

# Safety laser scanners from SICK

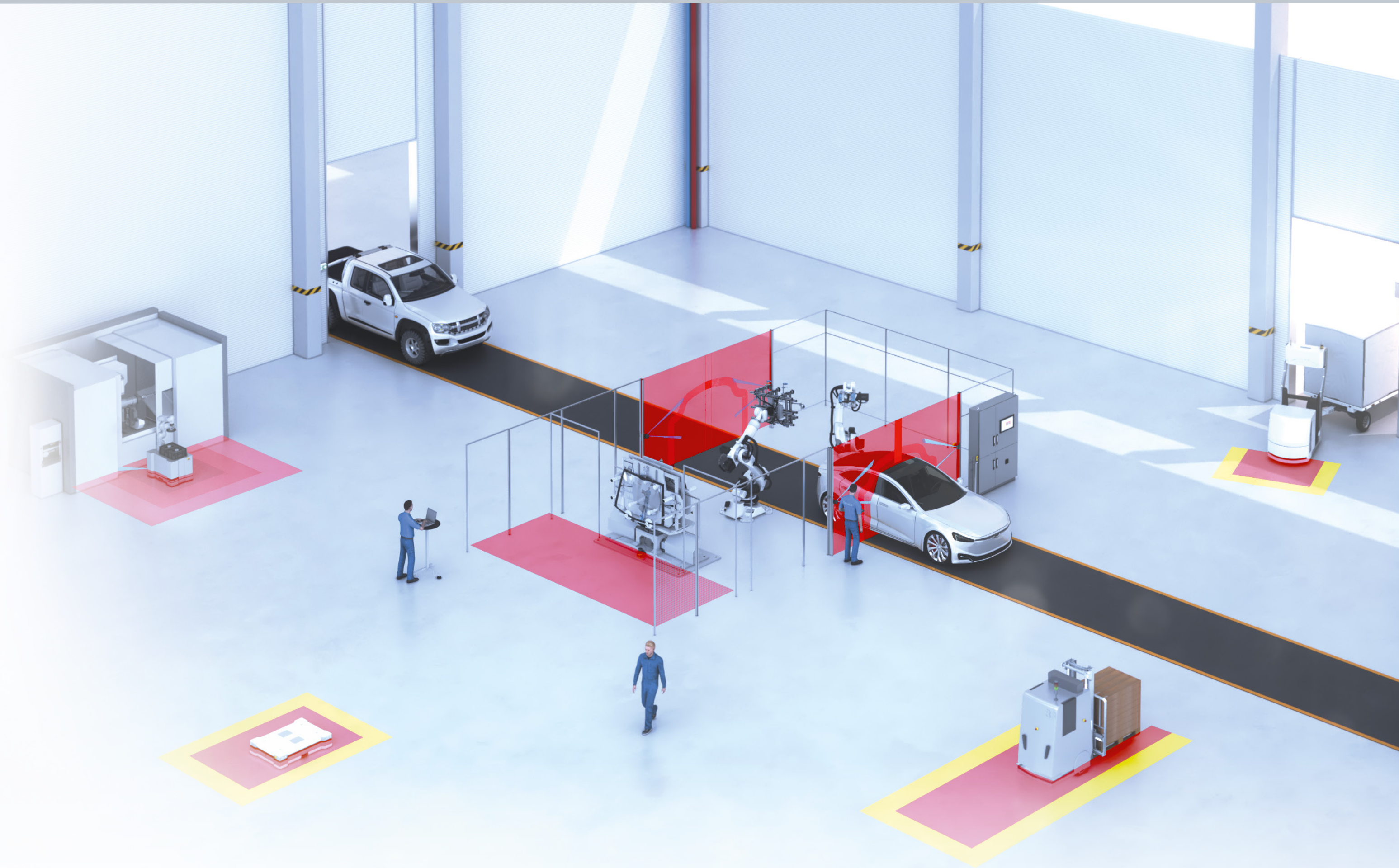
Safety laser scanners enable humans and machines to collaborate safely in industry. There, laser scanners protect hazardous areas, hazardous points and access points – indoors and outdoors. Thanks to the safeHDDM® technology, the devices are resistant to ambient light, dirt, dust, rain, fog and snow. The microScan3, nanoScan3 and outdoorScan3 product families are setting new standards in the area of safety laser scanners, opening up new fields of application for you, and increasing productivity.

[Click here to learn about the advantages.](#)

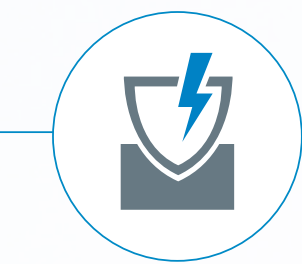
[Click here to learn about application examples.](#)

[Click here to get to know the product portfolio.](#)

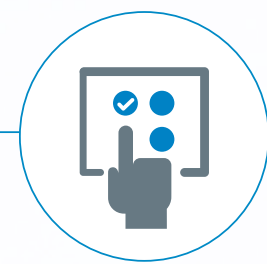
[Click here to learn about the benefits of choosing SICK.](#)



