INSTRUCTION MANUAL

FINECO
Labeling machine

Model: 909

Name: Semi Automatic Double Sides Labeling Machine

Content

Chapter 1 Statement

1.Matters need Attention....4

2.Rights Reserved....4

3.Safety Considerations....5

4.Operation Cautions....5

5.Operation environment....5

6.Run-in Period....7

Chapter 2 Introduction

1.Brief Introduction....6

2.Technical Parameters....6

3.Labeling Process Analysis....7

Chapter 3 Configuration

1.Overview....8

2.Detailed Drawing....9

3.Product Sensor....10

4.Adjuster....11

Chapter 4 Electrical Configuration

1.The principle of electric control....12

2.Touch Screen....12

Chapter 5 Adjustment

1.Mechanical Adjustment....18

FINECO
Labeling machine

2.Sensors Adjustment.....19

Chapter6 Operation

1.Label Winding.....25

2.Mechanical Operation.....25

3.Electrical Operation.....26

Chapter 7 Product Maintenance

1.Maintain and Clean.....26

2.Routine Maintenance.....27

3.Surface Maintenance 27

Chapter8 Usual Fault Treatment

1.Release Paper Broken.....27

2.Labeling deviation more than 2 mm.....28

3.Labels come out incessantly at a time 28

4.The Release Paper is Loose at the Label-peeling Plate.....29

FINECO
Labeling machine

Chapter 1 Statement

1.Matters need Attention

1. As this labeling machine is a customized industrial equipment, only trained workers are expected to operate it.

2.Operating this equipment need to be in accordance with the instructions in the manual or under our technician' guidance.Notice that some mechanical parts described in this manual are used for instruction only,not included in the standard configuration.

3.This operation manual applies to this equipment ONLY and aims to ensure correct operation and adjustment.And we hold the final explanation right of this manual.

2.Rights Reserved

1.We will provide service of updating the mechanical parts,electrical parts and the software,but charge fees accordingly.

2.We will not responsible for any machine problem that caused by your arbitrarily movement,and you should not change the machine without our engineers' suggestion.

3.Optional function :hot stamp printer and other needed functions.We will provide technical support for you but hold no responsibility for the optional functions.

4.We hold intellectual property rights for this machine and machine instruction,we will look into legal responsibility if copyright or something like

that occurs.

3.Safety Considerations

1.Electric shock Caution！ Earth wire is indispensable for operating this machine,make sure you have one.

2.Caution！ Voltage overloaded is dangerous.

3.Caution！Do not touch the circuit in the electric box without our technician' guidance.

4.Caution！ Do not touch the running mechanical parts.

4.Operation Cautions

Only trained worker are allowed to install,operate and maintain the equipment.

The operator should equipped with these qualities：

——be able to operate the machine safely by himself.

——be able to fix the small mistakes by himself.

——there should be at least 2 people at hand to provide guidance for him .

5.Operation environment

Please do not use this machine in the following environment：

- with great temperature variation
- with high humidity
- with strong vibration or impact
- dusty
- where there is water, oil, chemical splashes

• Where there is a risk of explosive, flammable items

6.Run-in Period

This machine are tailor-adjusted to adapt to your product,being nonstandard equipment and the operator must be trained,so there would be a run-in period of 1 month or so.In the run-in period,you can ask us for technical support if the machine can not reach to your requirement.

Chapter 2 Introduction

1.Brief Introduction：

Suitable for double sides labeling for flat/square/round products.Can be equipped with a hot stamp coder,which can print production date,expiry date,and batch lot while labeling.

2.Technical Parameters

＊Accuracy:±0.5 mm (exclude the error caused by product and label)；

＊Capacity:15～30pcs/min（influenced by the size of product and label)；

＊Product Size: L: 20 mm-200 mm; W:20 mm-150 mm ; H: 0.2 mm-120 mm

＊Label Size:L: 6 mm-150 mm W/H：15 mm - 130 mm；

＊Machine Dimension：800*800*1000mm（L*W*H）；

＊Voltage：220V 50/60HZ；

＊Weight：250KG.

3.Labeling Process

1.Feeding :Put product on the fixture.

2.Transmission:the conveyor sends the product forward and backward.

3.The product sensor sends product signal and PLC outputs labeling signal.

4.Labeling.

5.Strengthening:the sponge on the 2 sides press the labels to make they stick tighter.

6.Collection:Get the ready labeled product Out.

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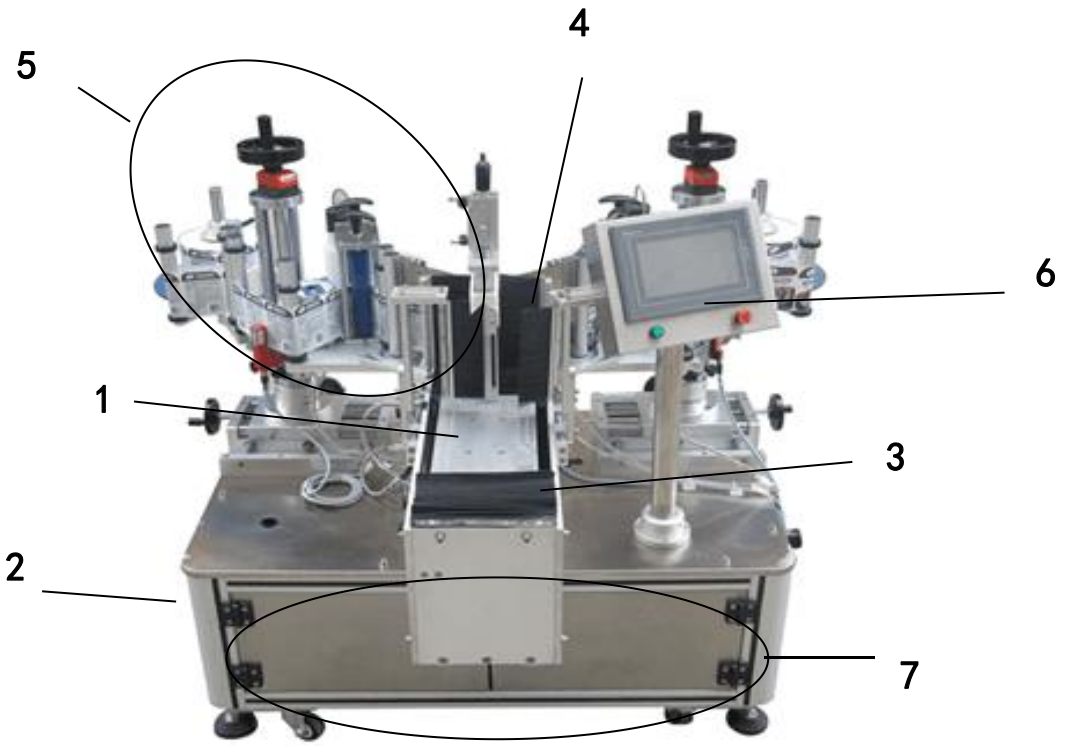
Chapter 3 Configuration

1.Overview



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1.Fixture:Fix the product.

