



# SIMPLIMATIC AUTOMATION

Keep it smart. Keep it simple.

## Magazine Unloader Model 3130U

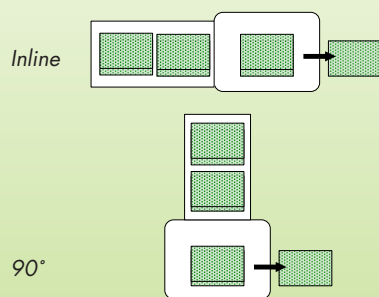
*The Model 3130 Magazine Unloader is designed to introduce product from a magazine onto the beginning of a manufacturing line. With standard Simplimatic magazines, the machine can unload up to 250 populated boards without operator intervention. The machine can also be customized to handle most third-party magazines types.*



### STANDARD FEATURES

- Motorized ball-screw carriage system
- High-speed DC stepper motor conveyor
- Five magazine capacity
- Hand crank width adjust
- Touchscreen interface
- ESD conveyor belts

There are 2 magazine handling configurations:



### ADDITIONAL BENEFITS

- Zero-clearance edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Load and unload positions can be taught at the touchscreen, which also provides diagnostic and trouble shooting information.
- Closed-loop servo positioning system delivers a high degree of precision and repeatability.
- Precision THK linear guides and electromagnetic brake system delivers a high degree of precision and repeatability.
- Adjustable, low-back pressure magazine conveyors deliver a smooth and reliable magazine transfer.
- Pneumatic locking cylinders on the carriage secure both the top and bottom of the magazine, which reduces transfer errors due to slightly out-of-square magazines.



### TYPICAL APPLICATIONS

- Introducing populated product into a production line, especially where magazines are used elsewhere for management WIP
- Handling large, delicate, or large volumes of product

# Magazine Unloader Model 3130U

## CONSTRUCTION

The Magazine Unloader utilizes Simplimatic's trademark sandwich construction, which creates a very rigid machine package by securing large aluminum frame members and load-bearing vanity covers between two 3/8" thick steel top and bottom plates. The result is a very strong, precise, modular frame.

The beefy carriage assembly is designed to support the top and bottom of the magazine. A servo-controlled positioning system, electromagnetic brake, and THK linear guides work together to ensure correct magazine alignment.

The conveyor assembly features ESD belts, DC stepper motors, and a sliding belt take-up.

## MAINTAINABILITY

Two hinged, interlocked access doors provide maximum access to the interior of the machine. Maintenance-free pneumatic cylinders are used and maintenance overrides in the software help the technician configure the machine for maintenance.

## SAFETY

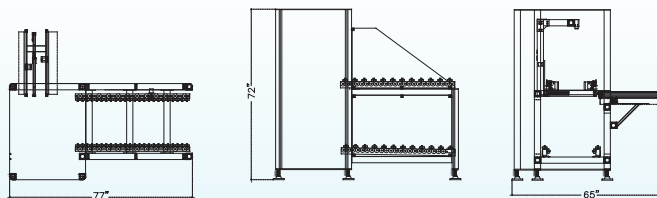
Lexan guards around the magazine loading and unloading conveyors reduce pinch hazards.

Other potential hazards are guarded and marked with SEMI-approved labels. Emergency stops are located in the front and rear of the machine and exhaust air pressure when activated. Machine status lights and audible alarm are standard.

## AVAILABLE OPTIONS

- Inline or 90° magazine conveyor orientation (see front)
- Power Width Control
- Right-to-left transfer
- Large board version – up to 22" x 28"
- Custom magazine handling

## SPECIFICATIONS



### BOARD HANDLING CAPABILITY

SMEMA 1.2 Compliant

Circuit Board Length	3" (76.2mm) to 20" (508mm)
Circuit Board Width:	2" (50.8mm) to 18" (457.2mm)
Circuit Board Thickness:	0.010" (0.254mm) to 0.125" (3.175mm)
Allowable Warpage/Sag:	0.007 inch per inch, .125" max.
Edge Clearance:	Requires a clear area of 5mm (0.197") on the front and rear edges of the bottom surface of the board (3mm optional)
Component Clearance:	2" (50mm) above and below the conveying surface

*Note: Consult factory on PC boards with cutouts, or boards with an aspect ratio where the width is greater than the length, and on boards with specifications outside those listed above.*

### FOOTPRINT

L	32" (80cm)
W	51" (129.2cm)
H	54" (137.2cm)

### FACILITY REQUIREMENTS

Power	110 VAC, single phase, 10A
Air	OFA, 80 PSI, 3CFM

- Tooled Width Adjust – requires tools to adjust
- Closed-loop servo positioning
- Motorized magazine conveyors
- CE compliance
- Exit conveyor

## Corporate Office

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Simplimatic Automation has been a leader in material handling systems since 1965. The company is part of the Simplimatic Engineering Holdings family of companies, which also includes Advantage Puck Technologies.