RHX-C03 Automatic Capping Machine User Manual

Ver 7.0

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REHEART

WENLY REHEART INDUSTRIAL LIMITED

Contents

1 Product Introduction

The RHX-C03 Automatic Capping Machine consists of:

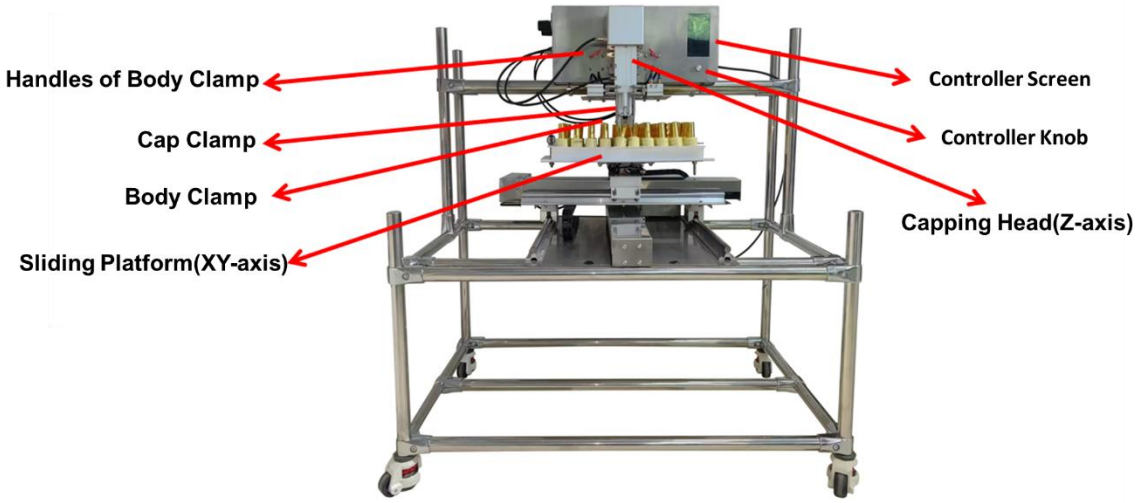
- X, Y, and Z-axis sliding platforms
- Bottle clamp (holds the bottle body)
- Cap clamp (holds the bottle cap)
- Bottle clamp lifting platform
- Control unit

The X and Y-axis sliding platforms have a large scale. This scale can weigh from 0 to 35 kilograms (about 77 pounds) and is accurate to 1 gram (0.035 ounces). The main job of this scale is to detect any bumps or crashes during the capping process.

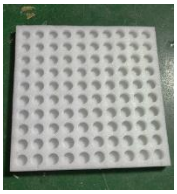
The cap clamp and the capping motor are both attached to the Z-axis sliding platform. The capping motor can sense how much force it's using. This means it can automatically feel when the cap is tight enough and stop turning.

The X, Y, Z, and capping motors can all detect crashes or bumps. They can do this both while they're working and when they're waiting to work. If there's a problem, a warning message will pop up on the control unit's screen.

The whole machine is controlled by a network of smaller control units spread throughout the machine. There are six computer control units in total. These units talk to each other using something called a CAN bus network. This setup makes the system simple and easy to fix if something goes wrong.



2 Packing Information

Item	Unit	Qty	Picture
Machine	pc	1	
1 kg calibration weight	pc	1	
Capping head finger rubber	set	5	
Positioning Cover(35mm)	pc	1	
Positioning Cover Pin	set	4	
Foam Tray	pc	100	
Lengthen Tube	pc	1	
Phillips Screwdriver	pc	l	

Flat Screwdriver	pc	1	
Nut Driver	pc	1	
Wrench 5.5mm/7mm	pc	1	
Wrench 8mm/10mm	pc	1	
Stainless Steel Ruler(60cm)	pc	1	
Hex key	set	1	

