



PALLET CLASSIFICATION SYSTEM

FAST AND ACCURATE CLASSIFICATION AND ACCOUNTING
OF YOUR PALLETS

Quality control systems

SICK
Sensor Intelligence.

Out of the millions of pallets needed and in circulation, some are subject to a deposit. If pallets are incorrectly categorized at receiving, a company may end up paying for pallets that aren't subject to a deposit. And manually inspecting pallets not only tends to yield errors, it's also exceptionally time and resource intensive.

The solution: PACS — our innovative pallet classification system based on deep learning. PACS automatically recognizes the markings on each pallet's foot and uses an artificial neural network to quickly and accurately check what type of pallet it is. This approach helps to avoid making incorrect deposit payments and to seamlessly manage pallets.



Cost savings
through correct
deposit accounting

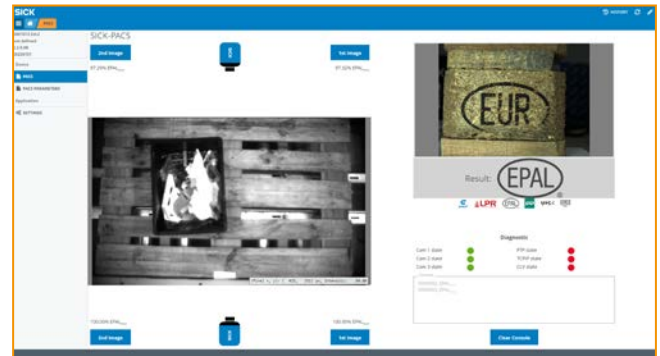


Transparency about
pallet stocks

1 Recording the pallets in receiving

Automated, dynamic image acquisition

- 2D machine vision cameras midiCam2 record the markings on the pallet feet as the pallets move through the conveyor system
- An additional midiCam2 placed above the conveyor belt captures the pallet's load for documentation
- Space-saving design makes it easy to integrate into existing systems



The PACS user interface displays the acquired images of the pallet's feet and load, an evaluation of the pallet type, and an indication of the probability for correct classification. PACS is easy to use. No programming knowledge is required.

2 Identifying the pallet type

Classification of pallets using deep learning technology

- The system uses an artificial neural network to determine the type of pallet — e.g., EPAL, Chep, UIC
- Teaching-in for additional types of pallets is possible

3 Transmitting information

Readout of relevant master data

- The Sensor Integration Machine SIM1012 transmits the acquired data to the superior warehouse management system
- Pallets subject to a deposit are directly recorded so the customer can correctly complete accounting
- Transparency in pallet stocks