MICROTEC

APEX MAX QUICK GUIDE

XR1515

# APEX Max Roll-to-Roll 15×15 DTF Heat Press

One picture per step. Follow the steps in order.




## Safety first

**The heat plate gets very hot**
Up to 450°F. Never reach under the press head. Keep children and pets away.

**220V, well grounded — electrician only**
Grounded 220V, 60 Hz, 10 A. Ground must be under 4 ohms. No extension cords.

**Parts move by themselves**
The table, film and heat plate move on their own. Keep hands, hair and sleeves clear.

**Indoors, dry, airy room**
Level, solid floor. 41–104°F room. Away from water, dust and anything that can burn.

**Emergency?** Press the red **EMERGENCY STOP** button on the press head. The heat plate lifts, the film goes to its highest position, and pressing stops. Then turn off the power.

## 1 Unbox



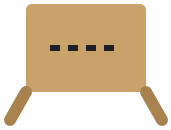
**1. Check the shipment before you sign**

It comes by freight truck. If anything looks damaged, write it on the delivery paper.



**2. Move it with a forklift or pallet jack**

It is heavy and tall. Never lift it by the rollers, doors or press head.



**3. Unpack it where it will be used**

Remove all packing material and straps.



**4. Keep all packaging**

You will need it if the machine ever has to come back for service.

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## 2 Set up




**1. Roll it onto a level, solid floor**

Leave room around it to load film and reach the doors.



**2. Have an electrician install a 220V outlet, then plug in**

Grounded 220V, 60 Hz, 10 A. Ground under 4 ohms. A regular 110V wall outlet will not work.



**3. Connect the air hose**

From your air compressor to the air regulator under the table. Slide the green part to turn the air on.



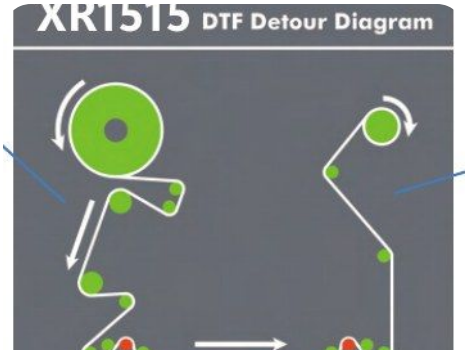
### 4. Plug in the foot switch

Put the orange foot switch on the floor where your foot can reach it. Its cable plugs into the socket underneath the machine. Push it in all the way. Check: power cord, air hose and foot switch — 3 connections.




### 5. Turn on, then press and release E-STOP

Press the blue POWER button. Then press the EMERGENCY STOP in and release it. Do this every time you turn it on.




### 6. Load the DTF film

New roll on the left shaft (unwind), empty core on the right shaft (rewind). Thread the film over every roller exactly as the routing diagram shows, through the web guide sensor and past the color mark sensor. Tighten both shafts.



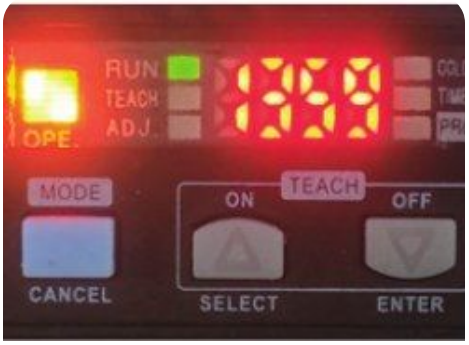
### 7. Set the film tension

Use the tension knob on the side cabinet. Snug, not too tight.



### 8. Center the web guide

On the web guide box: press MANUAL, then CENT. Move the sensor until the display reads 0. Press AUTO.