3 Quick Installation Guide

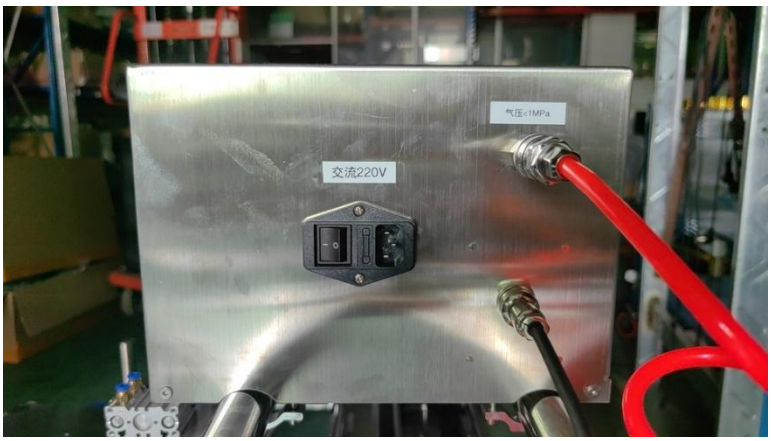
3.1 Connecting Power and Air Supply

The RHX-C03 uses both electricity and air pressure to work.

For electricity, you can use either:

- AC110V (100V to 130V) or
- AC220V (220V to 240V)

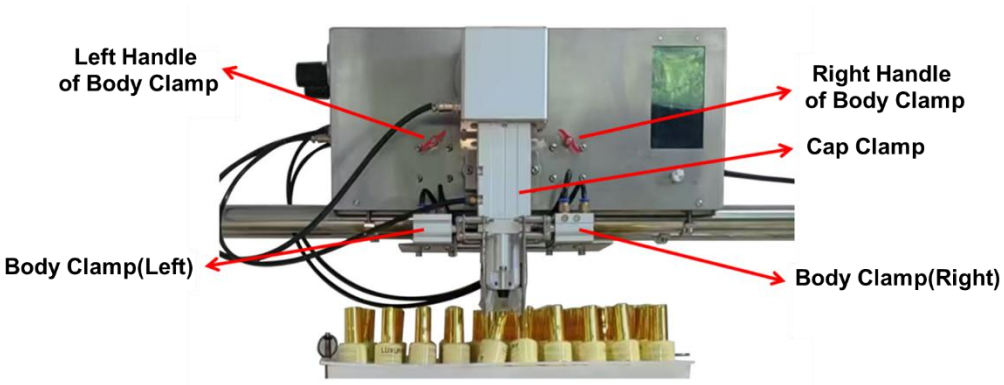
For air pressure, use no more than 1Mpa (about 145 psi).



3.2 Understanding the Clamps

The capping machine has two main clamps:

- Cap clamp
- Bottle clamp



3.2.1 The cap clamp

- Turns to screw on the cap
- Is powered by a special motor that can feel how tight the cap is
- Moves up and down with the Z-axis
- Uses air pressure to grip the cap

3.2.2 The bottle clamp

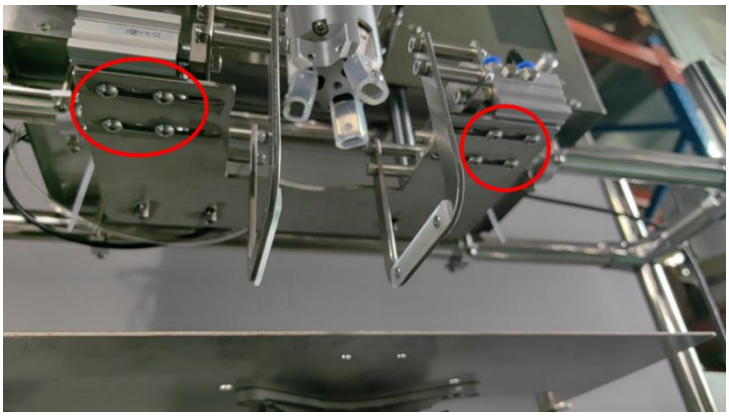
- Moves left and right to hold the bottle
- Is powered by air pressure
- Sits on a platform that can be raised or lowered by hand
- Can be adjusted for different bottle heights
- Has two handles to lock and release the platform

