### 1. Operating principle

Using imported intelligent high-accuracy sensor and high reliable computer chip program controller (PLC) to control Separation of labels, sending labels and labeling work, using air pressure to let the labels adhere on the machine label head. Machine labeling head pushed by air cylinder to do labeling work.

- 2. Scope of application
- 1) In all sorts of thing with flat surface.
- 2) Cosmetics , pharmaceuticals square bottles
- 3) Cartons, cards
- 4) Screen, electric elements
- 3. Advantages of product
- 1) Efficiency, speed can be max 60 pcs/min.

2) Machine labeling head can be upward and downward, front and behind can be adjusted , satisfy for the needs of different objects.

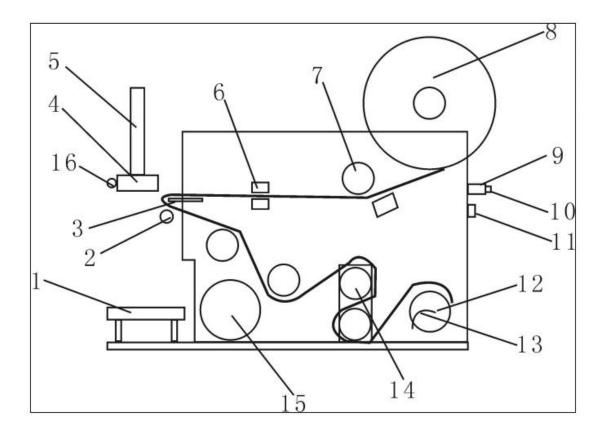
- 3) Effect is good ,no bobbles, no ruffles, high grade, to increase product competitiveness.
- 4) Choose brand PLC, sensor and electronic components, very stable performance.
- 5) Can work with the single machine, also can be installed to work with production line .
- 6) Modular design, convenient maintenance and low cost of repair.
- 4. Technical parameters
- 1) Efficiency: 20-40 pcs/min
- 2) Precision: ±1 min
- 3) Label roll:outer diameter 300mm Inter diameter: 75mm
- 4) Label size: width 10-140mm Length 10-80mm
- 5) Power supply: 220V/110V, 50HZ, 200W
- 6) Air supply:0.4-0.6Mpa
- 7) Machine size: 300×200×400mm
- 8) Machine weight: 25kg

#### **5** Operation sequence

1) Install the plastic cover beside of the label roll, and also put the roll fixing block into machine axis, and move the green O ring into the block, then fix the block by screw.

2) Install the labels roll, put one whole roll of labels into the machine axis, make sure the labels will be move out along clockwise, then fix the plastic disc cover.

3) Referring to the following figure to check the label directions. Make sure the label ended in backing sheet roll(No.12) clockwise. Then use the backing sheet fixing device(No.13) to fix and tight the backing sheet on the backing sheet roll(No.12), if not tight enough, the machine will not work. Then check the label road is at the same level(No twist, flip). Then fix all the guide wheels(No 7 and other wheels)



## Machine diagram & Label stretching chart

(1) Worktable (2) Blowing tube (3) Stripping plate (4)machine labeling head(5)Air

cylinder(pushing) (6)sensor (7)Guide wheel (8) plastic disc cover

(9)air power switch (10)air pipe input (11) power switch (12) backing sheet roll

(13)backing sheet fixing device (14)tighter guide wheel (15) motor (16)air exhaust pipe plug

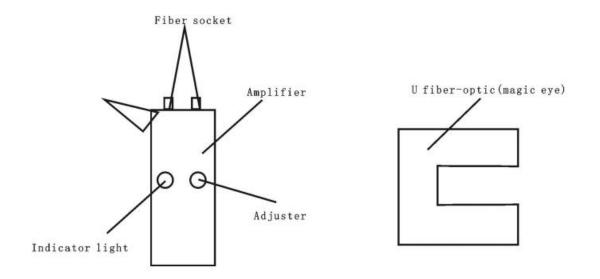
4) connect the cable to the electricity.

5) connect air compressor, and make the air pressure about 0.4-0.6 Mpa.

6) switch on the power switch(No. 11), adjust the sensor.

The sensor has two parts: amplifier and U fiber-optic. As shown in figure:

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First, plug the "U fiber-optic" into the "fiber socket" about 2 centimeters. Then lock it, the rotate the "adjuster" counterclockwise to the end. Secondly, let the label go through the u-shaped slot of the "U fiber-optic", then make the "gap of two pieces of the labels" or "just take off one label, shows the backing sheet" on the u-shaped slot of the "U fiber-optic". Then rotate the "adjuster" again, rotate slowly from the end to right clockwise, when the "indicator light" become on(light on), stop rotating. Thirdly, move the label a little, make the

label(label with backing sheet) on the u-shaped slot of the "U fiber-optic", check the "indicator light" will be off. That means the sensor is finish and ready to work. If not, please adjust the the sensor again(just rotate it "adjuster" a little).

Move the label.when Label on the u-shaped slot of the "U fiber-optic", indicator light should be off.Again, when backing sheet on the u-shaped slot of the "U fiber-optic", indicator light should be on. Actually, the sensor has already been adjusted before we sendout the machine, it is already to use.

a. Sensor position: sensor position is very important because it will decide the label stopping position. Different sizes(length) of labels the require different positions of sensor. If the sensor position is too back, will make the label move out too long, so that the the machine label head can not catch up(suck) a label in right position or even can not catch up(suck) a label at all. If the sensor position is too forwarder. will make the label move out too short so that the machine label head can not get a label. b. Label stopping position: means before the label be pushed down, how long is the label comes out from the Stripping plate(No.3), it is controlled by the sensor position. So we should adjust the sensor position so that the labels will be catched up(suck) by machine labeling head in right place.

6) adjust the height of the machine labeling head: adjust the magnetic switch on the Air cylinder(No.5) to adjust the height of the machine labeling head, depend on the product height.

7) Adjust the position of blowing tube(No.2): this part is used for preventing label roll up. According to different label length, adjust the blowing tube at a suitable position.

8) Press the pedal switch, the machine labeling head will automatically move from up to

down and adhere the label on your product. According to the height of your products, adjust the stroke of the machine labeling head by adjusting the position of the magnetic switches on the Air cylinder(No.5).

9) Adjust the position of your products in the work table.

### 6. Notice

1) read the instruction before using the machine.

2) Before you connect the machine to the electric and air compressor, make sure the switches are all off. Then operate the machine according to the manual.

3) Air source must be stable, don't let the machine work when the air pressure is low!
4) Important!!! : when these is no product on the work table(No.1), don't press the pedal switch, or the machine labeling head will fall down to the bottom and machine will be stopped working. Anyway, if in this case, should immediately shut off the air, manuallypush the machine labeling head up to the top and restart.

# 7, Troubleshooting

1) Labeling action is not normal :Check the label position and check if any place is stuck.

2) Label head doesn't fall or rise : Check the air source .

3) Label can't be catch up(suck by machine labeling head):Check the air source.

4) Label roll up : Check whether the blowing tube is in the correct position.

5) Backing sheet doesn't roll up :Check whether the tighter guide wheel (No.14) is too tight