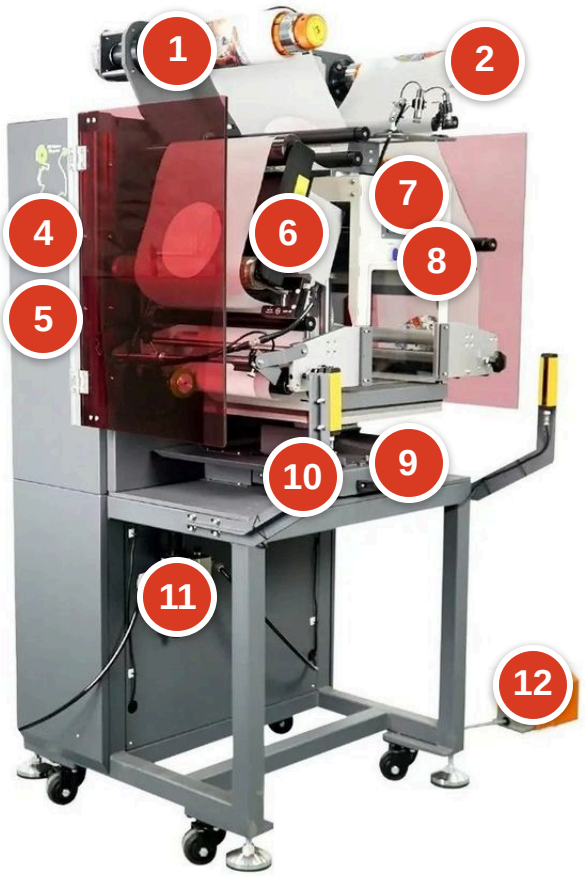

### 9. Teach the color mark sensor

Aim the light at the longest part of the design. Press MODE for TEACH. Light on the mark → ON. Light on the background → OFF.

Your design plus the gaps on each side must be wider than the heat plate. Design width must be under 15″ (38 cm).

If the screen asks for a password when you turn it on, call us.

## 3 Know your machine




**1 Unwind shaft (new film)**
Holds the new DTF roll. Tightens to grip it.

**2 Rewind shaft (used film)**
Rolls up the used film.

**3 Laser**
Helps you place the garment.

**4 Web guide controller**
Keeps the film lined up.

**5 Tension knob**
Sets how tight the used film rolls up.

**6 Servo web guide**
Fine-tunes the film position over the plate.

**7 Touchscreen**
Temperature, times and film settings.

**8 EMERGENCY STOP**
The blue POWER button is just to its left.

**9 Worktable**
Lay the garment here. It slides in and out by itself.

**10 Green start buttons**
One each side. Press both together.

**11** **Air regulator and gauge**
Sets and shows air pressure. Green slide = air on / off. Clockwise ↻ = more pressure, counter-clockwise ↺ = less. If the knob won't turn, pull it up first; push it down to lock. Turn a little at a time and watch the gauge.

**12** **Foot switch**
Tap lightly to start, instead of the buttons.

**13** **Color mark sensor and encoder wheel**
Find each design and measure how far the film moved.

## 4 Touchscreen




**1** **T (Test)**
Film test mode. The plate does not heat-press.

**2** **R (Reset)**
Zeroes the film position. Press after every new roll.

3 **PV / SV**
PV = temperature now. SV = temperature you set (tap to type).

4 **Counter**
Presses done. Hold 5 sec to clear.

5 **T1 / T2**
First and second press time. T2 = 0 means one press only.

6 **Delay Time**
How long before the film lifts.

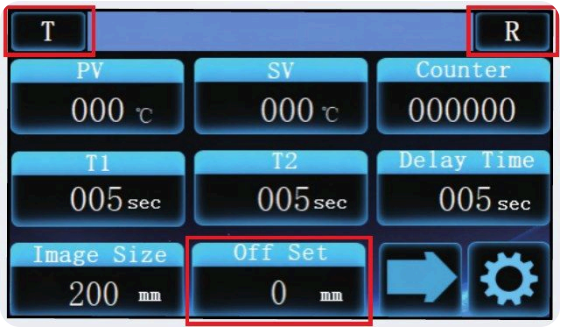
7 **Image Size**
Length of one design, in mm.

8 **Off Set**
Moves the design left (–) or right (+), in mm, as you face the machine.

9 **→ (arrow)**
Moves the film 2 mm per tap. Hold 2 sec to keep feeding.

10 **⚙ (gear)**
Settings: °C / °F, move parts by hand, speed.

## Line up the film (do this after every new roll)




### 1. Tap R

Zeroes the film position.

### 2. Tap T

Test mode. The plate will not press.

### 3. Press the start buttons or foot switch

The film moves and stops with the design at the plate center.

### 4. Check and fix with Off Set

Off center? Change Off Set. Press again to check the next design.

### 5. Tap T again

Back to normal pressing.

Design size changed? Update Image Size, teach the color mark sensor again, and redo the steps above.