3.2.3 Setting Up the Cap Clamp

- You can easily change the cap clamp to fit different bottle types
- To change it, just remove two screws
- The turning motion is controlled by the special motor
- The gripping action is controlled by air pressure
- There are plugs for the motor cable and air supply
- Connect these plugs as shown on the machine's labels
- You can adjust the pressure for both cap and bottle clamps
- The pressure is set to 0.2Mpa (about 29 psi) at the factory

3.2.4 Setting Up the Bottle Clamp

- The left and right bottle clamps are held by four screws each
- You can remove these screws to take off the clamps
- You can also loosen these screws to slide the clamps left or right for different bottle sizes

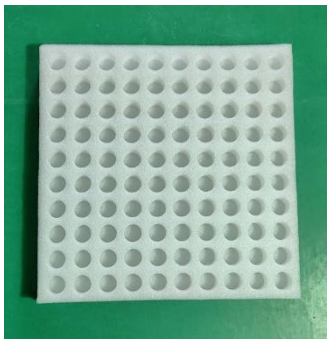


3.2.5 Adding Rubber Pads to the Clamps

- The cap clamp uses a tube-shaped rubber pad, held by one screw
- The bottle clamp uses a strip-shaped rubber pad, held by two screws

3.2.6 Setting Up for Multiple Bottles

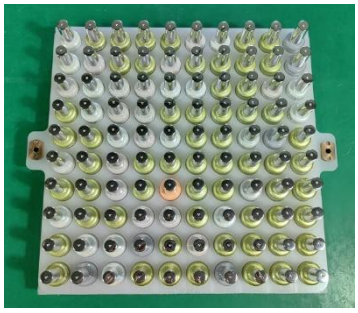
The machine comes ready to cap 100 nail polish bottles at once. It shows below. You can choose different trays and pins for different bottle types.

