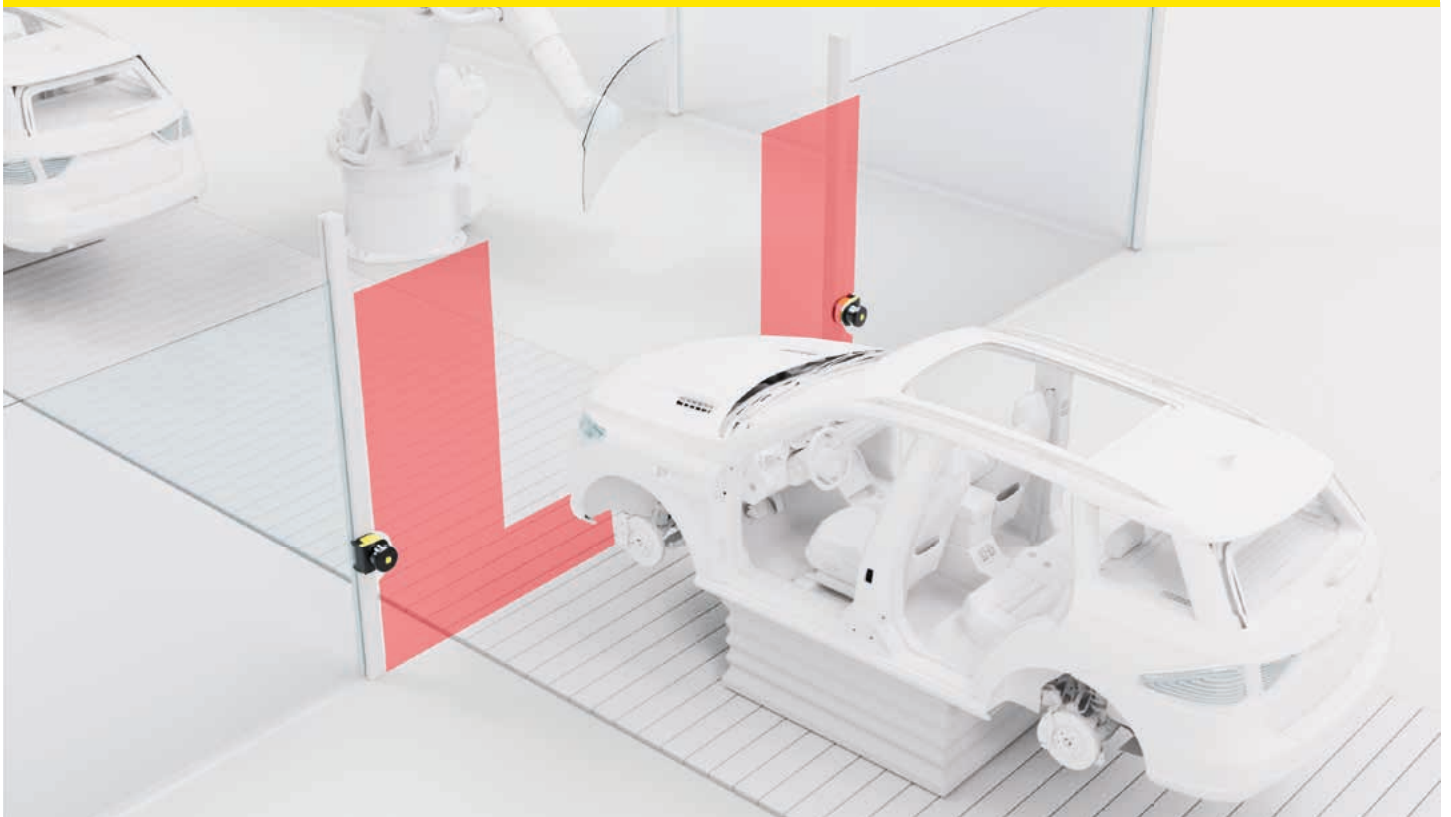


## Safety Solutions

### Access safeguarding at skid transfer area

#### Safety at Leuze



### Simple. Safe. Productive.

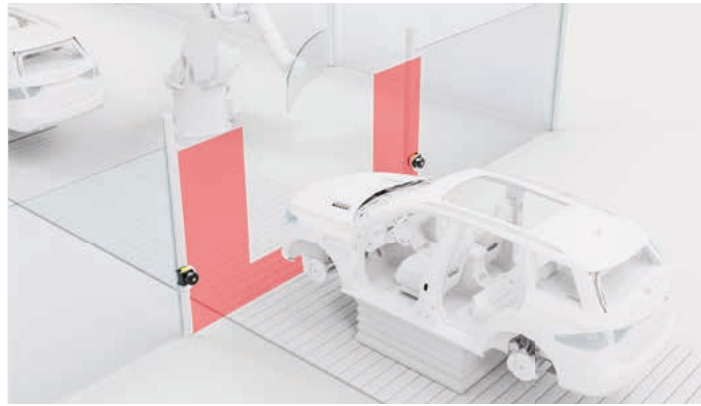
From risk assessment to validation: our safety solutions provide complete solutions for your systems. The innovative safety concepts of our expert teams ensure efficient material flow, gapless safety and high availability of your system. Even in applications where classic concepts are pushed to their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

Skid conveyor systems transport moving and height-adjustable work platforms. A succession of platforms is used for transporting heavy loads through the assembly area, and the adjustable height of the platforms makes assembly work easier, e. g. on the final assembly lines.

At the large openings of the transitions between manual and automated work areas, an access safeguarding system is necessary which can reliably distinguish between the loaded skid and people. If, as a result of flexible production processes, the dimensions (e. g. width) of the transported goods change, then classic concepts such as muting or muting with monitored, lateral wicket gates quickly reach their limits. This is because persons who are located to the side of the transported goods can no longer be reliably detected in all situations and could therefore enter the danger zone. For these applications, the Leuze safety solution provides gapless safety for skid transfer areas, even in the case of changing body variants.

## Access safeguarding at skid transfer area

**Requirement:** The infeed and outfeed interfaces at skid transfer areas must be safeguarded against access by persons. The safety concept must allow different body variants to be transported. Persons moving alongside the skid must also be detected.



**Solution:** Two vertically aligned safety laser scanners use their protective field to guard access to the danger zone. The system control tells the safety system which body variant will be transported next, and the safety system adapts the protective field accordingly. The entire process is monitored for safety.

### Advantages for you

- Continuous monitoring of the entire access area
- Gapless safety during the transport cycles
- High reliability and availability
- Low space and service requirements
- Optimum protection against manipulation; the protective device cannot be bypassed unconsciously
- Easy to retrofit

### Operating principle

Two safety laser scanners produce a vertical protective field in front of the danger zone. Before the loaded skid enters the danger zone, the safety system receives information telling it which window needs to be opened in the protective field. This allows the loaded skid to be transported without interruption. The access point to the side of the loaded skid continues to be safeguarded. After the loaded skid has passed through the protective field window, the protective field is reset to its original, closed state. The entire process is monitored for safety.



Simple. Safe. Productive.

### System components and safety parameters

Safety sensors: RSL 400 safety laser scanner
System control: MSI 400 safety control or Siemens SIMATIC S7
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 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



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 en 01-2024/04 PDF version · Subject to modifications and errors