

Sleeve Sealer Operation Manual

Catalogue

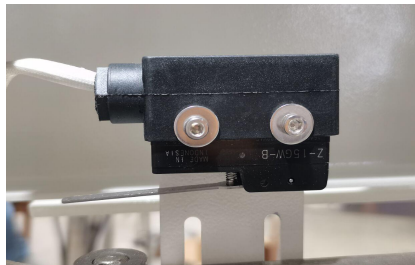
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1. Safety Precautions

1. Safety Devices:

This machine is to use limit switch to detect the sealing and cutting blades,so as to accidental cutting of non-film objects,the actuation range and precision of the limit switch can be adjusted by moving it up and down. A safety device is designed to prevent the machine from being damaged of accidental contact of non-film objects such as workpieces.Further sealing and cutting will damage the cutting blades.In this case, the machine shall be stopped and trigger an alert on the alarm interface.

After cleaning is completed, press and release the emergency stop button to clear the fault message,and the machine can be restarted.



2. Precautions:

1. During operation, do not place hands under the sealing blades.



2. Please make sure the power wires are correctly connected.

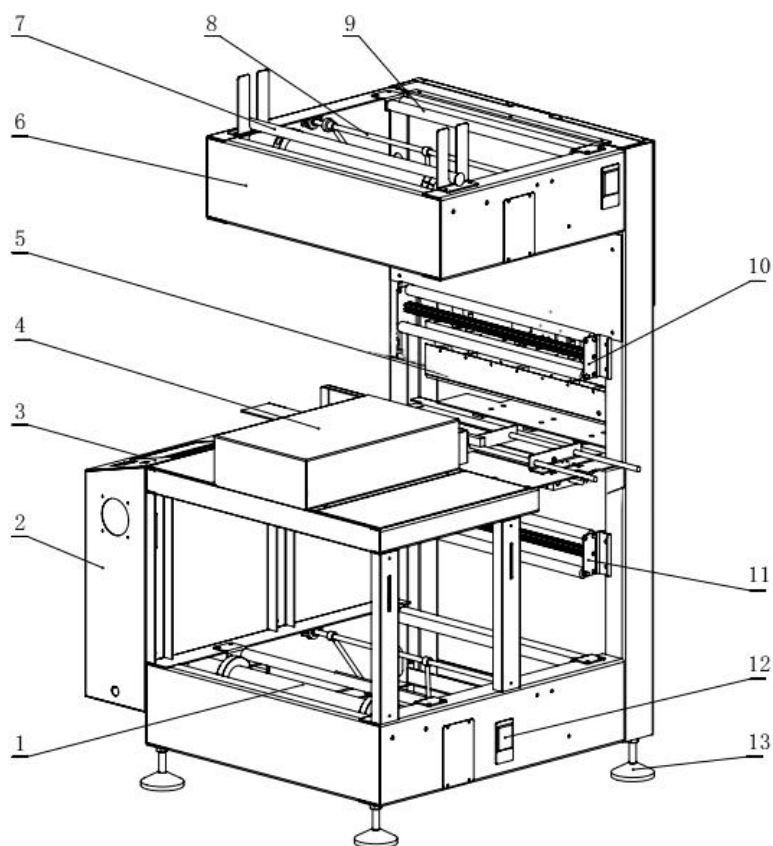
3. In case of malfunction, please switch off the power before repair. After repair, please perform sealing in manual mode first, then switch to automatic operation.
4. For safety reasons, do not disassemble electrical equipment at all.
5. Please do not place tools or other objects on or inside the machine.
6. Do not clean the machine with water, if the workplace is humid, operators must not work barefoot.