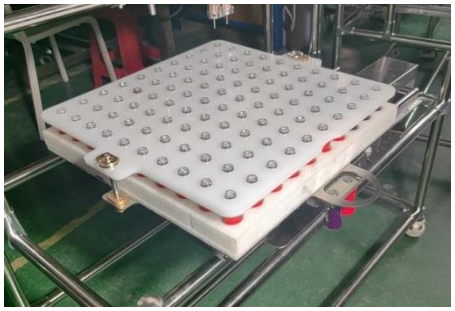


Foam Tray

Positioning Cover

Positioning Pins





After assembly

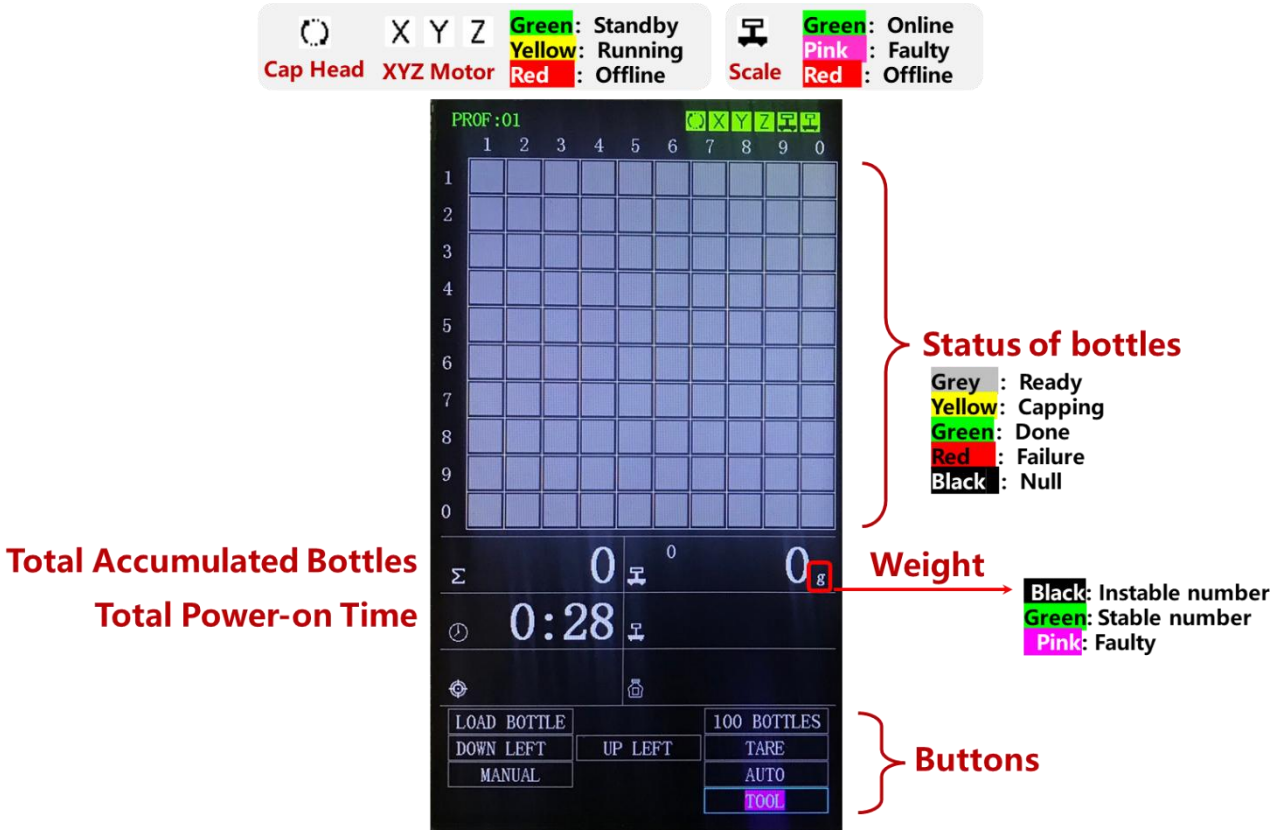
4 Controller Menu Introduction

4.1 Understanding the Control Knob

Below the screen, there's a round control knob. You can use it in these ways:

- Click: Press and release quickly (like a left mouse click)
- Long press: Press for 2 seconds before releasing
- Turn left: Rotate to the left (like moving a mouse up or left)
- Turn right: Rotate to the right (like moving a mouse down or right)