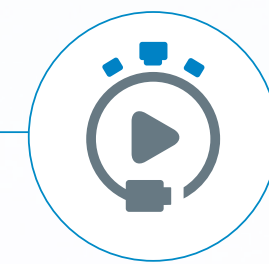
## ADVANTAGES OF SAFETY LASER SCANNERS



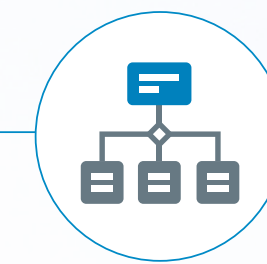
Scanning technology  
safeHDDM®



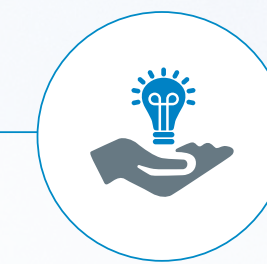
Smart housing  
and accessories  
concept



Smart  
integration



Configuration  
with  
Safety Designer



Intelligent  
field functions



Comprehensive  
diagnostic  
options

## safeHDDM® – the patented scanning technology



### Safe

Thanks to the safeHDDM® scanning technology, the safety laser scanners from SICK are very reliable and ensure safe operation of your application. The scanning technology also allows a large scanning range of up to 9 m while maintaining a compact design. Thanks to the scanning angle of 275°, there are no safety gaps even when the device is mounted in a corner.



### Reliable

The safety laser scanners from SICK are especially resistant to dirt, dust, and ambient light, thus ensuring a high machine availability. Thanks to their high electromagnetic compatibility (EMC), the laser scanners implement safety functions reliably.

[▶ Find out more](#)



### Outdoor compatible

The patented safeHDDM® technology has been substantially further developed for the outdoorScan3, and thus for outdoor applications, with the help of special algorithms. The precise outdoor safeHDDM® scanning technology distinguishes between real safety risks and disruptive environmental influences and works reliably even in demanding weather conditions.

## Smart housing and accessories concept



### Display with status indicator

Important status and diagnostic data can be accessed directly on the device via pushbuttons and the integrated display.

[▶ Find out more](#)



### Modular concept

The configuration is saved in the system plug. This means that if the safety laser scanner gets damaged, you only need to exchange it and the cabling remains the same. The optics cover can also be quickly and easily replaced if necessary.

[▶ Find out more](#)



### Wide range of accessories

Machine integration is easy thanks to matching accessories. And the vibration- and shock-tested mounting equipment ensures trouble-free operation.

## Smart integration



### Simple machine integration

Thanks to the extensive accessories and standardized connection technology, mounting and electrical installation are quickly completed. You also benefit from a consistent integration concept across the entire safety laser scanner portfolio.



### Safe network integration

The different variants of the microScan3 can be integrated easily and safely into numerous networks, e.g. via an I/O interface, EFI-pro, EtherNet/IP™ CIP Safety™, PROFINET PROFIsafe, EtherCAT® FSoE, etc. The devices also provide you with detailed measurement data and diagnostic information.

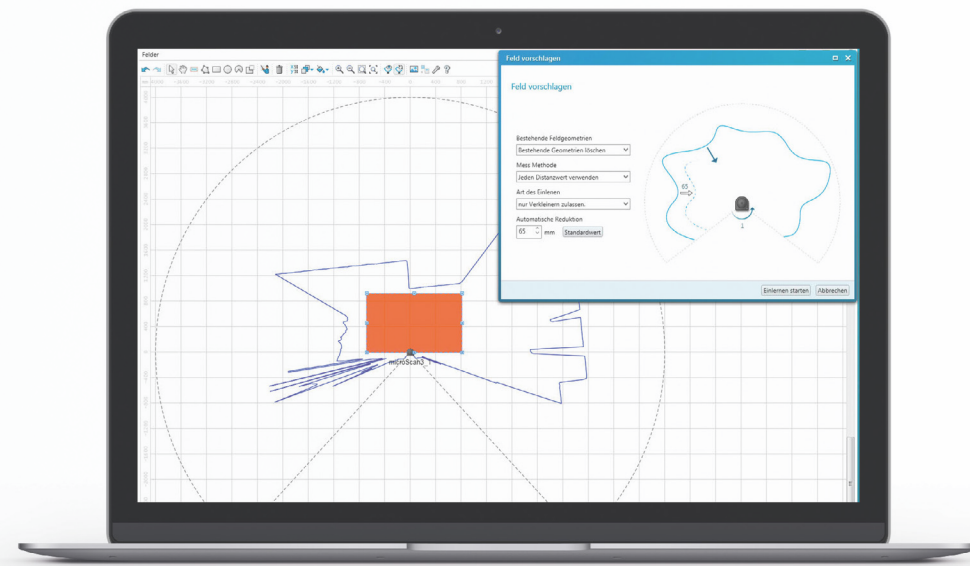


### Safe EFI-pro System

The industrial Ethernet-based network technology EFI-pro makes it easy to network safety sensors, safety controllers, and actuators connected via EtherNet/IP™ CIP Safety™.

[Find out more](#)

## Configuration with Safety Designer



### Intuitive configuration

Using the Safety Designer software, you can configure the safety laser scanners quickly and easily. Intuitive user guidance, fast field configuration, and simple logical operations using pre-certified function blocks reduce the commissioning time.

