3M-Matic™
Fully Automatic Random Case Sealer 800rf

Accurately indexes and seals random size cases.
3M-Matic™ Fully Automatic Random Case Sealer 800rf for consistent flow and sealing without an operator.

The 3M-Matic™ Fully Automatic Random Case Sealer 800rf has sensors to provide input to a PLC (Programmable Logic Controller) that automatically adjusts the machine for various case sizes. The 800rf separates cases from a flooded line, folds the upper flaps, and seals the cases while the operator is free to work elsewhere. Sizes can be random within the following ranges:

- Length 8-24" (203-610mm)
- Width 5.5-20" (140-508mm)
- Height 6-20" (152-508mm)

Case rate is up to 8/minute.

Other features of the 800rf include:

- Pneumatic rear flap folder and two rods for major flap folding provide smooth positive flap folding and assembly.
- Machine can be ordered with control cabinets on the left or right side.
- Automatic shut-down if a jam occurs.

Perforated sheet metal shields allow visibility during operation and slide open for access. For safety, the 800rf will not operate with the shields open.

Three operating modes

With the manual selector switch, an operator can choose one of the following:

1. Random – Considered the standard mode, the case sealer automatically adjusts for case size, sealing top and bottom.

2. Fixed – Case sealer runs multiple cases of the same size, sealing top and bottom.

3. Bypass – Random size boxes are conveyed through the case sealer with tape applied only to the bottom flaps. Top flaps are not folded or sealed.

3M™ AccuGlide™ II Curvilinear Tape Head

- Tape is applied with a low impact controlled sweeping motion to help protect cases and maximize system life. Cases are securely and precisely sealed.

- Conforming buffing roller and brush compensate for case variation.

- Friction brake drum and constant tape tension roller help assure consistent tape cutting and application.

Self-centering laced side belts grip cases for positive drive and consistent tape application.
Frame-mounted top tape roll
- Adjustable friction brake drum.
- 15.5" [390mm] tape roll diameter capacity.

Patented 3M® AccuGlide II Taping Heads
- Easily installed and removed for cleaning and maintenance.
- Provides positive tape starting and precise tape application.
- Built-in blade cleaner helps prevent adhesive buildup.
- 3-year head warranty and 90-day warranty on knife blades, springs, and rollers.

Top flap compression rollers for tighter seal

Side-drive belt assemblies convey the box through the case sealer
- Belt speed 90 feet per minute (45 m/s).

Functional industrial design
- 16 gauge (1.5mm) formed steel frame, robotically welded.
- Tough epoxy paint.

Graduated inner legs for convenient, precise bed height adjustment

Bottom tape roll
- Adjustable friction brake drum.
- 15.5" [390mm] tape roll diameter capacity.

Local and nationwide service available

Operators manual and tool kit included

Instructional and safety labeling

NOTE: Unit at right shown with doors removed for illustration purposes only.

Locking/swivel casters
- 4" [102mm] diameter wheels.
Red warning beacon light

Minor flap folding arm

Major flap folding arm

One of two emergency stop switches (rear switch not shown)

Allen Bradley SLC 500 Programmable Logic Controller

3M-Matic

Air control assembly with metal fittings, filter regulator, on/off valve gauge

Electric control panel with fast access main disconnect switch

Pneumatic guide rails to pre-center case

Powered gating section for metering case flow from flooded lines
Machine Dimensions

Schematic below shows dimensions in both inches and millimeters. For example, 20.00 inches (508 millimeters) is shown as 20.00 (508).

Typical Machine/Conveyor Installation

Notes:
- Case sealer must be installed level.
- A powered accumulation infeed conveyor brings cases to the sealer at a maximum speed of 60fpm (0.30 m/s).
- Exit conveyor to positively take boxes from end of sealer.
- Infeed/Exit: exit conveyors must provide straight and level case transfer to/from the sealer.
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Specifications

Box:

Boxes must meet the current FBA/VMMI voluntary standards for RSC (Regular Slotted Containers). All boxes must be test run to insure satisfactory machine performance.

