

Paper tape wear test machine

RCA-01

Operating

Manual

1. Technical parameters

Test load (g) : 55 , 175 , 275

Machine size: 830 × 490 × 340mm

Power source: . 1 ϕ , 220V,. 5A or designated

Heavy volume: 20kg

Labeled with: a set of tools . Magnifying glass . Test load: 55g, 175 g of each of a .O -ring
three .. tape roll 1 .

2. Overall appearance and operating instructions



2.1.1.1. Part name and description

A. Winding wheel device

B. Base level, you can install four foot pads (E-1) before placing the instrument,
adjust the level according to the situation

C. Sliding bolt, used to confirm whether the vertical axis is parallel to the base of
the instrument, and set "B" (surface meter, the indicator is parallel to the
instrument). When the "O" ring and test paper are placed in the test area,
you must confirm whether In line with the parallel, the sliding bolt must be

removed from the rocker arm "E" during operation

D. Rotation counter

E. Swing arm

F. Vertical axis fine adjustment screw

G. Vertical axis, can be adjusted up and down

H. Dust cover

I. Swing the clamp screw on the arm (used to change the vertical axis angle)

*The angle of the vertical axis is fixed before leaving the factory, please do not loosen and adjust it, please refer to the precautions

J. A nylon bearing frame is included to guide paper and tape without any adjustment

K. "O" ring, the surface is damaged or must be replaced after six months of use

L. Supply reel

M. Pressure roller

N. Drive roller

2.1.1.2. Quick installation abrasion testing machine

Purpose: If you move the sliding pin (C) flat part slightly, you can confirm whether the weight of the vertical axis falls on the sample to be tested (whether it is parallel to the instrument base)

Method: A. Drive the motor slightly until the rocker arm (E) is raised, the cam is at the lowest position, and the bearing cam drive shaft is at the vacated position

B. Fix the rocker arm on the plane part of the sliding bolt (G), loosen

the two screws on the vertical axis (G), and move the vertical axis (G) up and down so that the "O" ring is tightly positioned on the sample to be tested

C. Rotate the copper weight fine adjustment screw (F) until the sliding pin (G) moves slightly in and out while the vertical axis also moves slightly

D. Retighten the screws

E. When there is a load on the sample (vertical axis), this action can set the swing arm to be parallel to the instrument base

F. For samples of different thicknesses, this adjustment must be re-implemented

2.1.1.3. High rotation speed continuous wear test function

● A. Change the standard rotation to continuous wear test

- (1) Stop the motor after the slewing counter has a counting sound
- (2) using a hex wrench to loosen the coupling hand swing cam arm and the screw shaft of the bearing wire (since the screw hole is fixed to the shaft, the rotating it needs about 3 turns before release).
- (3) There are two small holes at the bottom end of the transmission shaft for returning to the standard type for rotary fixing
- (4) Gently push the bearing and the drive shaft towards the operator until there are gaps at both ends without contact with anything before stopping. Lightly screw with your hands (do not use force)

● **B. Ways to perform continuous wear testing**

(5) Load samples in the normal way

(6) Turn on the motor

(7) Stop the motor at regular intervals, lift the rocker arm with your hand to see if the substrate is worn, and the sample cannot be moved

(8) Lower the swing arm, if the test has not been completed, turn on the motor to continue the test

(9) Note: The above viewing method steps will not affect the accuracy of the test workpiece

(10) Note: Multiply the number of continuous rotation times by 2.5 times, that is, convert to standard rotation times

(11) Note: Some testers will perform the test to a certain number of revolutions and then stop the test, which can save time, paper and reduce the "O" ring wear.