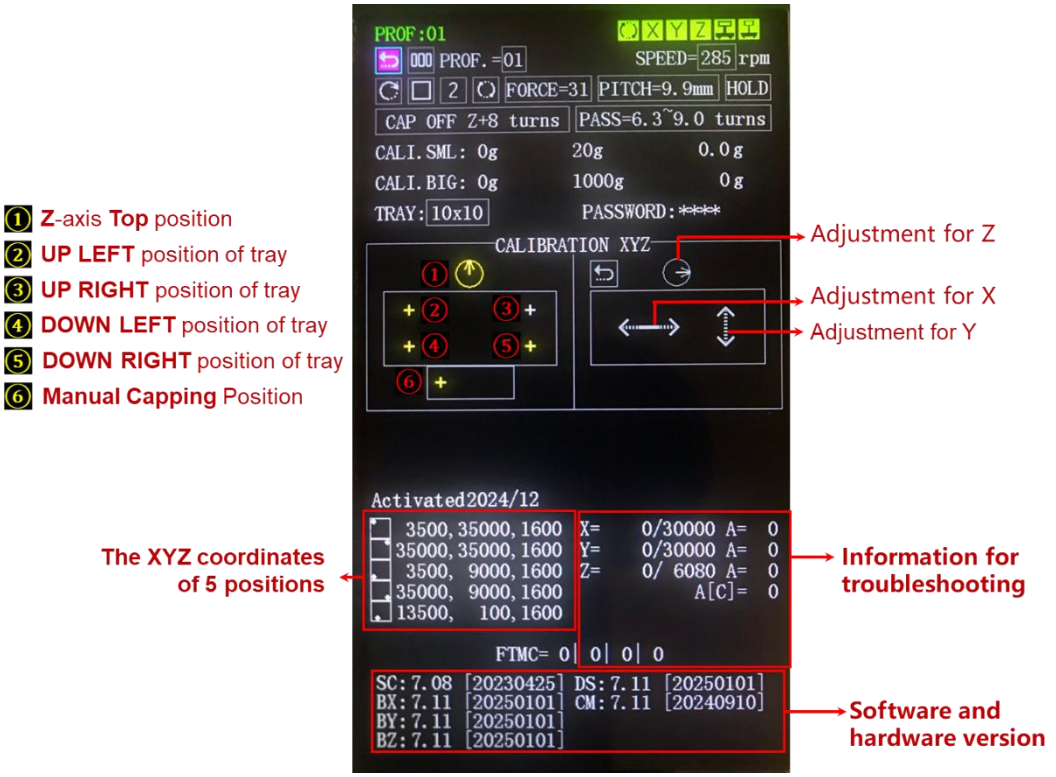
4.2 Home Screen

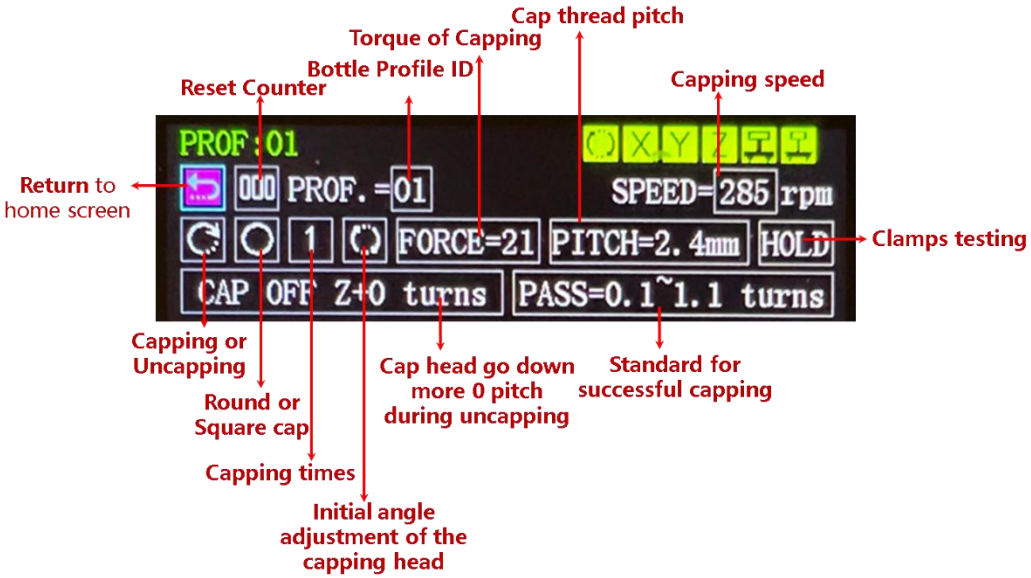


4.3 Home menu buttons

Button	What it does
LOAD BOTTLE	Click this to move the platform to the **Load Bottle** position. You can then put on or take off the tray of bottles.
XX BOTTLES	If you're not using a full tray, click this. The background turns yellow. Then turn the knob right or left to increase or decrease the number of bottles. Click again to confirm.
DOWN LEFT	Click to move the platform to the **Down Left** position.
UP LEFT	Click to move the platform to the **UP LEFT** position.
TARE	Click to reset the scale to zero
MANUAL	Click to start manual capping. You can't do manual capping in other positions.
AUTO	Click once: The background turns yellow. You have two choices: 1. Click again to start automatic capping 2. Turn left or right: The background turns pink. You can then turn to other buttons.
STOP	When auto-capping starts, the "Auto" button becomes "Stop". Click to stop capping
TOOL	Click and the background turns yellow. Enter a 4-digit password (by turning and clicking) to access the toolbox. The default passcode is 0000.

