

TAP880TC
Taping Machine
User's Manual



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http://www.smtmax.com

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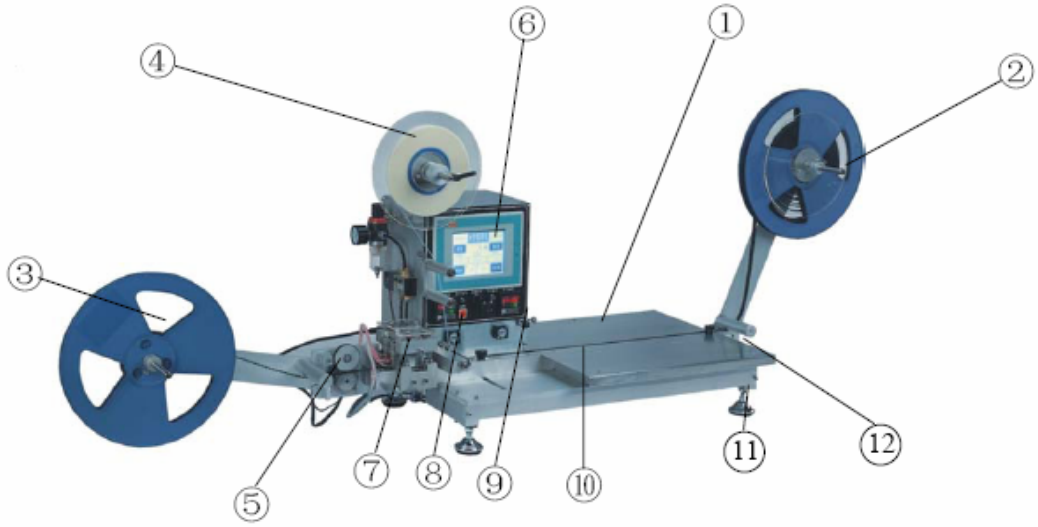


Fig1.1

1） Workbench
2） Feeding reel
3） Collecting reel
4） Film reel
5） Drive wheel
6） Touch screen
7） Heat seal device
8） Film guiding device
9） Space detection probe
10） Guide rail
11） Workbench adjusting screw
12） Track adjusting micrometer

Operation panel and keyboard

1. Operation panel:

Operation panel is composed of the following parts:

1).Touch screen: set the machine operating parameter and display the machine working state.

2). Inner knife thermometer: set and auto control the sealing temperature of inner knife while in machine operation.

3). Outer knife thermometer: set and auto control the sealing temperature of outer knife while in machine operation.

4). "Heating" key: the on-off of thermometer, and can control whether to heat the heating knife or not.

5). Power switch: can turn on and turn off the machine

6). "Revolution distance adjust" knob: adjust the tension of electric collecting machine, the tension range is 0-100, and generally it is about 40-50.

7)..Footswitch: while press and release it once the machine will work once, at this situation it is relevant to manipulating key. While press it all along, the tape will go ahead all along, at this situation it is relevant to auto key. While in auto operation state, press the footswitch to cancel this state.



Picture2.2

2. Thermometer（Picture 2.2）

PV: Display measured value (red)

SV: Display set value (green)

1).Function key:

" **SEL** " setting key: while at operation state, press this key to enter setting state; while at setting state, press this key to the next option.

" " Decrease key: Press " " key to decrease the value.

" " Increase key: Press " " key to increase the value.

2).Set of heating sealing thermometer:

•Press "Heating" key to electrify the machine and display the measured value.

•Press " " key and " " key to set heating knife sealing designation temperature.

3. Touch screen： （Picture 2.3）



Picture 2.3



Picture 2.4

Operational key：

a. “**Forward** ” key：press this key and drive wheel will do clockwise rotation to bring carrier type move forward.

b. “**Backward**” key：press this key and drive wheel will do counterclockwise rotation to bring carrier move backward.

c. “**Heat seal**” key：press this key and electric heating sealing machine will operate separately to bring heating knife make sealing.

d. “**Auto**” key：press this key and the machine will automatically operate; while in auto operation state, press this key to stop the machine.

e. “**Reset**” key：press this key to reset the output counter, that is to clear all the counting value.

f. “**Set** ” key：press this key to set all the operating parameters.