2. Machine Parameters

Machine Name	Sleeve Sealer Packaging Machine
Machine Model	FY-600
Product Length	(L) 30-350mm
Product Width	(W) 50-160mm
Product Height	(H) 50-16mm
Machine Speed	0-10 (packs/min)
Temperature Range	Room Temprrature-200℃

Film Width	Max. 560mm
Powder	1.2 (kW)
External Power Supply	6-8 (kg/cm ²)
Machine Weight	300 (kg)
Machine Dimensions	L2400xW1200xH1700mm

3. Component Names



1. Powered Roller
2. Electrical Box
3. Operation Panel
4. Pushing Cylinder Protection Cover
5. Assembled Cutting Blade
6. Main Frame
7. Top Film Protection Rod
8. Film Storage Holder
9. Film Guiding Roller
10. Top Film Guide Bracket
11. Bottom Film Guide Bracket
12. Motor Speed Controller
13. Adjustable Feet

4. Operating Steps

Startup Procedure

- 1、Connect to 220V power supply, and apply air pressure of 5–6kg/cm².
- 2、Set the heating temperature, usually around 150°C (varies depending on the material and thickness of the shrink film).

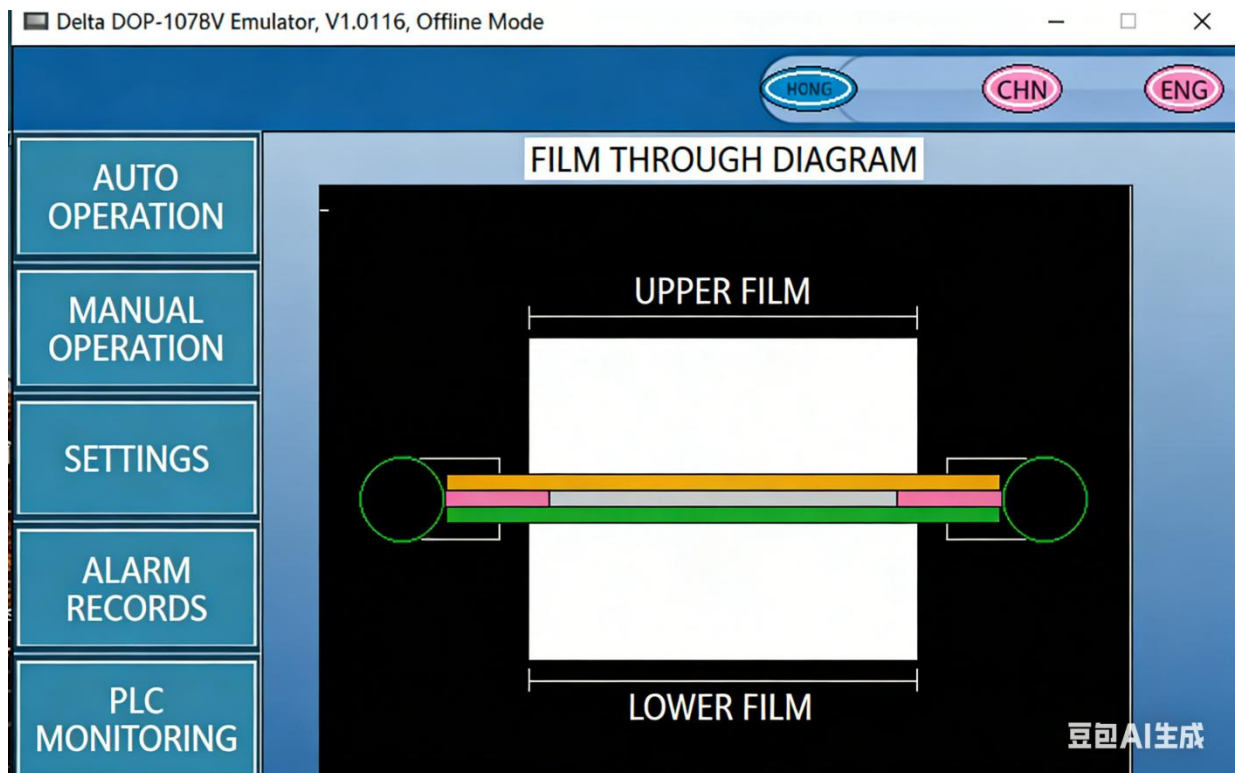
- 3、Adjust the position of the feed conveyor, according to the width and length of the product to be packaged, adjust the baffle screws on the conveyor belt to ensure smooth feeding into the packaging machine.
- 4、Adjust the material pressing cylinder.
- Clear all objects under the material pressing cylinder. On the manual operation touch screen, tap to lower the press. Place the material at the pressing position, loosen the locking screws, and move the entire cylinder frame downward so that the pressing point of the cylinder fits just above the material. Then tap Lower Press again on the touch screen to cancel the lowering action.
- 5、Thread the shrink film (please refer to the method for installing shrink film).
- 6、After threading the top and bottom film, pull them out and align properly. Once the heating temperature reached the set value, you may tap Manual Operation on the screen to perform manual sealing and cutting. The sealing and cutting time is usually set to 1.1 seconds (varies depending on the material and thickness of the shrink film).
- 7、Set the numbers of stacking layers, once completed, tap the screen to enter automatic mode and start automatic operations.

