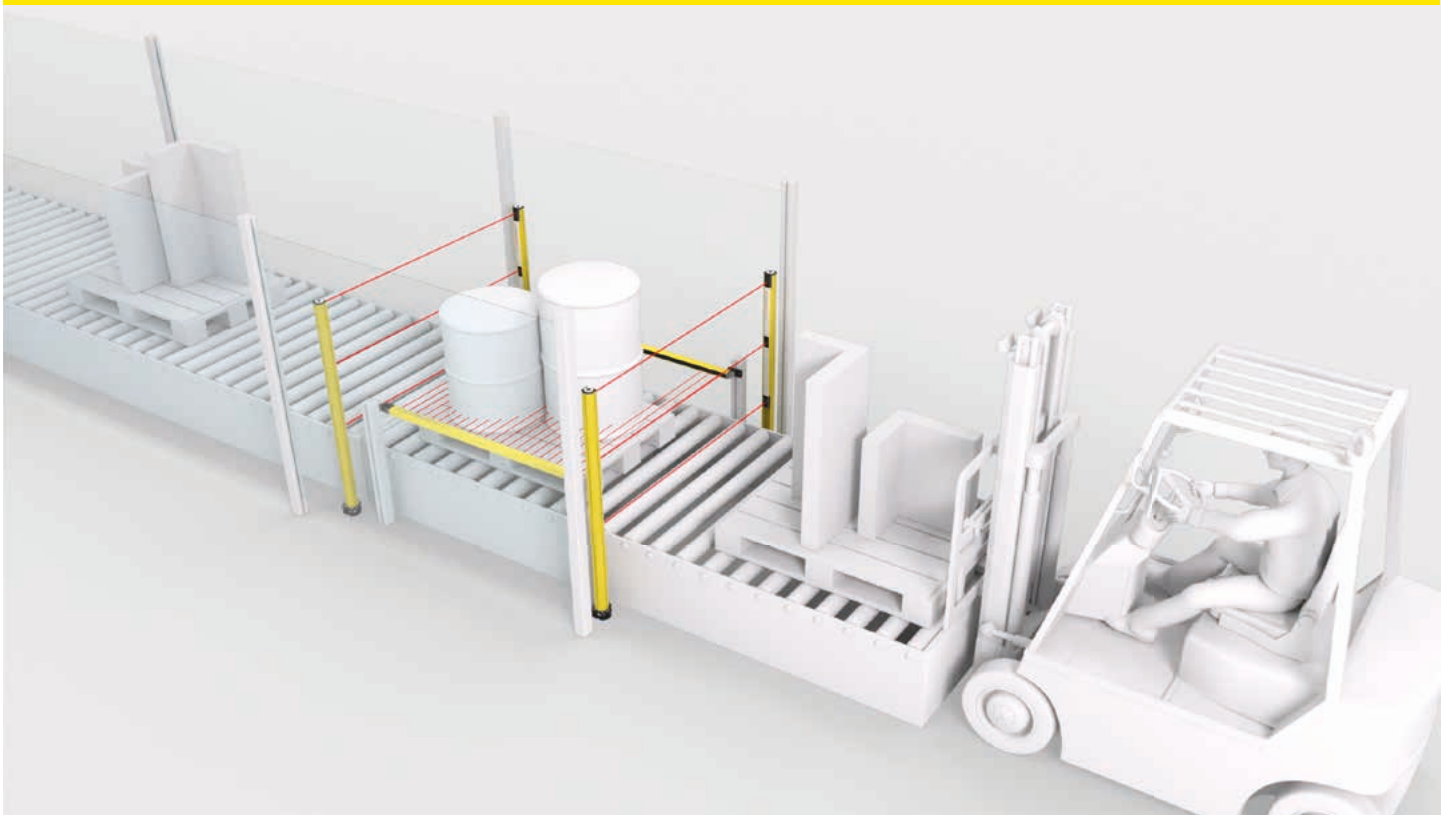


Safety Solutions Access guarding at material output station

Safety at Leuze



Simple. Safe. Productive.

From risk assessment to validation: our safety solutions provide complete solutions for your systems. The innovative safety concepts of our expert teams ensure efficient material flow, gapless safety and high availability of your system. Even in applications where classic concepts are pushed to their limits. Always with legal certainty, CE certification and compliance with standards. This makes implementation extremely easy for you.

