MICROTEC

APEX QUICK GUIDE

XC-25 XC-37

APEX XC-25 / XC-37 Fully Automatic DTF Film Cutter

One picture per step. Scan the QR code to watch the machine in our video.

Watch the video



! Safety first

Sharp blades inside

The cross cutter and the slitter knives are very sharp. Never reach under the cutters or near the rollers while the machine is on. Fingers can be pulled in between the rollers.

Clearing a jam? Stop the machine first

Press the red EMERGENCY STOP button before you touch the film, the blades or the rollers.

Safety light curtain

If something breaks the light beam while the cross cutter runs, the machine stops. It is a backup — still keep your hands out.

Electrician only — grounded power

220V, 60 Hz. Ground: less than 4 ohms, ground wire thicker than 4 mm², no longer than 65 ft (20 m).

Indoors, dry, level floor

32–104°F, humidity below 80%. Away from water, heavy dust and anything that can burn.

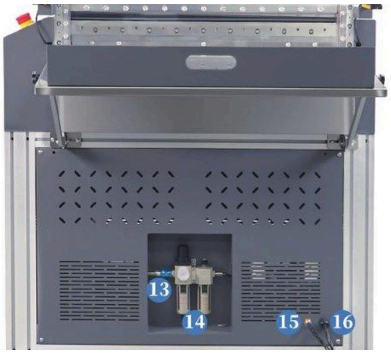
Emergency? Press the red **EMERGENCY STOP** button on the control panel. The machine stops at once. When it is safe: twist the button to release it, then press and hold the message at the top of the screen to clear it.

1 Set up



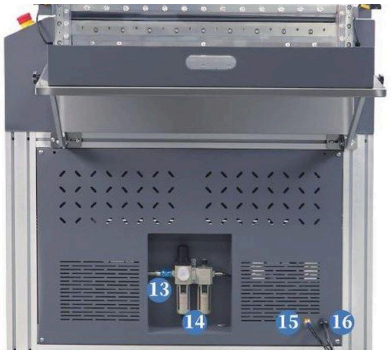
1. Pick a level, open floor area

The film roll goes on the back stand, cut sheets come out at the far side. Leave walking room all the way around.



2. Have an electrician connect the power cord (16)

The power cord (16) is at the back, at the bottom. It needs 220V, 60 Hz and a good ground. Only an electrician should wire it.



3. Connect clean, dry compressed air (15)

Connect your compressor hose to the air inlet (15). Open the air slide valve (13). The filter-regulator (14) cleans the air and sets the pressure.

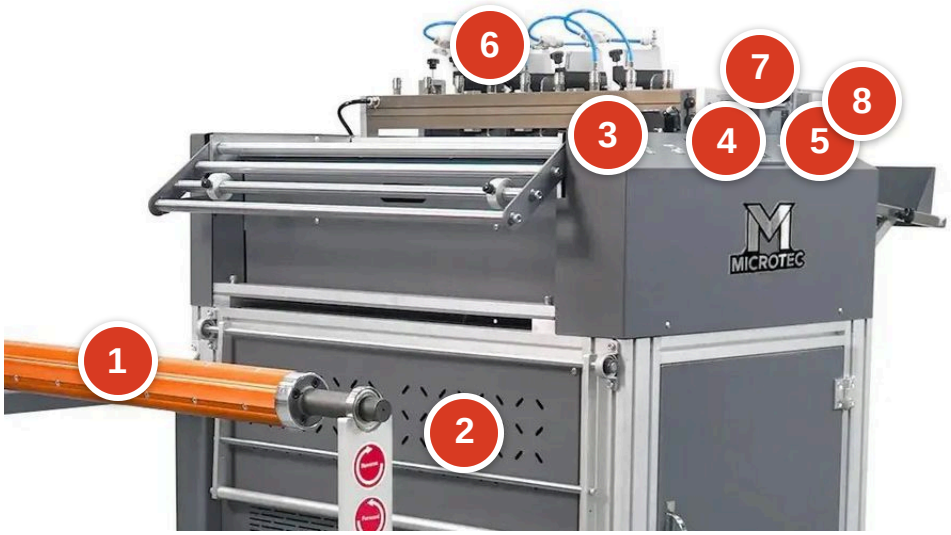


4. Turn on the power

Turn on the main breaker. Then flip the red **POWER** switch on the control panel. The main screen comes up.

Air supply: set it to **58 psi** (4 bar). Use a compressor that gives at least 4.2 CFM, with a 10-gallon tank or bigger.

2 Know your machine



1 Air shaft
Holds the film roll. Air makes it grip the roll core.

2 Feeding sensor
Sees when the film runs out. A message shows on the screen.

3 AIR SHAFT · H-CUT · START buttons
AIR SHAFT: tap to lock / unlock the roll. H-CUT: hold 2 sec (Manual mode) to run the cross cutter once. START: tap to start cutting.