5. Operation Interface

1. Main Interface

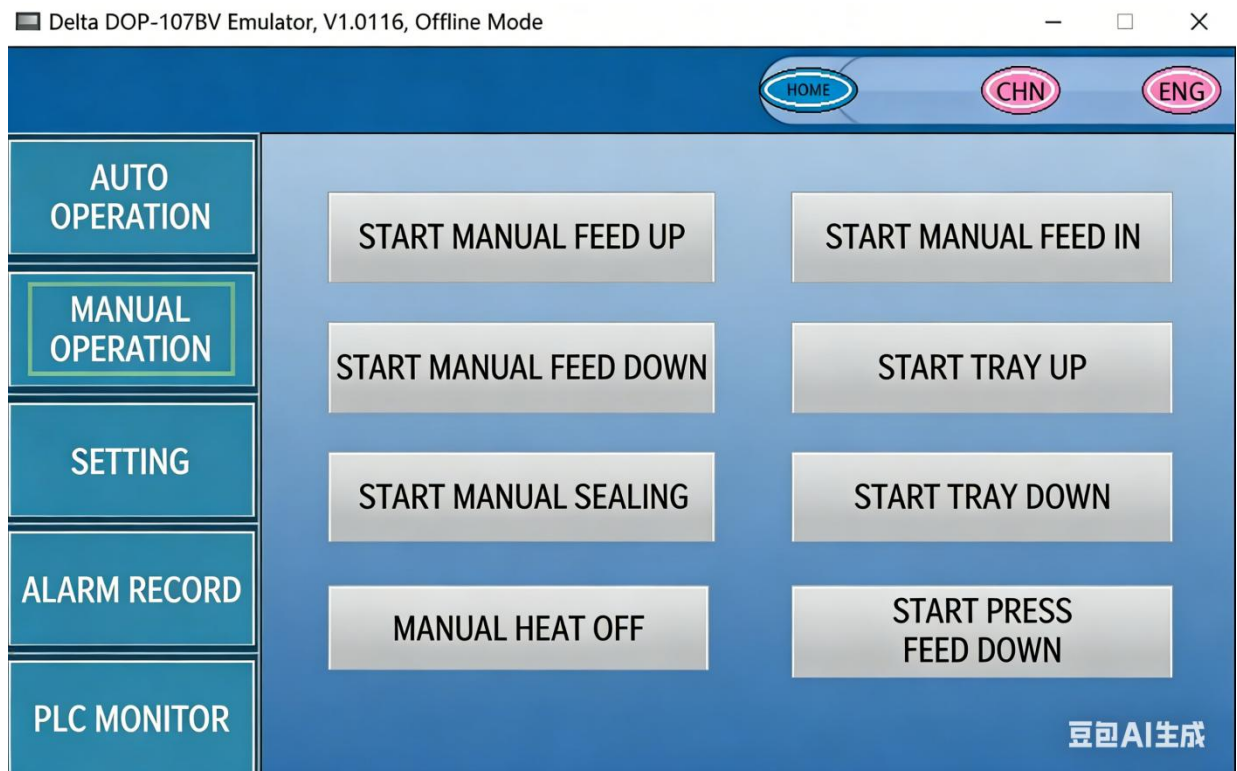


After powering on, the system enters the automatic interface. In the upper-right corner, users can select CHN for Chinese version and ENG for English version. The menu list is on the left, where various functions can be viewed.