2.Power Switch:The main switch of the machine.

3.Conveyor:Convey the product forward and backward to complete labeling.

4.Strengthening Device:press labels to make it stick tighter.

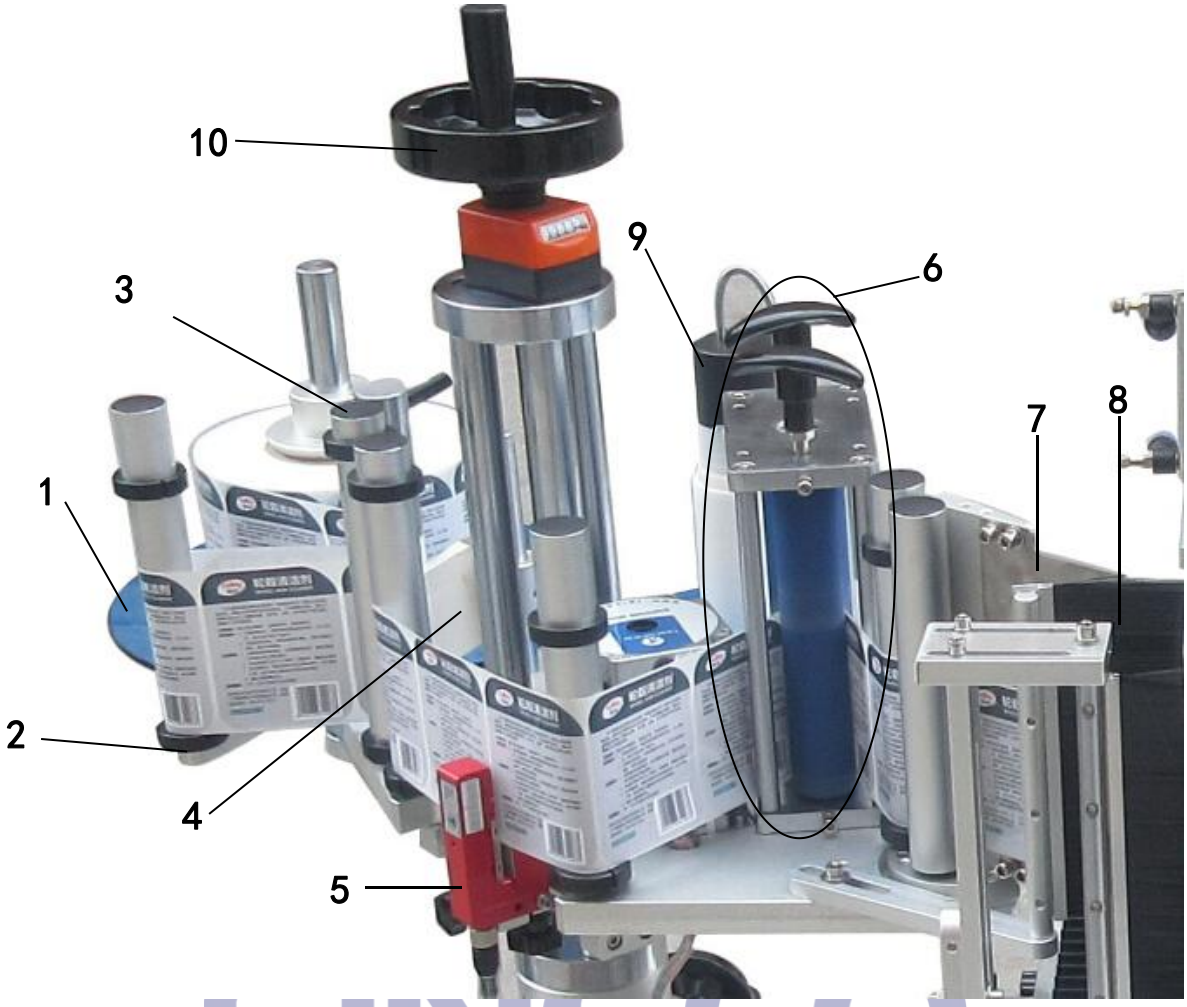
5.Labeling Head:The core of the machine.

6.Touch Screen:Setting parameters and control the machine.

7.Electric Box:Place electronic configurations.

2.Detailed Picture

2.1 Labeling Head



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1.Reel Tray:Place the label reel;

2.Brake Roller:Keep tension of the label,in case the label loosed;

3.Roller:Winding label;

4.Pressing blade:Balance and keep tension of the label;

5.Label Sensor:Detect label;

6.Traction Device:Drive the label reel;

7.Label-peeling Plate:Peel the label from the release paper;

