

The Solution for Pallet Conveyability Inspection

The AIT Smart Pallet Check provides the foundation for a stable and uninterrupted material flow by checking the quality and conveyability of load carriers directly during operation. In highly dynamic logistics environments, where even minor pallet damage can lead to equipment downtime or consequential costs, the solution ensures maximum safety while maintaining consistently high throughput.

At the heart of the application is an intelligent, camera-based inspection system that reliably identifies and evaluates a wide range of pallet types. In addition to classic criteria such as damage and the condition of critical components such as pallet feet, the system also precisely identifies and classifies further characteristics, including color variants, pallet types, and object-specific properties. This creates a comprehensive profile of each individual load carrier that goes far beyond a simple visual inspection. Evaluation is based on defined quality standards, such as the EPAL classification, providing an objective and traceable basis for decision-making.



The inspection is performed fully automatically while the pallets are in motion, without slowing down material flow or requiring additional process steps. Defective or non-conveyable pallets are detected immediately, allowing corrective action to be taken before disruptions occur in the conveyor system. This significantly reduces unplanned downtime and sustainably increases system availability. At the same time, manual inspection becomes unnecessary, freeing up personnel and minimizing potential sources of human error.

Another key advantage is the solution's high degree of flexibility. AIT Smart Pallet Check can be integrated into existing systems with minimal space requirements and can be configured for a wide range of conveyor technologies and pallet variants. Retrofitting existing systems is also straightforward. Via standardized interfaces, the captured data can be transferred directly to higher-level systems such as ERP or SAP, making all information available in real time for downstream processes and analyses.

Pallet inspection thus becomes an integral part of a fully digitalized intralogistics operation. Companies benefit from comprehensive quality assurance, stable processes, and a significant reduction in the risk of downtime, while maintaining consistently high throughput. AIT Smart Pallet Check transforms a potential source of disruption into a controlled and transparent process step, making a decisive contribution to the efficiency and future readiness of modern logistics systems.

Technical & Benefits

- **Identification:** Damage detection & pallet foot inspection
- **Application:** Minimal space requirements & easy to retrofit
- **Evaluation:** Compliance with EPAL quality classification
- **Interface:** Connection to higher-level systems (ERP, SAP, etc.)
- **Variants:** Configurable for all types of pallets
- **Integration:** Retrofittable for all types of conveyor systems