Bin-Picker

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The system is used for material handling and picks objects by means of a robot straight from transport packaging, e.g. a Euro pallet with collars. The handling of parts is virtually noiseless and requires minimum floor space. The parts can lie anyhow in packaging, even vertically, meaning that no separating spacers are required between layers of parts.

The system has major benefits when handling complex parts, castings and forgings. The system is very flexible and allows rapid conversion when switching components.

The Bin-Picker, which forms part of Mabema RobotVision portfolio, uses object recognition to identify and locate objects in the packaging. Object recognition and the monochrome laser light technology enables active suppression of ambient light making the system less sensitive to interference from ambient light than traditional vision technology which relies on contrast recognition to bright backlighting. Object recognition also allows handling of complex shaped objects with no defined surfaces or edges.

The system's simplicity enables swift and simple installation where pattern laying of new objects is easy to do through a 3D-model.

Technical data

Control system	Slave-controlled by an external overall system, e.g. robot
CAPACITY	
Cycle time	Typical value 5 to 15 sec/part depending on shape of the part
Object size	
BP 800	Approx. 100 x 100 x 100 mm or larger.
BP 450	Approx. 30 x 30 x 30 mm or larger.
Object surface	Most materials and surfaces.
Size of picking box	
BP 800	1200 x 800 x 600 mm (Euro-pall with 3 collars).
BP 450	620 x 450 x 300 mm (Schäferbox)
EQUIPMENT AND CONNECTIONS	
Communication	Databus: LAN
Robot type	ABB, KUKA, Motoman etc
Ventilation	Active cooling unit
OTHERS	
3D-reference models	STL alt. IGES, STEP
Dimensions	
BP 800	H 2215, B 600, D 1110 mm
BP 450	H 1780, B 600, D 980 mm
Weight	Appr. 250 kg
Laser safety class	3R according to SS EN 60825-1

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