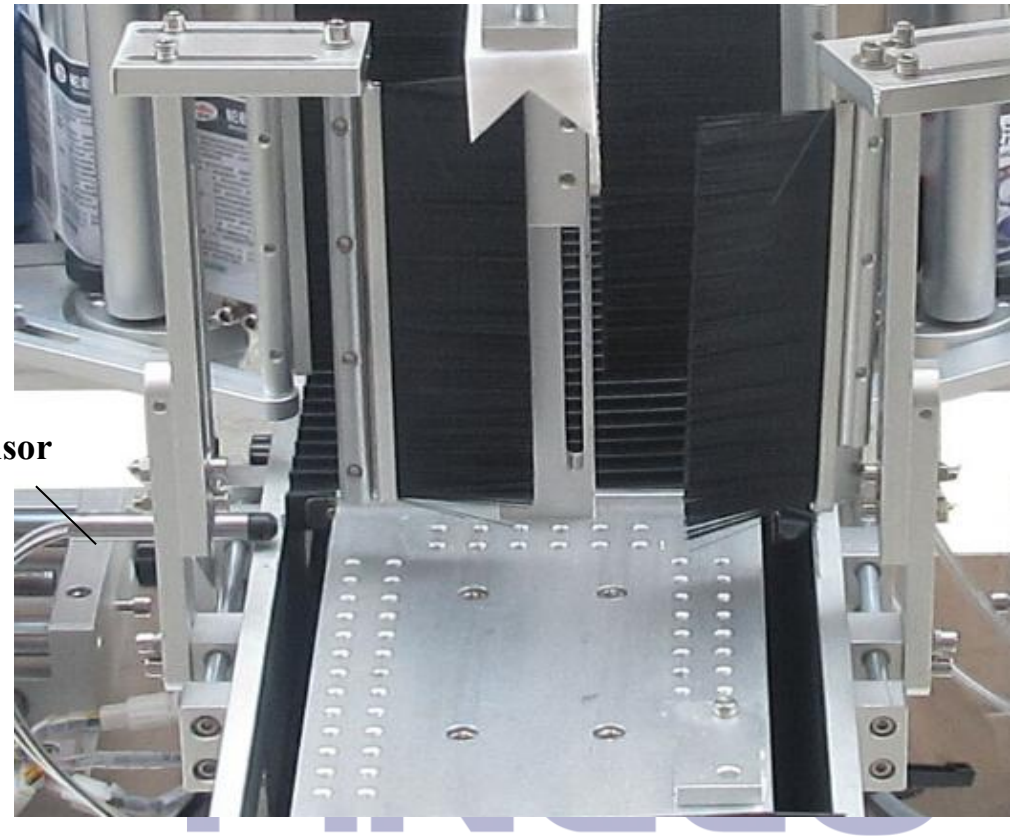
8.Strengthening Device:Press the label to make it stick tighter;

9.Recycling Device:Recycle the release paper;

10.Vertical Adjuster:Adjust the vertical height of the labeling head.

3.Product Sensor : Detecting products,contains transmitter/receiver and a reflector.Can be adjusted forward/backward.

Product Sensor



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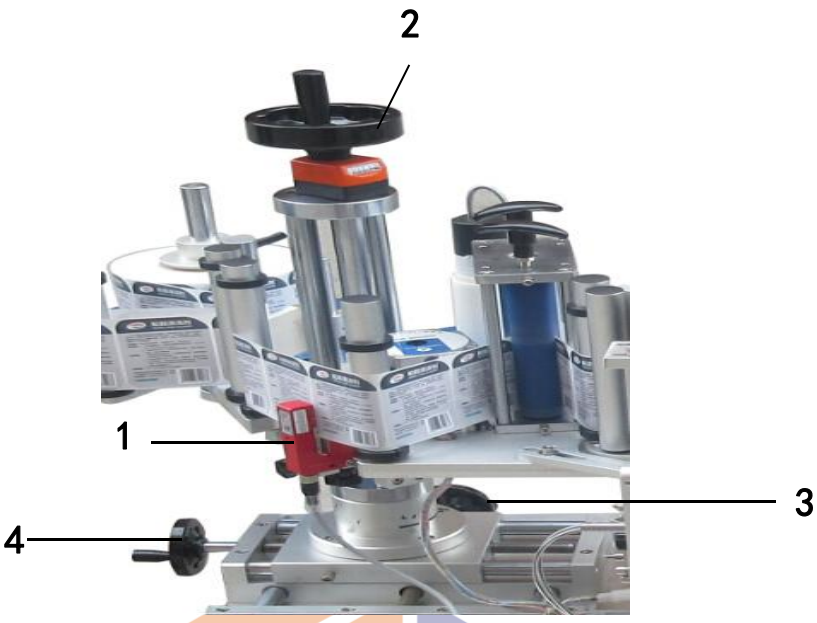
4.Adjuster



*TIP:Loose the screw of corresponding part before adjustment and lock it after adjustment done.

1.label sensor frame：move to adjust the label pre- peeled label length(Part of a label that stretches out from the label-peeling plate automatically;

2.Vertical Adjuster:Adjust the vertical height of the labeling head.

3.Forward-Backward Adjuster

4.Left-Right Adjuster

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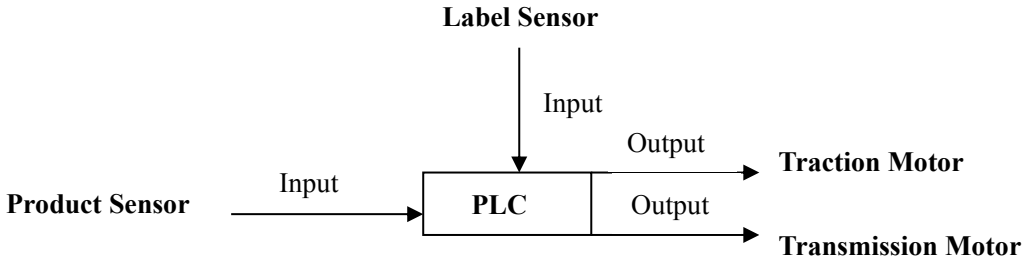
Chapter 4 Electric Configuration