4.Operating parameter setting：

1).set parameter： （Picture 2.4）

Press “Setting” key to enter program setting state, and then press “Number” key to activate a small number input keyboard and input the number needing to be changed.

2).All the operating parameters of this machine as follow：

a. “**Set Amount XXXXX**”： Can preset the element pieces of every reel to be sealed, when the counter get to the preset output, it will alarm and display “Preset Output Finished”.

b. “**Set Hole Amount XX**”： The PITCH between two elements, that is the holes between two material tray in the carrier. The hole =PITCH VALUE/4.

c. “**Set Tape Moving hole XX**”： The pitch of every step of carrier moving. It is set by the length of heating knife, and the length of heating knife is 80 mm, the pitch between any two adjoining holes is 4 mm, so the tape moving hole is 9 or 18. It can also be set according to operating needs.

d. “**Heat Sealing Stay Time X.X S**”： Set according to the heat sealing requirement, and the range is 0.1-2.0 seconds. The longer of heat sealing time, the larger of lacerative force after seal.

e. "**Set manual revolution XXX r / min**" : Set the speed of single action forward and backward of this machine.

f. "**Set Auto Revolution XXX r / min**" : Set the operating speed.

g. "**Pre-warning Amount XXXXX pieces**" : Set the counting pre-warning amount. For example, if the output is set as 1000 and the pre-warning amount set as 950, when the counter get to 950, it will display "Counting 950 Pre-warning" and alarm to remind operating staff that the preset output amount is going to be finished.

h. "**Set Head leader Amount XXXXX pieces**" : According to international standard, when use carrier to package element, it must leave a space without element in both ends of the tape of every reel, that is Head leader. The Head leader length can be set under customer's requirement. The value of the Head leader in this machine is set according to the total void element amount of both ends of the tape, and cut from the middle according to the amount of both ends. While it needs no Head leader, this parameter will be "0". While the "Head leader" is set, this machine will alarm and displays "The Amount is finished" when the counting gets to the preset output. Press "Reset" key, it will turn to "Head leader" state, and press "Auto" key, it will move the Head leader, when the Head leader finishes the amount it will alarm and auto turn to output counting state.

Set Initial Value:

Before ex-factory, this machine must be set according to the carrier encapsulation requirement as follow:

- "Counting **1000 pieces** " ;
- "hole **3 pieces** " ;
- "**Tape Moving hole 9 pieces**" ;
- "**Heat Sealing Time 0.3 S** " ;
- "**Inching Revolution 20 r / min**" ;
- "**Operating Revolution 40 r / min**" ;
- "**Pre-warning Amount 0**" ;
- "Head leader **Amount 0**" .

1）Machine Installation：

Machine location：

This taping machine is 30 kg weight, 2600 mm long, 560 mm wide and 1600 mm high. Please leave one meter behind this machine as maintenance space and one meter in frond of the workbench as operation space. The total installing space is 3.0×2.0 meter.

Adjust the Machine Horizon：

Use the foot in the four corners of the machine base to adjust machine horizon after the machine set in placed. Adjusting horizon is not so important, since the machine can still operate even though the horizon is not accurate. But if don't adjust the foot, the machine will sway and this may influence the sealing.

Set the Arm：

The feeding reel arm and collecting reel arm are packaged separately to make transportation more convenient, so these arms must be erected before operation. First loose all the screws in the arm, then connect the arm with the interface in the machine and tighten the screws. And then connect the cable interface with the plug jack in the machine.

Install Foot Switch：

Connect the cable interface of foot switch with the foot switch interface in the left of machine base.

2）Machine Setting：

Following is the order of machine setting（New tape reel and Film）：

•Install the tape reel on the feeding reel arm;

•Adjust the track width;

•Install the carrier on the driving gear;

•Install Film reel and feed Film;

•Adjust Film direction;

•Lap carrier over the take up reel;

•Set the operating parameter in the operating keyboard;

•Set space sensor;

•Start operation, put the elements into the martial trough .

Install Collecting Reel：

The tape feeding reel applies to 22'' paper reel and 13'' plastic reel. Remove the compressed spring retainer ring and plastic retainer ring, and then reel the collecting reel on the tape feeding reel. The sprocket hole must direct to the inside of machine, and the tape feeding reel must do counter-clock wise turning. And then install the compressed spring retainer ring and plastic retainer ring.

