# Press Release

# Clearly measuring contours

Leuze is expanding its product portfolio with LiDAR technology: New ROD 300 series of laser scanners for efficient contour measurement and ROD 500 for precise AGV navigation

*Owen, December 2, 2024* – Whether on the conveyor belt or on the automated guided vehicle system: When sensors are used to detect contours, precision and attention to detail are what count. Leuze is launching two new laser scanner series that are perfectly suited for this. The devices of the ROD 300 series reliably detect contours even during fast production and logistics processes. Thanks to their high scanning rates and angular resolution, the laser scanners of the ROD 500 series are optimally suited for navigation tasks. Another advantage is the sensors' integrated window monitoring, which detects if the optics window becomes dirty. This enables predictive maintenance and contributes to high system availability.

**Perfection in precision**

The devices of the ROD 300/500 series scan at a frequency of up to 80 Hz. This means that moving objects are reliably detected and the data quality remains optimal even at high speeds. With their high angular resolution of 0.025° at 10 Hz , the laser scanners of the ROD 500 series determine the contour of the parts even with different high-gloss or matt surfaces. The new laser scanners can be integrated into almost all production processes. Their rugged design also contributes to this: protection class IP 67, high-quality aluminum base and the built-in laser diode make the ROD 300/500 laser scanners resistant to external influences. The sensors also work in temperature ranges from -30 °C to +60 °C. This makes them suitable for applications in both the deep-freeze sector and for high-temperature requirements, such as in battery production.

**Natural Navigation made easy**

The new laser scanners can also be used for navigating driverless transport systems (DTS). They create a very precise map of the environment, such as the material storage area. In ongoing logistics operations, a scanner from the ROD 500 series enables collision-free AGV navigation via natural navigation. Those responsible for intralogistics also benefit from the compact design of the laser scanners: With dimensions of around 80 x 80 x 80 millimeters, the sensors can be integrated even into the small installation spaces of mobile vehicles.

Characters: approx. 2,367  
   
Please send a sample copy.  
Interviews available upon request.

**Image material**



Figure 1: The new laser scanners in the ROD 300 series for contour measurement and the ROD 500 series as a high-resolution variant for navigation tasks are characterized by high scanning rates with simultaneously high angular resolution.

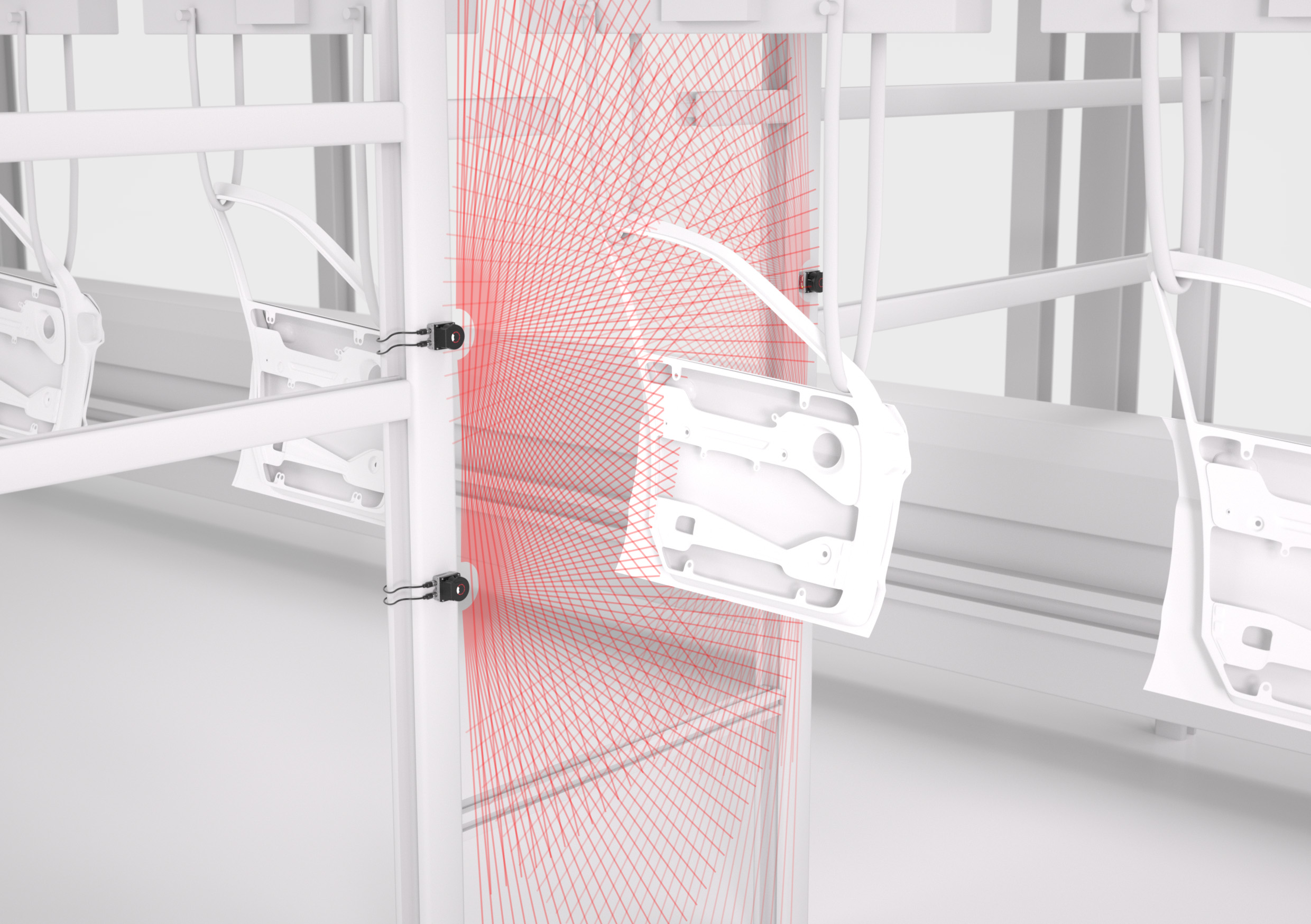


Figure 2: With their high resolution of 0.025°, the laser scanners of the ROD 500 series can precisely determine the contour of parts, even with different surfaces (high-gloss or matt).