[▶ Find out more](#)



### Documentation and verification

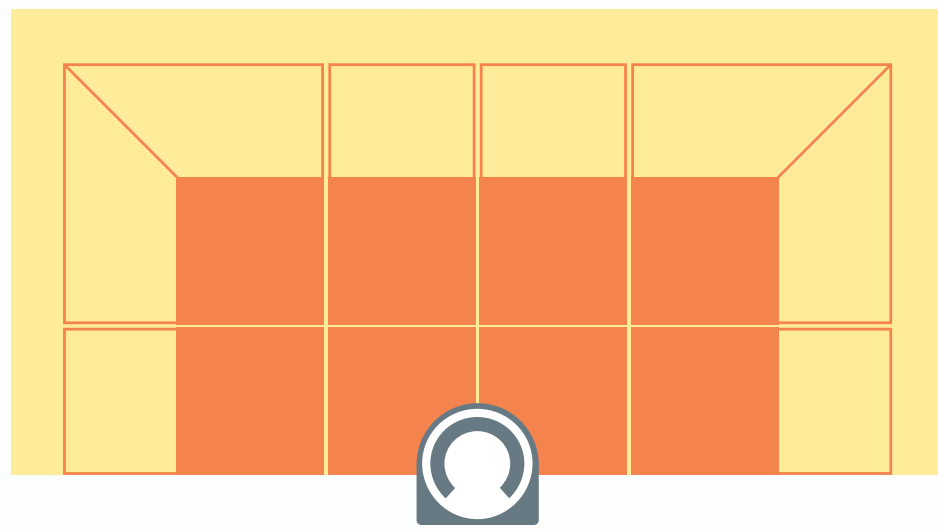
You will receive a detailed documentation report for the devices and the overall application. This will help you to quickly verify your application.



### All-in-one solution

Project plan your entire safety application with a single software program: the Safety Designer can be used to configure safety controllers, safety laser scanners, and other safety components.

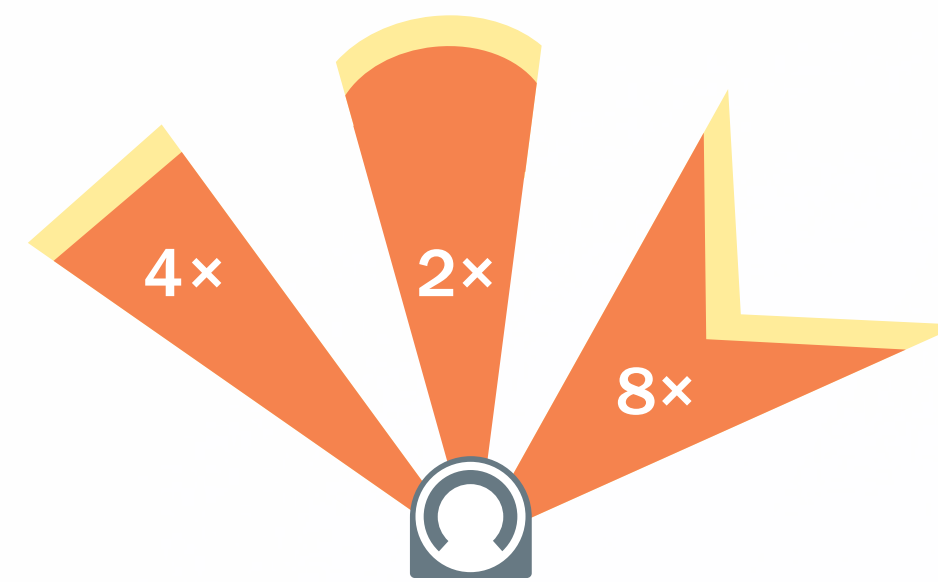
## Intelligent field functions



### Flexible field configuration

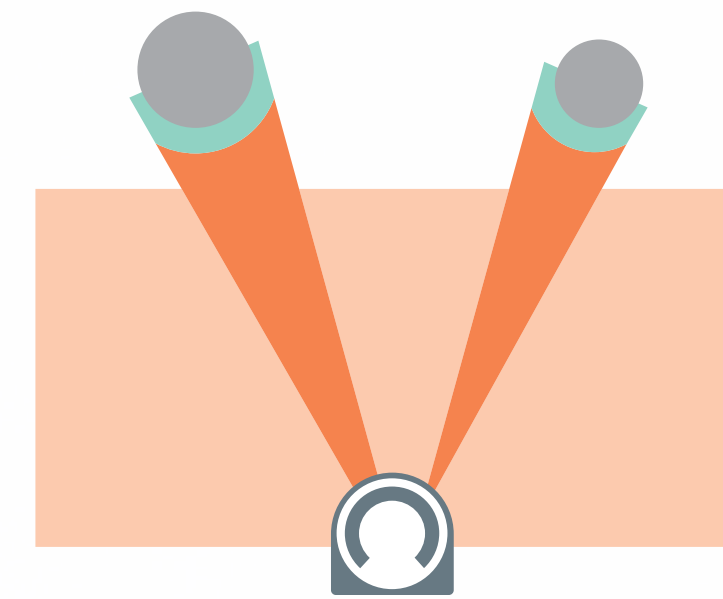
With up to 128 fields and monitoring cases, you can flexibly adapt the sensor settings to the respective current requirements.

The ability to simultaneously evaluate up to 8 protective fields opens up even more possibilities in your application.