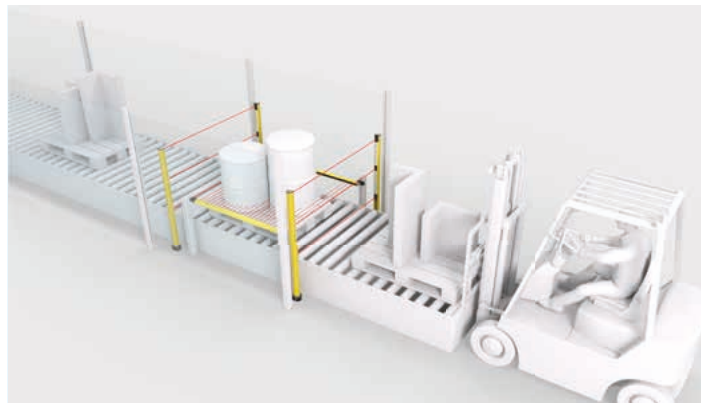
One challenge at material output stations is to reliably distinguish between people and the transported goods – particularly in cases where the shape and size of the transported goods can vary. While tried-and-tested safety concepts can be used when

the pallet load is always the same, changing or incomplete loads quickly reveal safety gaps. Existing safety concepts therefore often require the entire hazardous process to be stopped during material output in order to ensure the necessary protection of operating personnel. This reduces the utilization rate of the system and thus its efficiency.

With its superior safety concept, the Leuze safety solution for material output stations provides the perfect answer. It guarantees gapless safety at all times while ensuring optimum utilization of the system.

Access guarding at material output station

Requirement: Pallets with changing load – e.g. different shape and size or partially loaded pallets – must be transported out of the danger zone. Access to the system must be safeguarded. To ensure optimum utilization of the system, it must be operated without interruption even when the pallets are being transported out.



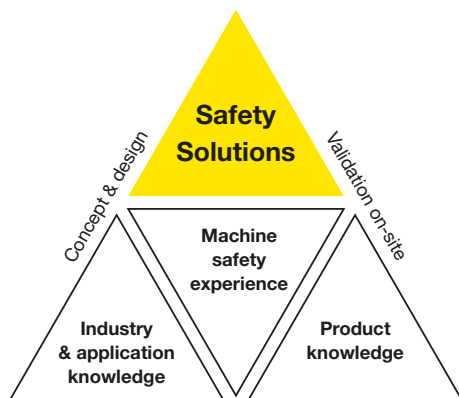
Solution: A safety lock with two multiple light beam safety devices at each end is installed on the conveyor line. The area between the photo-electric sensors is monitored by a horizontally mounted safety light curtain. The safety light curtain uses its protective field to detect the presence of people.

Advantages for you

- Flexible safety concept for optimum utilization of the system through interruption-free operation, even with changing loads
- Reliable outward transport of goods of any shape and size as well as partially loaded pallets
- No modifications required in the event of a format change
- No operator intervention necessary

Operating principle

Two safety sensors, which form a lock area with their vertical protective fields, are installed on the conveyor line. The transported goods are output through this area. The size of the area must be such that it completely contains the largest possible transported item. After the transported goods have left the lock area during outward transport, the horizontally mounted safety light curtain checks the lock area. The system only releases the safety sensor on the inside if no goods or persons are detected inside the area. The next transported item can then be transported out. The system monitors whether the processes are correct in terms of safety.



Simple. Safe. Productive.

System components and safety parameters

- Safety sensors: MLD 500 multiple light beam safety devices with device columns, ELC 100 or MLC 500 safety light curtain
- System control: MSI 400 safety control
- Leuze safety program
- PL e in accordance with EN ISO 13849-1, SILCL 3 in accordance with IEC 62061
- 2-channel safety output, 2 signalling outputs

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 the design of safety concepts and have detailed knowledge of current norms and standards.

We support you throughout the project, from risk analysis to safety-related acceptance. Our teams make sure that our solution meets your requirements and ensure that your project runs smoothly.

Complete solutions – Tailored to your needs

Our safety 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 control programming and configuration according to project requirements
- Full, CE-compliant documentation
- Start-up support
- Validation of the safety function



Leuze electronic GmbH + Co. KG

In der Braike 1, 73277 Owen · T +49 7021 573-0 · F +49 7021 573-199 · info@leuze.com · www.leuze.com
 en 01-2024/04 PDF version · Subject to modifications and errors