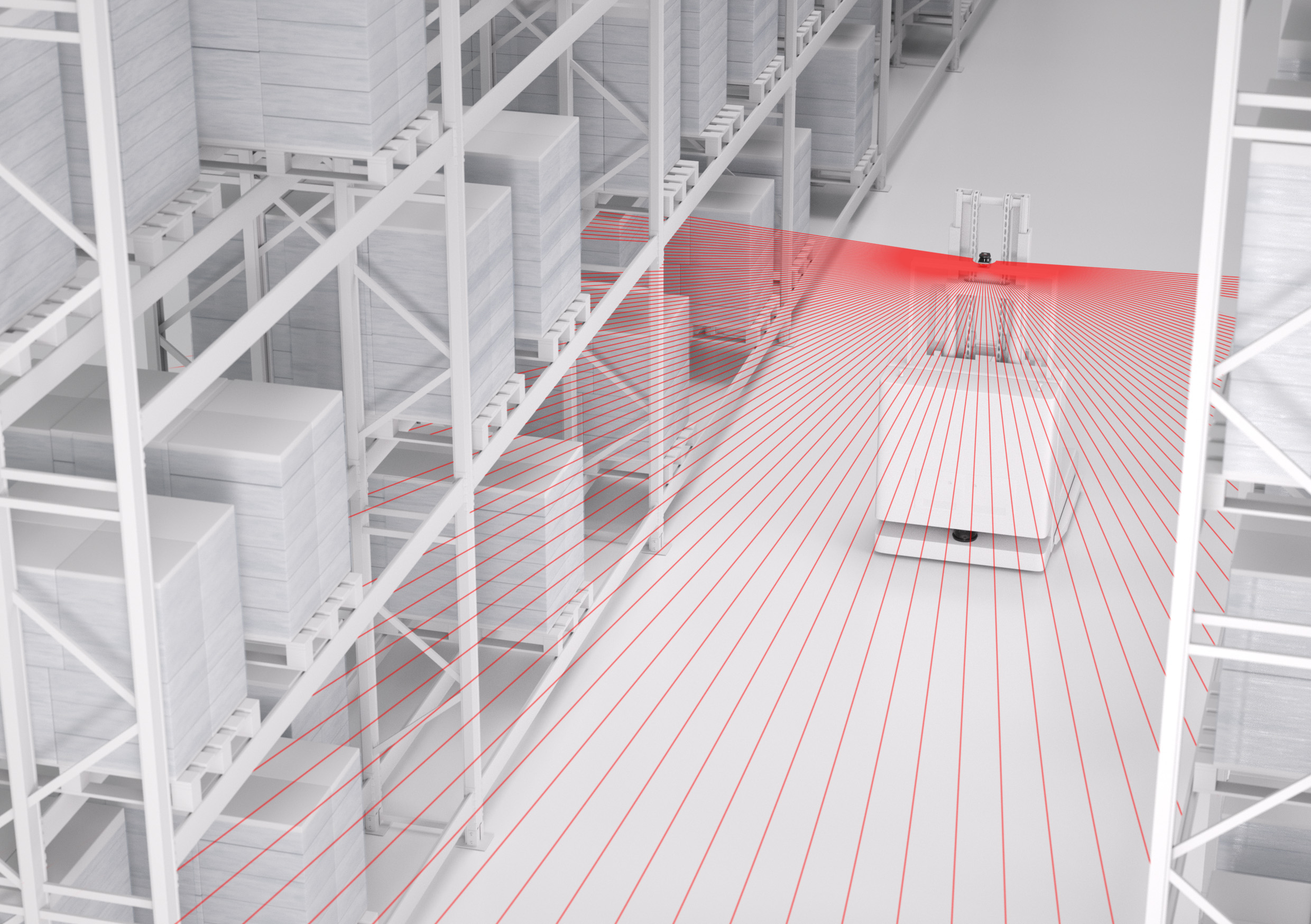


Figure 3: The laser scanners of the ROD 500 series can create a very precise map of the environment. In ongoing logistics operation, the ROD 500 is ideally suited for collision-free navigation of the FTS via natural navigation.



Figure 4: If the integrated window monitoring detects that the window is dirty, it issues a maintenance notice. The warning threshold can be adjusted. This predictive maintenance contributes to high system availability.

*With over 60 years of experience, Leuze has become an expert in innovative and efficient sensor and safety solutions in automation technology. Today, around 1,600 Sensor People worldwide use curiosity, passion and determination to drive progress and change. Their motivation is the lasting success of their customers in a constantly changing industry. Leuze offers its customers an individual competitive advantage through intuitive and reliable solutions for safe and non-safe position detection. For example, switching and measuring sensors, identification systems, solutions for data transmission and image processing. As a family-owned company and safety expert, the company also focuses on components, services and solutions for occupational safety. With their broad and at the same time in-depth application know-how in the mechanical and plant engineering sectors, the Sensor People are a competent and flexible partner for their customers with a wide range of industry requirements.* [www.leuze.com](http://www.leuze.com)

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