Film threading diagram: On the left side of the main interface, under Adjustment Guide, you can find the film path diagram.

2. Manual Interface:



Perform individual actions by clicking to test whether each function is normal, and use PLC IO monitoring to locate faults and maintenance points.

Manual upward pushing: Click to extend the upward pushing cylinder to the limit(X12). It will retract after a 3-second delay.

Manual feeding: Click to start the feeding conveyor belt. It will stop when feeding-in-place fiber optic sensor(X0) is triggered.

Pallet up: Click to raise the pallet. It will stop when X14 is triggered.

Pallet down:

First click: Set the pallet drop timer value. The pallet will stop at the 1st level position upon reaching the set value. The descending distance can be adjusted by modifying the drop value.

Second click: Lower the pallet to the lowest position. It will stop when X15 is triggered.

Manual Sealing and Cutting: When the down-pushing cylinder fully retracts and triggers X6, the sealing and cutting blade starts to descend, when it reaches X10, the sealing and cutting timer begins counting. Users can adjust the sealing and cutting time value according to different packaging films.

After timing completed, the sealing and cutting blades retract.

Manual heating: For models with electric heating only.

Material Pressing Down: Press the button to lower the pressing cylinder. It's often used for machine setup when changing product sizes. Press again to retract the pressing cylinder.

3. Setting Interface:

Upper Film Feeding Time: Used to limit the upper film feeding time. The set value shall be ≤ 3 seconds.

Lower Film Feeding Time: Used to limit the lower film feeding time. The set value shall be ≤ 3 seconds.

Sealing and Cutting Time Value: Used to adjust the sealing and cutting for packaging films. Different films have different materials and thickness.

Drop Time Value: This is the base time for each decent of the drop cylinder. For precise timing, refer to the adjustment value on the right.

Material In-Place Value: To prevent the misoperation caused by photoelectric signals, a time delay is added to ensure the validity of the signals.

Pressing Delay Lifting Time: Normally set to 0. When cooling time is needed, increase this value to hold the material in place and prevent it from falling apart. If no cooling is required, set it to 0 to avoid wasting time.

Layer Setting: Users can set the number of layers as required.

- 4. PLC IO Monitoring Interface:
- X0 Fiber Optic (Material Present)
- X1 Upper Film Approach
- X2 Lower Film Approach
- X3 Mis-cut Inspection
- X4 Front Push-Down Magnet
- X5 Middle Push-Down Magnet
- X6 Rear Push-Down Magnet

X7 Upper Sealing Magnet
X10 Lower Sealing Magnet
X11 E-Stop (NC) NC=Normally Closed
X12 Front Push-Up Magnet
X13 Rear Push-Up Magnet
X14 Lower Drop Magnet
X15 Lower Drop Magnet
Y0 Feed Motor
Y1 Upper Film Motor
Y2 Lower Film Motor
Y3 Heating Element
Y4 Sealing/Cutting Cylinder
Y5 Upper Pushing Cylinder
Y6 Material Pressing Cylinder
Y7 Alarm Lamp
Y11 Lower Drop Cylinder
Y12 Lower Pushing Cylinder

When each sensor is in place, the corresponding X indicator will light up.