4.4 Toolbox Menu





4.5 Toolbox Buttons

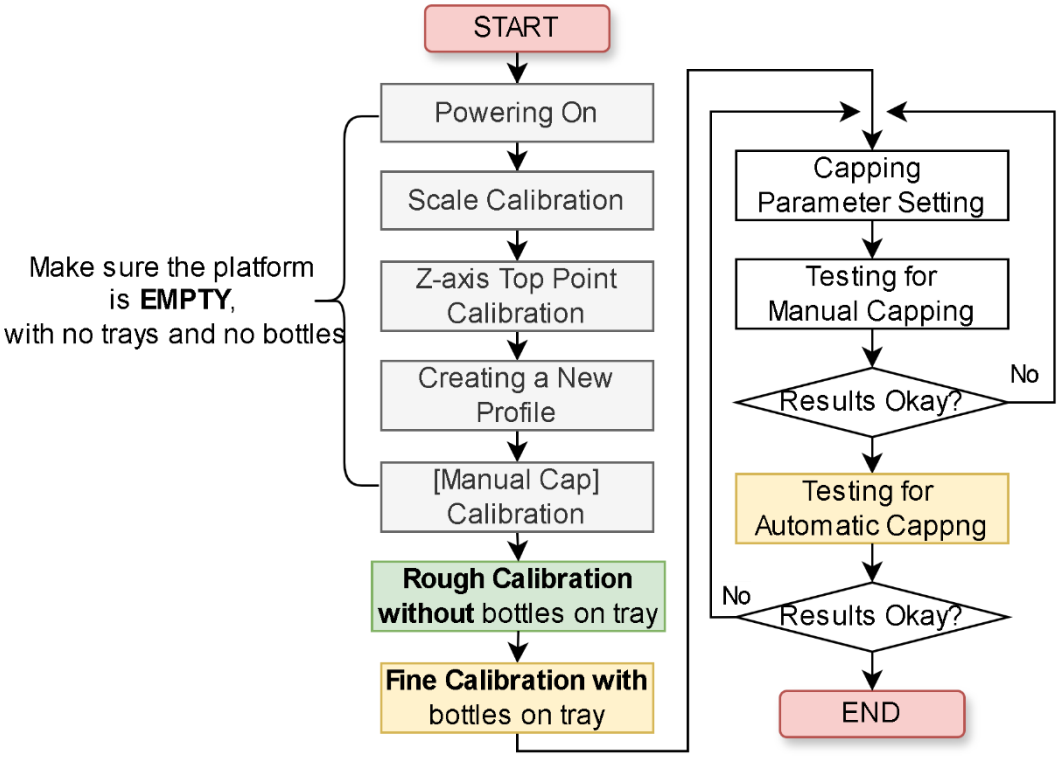
Button	What it does
	**Return** Click to go back to the home screen
	**Reset Counter** Click: The background turns yellow. Turn the knob: Exit without resetting. Click again: Reset the counter. This sets both the power-on time and total bottle count to zero.
PROF.	**Bottle Profile (**1-50) Click: The background turns yellow. Turn the knob: Switch between bottle profile. Click again: Confirm and exit. You can set up to 50 different bottle profiles for different sizes of bottles.
SPEED	**Capping Speed** (1-555 rpm). Click: The background turns yellow. Turn the knob: Change the speed. Click again: Confirm and exit. The maximum speed is 555 rpm.
	**Switch between capping and uncapping.**  means capping  means uncapping
	**Cap Shape**  for round caps  for square caps
1 2	**Capping Times** 1 : Cap once (for caps without brushes) 2 : Cap twice (for caps with brushes)
	Adjust the **initial angle of the capping head** (for square caps) Click: The background turns yellow. Turn the knob: Change the angle. Click again: Confirm and exit
FORCE	**Adjust torque** (5-31) Click: The background turns yellow. Turn the knob: Increase or decrease torque. Higher numbers mean tighter capping. The maximum is 31. Note: Uncapping torque is fixed at 28.
PITCH	Adjust bottle cap **thread pitch** (0.1 - 9.9mm).