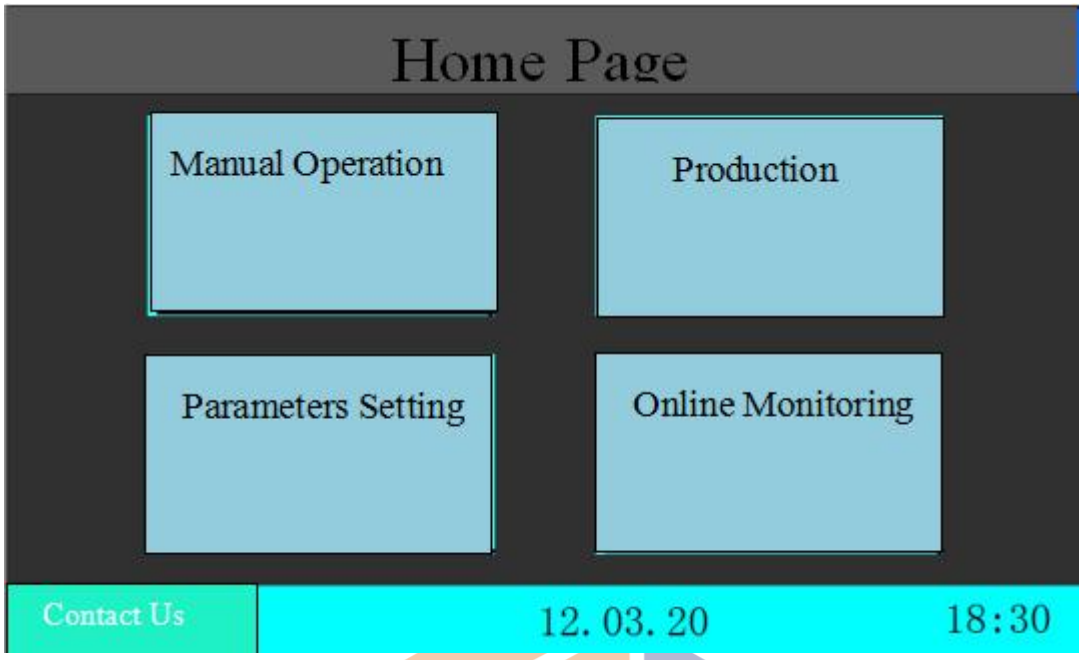
1.The principle of electric control



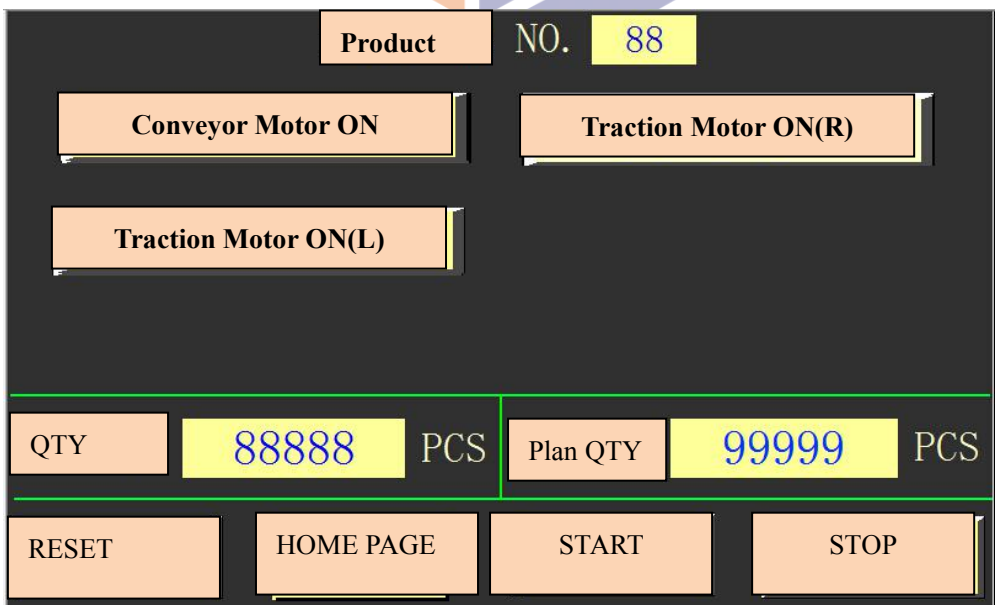
2.Touch Screen

2.1 Welcome Page:The basic information of the supplier.

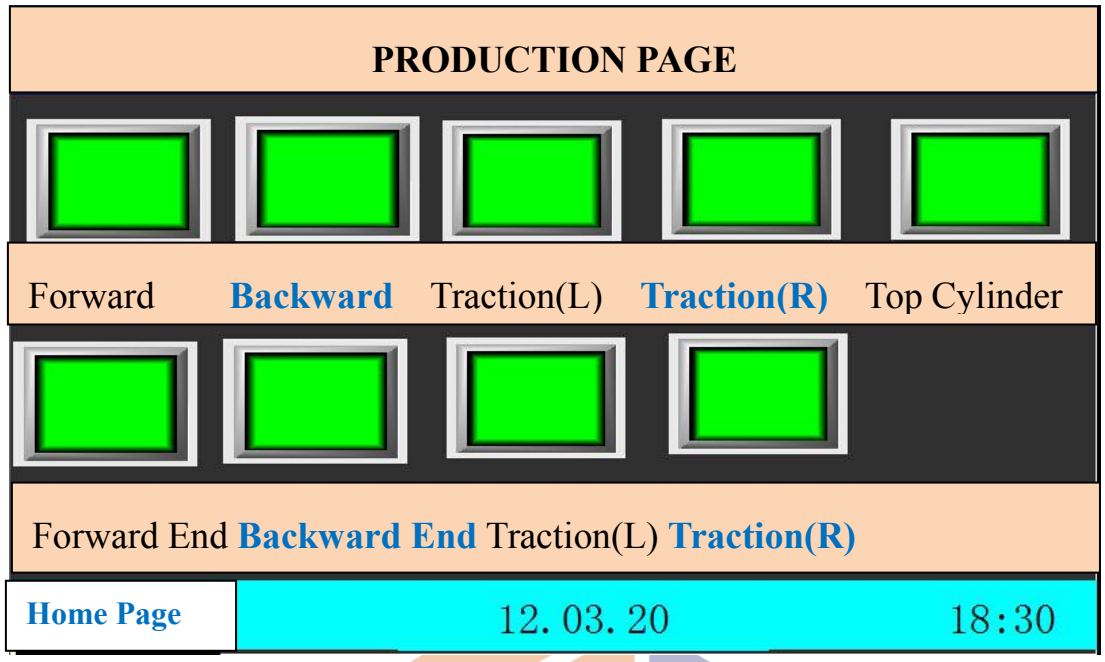
1.2 Home Page:There are 4 sections:Manual Operation,Production,Parameters Setting,Online Monitoring.



1.3 Production Page:turn ON/OFF the corresponding parts;Set production qty.



1.4 Manual Operation:used to adjust machine parts separately.



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1.5 Parameters Setting：

1.Product No.:there are 50 programmable preset product parameter groups.

2.Manual Speed:The speed of label-peeling and transmission under “Manual Operation” condition；

3.Automatic Speed:The speed of label-peeling under production condition,setting range 200HZ-32000HZ；

4.Filter Product Signal：Products stay in the induction zone after labeling for strengthening.In order to prevent labeling the same product again ,we use this parameter to filter the subsequent product signal for a short time.

