

# Matrix™ 7100

## Reel-to-Card Laminator



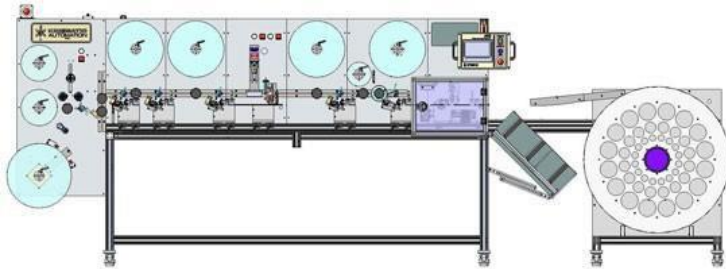
### **State-of-the-Art Manufacturing Systems for the Test Strip Industry**

*The **Matrix™ 7100 Reel-to-Card Laminator** offers continuous lamination of diagnostic membranes in a compact, high efficiency system. The resulting laminate is cut into individual cards for further conversion in downstream processes.*

*Kinematic's commitment to continuous technological advancement has led to the development of a line of standard systems and modules for manufacturers of diagnostic test strips. From the development laboratory to the production floor, Kinematic's Matrix systems offer cost effective advanced technologies for all strip manufacturing processes including dispensing, laminating, cutting and packaging.*

# Matrix™ 7100

## Reel-to-Card Laminator



Shown with optional take-up reel module

The **Matrix™ 7100 Reel-to-Card Laminator** was developed to meet the demanding requirements of the lateral flow test strip industry for a moderately priced system capable of supplying the membrane lamination needs of the moderate to high volume production facility. The unit was designed to allow process flexibility while at the same time optimizing product yields and throughput. Numerous options are available allowing the system to support a wide variety of material types, lamination configurations and process variables.

The **Matrix 7100** allows for continuous lamination of membranes onto a plastic backing web and the cutting of the resultant laminate into discrete cards for further processing on other, downstream equipment. Numerous options provide the utmost in process flexibility at a very low overall cost.

The integral touch screen operator interface terminal provides for multiple recipe storage and simple and reliable setup and operation while simplifying process validation.

### SPECIFICATIONS

#### Key Features

- Touch screen operator interface terminal for simple setup and operation
- Simple web guide adjustment
- Rapid changeover to support multiple products
- Flexible to support changing requirements
- Base configuration supports Backing Web with Release Liner plus 4 membranes
- Extruded Aluminum structural frame
- Flying shear for continuous card cutting

#### Capacities

Web width ..... 0.25" to 4" (0.6 to 10.16 cm)  
Membrane Reel ..... 3" ID x 14" OD (7.62 x 30.5 cm)  
Backing Web Reel ..... 6" ID x 16" OD (15.25 x 41 cm)

#### Performance

Throughput: 1200 cards/hour  
(20ea 12" (30.48 cm) cards/min)  
Card length: 7.87" - 23.62" ±0.04"  
200 mm - 600 mm ±1.0 mm  
Lamination tolerance ..... ±0.01" (0.25 mm)  
plus membrane width tolerance  
Speed range: 0.19"/sec - 3.94"/sec  
5 mm/sec - 100 mm/sec

#### Options

- 100% inprocess inspection with reject marking
- Additional Unwind Modules (with or without tension control)
- Additional Peel Bar Assemblies
- Additional Release Liner or Interleaf Web Rewind Modules
- Final Lamination Take-up reel
- Custom configurations
- Take-up Reel Module

#### Facilities Requirements (approximate)

Power .... 200/240 VAC, 50/60 Hz, 20 Amp single phase  
Air ..... 4 cfm @ 80 PSI (110 lpm @ 5.4 bar) clean, dry air

#### Dimensional Specifications (approximate)

Size ..... 109" W x 23" D x 61.5" H  
277 cm W x 58 cm D x 156 cm H

Weight ..... 470 lbs (213 kg)

**Warranty** ..... 12 months

*Specifications subject to change without notice*

