

## Model 2192U Mini Magazine Unloader

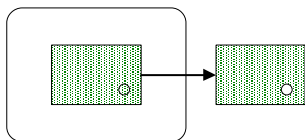


### Standard Features

- Motorized ball screw positioning system
- High-speed DC stepper motor conveyor
- 18" x 20" (457mm x 508mm) board capacity
- Hand crank width adjust
- Touchscreen interface
- ESD conveyor belts

### Application

The Model 2192U Mini 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 50 populated boards without operator intervention. The machine can also be customized to handle most third-party magazines types.

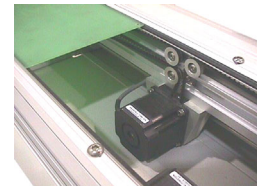


Typical applications include:

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

### 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 troubleshooting information.
- Precision THK linear guides and electromagnetic brake system delivers a high degree of precision and repeatability.



Standard Simplimatic Magazines

## 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  $\frac{3}{8}$ " 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

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

- Power Width Control
- Right-to-left transfer
- Large board version—up to 22" x 28"
- Custom magazine handling
- Tooled Width Adjust—requires tools to adjust
- Closed-loop servo positioning
- CE compliance

## Specifications

### Board Handling Capability

SMEMA 1.2 Compliant

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

Length:	43 inches (1.1m)
Width:	35 inches (88.9cm)
Height:	65 inches (1.6m)

### Facility Requirements

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