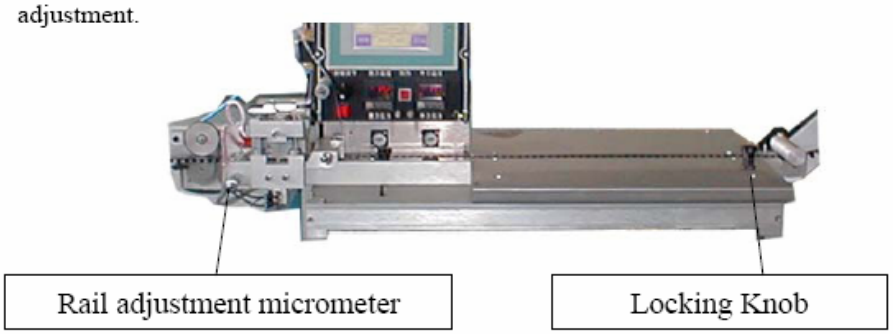
Install carrier: （Picture 3.1）

Adjust the tape width:

The outside tape guide rail can be adjusted according to the tape width. While adjust the tape width, first loose the outer guide rail locking knob, and pull or push the outer guide rail according to the carrier width to make adjustment. Once adjust to the proper width, tighten the knob. The extensional guide rail width must be adjusted according to the machine base guide rail width.

Install the carrier:

Pull out the carrier from tape feeding reel and put the end of tape through the tape guide into the tape guide rail. Adjust the outer guide rail to make the rail just reach the tape. Move the tape horizontally to make sure it is not being jammed. When the tape move in the rail, it is normal that there is a small drag force. Tighten the outer guide rail locking knob after adjustment.



Picture 3.1

Interholeing Sprocket: （Picture 3.2）

Pull the tape to the sprocket of the driving wheel, raise the pinch roller and hang the edge boring of carrier to the sprocket of driving wheel, lay down the pinch roller and press "**Forward**" key to drive tape. Make sure the sprocket interholees the edge boring but doesn't break the tape and keeps moving the tape from the underside of tape guide.

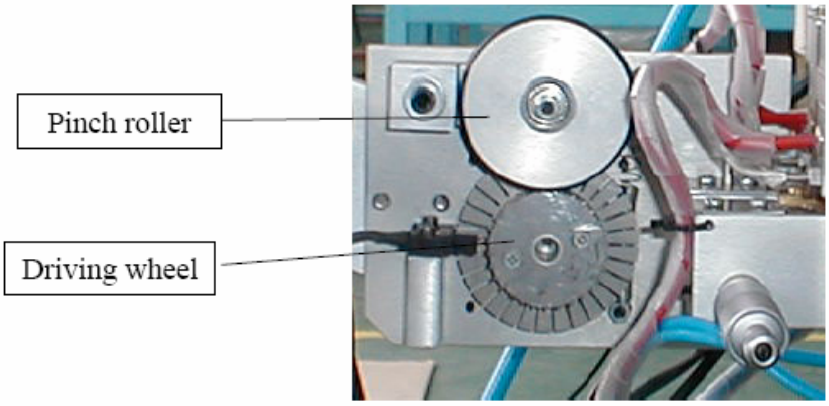


图3.2

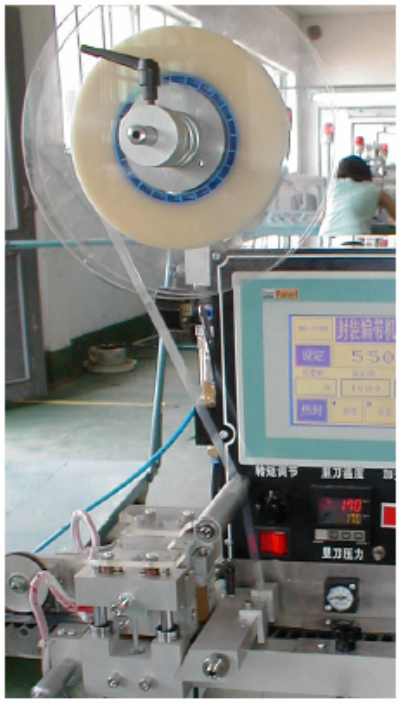
Install Film:

Install Film Reel:

Remove the clip ring and plastic retainer ring from Film axle and then reel it over tape feeding wheel. Pull out the Film from the underside of reel and the reel should so counter-clockwise rotate. Then install the clip ring and plastic retainer ring.

