



Hi-Vision System: AI enhances Dieci rotating telehandlers

IMAGE SOURCE: DIECI

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- DIECI introduces the Hi-Vision System, the first AI-based vision system for rotating telehandlers, enhancing safety, visibility, and control.
- The Hi-Vision System, unveiled at Bauma 2025, features six high-definition cameras, three Lidar units, and a high-capacity control unit for real-time alerts.
- Key AI features include people detection, obstacle detection, terrain dip detection, obstacle detection up to 30 meters, and equipment docking assistance.

- The Hi-Vision System will be featured across the Pegasus Elite range, including new models Pegasus 100.29, Pegasus 70.35, and Pegasus 60.40, offering enhanced performance and safety.
- The Pegasus 100.29 has a capacity of 10,000 kg and a lifting height of up to 29 meters, while the Pegasus 70.35 and Pegasus 60.40 offer capacities of 7,000 kg and 6,000 kg with lifting heights of 35 and 40 meters, respectively.

Safety, visibility, and control: DIECI introduces the Hi-Vision System, the first AI-based vision system dedicated to rotating telehandlers.

Unveiled as a world première at Bauma 2025, the Hi-Vision System is the first AI-based advanced vision system to be mounted on rotating telehandlers. Designed to ensure high operational precision and the highest safety standards, this technology revolutionises construction site, logistics and emergency operations, optimising processes and simplifying handling.

ADVANCED AI SAFETY: DIECI UNVEILS THE HI-VISION SYSTEM

The Hi-Vision System is the latest technology developed by DIECI's R&D department, bringing even greater safety, visibility and control to the telehandler market.

Based on computer vision technologies, artificial intelligence and a robust hardware architecture, this system is designed to help companies prevent risky situations and reduce accidents and human errors on construction sites by:

- Reducing blind spots;
- Assisting with stabilisation and lifting manoeuvres;
- Detecting and warning of obstacles, people, or dips in the terrain;
- The new rotating telehandlers equipped with the Hi-Vision System feature movements assisted and simplified by artificial intelligence, enabling operators to work with greater precision and in complete safety. All this is made possible by a robust and modular hardware architecture, consisting of:
 - A central unit with dedicated software;
 - Six high-definition cameras, providing a complete view up to 30 metres;

- 3 Lidar (Light Detection and Ranging) units, enabling three-dimensional mapping of the surrounding area;
- A dedicated control unit with high computing capacity (8 times faster than traditional control units), capable of providing the operator with real-time alerts.

Thanks to these features, DIECI's advanced vision system offers considerable assistance in working with a 360° view, delivering significant advantages in terms of safety and productivity.



DIECI cab

IMAGE SOURCE: DIECI

5 AI FEATURES FOR ROTATING TELEHANDLERS

At complex construction sites or in confined operating environments, reduced visibility and tight margins for manoeuvring can pose serious risks. In order to address this challenge and support the construction sector with increasingly high-performance vehicles, DIECI has created the revolutionary Hi-Vision System, offering 5 innovative features:

- People detection around the vehicle. The system alerts the operator to the presence of people within range of the vehicle, displaying them in real time on the on-board display for safer manoeuvring;
- Obstacle detection in the path of the outriggers when opening. A tailor-made function for DIECI vehicles which detects and alerts the operator to the presence of obstacles or people in front of the outriggers during manoeuvring;
- Detection of holes, dips in the terrain, and manholes in the path of the outriggers. Another tailor-made function for DIECI vehicles, which identifies any unevenness, holes or manholes in the outriggers' extension zones, and warns the operator in order to prevent any incorrect or dangerous manoeuvres.
- Obstacle detection up to 30 metres. The third tailor-made function for DIECI vehicles, which warns the operator of possible obstacles when the boom is being moved, with detection up to a height of 30 metres.
- Equipment docking assistance. This system assists the operator when changing equipment through a visual guidance system on the on-board monitor, simplifying and speeding up operations, and reducing error margins.

Thanks to these integrated AI features, the Hi-Vision System is an invaluable aid for increasing productivity, maintaining full operational control and ensuring high safety standards on the job site.



DIECI Lidar

IMAGE SOURCE: DIECI

PEGASUS ELITE: ROTATING TELEHANDLERS FOR THE FUTURE OF CONSTRUCTION

Introduced at Bauma 2025 on the new Pegasus 100.29, the Hi-Vision System developed by DIECI will be featured across the entire Pegasus Elite range of rotating telehandlers.

Designed to deliver maximum performance, comfort and safety, this line consists of a range of telehandlers with 360° continuous rotation. Created to offer construction professionals enhanced performance in all handling operations, the new range combines the capabilities of rotating telehandlers with advanced technological features that improve ease of use, safety, productivity and performance.

In 2025, the range will be updated with three new models offering exceptional performance:

- The Pegasus 100.29, with a capacity of 10,000 kg and a lifting height of up to 29 metres.
- The Pegasus 70.35, with a capacity of 7,000 kg and a lifting height of up to 35 metres;
- The Pegasus 60.40, with a capacity of 6000 kg and a lifting height of up to 40 metres;

Designed with safety, ease of use, and operational efficiency in mind, DIECI's new rotating telehandlers have set a new benchmark on the construction equipment market. The integration of AI, advanced sensors, and precision mechanics has paved the way for a new generation of telehandlers capable of effectively meeting the challenges of both the present and the future.



DIECI Pegasus

IMAGE SOURCE: DIECI

Source: Dieci S.r.l.