TECHNICAL DATASHEET

MetriXFreight NSP Detection.

Non-stackable pallet detection.

NSP Detection extends the MetriXFreight L23x and L33x with an automatic stackability check. During each measurement, additional color cameras capture the freight, and the metrilus cloud decides at human level whether a pallet is stackable, with a comprehensible reason and photos for each decision. That matters: our systems are in use worldwide and measure millions of shipments every year. At these volumes, even deviations of a tenth of a percent mean substantial lost revenue.

HIGHLIGHTS

- Human-level decisions: as reliable as a trained employee
- Freight analysis: checks the shape and labeling of the freight
- Comprehensive photo documentation: detailed images of the freight
- Transparent AI: explains every decision comprehensibly
- Real-time results: available immediately after the measurement
- Site-specific customization: adapts flexibly to the needs of your site

01 System and hardware

System type	Software module for MetriXFreight L23x and L33x
Sensor type	3D sensors of the base system plus additional color cameras
Dimensions and installation	As the base system, see the L23x and L33x datasheet

02 Stackability check

Result	Classification as stackable or non-stackable
Explanation	Comprehensible reasoning for every stackability decision
Photo documentation	High-resolution color photos of the freight

03 Checks performed

- Multilingual label detection
- Geometric analysis of the freight
- Detection of irregular top surfaces
- Evaluation of the aspect ratio
- Shape check
- Detection of freight with an open top
- Detection of no-stack cones

Measuring time	~ 200 ms
Operational throughput	300 – 600 pieces/h (incl. scan, depending on the process)

Measuring time and throughput are those of the base system; NSP Detection does not affect them.

04 Data transfer and processing

Internet connection	Required, connection to the metrilus cloud
Transfer trigger	Automatic with each measurement
Interface	Integrated into the base system's data interface
Data processing	Cloud-based (metrilus cloud)
Data types	Text/CSV file · JSON/XML · Color image · PDF

05 Installation types



L23x · V-Shape



L33x · A-Shape