Adjust Film Guide:

Adjust the Film guide roughly according to the Film width. Pull out the tape and put it though fixed axis and into the underside of tape guide and capsulation heating knife and fix on the carrier. （Picture 3.3）



Picture 3.3

Install Collecting Reel:

The collecting reel applies to 13'' and 7'' plastic reel. Install the collecting reel on the collecting wheel axis and rotate it to make the tine in the axis set in the collecting reel. The collecting reel should do counter-clockwise rotation to hang the tape on the axis of collecting reel. Thus, the machine installation has completed. See Picture 3.4.

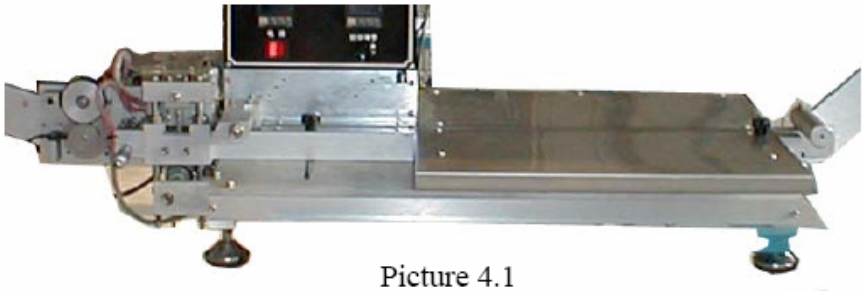


Picture 3.4

1）Adjust Track：（Picture 4.1）

In order to meet the requirement of different specifications of carrier, the track width can be adjusted. Loose the locking knob in the side of outer guider rail and adjust the track roughly according to the tape width. Slip the carrier into guide rail, adjust micrometer until the rail just reach the tape, move the tape horizontally to make sure it can move freely in the rail with a small drag force. Once adjust to the proper width, tighten the knob. The extensional guide rail width must be adjusted according to the machine base guide rail width. If the carrier width is less than 25 mm, adjust the micrometer in both sides directly to get the needed width; if the width is more than 50 mm, it must use oriented measuring column. The oriented measuring column has three files and each file is 25 mm long. Adjust the oriented measuring column to proper file and adjust the micrometer to needed width.

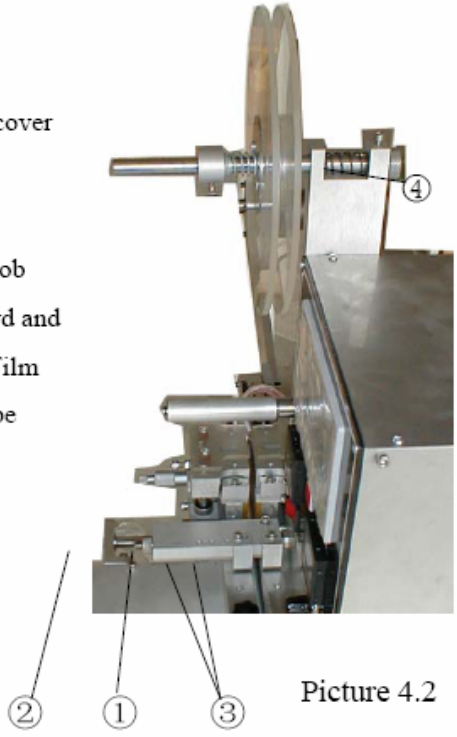
Notes: if the outer Film seal is rough, it may be caused by the nonparallel of outer guide rail and carrier. At this occasion, use micrometer to adjust the rail. Pay attention that the length in both sides of micrometer must be consistent.



Picture 4.1

2）Adjust Film：(Picture 4.2）

Adjust the Film locating guide according to the Film width to make the Film guide width be consistent with cover tape width. Rotate the Film guide and adjust the screw to make the Film in the right upside of carrier material trough. If the position of Film is improper, rotate the knob to make adjustment. While clockwise rotation is outward and counter-clockwise rotation is inward. And then rotate Film axis to adjust the screw to make the position Film axis be consistent with the position of Film guide.