5.Labeling Delay：typically be “0”.With this parameter ,the labeling process will not start immediately after receiving the product sensor’s signal,but delayed.Can be used under the condition that either moving the product sensor

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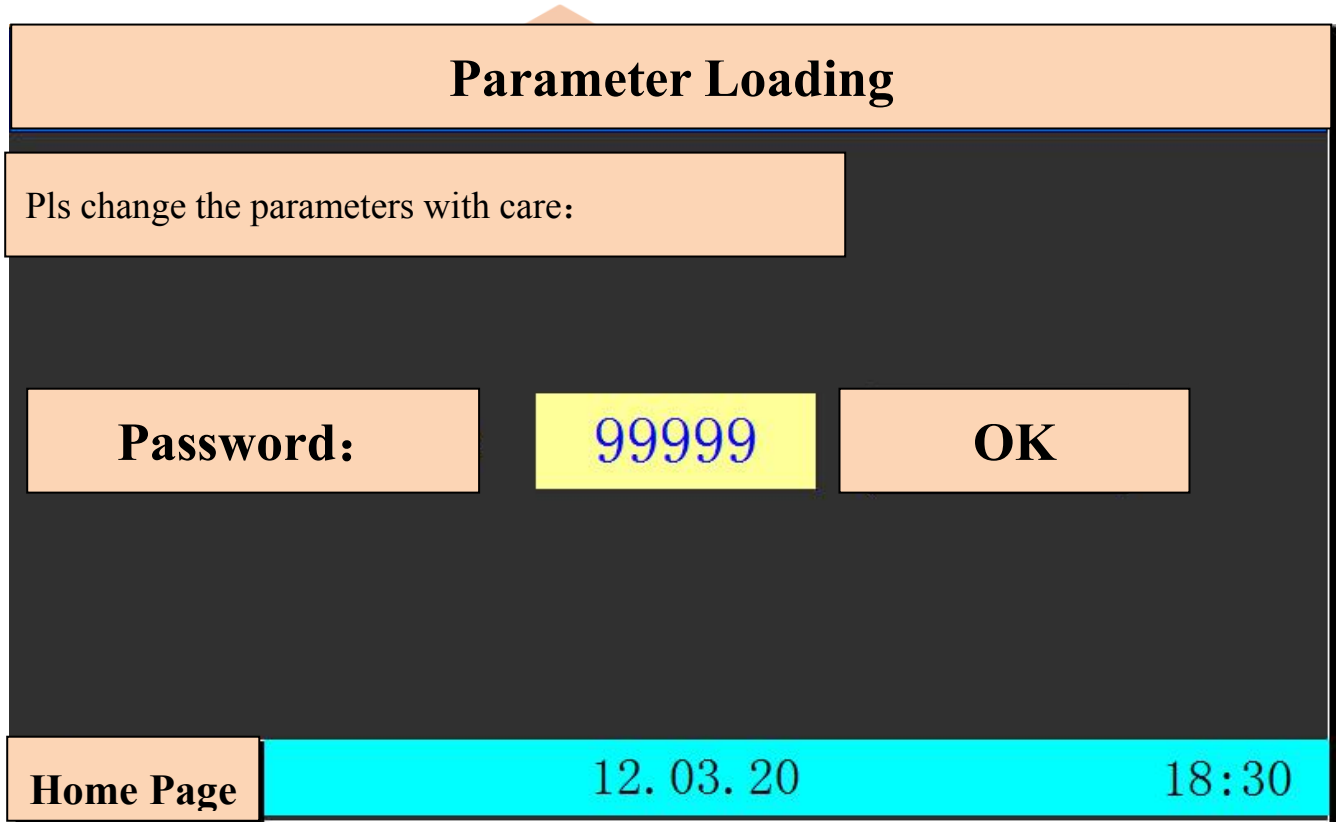
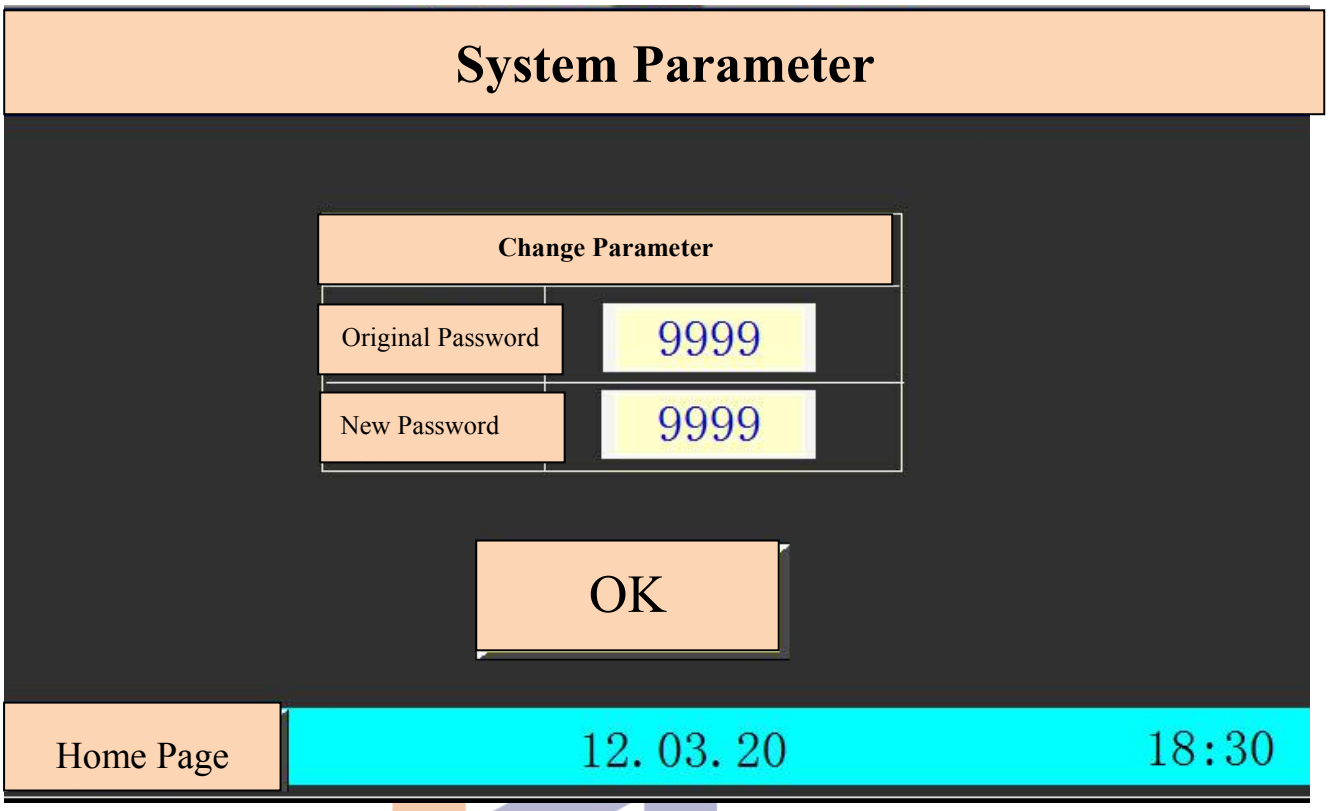
or using the position adjusters can not make the label be pasted to the designated position.

