

PRESS RELEASE

Pixel PT: AI-Powered Pallet Transporter for Rough Environments

Developed for Logistics: Flexible & Fast Implemented

Munich, 07.01.2025 – The pioneer in AI-driven robots for logistics, [Pixel Robotics GmbH](#), will showcase innovative, intralogistics-optimized transport robots at LogiMAT from March 11-13, 2025 (Hall 4, Stand F05). The Pixel PT combines cutting-edge technology with practical AI to make intralogistics more efficient, safer, and more flexible.

New Technology: The Optimized Foil Process

A highlight at this year's trade show is the Pixel PT's new foil process. Traditionally, loose foil hanging from pallets that encroach on safety zones triggers emergency stops for the transport robots. Pixel Robotics has resolved this issue: thanks to an innovative process, the Pixel PT recognizes the hanging foil as foil – rather than a safety-critical object (such as a person's foot) – and continues its movement without compromising safety or efficiency. This advancement significantly boosts productivity and prevents delays in warehouse operations.

In addition to this innovation, the Pixel PT continues to impress with its proven, practical features:

Key Features of the Pixel PT at a Glance:

Intelligent Fork Detection: Thanks to camera-based AI, the robot reliably detects forklift forks and adapts to rough floor.

Flexible Pallet Handling: Pallets can be picked up regardless of their position or slight deviations.

Secure Handling of Wrapped Pallets: The AI differentiates between foil and solid obstacles, ensuring smooth pallet handling, even for pallets wrapped to the ground.

Rule-Based Placement: Pallets are placed pragmatically and adaptively, just like a forklift operator would do.

Obstacle Avoidance: The Pixel PT identifies people, vehicles, and both moving and stationary obstacles, responding with remarkable flexibility.

Using a digital twin of the operational area, Pixel Robotics enables seamless collaboration between humans and machines – without the need for adjustments to existing processes or WMS integration.

Experience the Pixel PT live in action at LogiMAT 2025 and discover how we are reshaping the future of intralogistics. Visit us in Hall 4, Stand F05.

Further information:



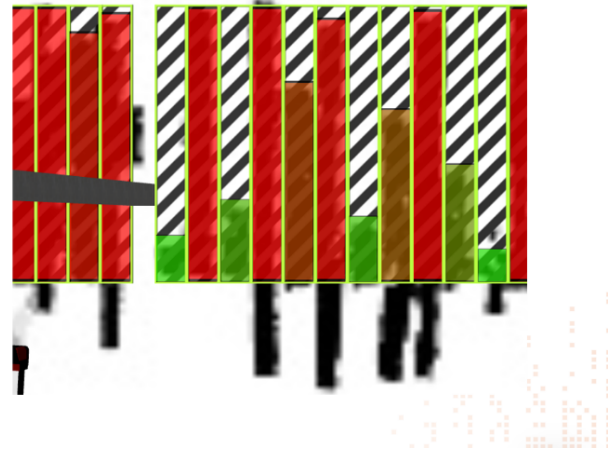
*Pic 1: AI Transport Robots: Navigating with Foil in the Safety Scanner's Field of View
(Source: Pixel Robotics)*

Pixel PT: AI-Powered Pallet Transporter for Rough Environments - Developed for Logistics: Flexible & Fast Implemented

Kamerasicht



Übersetzung in Spur-Belegung



Camera Vision

Translation to Track Occupancy

*Pic 2: AI Transport Robots Based on a Real-Time Digital Twin: Fill Level Detection in Buffer Lanes
(Source: Pixel Robotics)*

Press Contact

Pixel Robotics GmbH
Mr. Valentin Plapp
Wilhelmine-Reichard-Strasse 7
80935 Munich
Tel. +49 89 20008518
Email: office@pixel-robotics.eu
Internet: www.pixel-robotics.eu

(A copy or link is requested upon publication)

About Pixel Robotics:

Pixel Robotics uses an optical AI perception system to transform the real-world intralogistics environment into a real-time digital twin. This patented system tracks and digitizes the movements of industrial trucks, goods, and personnel. In combination with our lean and modular Autonomous Mobile Robot (AMR), the Pixel PT, pallet transportation in dynamic environments can be automated flexibly and cost-effectively. Real-time data from the digital twin allows driving tasks to be automatically generated and continuously adapted to current traffic conditions. Additionally, camera-based features such as intelligent fork detection and the handling of misaligned or foil-wrapped pallets ensure seamless mixed operations alongside human colleagues.