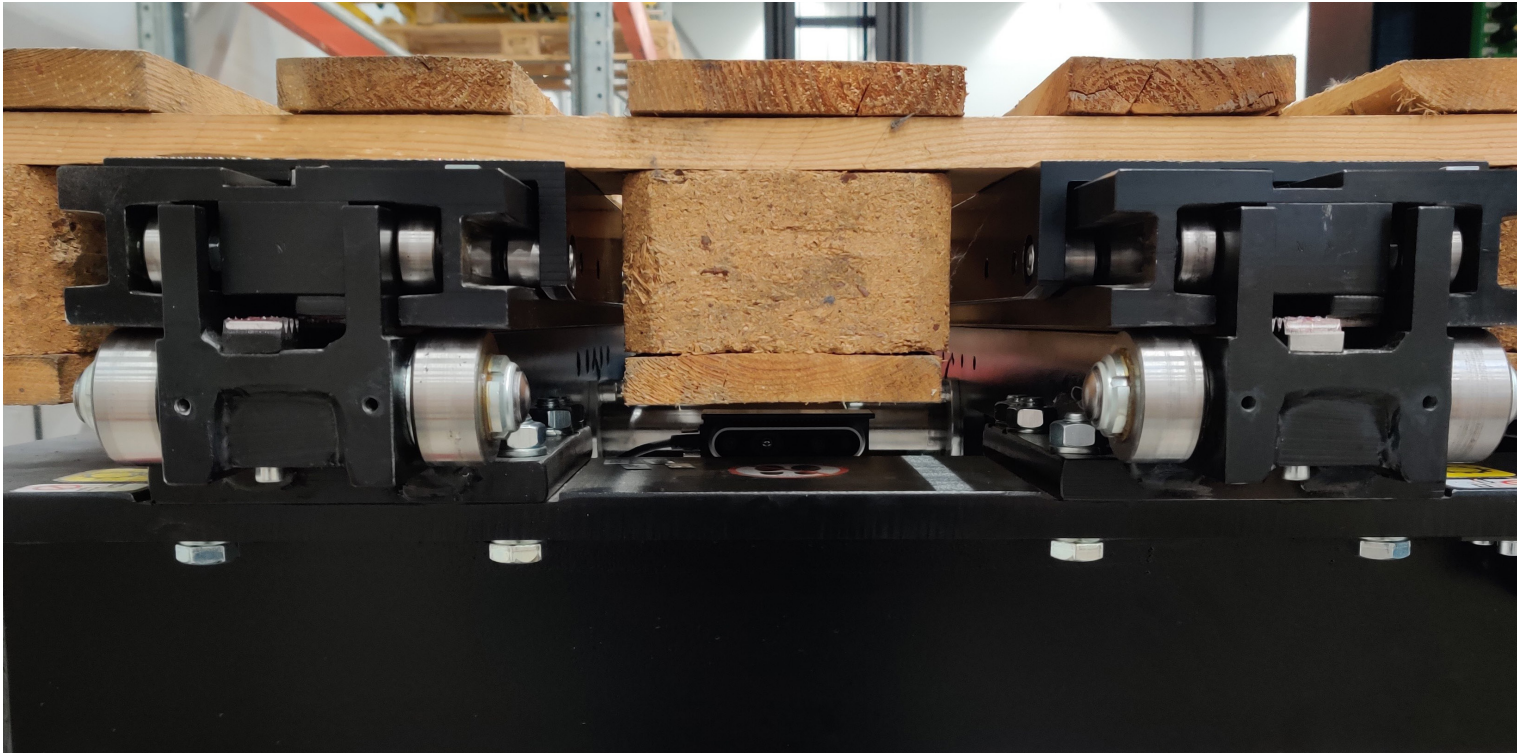**Multi-functional system for AGV's**

PalletLocator

PalletLocator guides the AGV to pick up pallets accurately!

PalletLocator is a 3D-vision based system that helps the AGV to locate the position of the pallet before picking it up.

PalletLocator ensures that there are no objects at the drop-off point before the unloading by the AGV.

PalletLocator measures the height of pallet stacks and rack beams.

PalletLocator can stream images to receiving software giving extra eyes when manually maneuvering the AGV.

3D Vision

Image streaming

Height measurement

Contact us or visit our website www.maxagv.com to read more about our systems!

www.maxagv.com

PalletLocator is managed from a SetupTool

PalletLocator is managed from a SetupTool that can be installed on a server/local computer for remote update over WiFi or at a laptop for direct wired connection. Load types, existence fields, measurements etc. are editable from the SetupTool.

Equipped with multiple functions

PalletLocator can be used with one or two cameras, making the system useful also for an AGV with double-sided loading capacity.

The **PalletLocator** can be used for a wide variety of purposes. The main task is to locate the position of a pallet to assist the AGV with pick-up when the pallet is placed in an unknown position. The system can handle up to 10 different load types, freely configurable. **PalletLocator** uses the centre-block of the pallet to decide its position.

Another useful task is to check that a location is empty before you leave the load on that specific position.

The **PalletLocator** system can measure positions and height such as the height of a stack of empty pallets before putting a new pallet on top of the stack. Another useful method is to measure the height of a rack beam to adjust drop-off height before unloading a pallet in a rack location.

Communication ports

Communication between PalletLocator and SetupTool requires the following ports to be opened on the computer running the SetupTool. SetupTool computer also needs to be able to send Ping messages.

TCP Port	Description
445	SMB file transfer
32203	SSH connection
32263	Image streaming
32264	Manage PalletLocator software
32265	Setup PalletLocator software

> ## PalletLocator is a qualified multi-functional system assisting the AGV

SPECIFICATIONS

SYSTEM: PalletLocator

MODEL: PL-435-1 and PL-435-2

TECHNOLOGY: The system uses 3D stereo vision.

PERFORMANCE: 10 updates/s.

FIELD OF VIEW: 85° hor, 58° ver, +/- 3° both directions

FUNCTIONS: Positioning of pallet including multiple load types. Checking existence of objects. Recording a sequence of images. Reading barcodes and text/numbers on the load.

HARDWARE: UP Squared with Linux Ubuntu server 16.04.5, Intel RealSense depth camera D435.

POWER REQUIREMENTS: 9 - 75VDC through a M12 connector. Pin 1: +V and Pin 3: -0V

INTERFACES: Sonix communication methods are TCP/IP or serial interface either by RS-232 or RS-422, available in a 9-pin male D-Sub.

Pinout 9M-DSUB:

Pin	RS-232	RS-422
1		B (Rx-)
2	RxD	A (Rx+)
3	TxD	Z (Tx-)
4		Y (Tx+)
5	GND	GND
6		
7		
8		
9		

MAX AGV

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