6.Automatic Forward Speed：The transmission speed under automatic product condition.Setting range 200HZ-32000HZ.

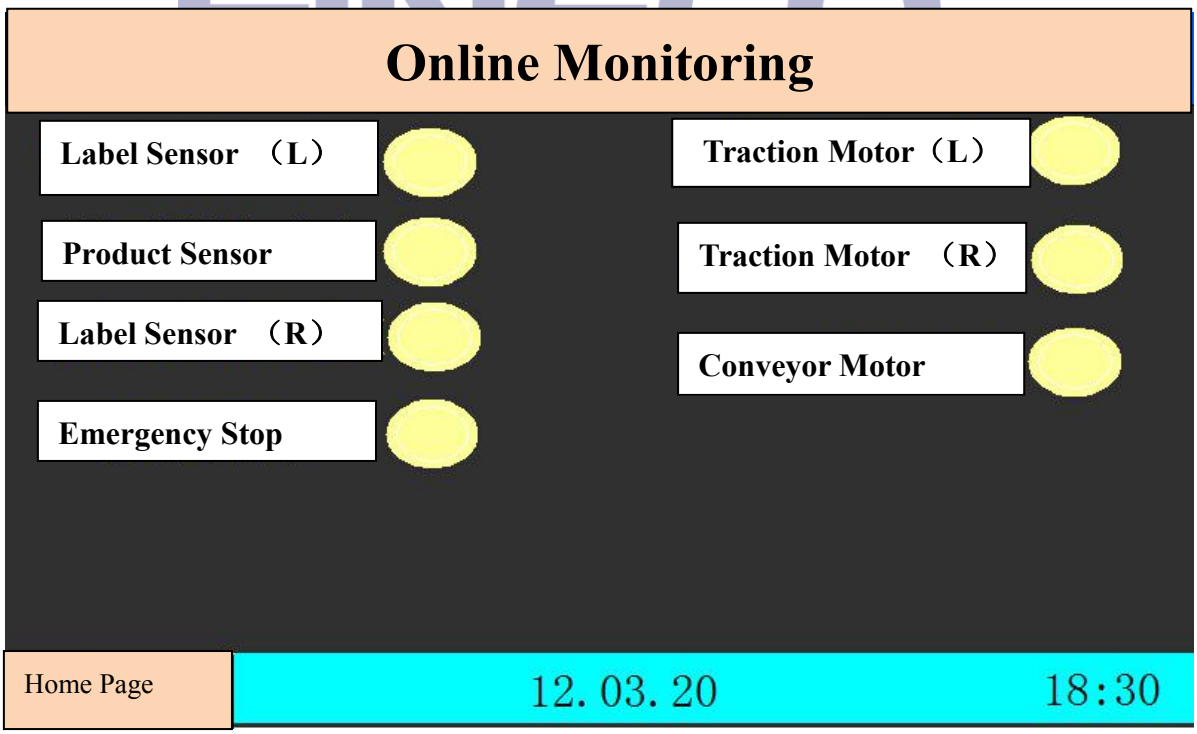
7.Automatic Backward Speed： The transmission speed under automatic product condition.Setting range 200HZ-32000HZ.

1.6 Parameter Loading Page:





1.7 On-line Monitoring:Displaying the status of each configuration,if the signal light turns blue,it means the corresponding configuration is working,this page is used in fault detection.



Chapter 5 Adjustment

1.Mechanical Adjustment

1.1 Strengthening Device Adjustment

Points:

1)The label strengthening device should be parallel to the conveyor belt in order to make sure the product will be uniformly forced and steadily labeled.

2)The label strengthening device should be neither too low(hinder the product) nor too high (can not touch product).

1.2 Labeling Head Adjustment

Points:Loose the locking screw before adjusting and lock it after adjustment done.Turn the adjusters to achieve forward/backward,vertical/horizontal adjustment.

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1.3 Label-peeling Plate Adjustment

Loose the screw in the joint of the plate to adjust.The label-peeling plate can swing in a certain range to adapt to different products.

2.Sensors Adjustment

This machine is equipped with 2 electric sensors:product sensor and label sensor,you can adjust them according to your product and labeling requirement.

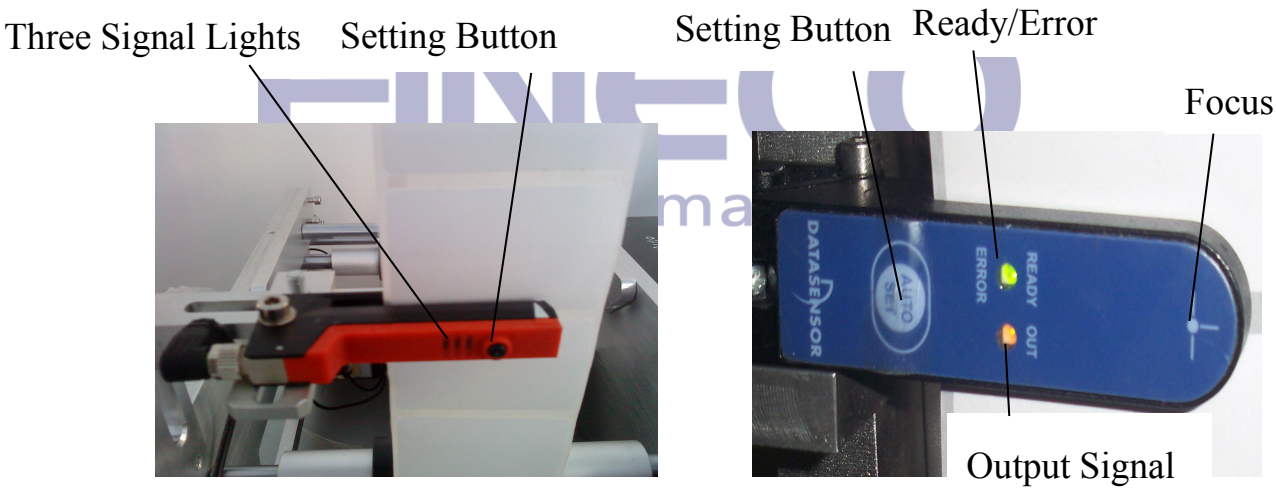
2.1 Position Adjustment

You can adjust them by adjusting the sensor frame,we have talked about this in the mechanical configuration part.