4 Touch screen
Set length, quantity and speed.

5 POWER switch · EMERGENCY STOP
Red power switch, and the big red stop button.

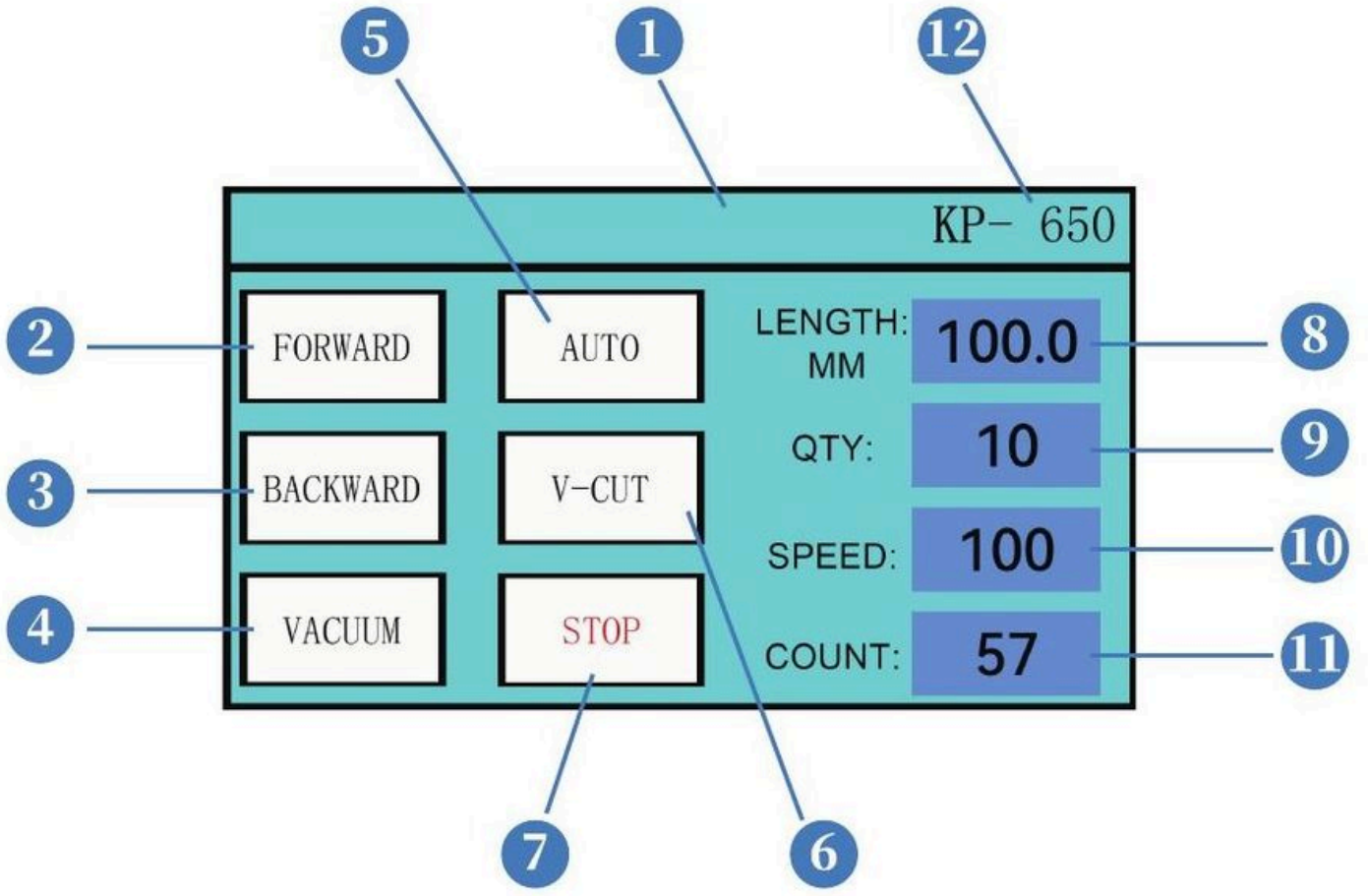
6 Slitter knives (vertical cutters)
Cut the film lengthwise. Each has an ON/OFF switch. Loosen the black thumb screw to slide it.

7 Guide shaft handle
Lift up to open the pinch rollers. Push forward to close them.

8 Safety light curtain
Stops the machine if the beam is blocked while the cross cutter runs.

On the back (bottom): air slide valve, air filter-regulator, air inlet and power cord. **Color mark sensor:** near the cutters — it reads the printed marks so each cut lands in the right place.