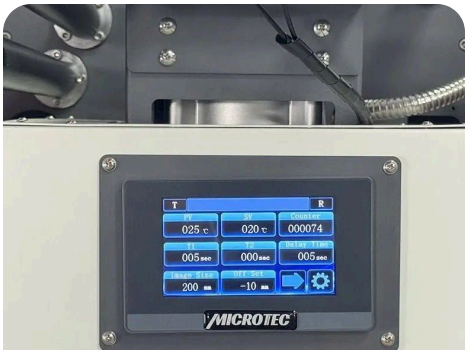
In the ⚙ screen, change only °C / °F unless we ask you to. Plate, film and table moves must go in order — if nothing happens, call us.

**Quick reference**

| I WANT TO… | DO THIS |
|---|---|
| Change the temperature | Tap **SV** → type |
| Change press time | Tap **T1** (and **T2**) → type |
| Press only once | Set **T2** to 0 |
| Loaded a new roll | Tap **R** |
| Feed the film a little | Tap **→** (hold 2 sec to keep going) |
| Clear the counter | Hold **Counter** 5 sec |
| Switch °C / °F | **⚙** → **°C** or **°F** → **Back** |

Ranges: temperature 0–450°F · press time 0–999 sec.

# 5 Your first press



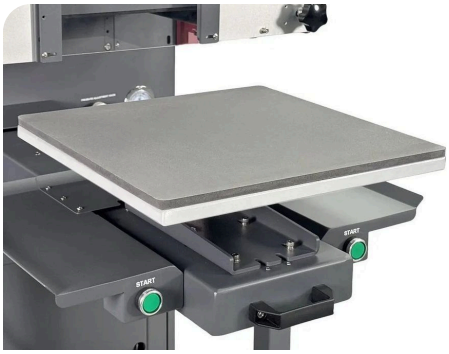

**1. Set temperature, T1, T2 and Image Size**

Use your transfer supplier's settings. Wait for PV to reach SV.



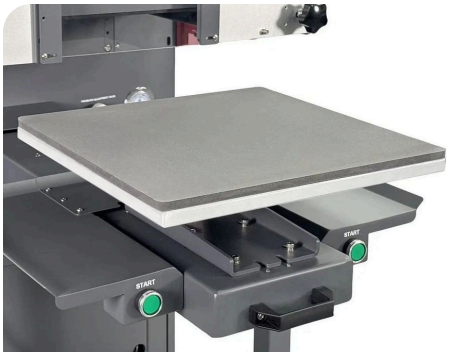

**2. Make sure the film is lined up**

New roll? Do R and T first (see Touchscreen).



**3. Lay the garment flat on the worktable**

Use the laser to place it.



**4. Press both green buttons together**

Or tap the foot switch. The table slides in and presses.




**5. The table comes back out by itself**

Take the garment off. Load the next one and repeat.

## 6 If something is wrong

### Won't turn on

1. Check the 220V power to the machine.
2. The breaker inside the electrical cabinet may have tripped. Call us before resetting it.
3. Check the POWER button.

### Used film won't roll up

1. Lower the tension a little.
2. Turn the power off and on again.

### Can't find the design / film keeps running

1. Teach the color mark sensor again.
2. Lower the film speed.
3. Tap R to reset.

### Won't start

1. Message on screen? Press and release EMERGENCY STOP to reset.
2. Foot switch not working? Try the two green buttons.
3. Check the speed setting is not 0.
4. Check the air is on and the pressure is normal.

### Alarm message on the screen

1. Press and release EMERGENCY STOP to clear it.
2. Comes back? Write down the message and call us.

## Specifications

| | XR1515 |
|---|---|
| **Plate size** | 14.9″ × 14.9″ |
| **Max design width** | under 15″ (38 cm) |
| **Power** | 220V · 2200W · 10A · 60Hz |
| **Temperature** | 0–450°F |
| **Timer** | 0–999 s |
| **Controller** | PLC touchscreen (XD3-32T-E + SK-043QE) |

