

## Smart Depalletizing for Automated Logistics

The AIT Splitbot enables precise detection, classification, localization, and handling of small load carriers (SLCs), fully automated and highly efficient. A top-view inspection first determines whether the separated load carrier is empty or loaded. A camera mounted directly on the gripper then captures the SLC stack, identifies and classifies the containers, and reads the individual label. Based on this information, the system calculates the exact gripping points, allowing the robot to position the gripper with precision and safely depalletize each SLC.



The entire process runs fully automatically without manual intervention. This reduces cycle times, lowers operating costs, and increases process reliability. Thanks to its flexible design, the AIT Splitbot can be seamlessly integrated into a wide range of automated logistics applications.

For more complex applications, the AIT Splitbot can be enhanced with AI-powered vision technology, enabling even greater flexibility and performance.

### Technical Highlights & Benefits

- **Fully automated depalletizing of SLCs** for higher throughput and reduced labor requirements
- **Precise detection, classification, and localization** for reliable processes and minimized picking errors
- **Top-view and gripper-mounted camera** for reliable identification of empty and loaded SLCs
- **Accurate gripping point calculation with collision avoidance** to protect equipment, robots, and containers
- **Reduced manual effort** for lower operating costs and increased process stability
- **PLC and ERP connectivity** for seamless system integration
- **Optional AI-powered optimization** for future-ready automation

**We show you how to increase quality and reduce costs:**

**Contact us for a free consultation: [sales@ait.de](mailto:sales@ait.de)**