3 Touch screen



1 Message area
Shows alarms. When fixed, hold here to clear the message.

2 FORWARD
Manual mode: tap to feed the film forward.

3 BACKWARD
Manual mode: tap to pull the film back.

4 VACUUM
Turns the vacuum table ON / OFF.

5 AUTO / MANUAL
Hold to switch between Auto and Manual.

6 V-CUT
Slitter knives. Turns on by itself when cutting. Hold STOP to turn it off.

7 **STOP**
Hold to stop the job and turn off the slitters.

8 **LENGTH**
Sheet length for fixed-length cutting (mm or inch).

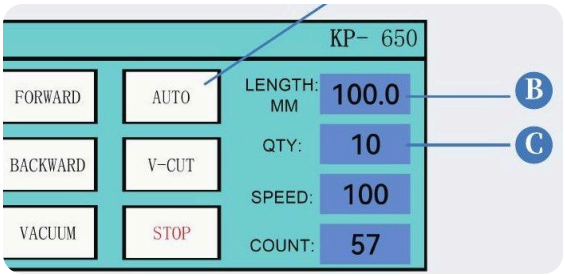
9 **QTY**
How many sheets to cut in this batch.

10 **SPEED**
Feeding speed. Film stretches? Set it below 100.

11 **COUNT**
Adds 1 each cut in Auto. Hold to reset to 0.

12 **Settings (top bar)**
Hold to open the settings page: jog distance, jog speed, buffer distance, mm / inch.

Cutting modes and the color mark sensor



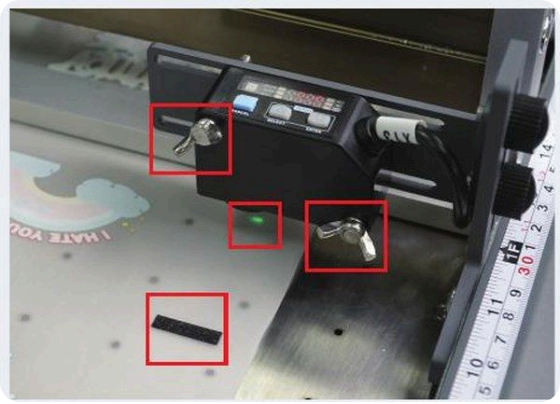
1. Fixed length: set up

For film **without** printed marks. Hold AUTO until it shows **MANUAL**. Enter **LENGTH** and **QTY**.



2. Fixed length: press START

Press the START button. It cuts and stops by itself when the quantity is done.



3. Color mark: line up the sensor

For DTF film printed with marks. Loosen the thumb screws, slide the sensor until its green dot sits on the line of printed marks, then tighten.



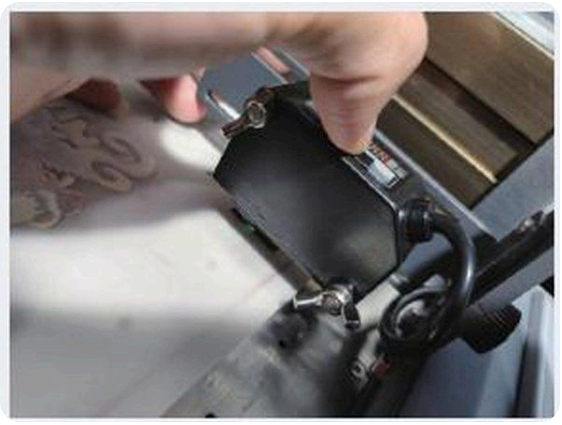
4. Color mark: press START

The screen shows **AUTO**. Press **START**. It cuts at each mark and stops when done.



5. Sensor misses marks? Re-teach it (1)

Switch the screen to **Manual**. On the sensor, press **MODE** and choose **TEACH**.



6. Re-teach (2): on a mark

Tap **FORWARD** / **BACKWARD** until a mark is under the green light. Press **SELECT** on the sensor.



7. Re-teach (3): on blank film

Move the film so the green light is on blank film. Press **ENTER** on the sensor. It shows **GOOD** when done.



8. Re-teach (4): check

Move the film by hand. The orange light should be OFF on blank film and ON over a mark.

⚠ Before switching to **Auto**, hold the **H-CUT** button once to clear the old data. If you skip this, the motor may run backward.

✓ The sensor is set at the factory. Re-teach it only if it misses marks, or when you change to a different mark color.