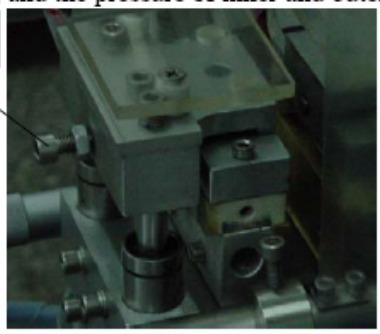
① Pinch axis ②Film guide setting screw
③Film locating guide ④Film axis setting screw

Picture 4.2

3）Adjust Heating Knife Pressure：（Picture 4.3）

Adjust the heating knife pressure through the inner and outer knife pressure setting knob in the setting panel. Clockwise rotate the knob to enlarge the pressure and counter-clockwise rotate it to reduce the pressure. The pressure gauge will display the pressure value. Press "Hot Sealing" key while adjust it. Generally the pressure is 2.4 kg/cm2, and the pressure of inner and outer knife are same.

Attention：**The heating knife may be very hot.**



Picture 4.3

4） Adjust the position of heating knife ：

（Picture 4.3)

The position of inner and outer knife can be adjusted.

Rotate the setting screw and move the heating knife fore-and-aft. While in clockwise rotation the knife moves inward; while in counter-clockwise rotation the knife moves outward.

Attention: while move inward, the heating knife edge mustn't exceed the edge of guide rail.

5）Adjust collecting pulley tension：

It can adjust the pitch of strand of electric collecting machine to adjust the collecting pulley tension. There is a pitch of strand setting knob on the panel, clockwise rotate it to enlarge the tension and counter-clockwise rotate it to reduce the pressure, and the tension range is 0-100 and generally it is 40-50.

6）Adjust dry detection：（Picture 4.4）

The dry trough sensor orientation must be accurate, so it can detect the middle hole in the carrier material trough. There is two probes in the detecting stand, one emits light and the other receives light. For black carrier, the sensor can detect dry trough only if the light passes through the middle hole in material trough. Loose the fixed knob in the detecting stand and adjust the sensor according to different middle holes to make the light emitted by probe can pass though the middle hole and received by the other probe. At this location, this machine will alarm and display "Starving".

Attention: do not use dry sensor while move forward idling tape . Move back dry sensor to avoid idling alarm.



7）Adjust feeding reel arm angle：

The feeding reel arm angle can be adjusted. Loose the fixed screw to rotate the arm around setting screw, and adjust the angle. Tighten the screw after adjustment.

1）Main technical index：

•Supply voltage：AC220V 50HZ 660W

•Auto optical count, and autosave the power cut value.

•heating sealing temperature：room temperature～300° C , adjustable, auto temperature control, can control the constancy of sealing temperature precisely.

•Sealing time：0.1s～2.0s adjustable，display accuracy 0.1 second.

•Apply to 8mm～88mm embossed carrier, and needn't to change any components.

•Dry detection and alarm function

2）Method of application：

•Turn the power on；

•Press the Heating switch；

•Set the heating knife designation temperature；

•Set machine parameter；

•Install carrier and cover type, and put the element to carry out sealing.

3）Alarm：

•Temperature deviation alarm：

When the heating knife temperature exceeds the upper and lower deviation of temperature, it will alarm, and the screen will display "Over Temperature", at this situation, it's no use to press auto, manipulating and foot switch. When the temperature back to normal range, the auto, manipulating and foot switch get back to normal function.

•Dry alarm：

While there is any dry detected, it will alarm, and the screen will display "starving". At this situation, it's no use to press auto, manipulating and foot switch. When add material, the auto, manipulating and foot switch get back to normal function.

Alarm of getting to preset output counting：

While in this situation, it will alarm, and the screen will display "Counting XXXX Finished".

•Pre-warning amount alarm：

When the counter reach the pre-warning amount, it will alarm and display "Pre-warning", and auto-recover to output counting state three seconds later.

•Head leader alarm：

When the head leader amount finished, the machine will auto stop and alarm, and then turn to output counting state.

Maintenance

Conservation and maintenance：

1）. While shut down this machine, make sure to turn off the "Power switch" and then pull out the power plug.

2）. If the sealing is not good, check whether there is any carrier adhered on heating knife caused by overheating. If so, use tampon dipped with alcohol or other solvent to clean up the feculence in heating knife heating and heat retaining state. Do not bruise the edge of heating knife.

Attention：**The sealing heating knife may be very hot.**

3）. Keep the machine clean, and prevent intense quake of the control box.