Burst Test: 125 to 275 psi, single wall, A, B or C flute.

Outside Box Dimensions:

Length: 8" (203mm) minimum.

Width: 5.50" (140mm) minimum.

Height: 6" (152mm) minimum.

Note: The 3M-Matic Fully Automatic Random Case Sealer 800rf can accommodate most boxes within the size range listed above. However, if:

- Box Tape Length in Seal Direction is less than 6
- Box Height there may be a problem in conveying.

Box Weight Capacity (filled): 65 pounds (29 kg) maximum; approximately 5 pounds (3 kg) minimum.

Packing: Contents must be heavy enough to hold box flat on conveyor bed with bottom flaps fully closed. Contents must support top flaps and not extend beyond the top flap score line. Foam peanuts or other light weight damage may cause problems.

Sample Testing: Machine performance is guaranteed only when customer sample cases have been filled and test run prior to order placement.

Tape:

- Scotch® pressure sensitive box sealing tapes.
- Width: 1.5" (38mm) minimum to 2" (48mm) maximum.
- Roll Diameter: Up to 15.5" (394mm) maximum on a 3" (76.2mm) diameter core.

Model 800rf-3 Case Sealer offers 3" (72mm) wide upper and lower 3M™ AccuGlide™ taping heads for tape widths from 2" (48mm) to 3" (72mm).

Machine Specifications:

- Horsepower per motor: 0.18 hp (.12 kW)
- Electrical: 208 to 240V AC, 50/60 HZ, 3.6A, 5.5 Amps, 3-phase. 11" (3.3mm) power cord supplied without plug. Customer supplies wiring connections to meet plant/local electrical requirements.
- Pneumatic: 100 PSIG (6.5 BAR) gauge pressure, 7.0 SCFM (11.89 m³/h 21°C, 101 kPa)maximum at maximum cycle rate.
- Weight: Approximately 1130 lbs (513 kg) uncrated.
  Approximately 1200 lbs (544 kg) crated.

PLC (Programmable Logic Controller):

- Allen Bradley SLC 500 (factory programmed.)

Operating Rate:

Up to 8 cases per minute depending on case size and mix. Belt speed 90 FPM (.45 m/s).

Operating Conditions:

A. Use in dry, relatively clean environments.
B. Temperature: 40° to 120°F (5° to 50°C) with clean, dry boxes.
C. Machine should not be washed down or subjected to conditions causing moisture condensation on components.

Product Use: User is responsible for determining whether the product is fit for particular purpose and suitable for user’s method of application.

Equipment Warranty and Limited Remedy: THE FOLLOWING WARRANTIES ARE MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING. A CUSTOMER OR USER OF TRADE. 3M Sells Its 3M-Matic™ Fully Automatic Random Case Sealer 800rf with the following warranties: 1) The Taping Head knife blades, springs and rollers will be free from all defects for ninety (90) days after delivery. 2) All other taping Head parts will be free from all defects for three (3) years after delivery. 3) All other parts will be free from all defects for ninety (90) days after delivery.

If any part is proved to be defective within its warranty period, then the exclusive remedy and 3M’s and seller’s sole obligation shall be, at 3M’s option, to repair or replace the part, provided the defective part is returned immediately to 3M’s factory or an authorized service station designated by 3M. A part will be presumed to have become defective after its warranty period unless the part is received by 3M within ten (10) days after its warranty period. If 3M is unable to repair or replace the part within a reasonable time, then 3M, at its option, will replace the equipment or refund the purchase price. 3M shall have no obligation to provide or pay for the labor required to install the repaired or replacement part. 3M shall have no obligation to repair or replace (1) those parts failing due to operator misuse, carelessness, or due to any accidental cause other than equipment failure, or (2) any other parts falling due to non-lubrication, inadequate cleaning, improper operating environment, improper utilities or operator error.

Limitation of Liability: 3M and seller shall not be liable for direct, indirect, special, incidental or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability or any other legal theory.

The foregoing Equipment Warranty and Limited Remedy and Limitation of Liability may be changed only by a written agreement signed by authorized officers of 3M and seller.

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