Magnetic ring sensors detect magnetic signals

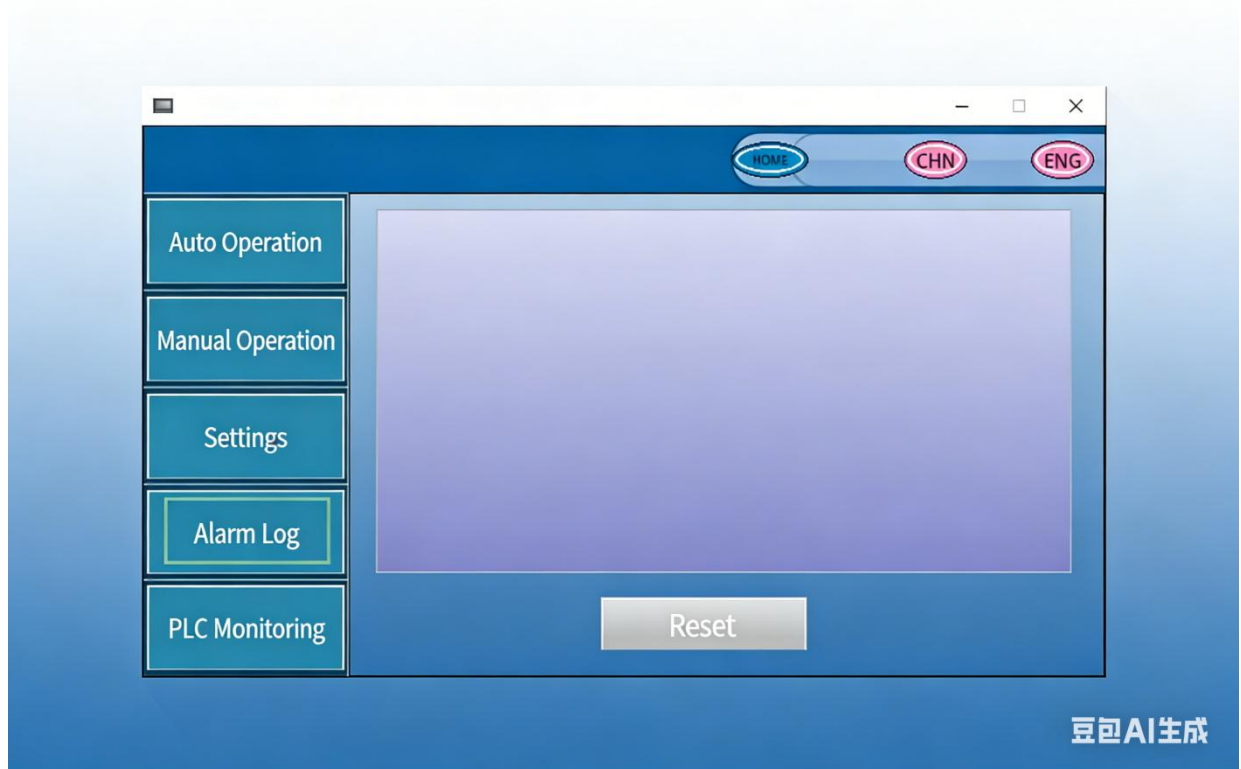
Travel switches sense via mechanical pressing

