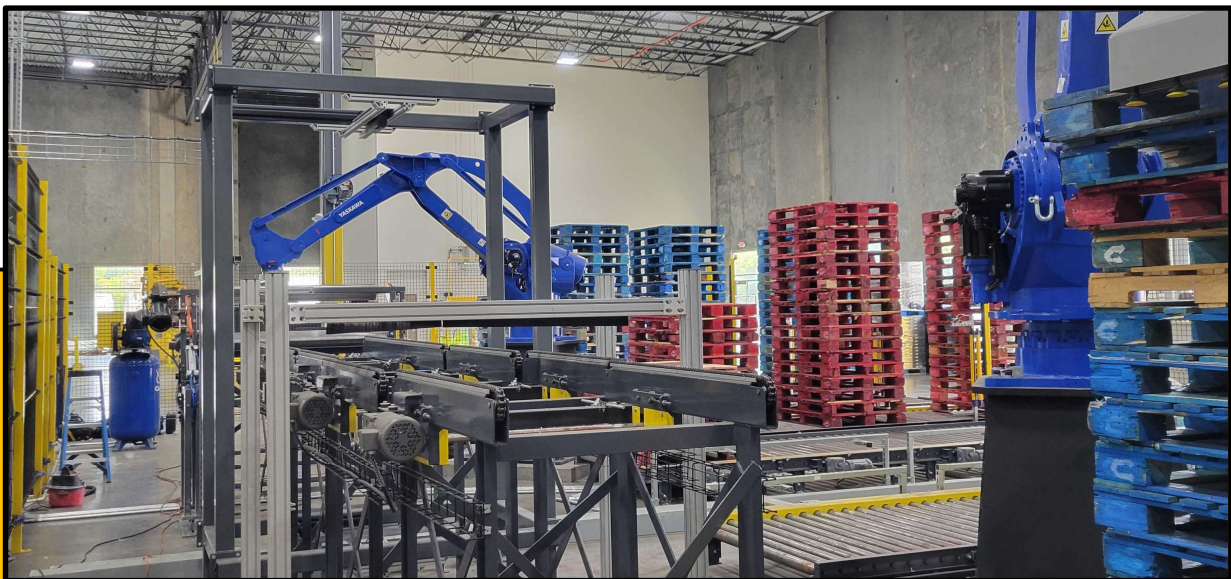


Universal Logic: Pallet Inspection System



The Universal Logic pallet inspection system is a revolutionary AI-driven quality checkpoint created for seamless, easy installation. With two high-resolution 3D sensors on both top and bottom, it scans each pallet to evaluate for defects. After analysis, the AI presents the system with a pass or a failure distinction. Pallets designated as fails can move to alternate locations like repair or dismantle, while the accepted ones can move to sorting or stacking. The driving force behind these decisions is a vision AI called Neocortex, which is powerful and faster than alternatives in the market. Once Neocortex assesses a pallet, it logs the results into a database that allows the user to track KPIs. It gathers throughput metrics; tracks common defects, types, and other data. With this system running through Neocortex, there is no specific hardware, and installation requirements are minimal. It works with many brands of sensors and most environmental conditions. The quality metrics are adjustable, adhering to industry standard metrics, and adaptable to the client's preferred tolerances. The Neocortex Pallet Inspection is a versatile tool that adds tremendous value to any current operation eliminating the need for a full-time operator.



Universal Logic

2518 Smith Springs Rd. Nashville, TN

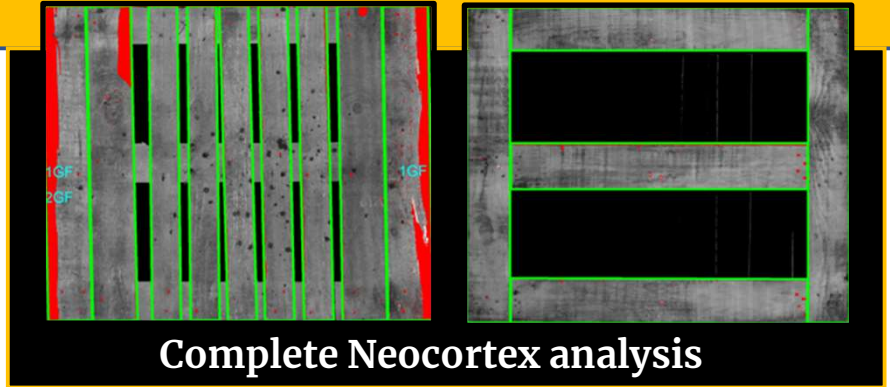
www.universallogic.com

615-366-7281

Pallet Inspection System



Neocortex is the brain of the inspection system. It was developed for fifteen years by a team of Ph.D. vision and machine learning experts. It uses 3D vision to gather and analyze tens of thousands of data points, then makes a probability-based decision at high speed.



Capabilities and Specifications

- ✓ Can detect nail extrusions down to $< 1\text{mm}$
- ✓ Looks for missing boards
- ✓ Finds cracks or splinters
- ✓ Identifies pallet color and type
- ✓ Field of view 400-2000mm
- ✓ Scan while moving up to 2m/s
- ✓ Can work in hostile environments
- ✓ Inspects all wooden pallet types



Universal Logic

2518 Smith Springs Rd. Nashville, TN

www.universallogic.com

615-366-7281