### Customizable settings

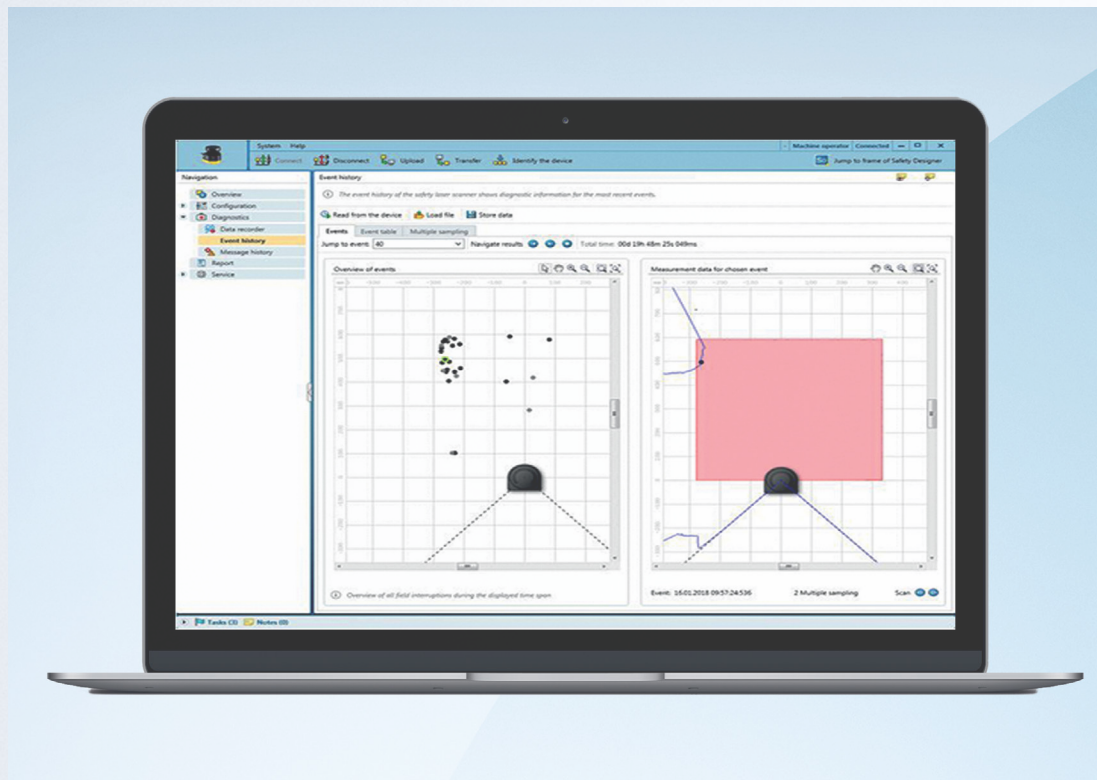
With the help of customizable settings, you can adapt the configuration very well to the particular ambient conditions. For example, you can enable multiple sampling or specify the object resolution for each field individually.



### Contour detection fields

Contour detection fields can be used to trigger safety responses based on the environment. If the safety laser scanner detects a previously defined contour, it is possible for example to initiate a monitoring case switchover.

## Comprehensive diagnostic options



### Safety Designer

You can access detailed diagnostic information via the Safety Designer software. Measurement data can be stored and analyzed, thereby helping you with process and configuration optimizations.



### Safety Laser Scanner Visualization

Using the Safety Laser Scanner Visualization application software, all diagnostic and device information of the safety laser scanners can be visualized and analyzed in real time.

[Find out more](#)