### Still stuck? Call us.

Phone

# (714) 261-9498

Mon–Fri · 7:30 am – 5:00 pm Pacific

Email

## sales@microtecusa.com

Free lifetime tech support

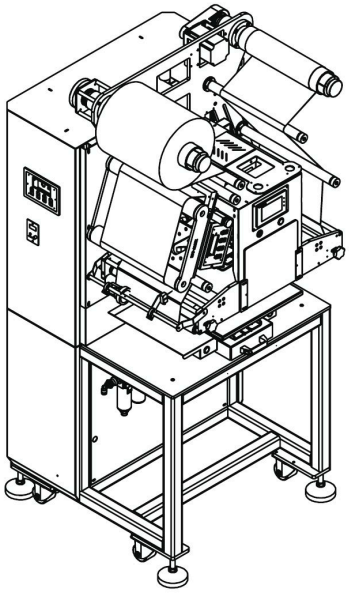
# Dimensions & diagrams

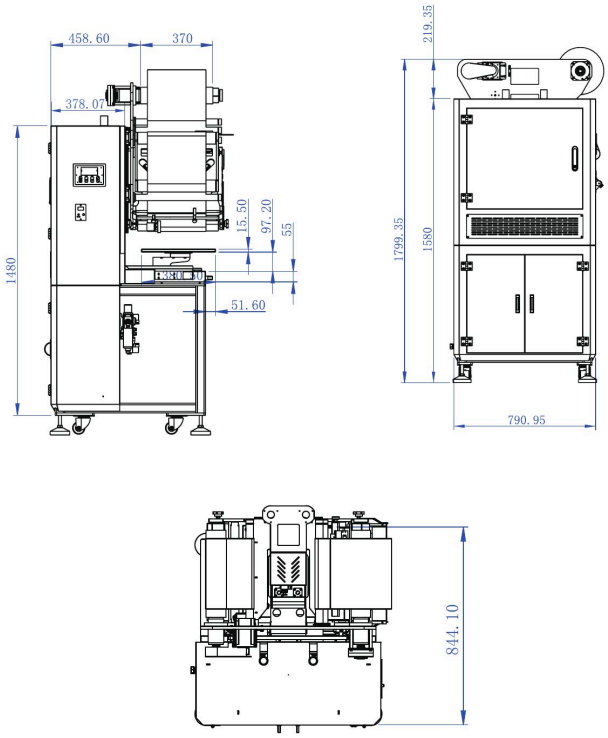
For service technicians. **Unplug the machine** and **disconnect the air** before opening any cover.