2.1.1.4. Paper tape installation

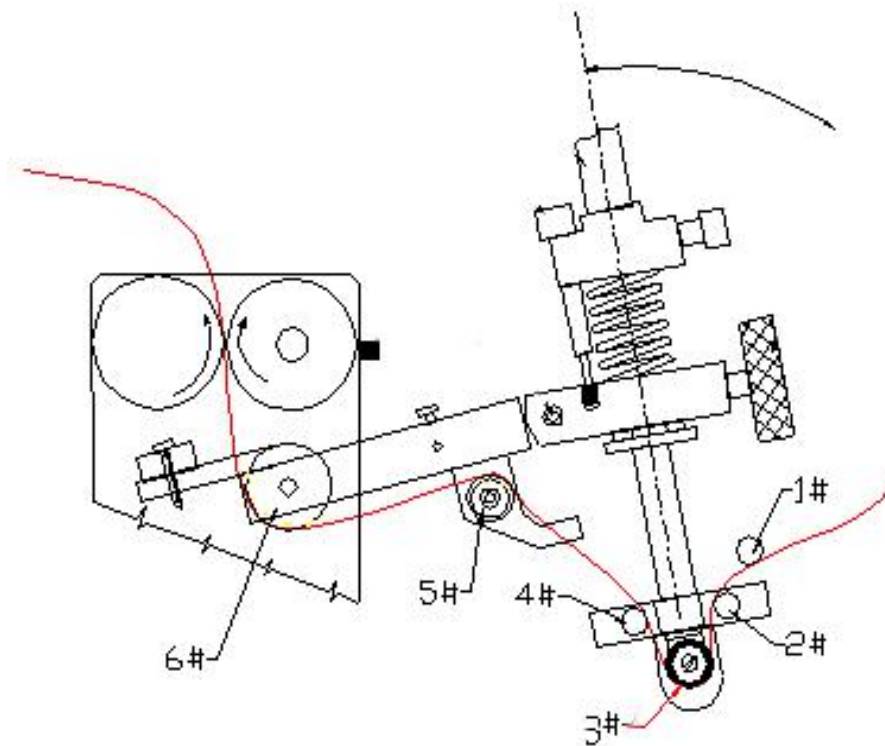
A. Start the motor, pull out the paper belt directly from the supply roll (Q), first pass the paper belt up through the gap between the two rollers, then stop the motor, install the paper belt in the order of # 1 to # 6

B. Push the protruding shaft of the center of the right-hand pressure roller (W) to the right, pull the front end of the paper tape with the left hand, and pull it out for a length beyond the center wheel of the take- up reel (D).

Adjust the belt to the center of the roller

C. Load the front end of the paper into the cutout of the center wheel of the winding reel (D), push the pressure roller (W) to the right with your right hand, and rotate the center wheel counterclockwise with your left hand to wind the paper for more than 2 turns. Winded on the center wheel

D. Note: The two fixing screws of the winding reel must be tightened to make the winding reel rotate



Precautions:

A. The four nylon bearings in the nylon bearing frame (N) cannot clamp the edge of the paper tape

B. The supply reel can not hinder the rotation of the paper belt

Start the motor, pull the paper belt directly from the supply roll (Q), first pass the

paper belt through the gap between the two rollers, then stop the motor, install the paper belt in the order of # 1 to # 6

3. Placement of samples to be tested (please also refer to the description of 2)

A. The sliding bolt (F) moves below the rocker arm. When the cam is at the lowest position, stop the motor, then the rocker arm is on the slide bolt

Note: There must be a gap between the cam and the cam drive shaft, and there must be no paper tape between the swing arm and the sliding bolt

B. (1) Use single-sided or double-sided tape to fix the parallel plate sample on the box-shaped anvil (P), or use the attached clip to fix the sample on the anvil (P)

(2) Fix the non-parallel surface samples with the universal roller plate sample holder (A)

(3) Fix to the round sample with the universal vise sample holder (B)

(The sample plate on the universal roller plate sample holder (A) must be removed first

When fixing the sample in the above (2) (3) method, a surface meter (Z) is needed to adjust the surface to be tested to be parallel to the instrument. For the method, please refer to the following description

C. Lower the vertical axis (K) (please loosen the two fixing screws first) so that the abrasion test tape is tightly positioned between the " O" ring and the sample, then tighten the two fixing screws by hand and move upward For vertical axis (K), you can gently press the spring before moving, do not

press the " O " ring or raise the rocker arm

D. Remove the sliding pin (F) under the automatic arm (H)

E. Hold and raise the rocker arm (H) to prevent the paper from contacting the sample, jog the motor until the cam can support the rocker arm (H), and the paper is not on the sample

F. Counter (G) returns to zero

4. Carry out testing

- Start the motor, when the rocker arm is in the elevated position, check whether the test area is worn to the substrate (whether the control color is different), this method is suitable for standard rotary test.
- Stop the motor at the timing of the continuous wear test to view the results (please also refer to the instructions in 3.2)
- Note: Please remove the " O " ring combination before using each day (please refer to the following seven instructions)
- Clean the wheels and other contact surfaces of the " O " ring center wheel

5. The combination and description of " O " ring

- A. The " O " ring is an important part of this type of testing instrument
- B. When the outer edge is worn or shows signs of aging and cracking, and after using it for 6 months, it needs to be replaced with a new " O " ring
- C. The above recommendations strongly request compliance
- D. Note: When not in use, please remove the " O " ring from the original fixed

position to prolong the service life

E. For the purpose of transportation, an “ O ” ring has been installed on the instrument , which can be removed and used, but on the vertical axis, there are three additional “ O ” rings that need to be removed before the instrument starts to use

