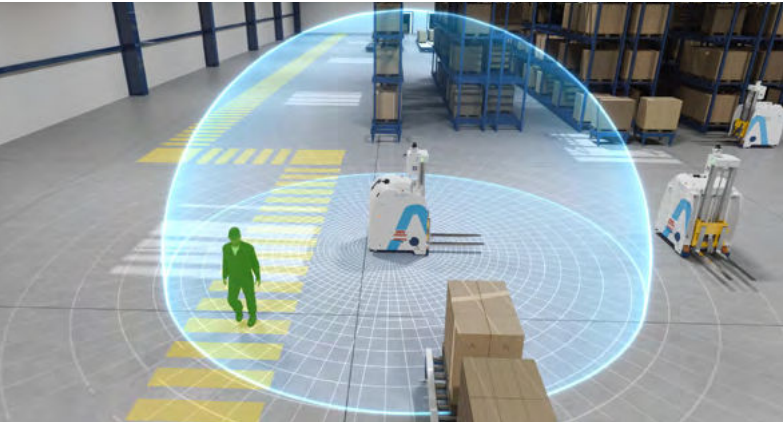
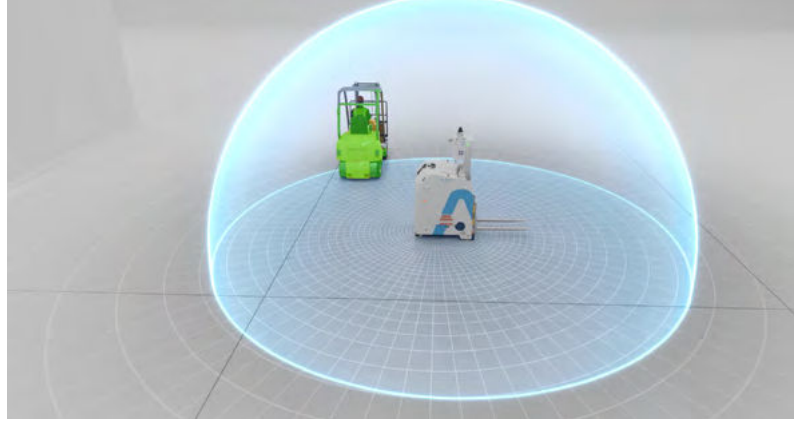


# AUTONOMOUS INDUSTRIAL VEHICLE

Powered by AI



**ALSTEF**  
GROUP



# A NEW GENERATION OF MOBILE ROBOTS POWERED BY AI

Alstef Group introduces its new Autonomous Industrial Vehicle, designed to redefine warehouse and distribution operations with intelligent autonomy, safety, and flexibility.



PERCEPTION BUBBLE & 360 VISION



INTELLIGENT OBSTACLE MANAGEMENT



PALLET RECOGNITION AND POSITIONING



SAFETY, PERFORMANCE AND ENERGY EFFICIENCY

## SMART PERCEPTION, SAFER FLOWS

At the heart of the AIV is the **perception bubble**, an advanced awareness zone that allows the vehicle to detect, classify, and respond to people, equipment, and environmental changes in real time.

By combining **on-board cameras** with **artificial intelligence models**, the vehicle is able to classify objects in its environment, distinguishing, for example, between pedestrians, manual carts, pallets, and fixed infrastructure. This semantic understanding enables:

- **Safer interactions** in shared spaces
- Contextual **adaptation of speed and routing**
- Dynamic **obstacle avoidance** and flow adjustment
- Improved **equipment availability**
- Greater **flexibility of the system**

## FLEXIBLE & SCALABLE OPERATIONS

The Autonomous Industrial Vehicle operates in live facilities without extensive infrastructure changes. Its perception bubble continuously adapts to layout changes, temporary obstacles, and evolving workflows, **simplifying system configuration and day-to-day operation** with:

- **Automatic recognition** of pedestrian crossings
- **Adaptive pallet docking** and loading
- **Dynamic speed control**

Two configurations are available: a light perception bubble, covering the front and rear of the vehicle, and a full perception bubble, providing 360-degree awareness. The AIV can expand its capabilities through software updates, ensuring long-term scalability and performance.