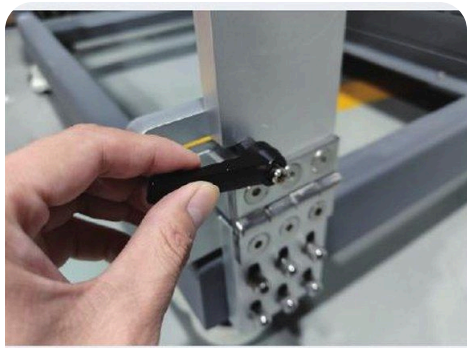
✓ **QTY starts over:** if you stop part-way (for example with the emergency stop), the next START runs the full quantity again.

Quick reference

I WANT TO…	DO THIS
Switch Auto / Manual	Hold **AUTO**
Move the film by hand	Manual mode: **FORWARD** / **BACKWARD**
Cut once by hand	Manual mode: hold **H-CUT** 2 sec
Stop the job	Hold **STOP**

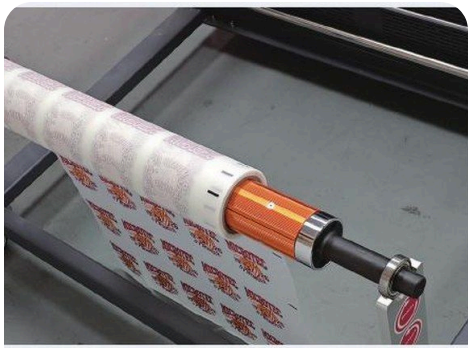
I WANT TO…	DO THIS
Clear a message	Hold the message at the top
Reset the counter	Hold **COUNT**
Change mm / inch	Hold the top bar → **MM** / **INCH** → **RETURN**

4 Load the film and cut



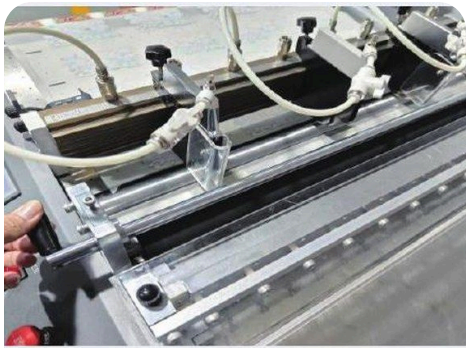
1. Open the air shaft bracket

Release the bracket lock and take off the support bracket.



2. Slide the film roll onto the air shaft

Put the bracket back and tighten the locking screw.



3. Raise the guide shaft

Flip the handle to the left. This opens the guide shaft between the slitters and the cross cutter.



4. Thread the film through

Follow the film path, under the raised guide shaft.



5. Line the film up straight

The film edges must run straight across the air shaft, the tension bars and the vacuum table.



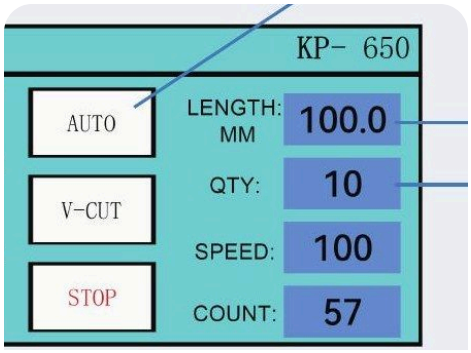
6. Press AIR SHAFT to lock the roll

The air shaft fills with air and grips the roll core.



7. Set the slitter knives

Slide each knife to where you want the lengthwise cut. Lock it with the thumb screw. Turn unused knives OFF.



8. Choose the mode and the amount

No marks on the film: Manual mode, set LENGTH and QTY. Film with marks: Auto mode (color mark). See Control panel.



9. Press START

Keep your hands away. It stops by itself when the batch is done.

⚠ Never reach into the cutter area while it is running. Press EMERGENCY STOP first.

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5 If something is wrong

⚠ Film ran out (message on screen)

1. Load a new roll.
2. Hold the message at the top of the screen to clear it.

⚠ Stopped by itself — light curtain

1. Remove whatever blocked the light beam.
2. Hold the message at the top of the screen to clear it.

Emergency stop message

1. Fix the problem first.
2. Twist the EMERGENCY STOP button to release it.
3. Hold the message at the top of the screen to clear it.

Motor runs backward in Auto

1. Hold STOP.
2. Switch to Manual, hold H-CUT once to clear the old data.
3. Switch back to Auto and press START.

Cuts miss the printed marks

1. Check the green dot sits on the line of marks.
2. Re-teach the sensor (see Control panel).
3. Fine-tune with Buffer Distance on the settings page.