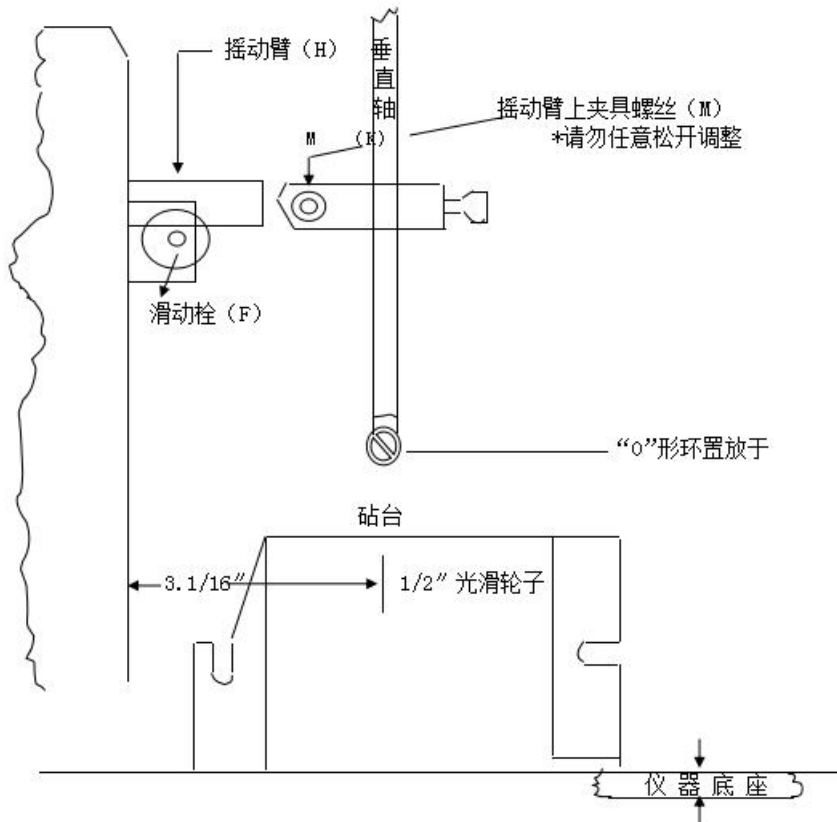
F. When installing the " O " ring, use 3 to 4 fingers to roll the " O " ring through the tapered part to a fixed position in the wheel, so as to avoid the outer edge of the " O " ring from being hit.

G. According to experience, if the " O " ring wheels cannot rotate flexibly, stop reading the number of revolutions

6. Precautions:

- ❖ The angle of the vertical axis has been fixed before leaving the factory. It is suitable for the test standard of 175g load . Please do not loosen the screw (M) to adjust it. Arbitrarily loosening the adjustment angle will cause the load to be non-standard and affect the test results.
- ❖ For samples with low abrasion resistance, (such as hot cover glossy film, small area printed letters and fonts need to perform low load test, you can add appropriate weight weight to the lever on the left side of the swing arm (H) To reduce the load to 175g (one weight) or 55g (two weights)
- ❖ In order to keep the winding reel (D) and supply reel in a certain position so that the center line of the friction test material is located at the center line of

the instrument, please do not change the position of the support cover behind the two reels (fixed before leaving the factory) it is good)



7. Maintenance Matters

- ① The instrument must be placed on a stable surface before use,
- ② It is not allowed to move the machine during use;
- ③ Choose the corresponding power supply voltage, do not be too high to avoid burning the device;
- ④ When the instrument is abnormal, please contact the Exchange for timely treatment;
- ⑤ The machine must have a good ventilation environment when working.
- ⑥ For the components of the key mechanism, due to the large operating load, please add lubricating oil to the mechanical part in time;
- ⑦ After each test, clean the machine and keep it clean;

- ⑧ The control box must be wiped with a dry cloth, not wet cloth.

8. Troubleshooting

- ◆ If the power is turned on and there is no display, it means that the power is not turned on or the power indicator is damaged. If the power indicator is damaged, replace the indicator. If there is no power output from the power output terminal, please check the power cord or power socket.
- ◆ If the power is turned on, the power indicator indicates, press the start button, the machine does not work, please check whether the relay is disconnected or disconnected, if it is disconnected or disconnected, please connect it in time, if the relay is not disconnected or disconnected , Indicating that the relay is damaged, it should be replaced in time.
- ◆ When the test reaches the number of times set by the counter, the motor still does not stop working, indicating (1), the counter is damaged ; 2), after the number of times set by the counter, the reset button is not pressed to write.
- ◆ If the power indicator is on and the counter is not showing, it means that the counter is damaged, so you need to replace the counter.