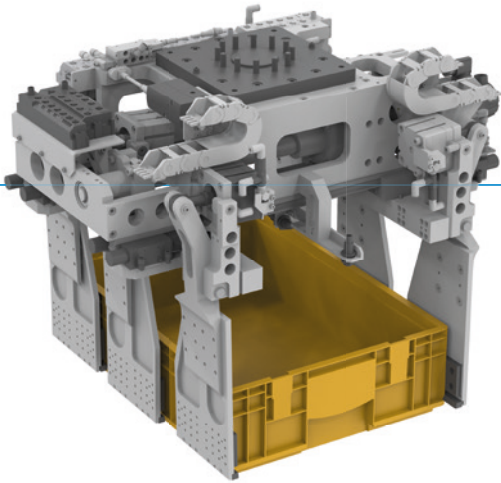


HANDLING SYSTEM FOR SMALL LOAD CARRIERS

Z01SYS114187

▶ PRODUCT INFORMATION



- ▶ In the area of intralogistics, small load carriers (SLCs) are frequently used in accordance with the VDA standard. Zimmer's standard solution for the Outbound division enables a wide variety of SLCs made of cardboard, plastics or polystyrene foam to be palletized. Corresponding sensor technology detects the current product format and monitors the secure position during transport. By connecting servo-electric and pneumatic drives, it is possible to achieve minimum cycle times and workpiece-specific gripping forces. A workpiece securing system that combines securing positioning and maintenance of force prevents the loss of workpieces even in the event of an emergency shutdown.

▶ CHALLENGE

- ▶ Sensitive gripping of various SLC types made of cardboard, plastics and polystyrene foam
- ▶ Flexible SLC monitoring
- ▶ Cycle time

▶ SOLUTION

- ▶ Optimized combination of servo drive and pneumatics
- ▶ High process stability with synchronized sensors
- ▶ Segmented gripping for secure handling

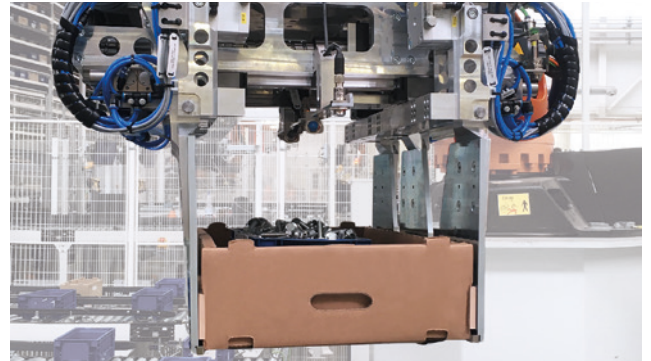
▶ WORKPIECE

- ▶ Workpiece weight: 25 kg plastics, 20 kg cardboard
- ▶ Material: Cardboard, plastics, polystyrene foam
- ▶ Width: 200 to 400 mm
- ▶ Length: 300 to 600 mm
- ▶ Height: 160 to 280 mm

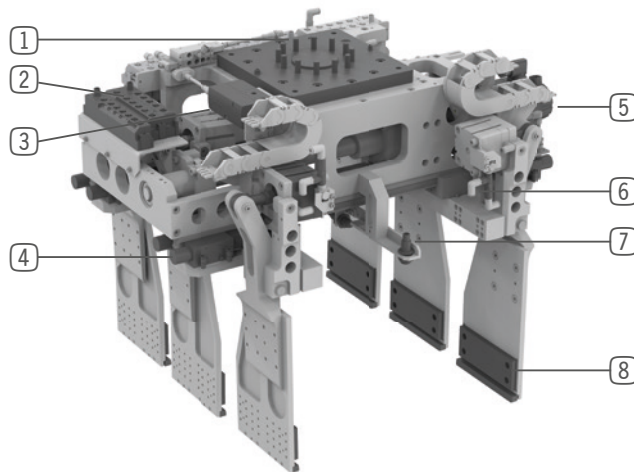


▶ TECHNICAL DATA

| | |
|-----------------------|----------------------|
| Product | Small load carrier |
| Gripping technology | Frictional fit |
| Workpiece weight [kg] | Max. 25 |
| System weight [kg] | 110 |
| Drive type | Electric / pneumatic |



▶ FUNCTIONS IN DETAIL



- ① Robot connecting flange
- ② Network module with sensor/actuator distributor
- ③ Proportional valve for continuous adjustment of the gripping force
- ④ Clamping element for secure positioning
- ⑤ Servo drive to set the gripping force quickly
- ⑥ Pressure safety valve for maintaining the gripping force in case of a pressure loss
- ⑦ Workpiece detection
- ⑧ Elastomer for increased friction value

▶ MORE INFORMATION/CROSS REFERENCES

▶ Small load carrier
Z01SYS114179

▶ Cardboard packaging
01SYS003871-01

▶ Small load carrier (cardboard)
Z01SYS114189