Sheets are the wrong length or the film stretches

1. Lower SPEED to below 100.
2. Check LENGTH and the mm / inch setting.

Film runs crooked

1. Press EMERGENCY STOP.
2. Line the film up straight across the air shaft, tension bars and vacuum table.

Specifications

	XC-25	XC-37
Cut size	25″	37″
Power	220V · 2 kW · 9 A · 60 Hz	220V · 2 kW · 9 A · 60 Hz
Air supply	58 psi (4 bar) · 4.2 CFM	58 psi (4 bar) · 4.2 CFM
Controller	PLC (XD3-32T-E + TPC4023CD)	PLC (XD3-32T-E + TPC4023CD)
Size (length × width × height)	1654 × 1082 × 1175 mm	2048 × 1393 × 1161 mm
Net weight	649 lb	766 lb
Shipping size	64.1″ × 52.7″ × 55″	79.1″ × 63.3″ × 55.5″
Working room	32–104°F · <80% RH	32–104°F · <80% RH

Still stuck? Call us.

Phone

(714) 261-9498

Mon–Fri · 7:30 am – 5:00 pm Pacific

Email

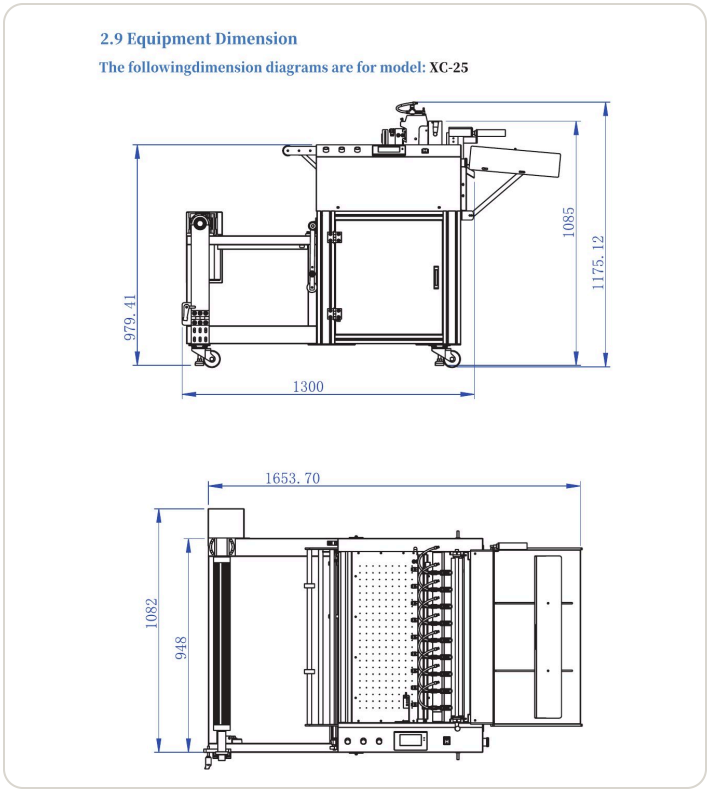
sales@microtecusa.com

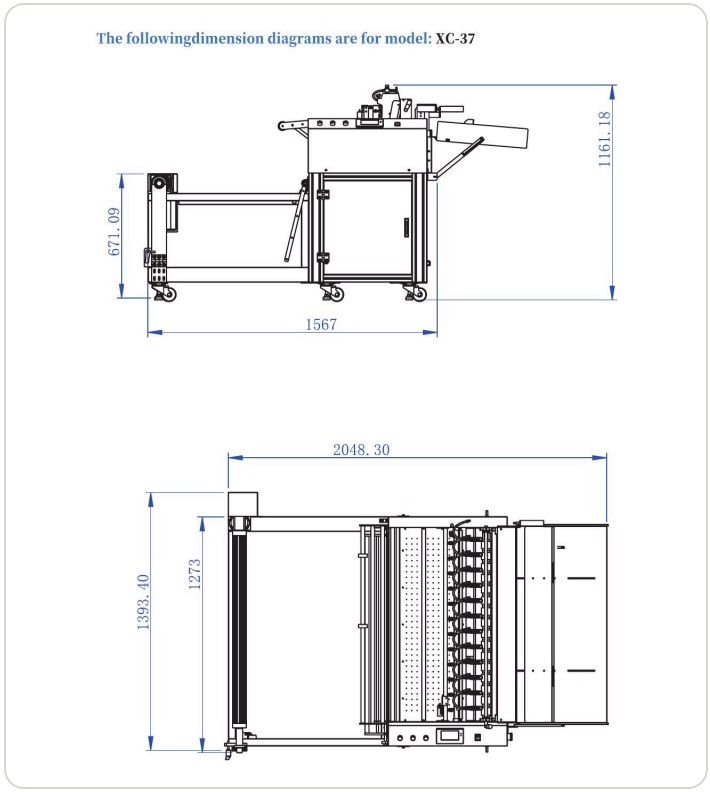
Free lifetime tech support

Dimensions & diagrams

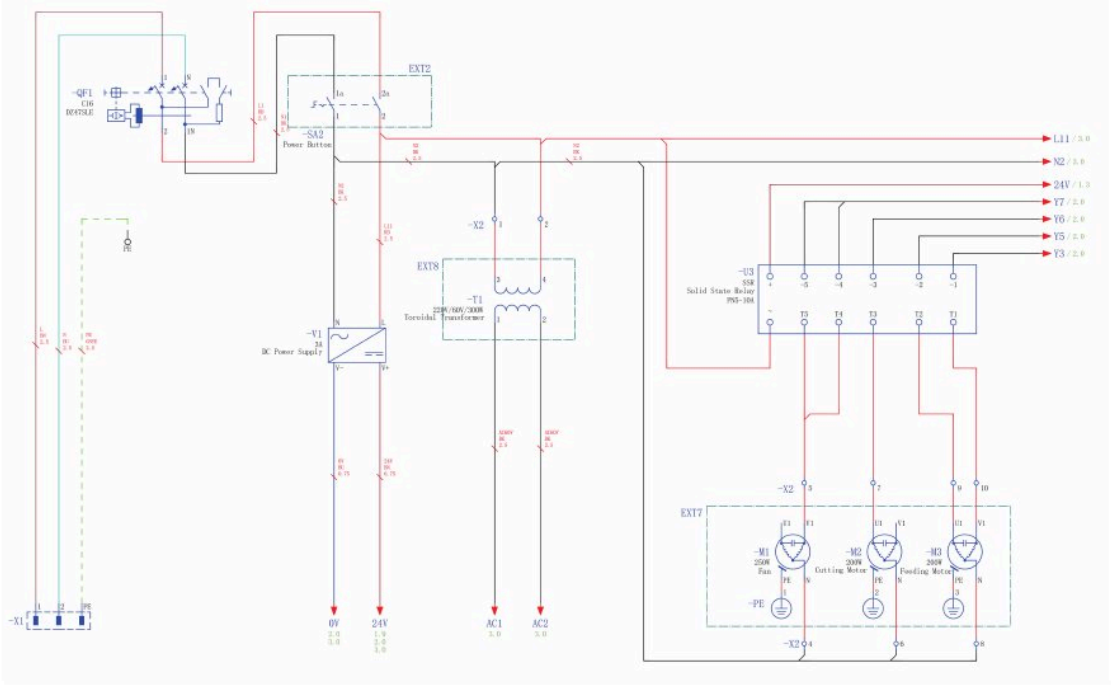
For service technicians. **Unplug the machine** and **disconnect the air** before opening any cover.

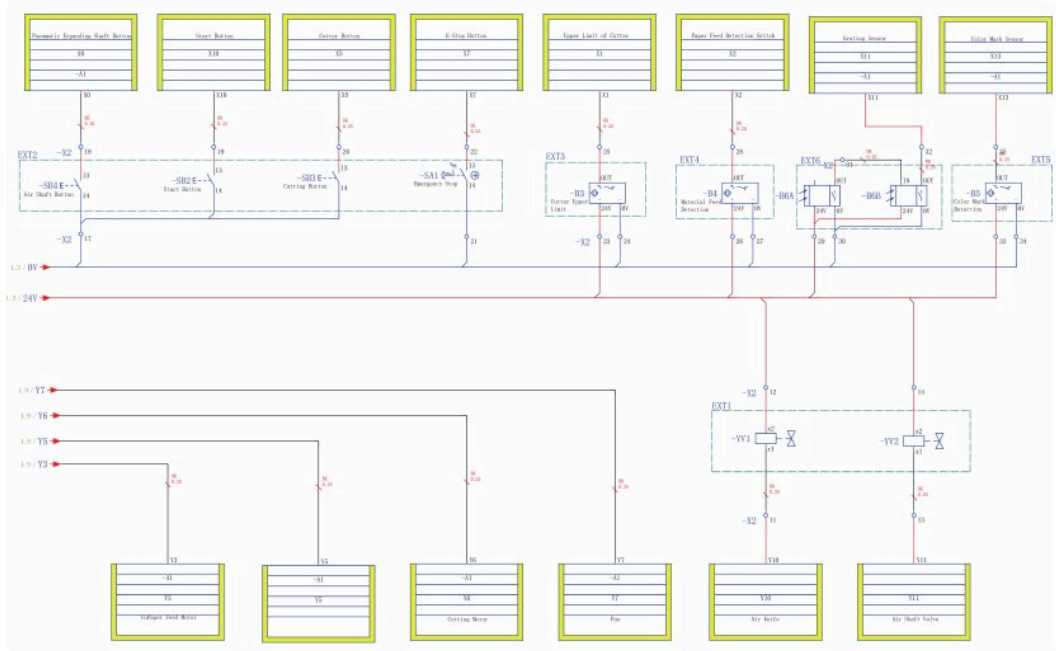
Dimensions (mm)