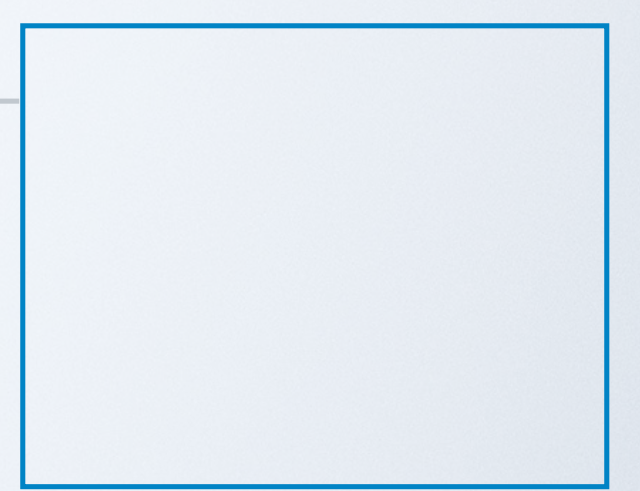
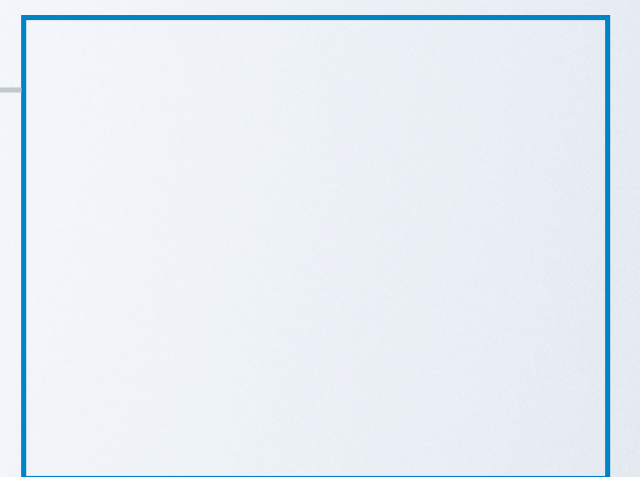
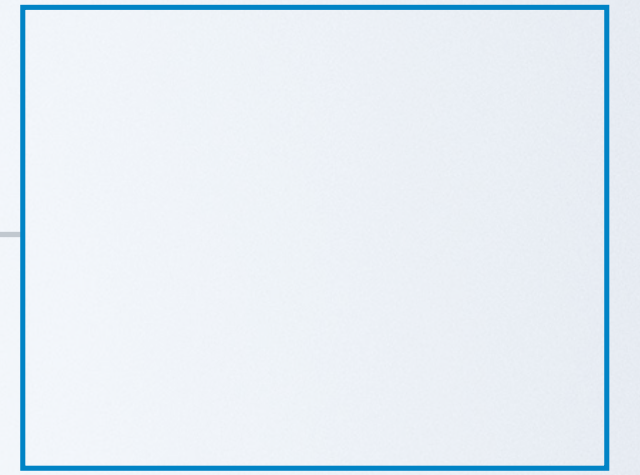