Fiber optic sensors detect light flux

General switches operate through contact signals

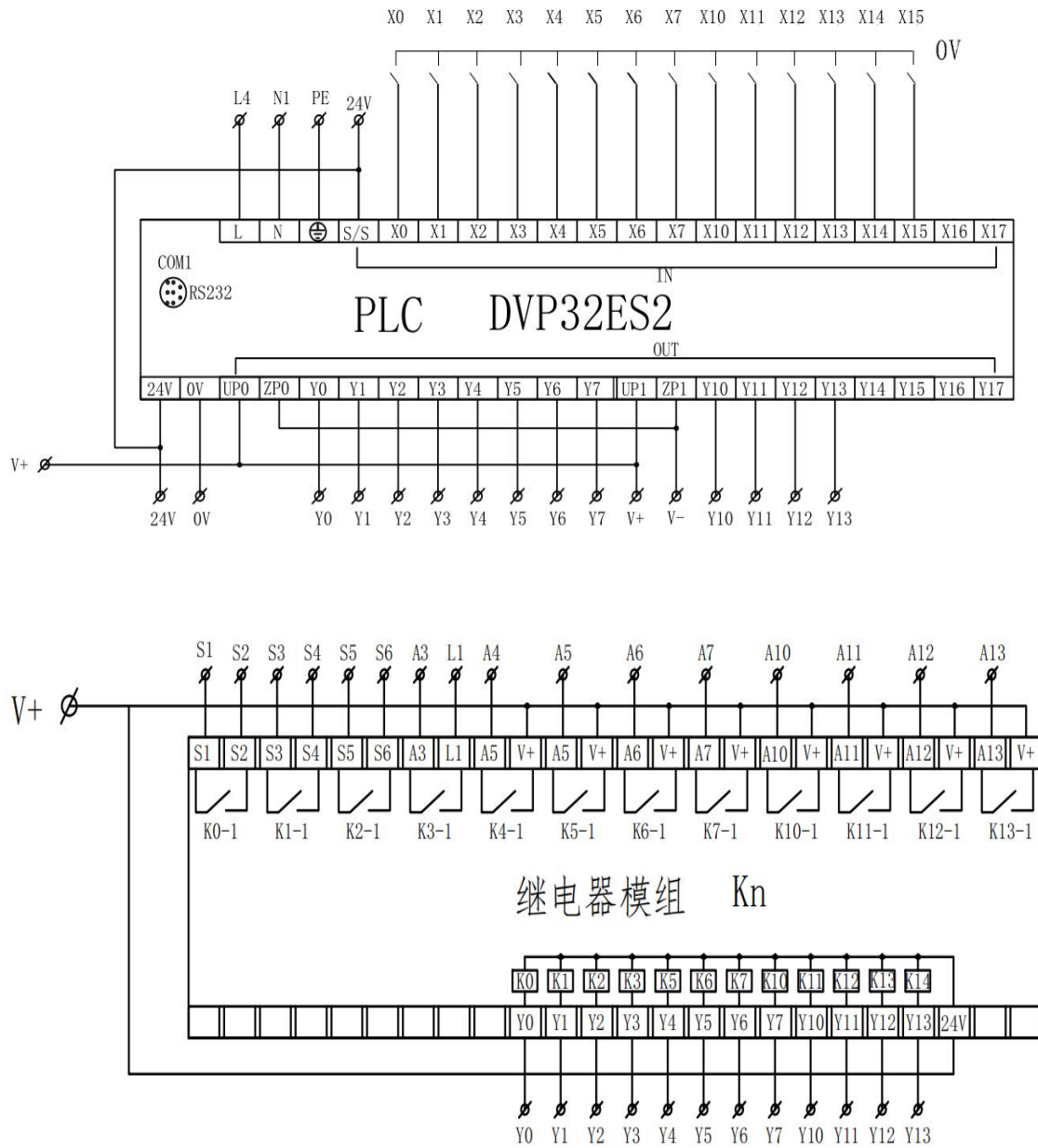
PLC outputs are controlled by corresponding Y terminals

5. Alarm Interface:



When an alarm occurs, the corresponding text prompt and troubleshooting methods will pop up and queue on the right interface. At the same time, the alarm light will turn on.

X0	Material In-place Detection	Y0	Feeding Motor
X1	Upper Film Feeding Detection	Y1	Upper Film Feeding Motor
X2	Lower Film Feeding Detection	Y2	Lower Film Feeding Motor
X3	Sealing Protection	Y2	Lower Film Feeding Motor
X4	Pre-pushing Magnetic Ring	Y3	Heating Wire
X6	Mid-pushing Magnetic Ring	Y4	Sealing Cylinder
X7	Post-pushing Magnetic Ring	Y5	Sealing Cylinder
X10	Lower Sealing Magnetic Ring	Y5	Pressing Cylinder
X11	Emergency Stop	Y6	Upper Pushing Cylinder
X12	Pre-upper Pushing Magnetic Ring	Y6	Alarm Output
X13	Post-upper Pushing Magnetic Ring	Y7	Falling Upwe
X15	Falling Lower Magnet	Y10	Falling Down
X16	Auto Start Button	Y11	Falling Up
X17	Auto Start	Y12	Lower Pushing



arm

operation, please observe the following:

- (1) After operation, carefully clean the sealing area with a soft cloth.

- (2) Please perform cleaning while the sealing knife temperature is still high.
- (3) Cleaning the sealing knife below 70°C may damage its Teflon coating.
- (4) When cleaning the sealing and cutting unit, please wear high-temperature gloves to avoid scalding.
- (5) If the sealing knife is worn and can no longer achieve a complete seal, it must be replaced.