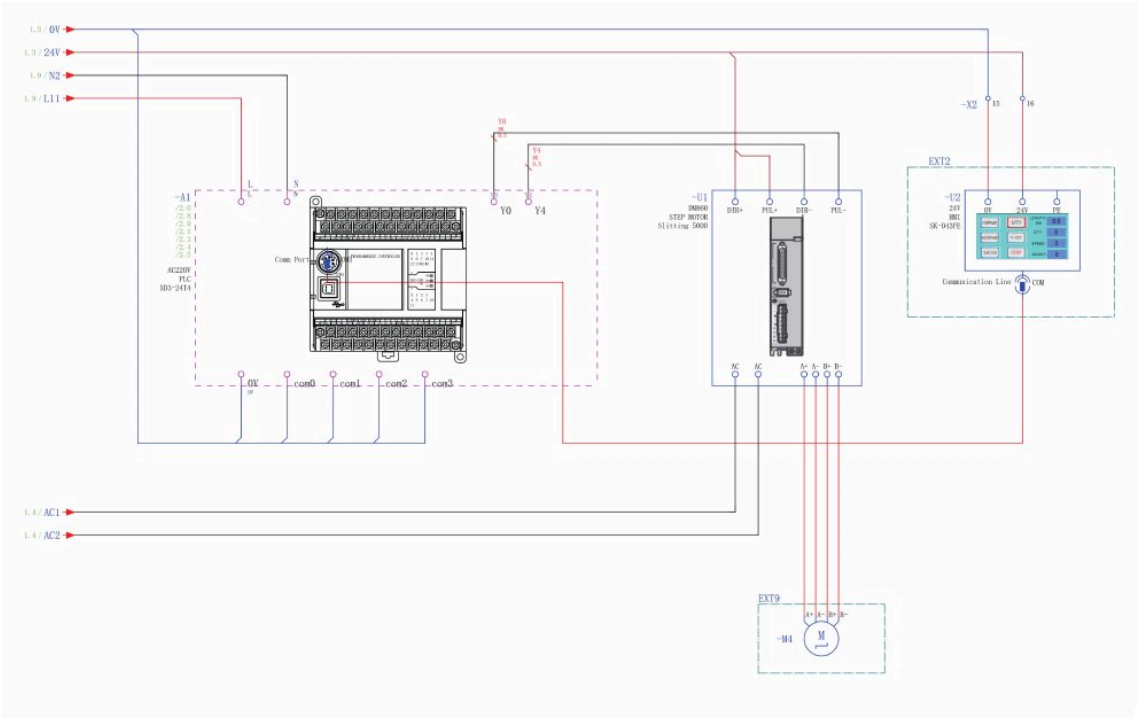


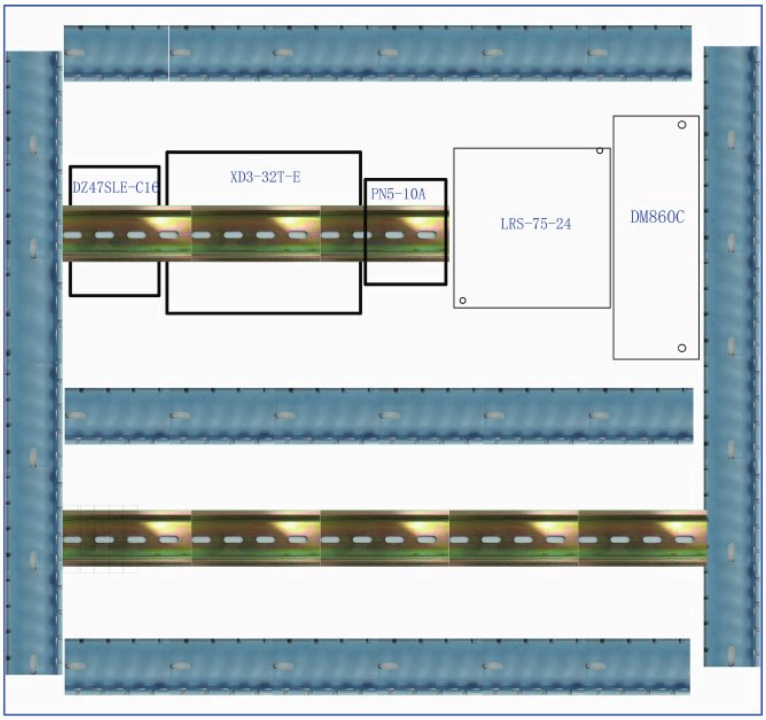


Wiring diagram

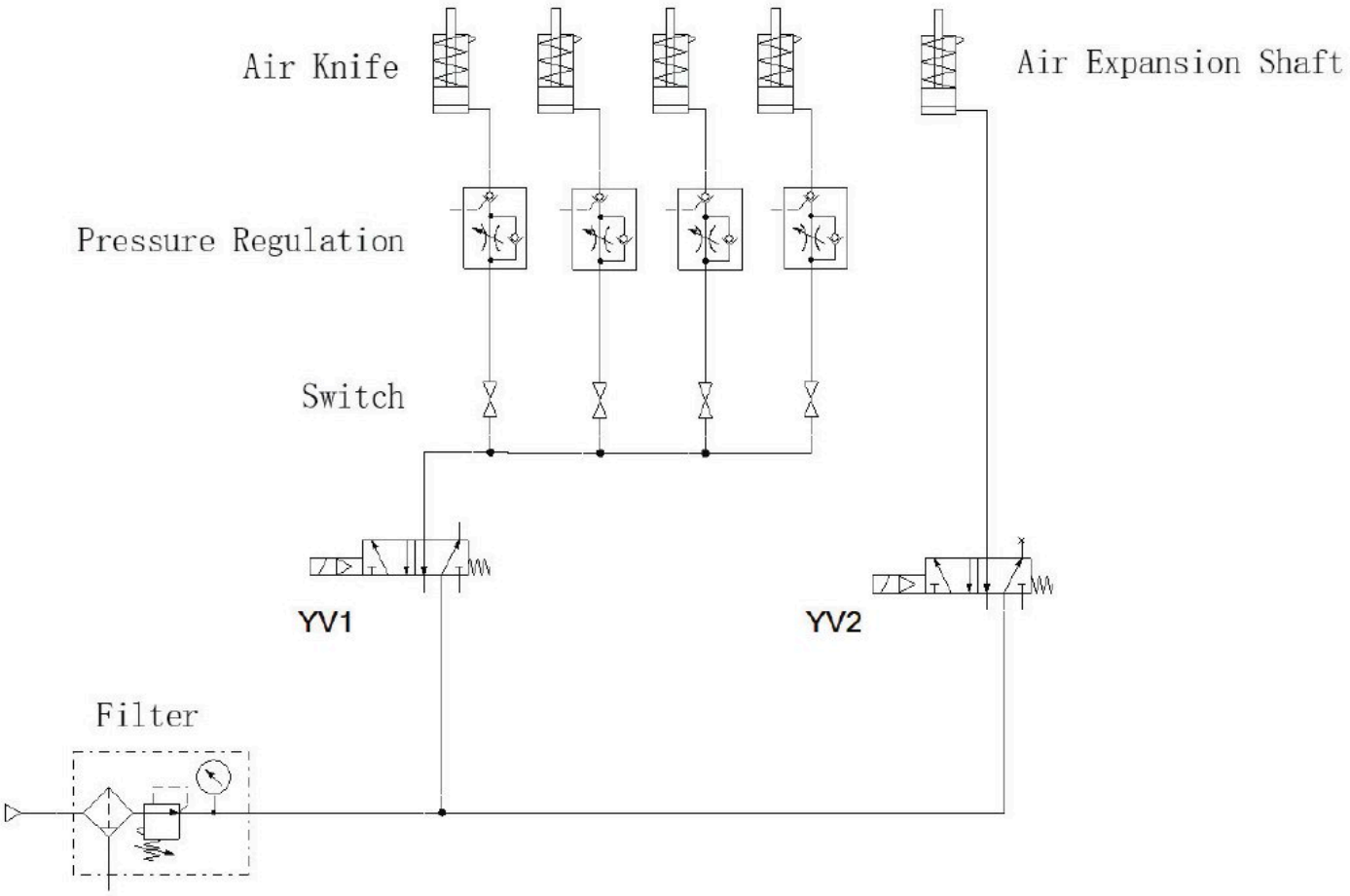





L3 / 0V
L3 / 24V
L9 / N2
L9 / L11
-A1
AC220V
PLC
XD3-24T4
L
N
Y0
Y4
COM
0V
con0
con1
con2
con3
-U1
DM860
STEP MOTOR
Slitting 5000
DIR+
PUL+
DIR-
PUL-
AC
AC
A+
A-
B+
B-
-X2
15
16
EXT2
-U2
24V
HMI
SK-043FE
Communication Line
COM
EXT9
-M4
M
L4 / AC1
L4 / AC2


DZ47SLE-C16
XD3-32T-E
PN5-10A
LRS-75-24
DM860C

Air diagram


Air Knife
Air Expansion Shaft
Pressure Regulation
Switch
YV1
YV2
Filter