2.2 Setting of the Label Sensor

The standard configuration of this machine is Datasensor SR21，other kinds of electric eye are optional.

2.2.1 Product Detect Sensor:（just for instruction use,not means the it being the sensor of your machine）



leuze GS-63(Germany) **Datasensor SR21-IR(Italy)**

(1) the Adjustment of Leuze GS-63：

a. Work principle: Make use of light penetrability.The light penetrability of

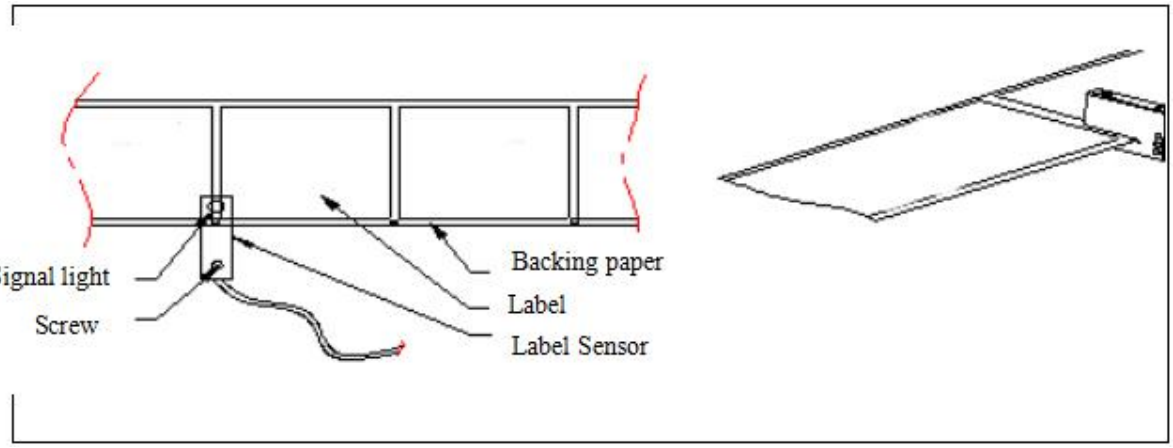
the label is different from the gap between two labels,suitable for paper label or the label has certain thickness.

b. About the signal lights and the adjustment button:

Green signal light : power light;

Yellow signal light：detection signal light（it lights up when detecting label）;

Setting Button:used for setting different labels;



c. Setting Method:

Test :Make the label pass through the slot of the sensor and pull the release paper,if the **yellow** signal lights up when focuses on gaps puts out when focuses on label,it means the label sensor works well and can be put into use directly.If not,you need to reset the label sensor:

① Focus on label, press the setting button for about 3 seconds until the yellow signal light flickers,then release the button.

② Focus on the **gap** between two labels,press the setting button again for about 8 seconds,then release.

③ Pull the label,let labels and gaps go through the focus alternately.Check if

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the yellow signal lights up and puts out when the gaps and the labels alternately appear.

(2) the Adjustment of Datasensor SR21-IR(Italy)

a. Work principle: Detect label by the intensity of light,suitable for the label that made of different material from the release paper.One side of the sensor launch light and the other side receives ,the intensity of the received light changes when the label and the label gaps alternately appears,by setting a threshold level, the sensor can detect if there is a label.

b. Setting Method:

① When the “ready” signal lights up,put the label on the focus of the sensor,pull the label to make the gaps and labels go through the focus alternately to see if the output signals change.If so,the sensor can be put into use directly.If not,pls set the sensor as following steps:

(1) Press the “auto set” button ,the green and yellow lights would put out ,it means the sensor is capturing the signal of the label in the focus.Do not move the label until the green signal light flickers.

(2) When the green signal flickers,pull the label to make the gap between 2 labels in the focus of the sensor slot.

(3) Press the “AUTO SET” button , the green signal put out.It means the sensor is capturing the gap signal.Do not move the label until the green signal light up.

(4) Pull the label back and forth to see if the “out” signal light up when the

border of label and gap pass the focus.Thus adjustment done.

(5) “READY” signal lights up shows that the sensor can work normally.

2.3.Product Sensor：(just for instruction use,not means the it being the sensor of your machine)

a. the connection method of FX-301series：please connect the product detect sensor as the picture.

b. Work Principle：

The detect sensor identifying objects by light reflection.it launches light on the object and the object reflects light to the sensor.When the reflection light reaches to your set number,the sensor can detect the object and send signal out.

c. Status Switching：

Press the“mode/cancel”button，the green signal changes among the “L/D”、“CUST”、“PRO”，representing different working status.

d Settings：

-Clear the induction zone,press the “+”button and adjust the green number to at least 2 times bigger than the red number.just as the following picture.

-Put a product in the induction zone(labeling position),make sure that the product stays close to the sensor frame on the left.You can adjust the labeling location of the product by adjusting the frame.

-Close the lid,setting finished.

-When the product be conveyed to the labeling position,the product detect sensor sends signals to PLC,then the PLC direct the relevant parts to operate,labeling start.