## Dimensions (mm)

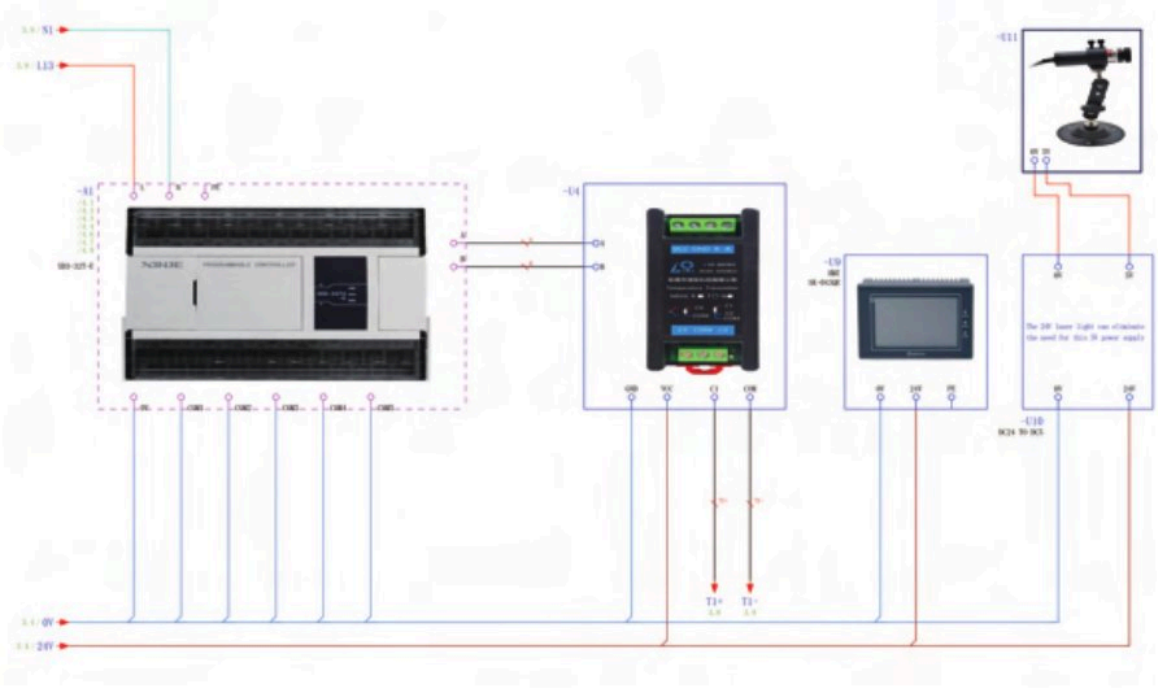
**2.6 Equipment Dimensions**

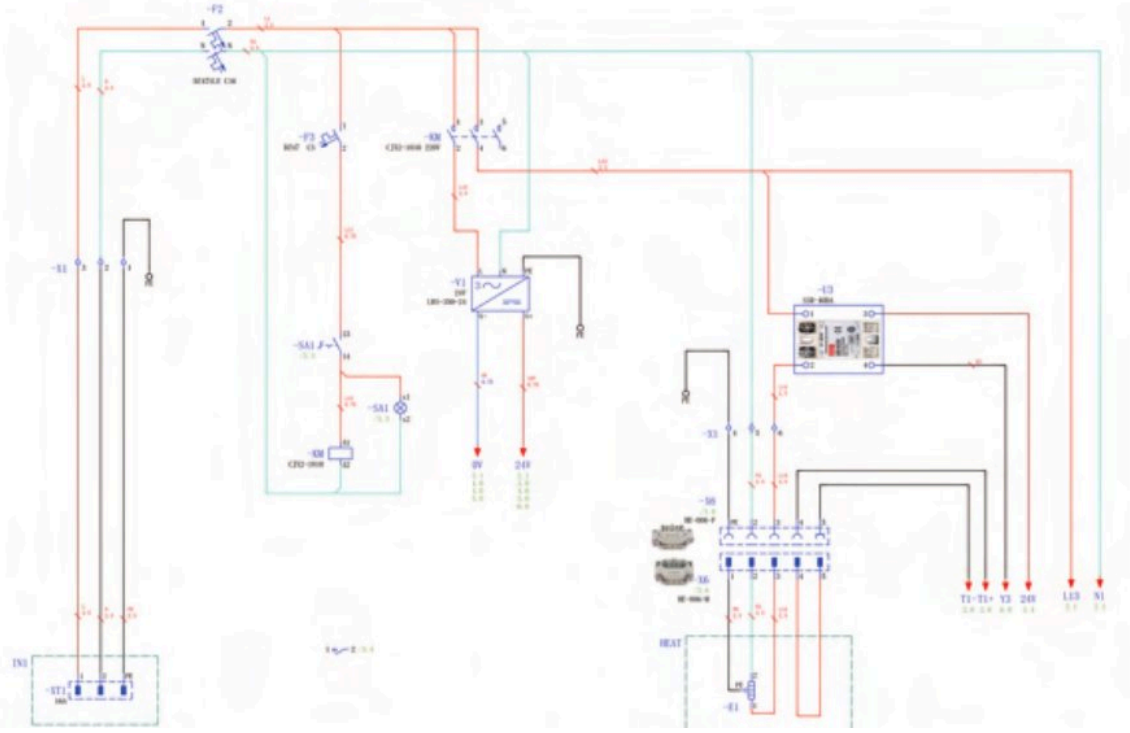
(Refer to the technical drawings in your original document for specific measurements.)