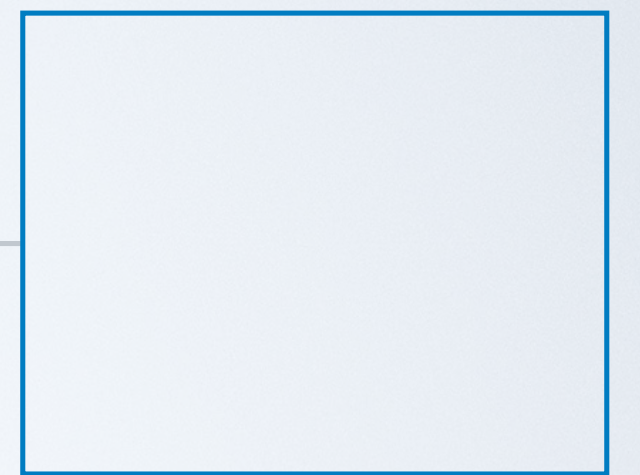
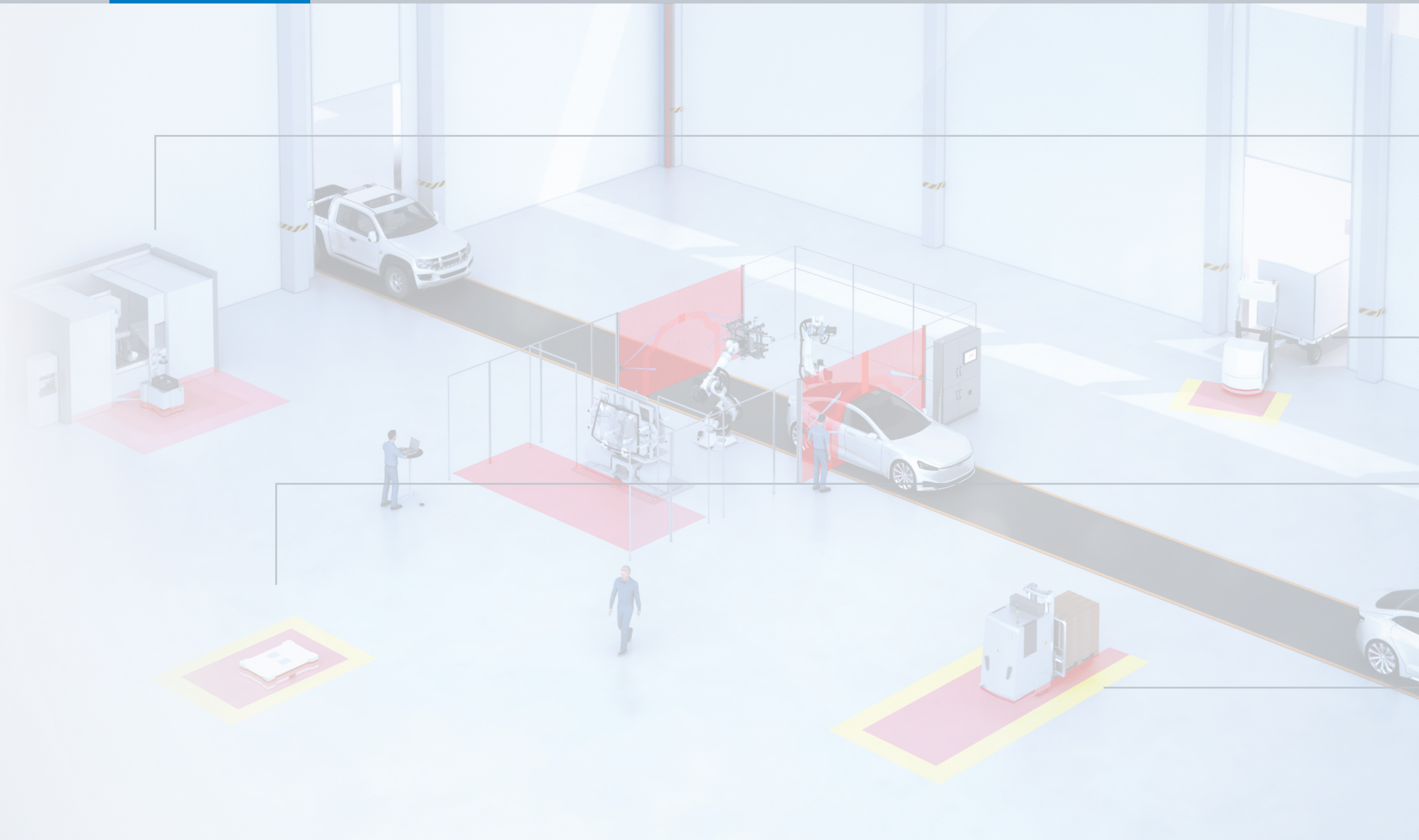