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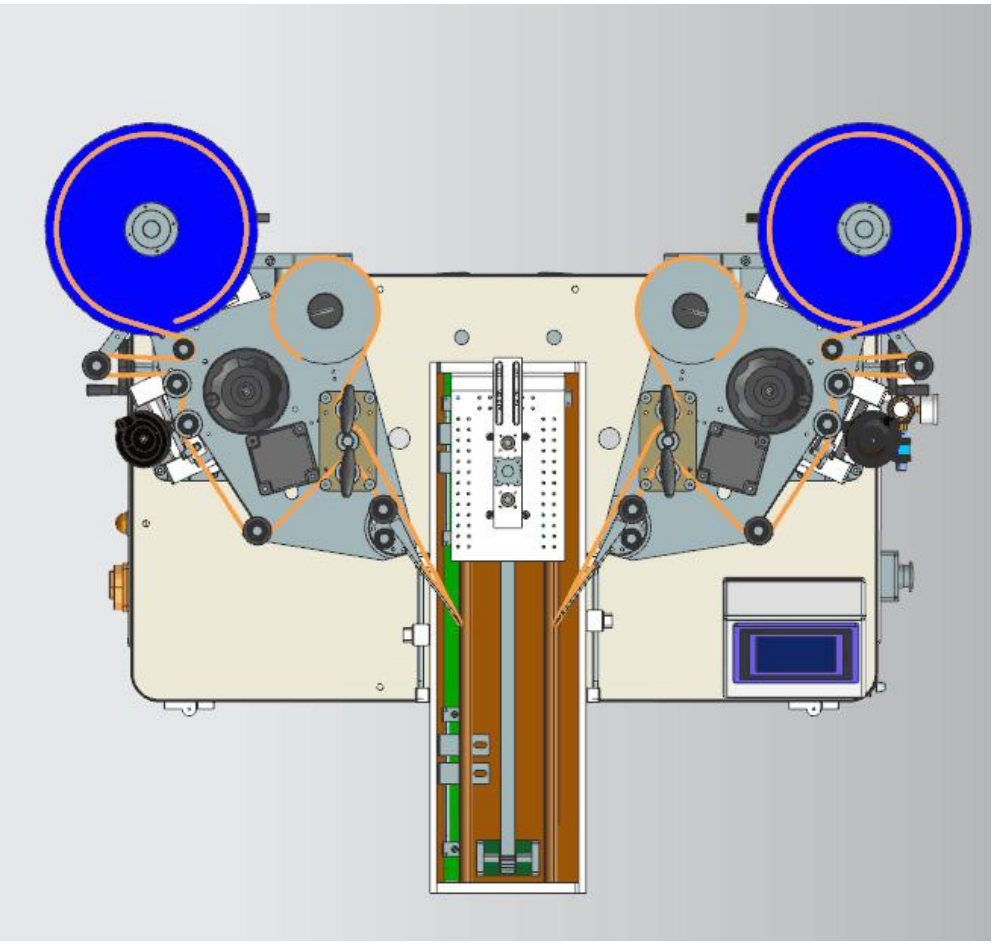
Chapter 6 Operation

1.Label winding

Please winding the label as following:(key point:keep the intensity and balance of the label)



2.Mechanical Operation

Preparation :Turn on the power,choose the “Manual Operation”.

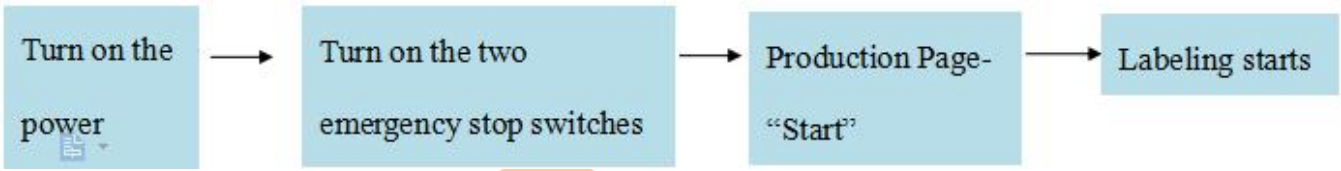
1.Conveyor Mechanism Adjustment：please refer to the adjustment section we talked before.

2 .Labeling Position Adjustment： make the product be paralleled to the label-peeling plate,adjust the labeling head or the product sensor frame to

make the plate fixed at the designated labeling position.

3 .Labeling Position Adjustment:There are three methods :a. moving the product sensor forward or backward,thus advance/delay the detection;b.setting "labeling delay" time.

3.Electrical Operation



Chapter 7 Product Maintenance

1.Maintain and Clean

1.1This machine is powered by AC power,so it needs replace the fuse for overload protection .

1.2 Please use alcohol to clean the machine; and use commercial neutral cleaning fluid to clean the electric box.

Matters need attention:

Do not use cleaning tool that would damage the surface of the machine.

Do not use corrosive plastic utensils;

Do not use acid soluble liquid.

2. Routine Maintenance

Regular inspection is necessary ,especially the following parts:

1.The conveyor belt's speed and accuracy (after extended periods of use)

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2.Clean up waste paper scraps and pieces.

3.Remove oil residue from the rollers and the machine edges.

4.Clean the sensor lens with a soft brush or cloth.

3.Surface Maintenance

This machine have chrome plating processed,equipped with antirust function.However, you still need to pay attention to rust in the placing processes,using anti-rust oil to spray the stainless steel and iron parts from time to time.

Chapter 8 Usual Fault Treatment

1.Release Paper Broken

Influence Factors:the quality of the Release Paper;the friction in the traction process;label adhesion.

Step 1:Check the Release Paper,if it is broken or of poor quality,then you should contact your label provider to change the Release Paper.It is recommended to use glassine bottom paper.

Step 2:Check if there any part scratch the label in the traction process and remove them.

Step 3:Check if the label stick to each other,or it will be broken easily.Adjust the automatic high speed length to make sure the label would not attach to the labeled product.

2.Labeling deviation more than 2 mm

Influence Factors:Label deviation;the label-peeling plate is not parallel to

the conveyor belt;the traction wheel skid;product error.

1.Label deviation: Loose the traction device,pull the label back and forth,correct the label trend automatically.Then fasten the limit circles on the two sides of the label.

2.The label-peeling plate is not parallel to the conveyor belt:Adjust the labeling head to make it be paralleled to the conveyor belt.

3.The traction wheel skid:tighten the locking screw of the traction wheel.

4.product error:errors happen in the product manufacture process also bring about labeling deviation,so the product quality must be strictly controlled.

3.Labels come out incessantly at a time

It relates to the sensibility of the label sensor,please adjust the sensor according to the steps we talked before.If the problem still exists,maybe the sensor is not applicable to the label or it has broken,please contact us in this condition.

Another cause may be the label bypasses the label sensor so the sensor can not detect the label,please make sure the label goes through the slot of the sensor.

4.The Release Paper is Loose at the Label-peeling Plate

There are two possible causes:the traction speed is too slow ,or the traction device loosed. Try to improve the traction speed or tighten the locking screw of the traction device.In addition,please check whether the drive belt behind the recycling axis is intact.

Service Commitment

Fineco based on the principle of customer first,dedicated to provide thorough pre-sales and after-sales service.

1.Professional technical consultation service

2.Professional training service.

3.Responsible for providing technical support.

4.One year warranty, provide maintenance services.

Thank you for using our machine，if there is any dissatisfaction with equipment quality, performance, service and so on, welcome to put forward valuable suggestions!

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