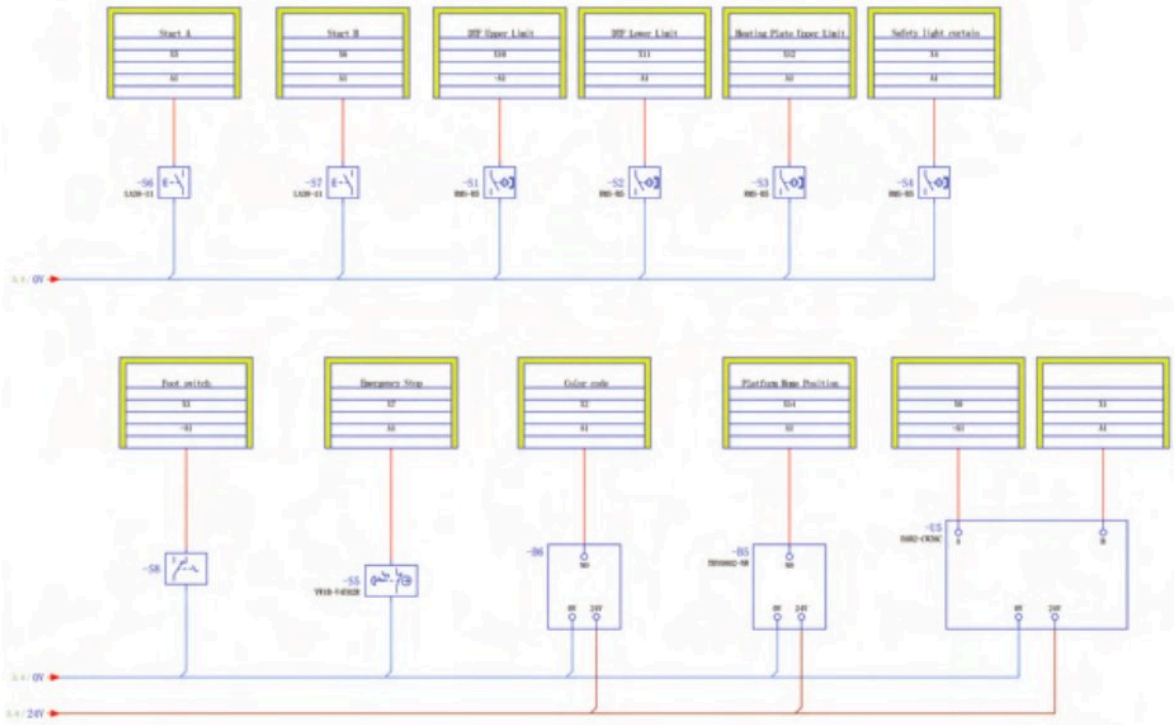


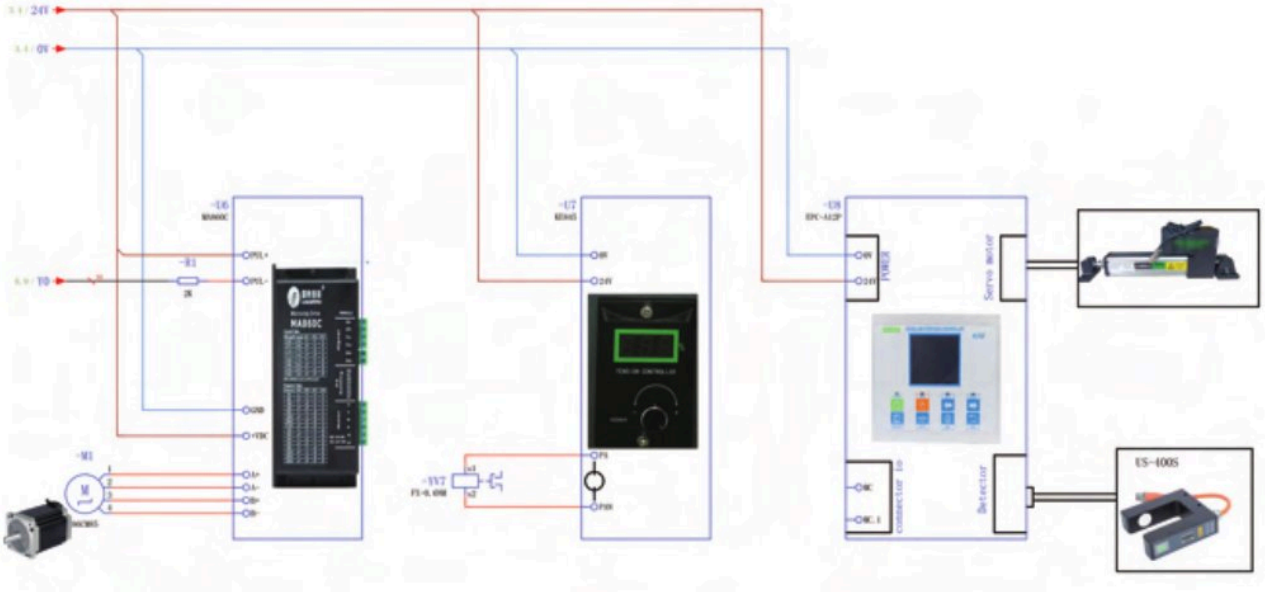


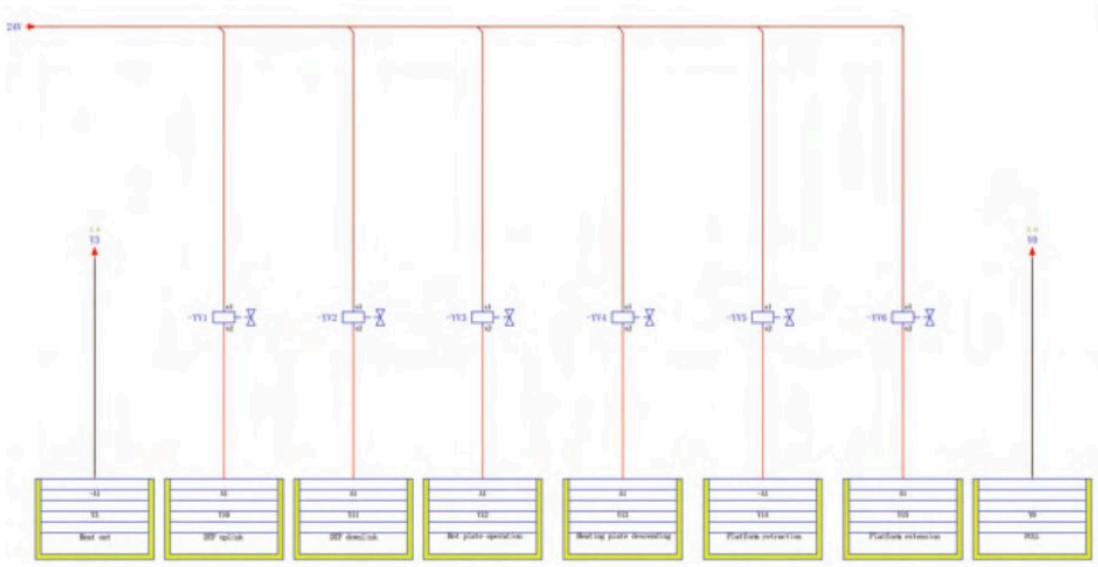
# Wiring diagram

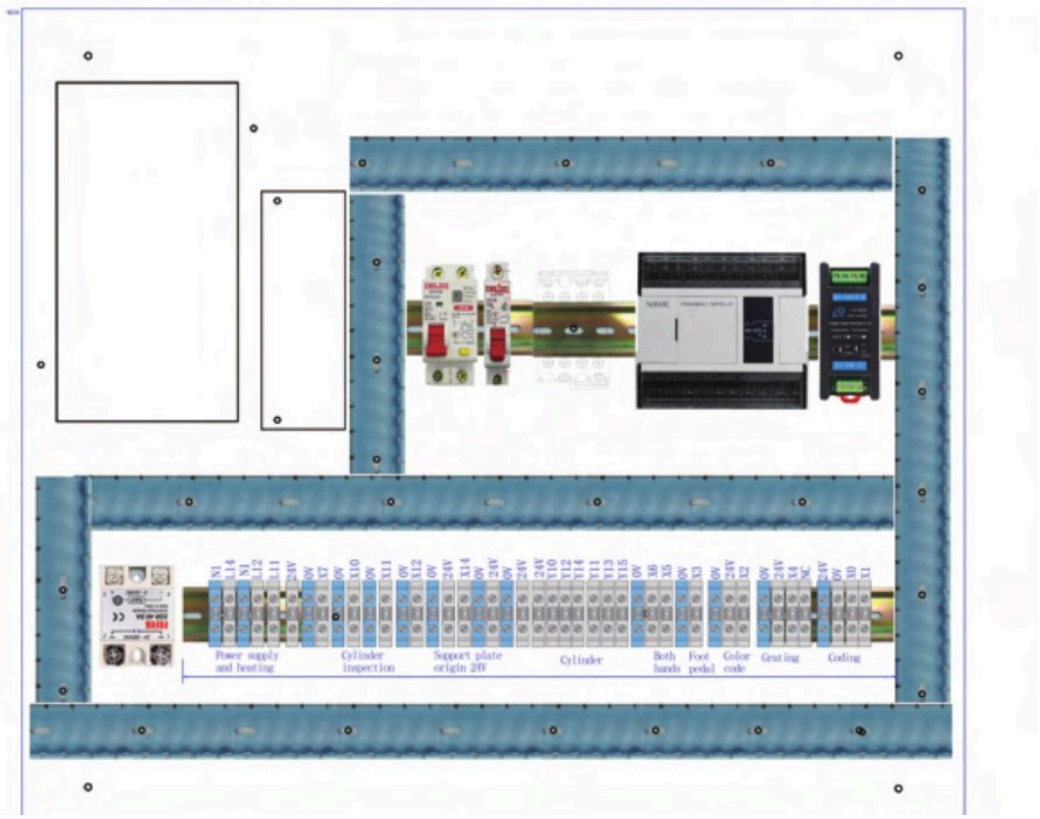




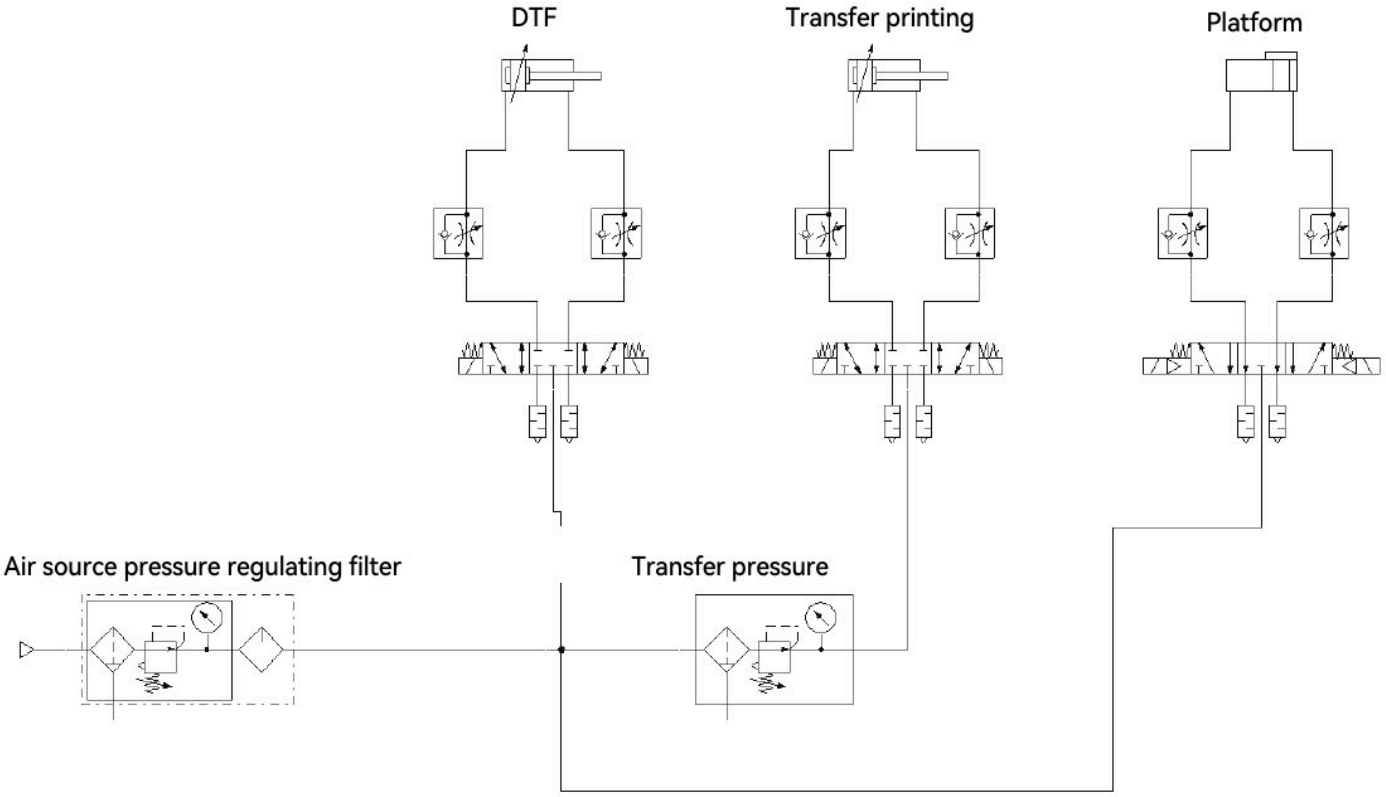

Start A
Start B
PP Upper Limit
PP Lower Limit
Heating Plate Upper Limit
Safety light curtain
Foot switch
Emergency Stop
Color code
Platform Home Position
0V
24V


24V
0V
TO
2K
MA860C
Servo motor
Detector
connector to
US-400S




Power supply and heating
Cylinder inspection
Support plate origin 2#
Cylinder
Both hands
Foot pedal
Color code
Grating
Coding

# Air diagram


DTF
Transfer printing
Platform
Air source pressure regulating filter
Transfer pressure