### SICK Augmented Reality Assistant

The SICK Augmented Reality app enables acquired data to be merged with real surroundings on mobile devices. The visualization of process and diagnostic information directly at the point of use speeds up troubleshooting and thereby increases machine availability.

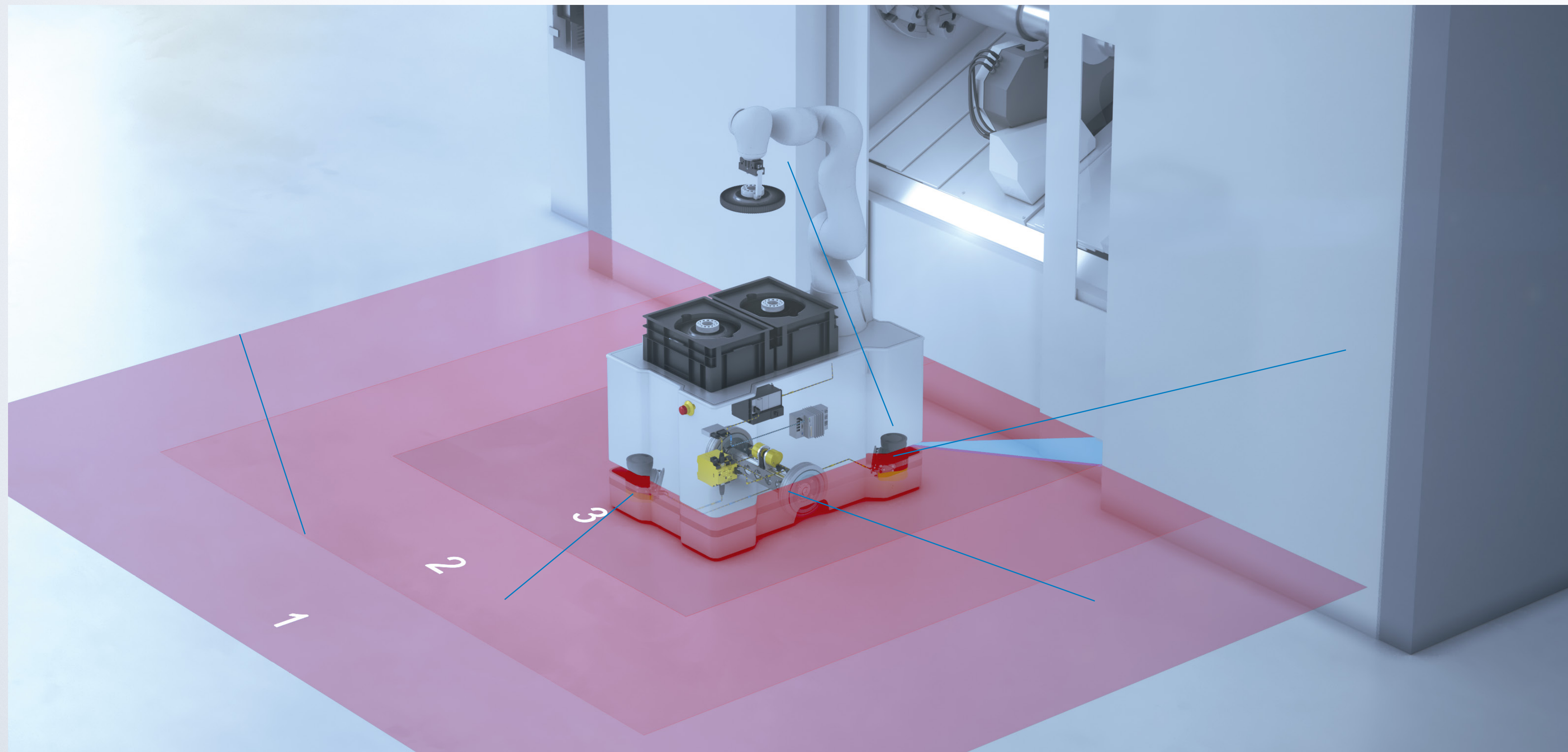
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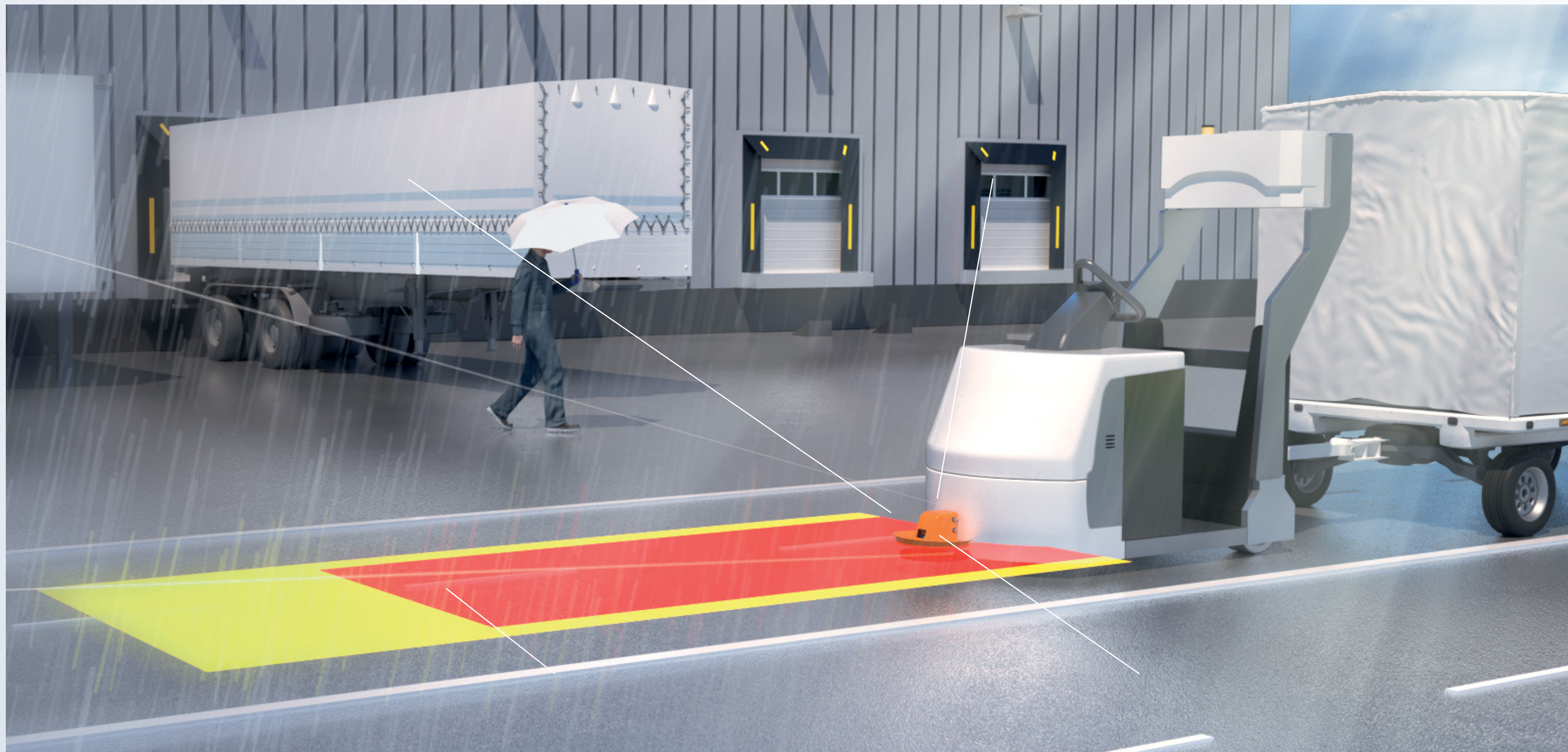
## Protecting robotics applications

