



ALA

AUTOMATIC TRAY LOADER

Efficient, Ergonomic and Cost-saving postal handling system with big capacity even for small floor space.

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AUTOMATIC TRAY LOADER GENERAL DESCRIPTION



Hanter's Automatic Tray Loader, ALA, is an efficient, ergonomic and cost-saving system, designed using a servo powered 3-axle gantry robot as main unit. The robot unit is integrated with a conveyor system for the highest possible level of automation.

The system allows loading in up to 20 different directions, with a capacity of approximately 1200 trays per hour. In order to obtain this high capacity, each direction consists of two incoming conveyors where the robot picks up the pre-sorted trays one layer at a time and unloads them on to trolleys.

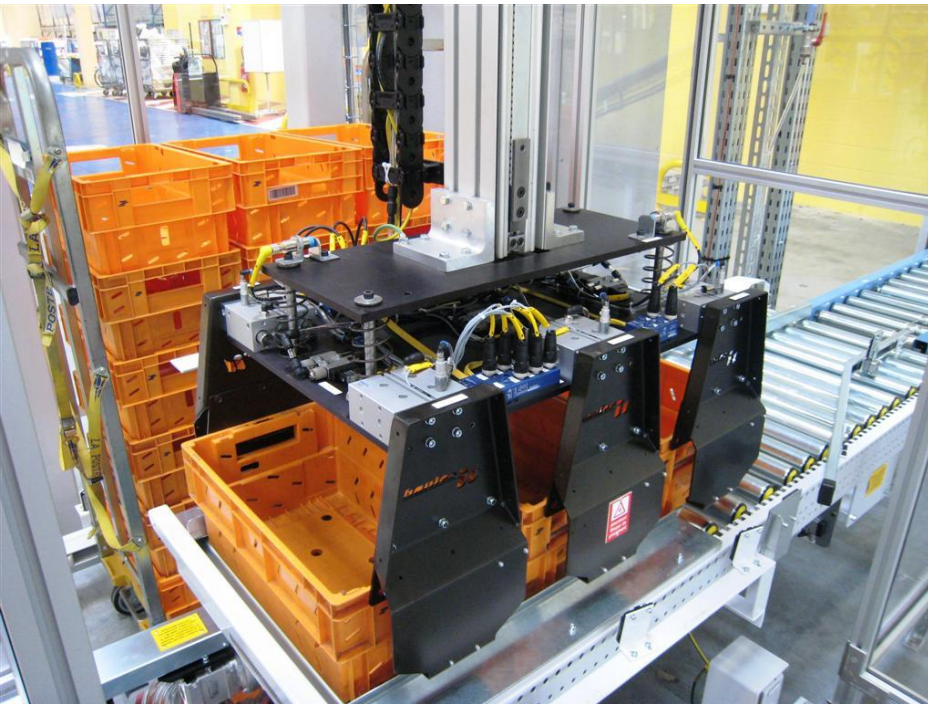
The system also stores additional trays, if the loading position is full.

When a sorting cycle is completed or if the sorting for some reason is interrupted, the robot collects the remaining trays.

Hanter's Automatic Tray Unloader, ALO, can be integrated in the Automatic Tray Loading system, ALA, for an overall solution for both loading and unloading.

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GRIPPING DEVICE

The gripping device serves all directions and loads one layer per cycle, which gives the system a high capacity. The gripping device can handle whole layers or parts thereof. The gripping device is adapted for different tray types.

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CONTROL and SECURITY



Control

The control system is based on a standard PLC solution. The user interface has an operator terminal with simple menus to reduce errors and misunderstandings during operation. The system is equipped with a large, colored display with a number of graphic user interface options.

Security

Inward and outward transportation of trolleys/pallets is monitored by section by means of an area scanner. For trolley/pallet exchange, the system only stops the section where the exchange takes place, which means that the robot continues to work at full capacity in other sections. The system has built-in protection on three sides as well as between the sections. The machine is manufactured in accordance with the EU machinery directive.



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Technical Specification:

- Three-axle gantry robot, servo-powered
- Sorting & loading in up to 20 different directions
- Capacity up to 1200 trays/h
- Gripping device can be adapted for different tray types
- Gripping device can handle whole layers or parts thereof
- Telescopic Z-axis as option
- Handles up to 100 kg/tray layer
- Aluminum profiles of own design
- Robust steel support
- Compact design requiring limited floor space
- Control system based on standard PLC solution
- Built-in protection on three sides as well as between sections. Inward and outward transportation of trolleys/pallets is monitored by an area scanner assuring maximum security