The close and, at the same time, safe collaboration between humans and robots is the prerequisite for high productivity, increasing efficiency, and good ergonomics.



## Protecting outdoor applications with outdoorScan3

Thanks to the outdoorScan3, humans and machines can also safely work together in outdoor settings. With the help of the laser scanner, AGVs and AMRs can, among other things, adjust their speed depending on the weather. This allows a smooth flow of materials between multiple production halls and ensures increased productivity both indoors and outdoors.



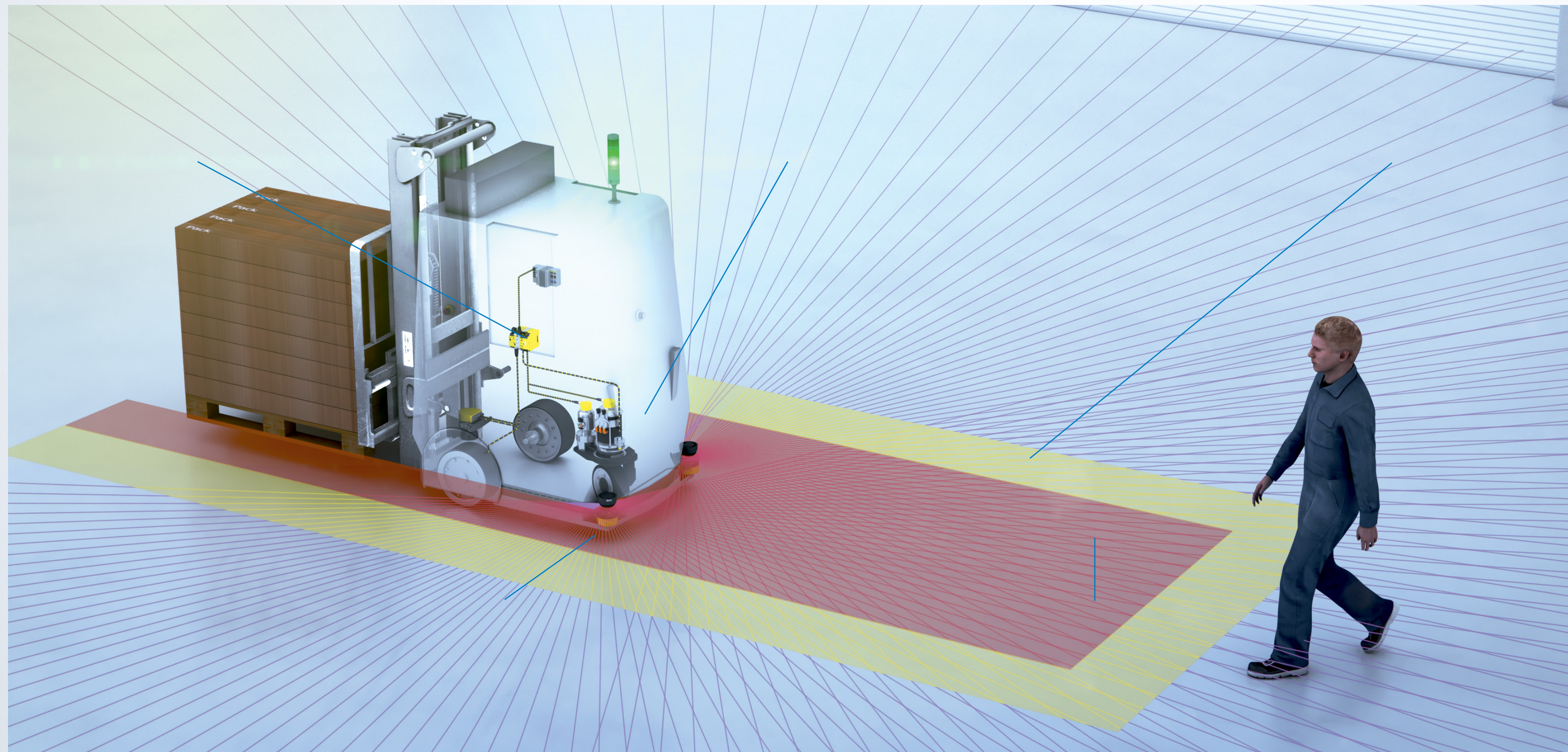
## Protecting small mobile platforms with nanoScan3

Thanks to its small installation size, the nanoScan3 safety laser scanner opens up new possibilities for you when designing small mobile platforms. The switchable protective fields of the nanoScan3 allow the speed and direction of travel of the mobile robots to optimally adapt to the specific environment.



## Safe operation of AGVs and AMRs

Mobile robots (AGVs and AMRs) are indispensable for the intelligent, fully networked factory of the future – they enable flexible and efficient production processes.



## SAFETY LASER SCANNER PRODUCT PORTFOLIO



### microScan3

The microScan3 safety laser scanner stands for the protection of very different applications: from stationary to mobile, from simple to complex. The innovative safeHDDM® scanning technology makes the microScan3 extremely resistant, even to dust and ambient light, and delivers high-precision measurement data. This increases the productivity and availability of machines.

[Find out more](#)



### nanoScan3

The nanoScan3 is the smallest safety laser scanner from SICK. It is perfect for protecting mobile platforms while at the same time providing precise measurement data to support navigation. Thanks to its size, it is also ideally suited for protecting machines in confined spaces. Like the microScan3, the nanoScan3 features the safeHDDM® scanning technology with all its advantages.

[Find out more](#)



### outdoorScan3

The outdoorScan3 is used to protect stationary and mobile outdoor applications. The patented safeHDDM® technology from SICK has been substantially further developed for this safety laser scanner, and thus for outdoor applications, with the help of special algorithms. The outdoorScan3 thereby opens up for outdoor applications, and for the first time ever, all the advantages of non-contact protection using safety laser scanners.

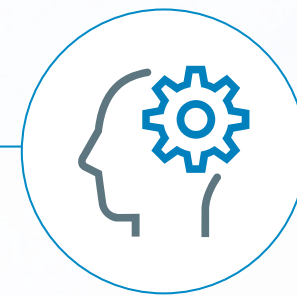
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## REASONS FOR CHOOSING SICK



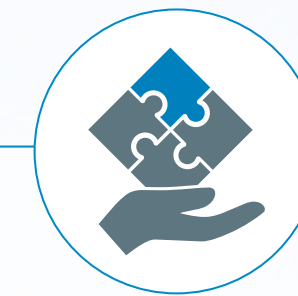
### Expert partner worldwide

Think globally, act locally



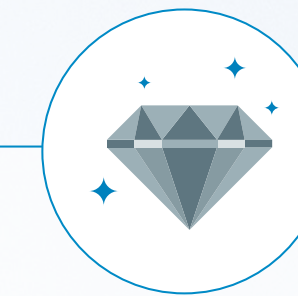
### In-depth application knowledge

Fields of application of SICK safety sensors



### Turnkey safety solutions

Everything from a single source



### SICK safety innovations

Technology milestones



### Comprehensive safety expertise

The path to safe productivity with SICK

We support you on your path to safe productivity

Contact us:  
[www.sick.com/safe-productivity](http://www.sick.com/safe-productivity)