	This is how far the cap moves up or down with one full turn. It controls how the Z-axis moves with the capping motor.
CAP OFF Z+	Adjust **Z-axis compensation for uncapping** (0-9 turns). When uncapping, the Z-axis needs to move down more to grab the cap. This sets how far it moves, measured in thread pitches.
PASS 0.1~3.6 turns	Set the **standard for successful capping** (0.1-9.0 turns). This sets upper and lower limits for how many turns the capping motor makes. If it's outside this range, the bottle position on the home screen will turn red to show it's not good. Note: For uncapping, this is fixed at 1.5 turns
HOLD/REL.	**Test cap and bottle clamping Action** Use this to check if the machine can hold caps and bottles correctly
CALI. SML	Not used for this capping machine
CALI. BIG	**Large Scale Calibration** To calibrate, press and hold the knob for 2 seconds on either the [0g] or [1000g] option.
TRAY	**Choose tray type** (4x4 to 10x10). Click: The background turns yellow. Turn the knob: Switch between tray types. Click again: Confirm and exit.
PASSWORD	Press and hold the knob for 2 seconds, then release to change the toolbox password digit by digit
	**Z-axis Top Calibration** Press and hold: Z-axis moves to the top automatically. Turn left/right: Raise Z-axis to the highest point Click again: Exit calibration mode.
	**Tray [UP LEFT] Calibration** Click: Move tray to UP-LEFT position. Press and hold: If already in UP-LEFT, enter calibration mode. If not, move to UP-LEFT first.
	Click: Move tray to UP-RIGHT position
	**Tray [DOWN LEFT] Calibration** Click: Move tray to DOWN-LEFT position. Press and hold: If already in DOWN-LEFT, enter calibration mode. If not, move to DOWN-LEFT first.
	**Tray [DOWN RIGHT] Calibration** Click: Move tray to DOWN-RIGHT position. Press and hold: If already in DOWN-RIGHT, enter calibration mode. If not, move to DOWN-RIGHT first.
	[Manual Capping] Calibration

	Click: Move tray to manual capping position. Press and hold: If already in position, enter calibration mode. If not, move to position first.
	**Z-axis Up/Down or Calibration** Click: Move Z-axis up or down. Press and hold: If nozzle is at lowest point, enter Z-axis calibration mode. If not, move Z-axis down.
	**X-axis Calibration** Click: Background turns yellow. Turn knob: Tray moves **left** or **right**. The faster the knob is turned, the faster the tray Click again: Exit fine adjustment mode.
	**Y-axis Calibration** Click: Background turns yellow. Turn knob: Tray moves **up** or **down**. The faster the knob is turned, the faster the tray Click again: Exit fine adjustment mode.

5 Commissioning Guide

5.1 Commissioning Flowchart



Note: After changing to a new bottle profile, large scale calibration and Z-axis top point calibration are optional.

5.2 Powering On

IMPORTANT: Before turning on the machine, **make sure to remove the tray from the platform**. The platform should be empty to avoid bottles being knocked over by the capping head during platform movement.

When you turn on the power switch:

- The capping head (Z-axis) will rise to its highest point.
- The Y-axis will initialize and find its zero point.
- The X-axis will initialize and find its zero point.
- The platform will move to the manual capping position.

When the platform reaches the manual capping position, the machine is ready to use.

5.3 Scale Calibration

Please refer to "7.2 How to calibrate the large scale?"

5.4 Z-axis Top Point Calibration

5.4.1 How to know if Z-axis top point calibration is needed?

After powering on or after each capping operation, the capping head should rise to its highest position. If it's not at the highest position, you need to calibrate the Z-axis top point.

5.4.2 Calibration Steps

Enter the toolbox from the main screen (see 7.1 How to enter the toolbox?)

Turn the cursor to ⏻. Press and hold the knob for 2 seconds, then release. The icon background will turn green.

Turn the knob left or right until the capping head rises to its highest position.

Click the knob to finish Z-axis top point calibration.

5.5 Creating a New Profile

5.5.1 Bottle Profile

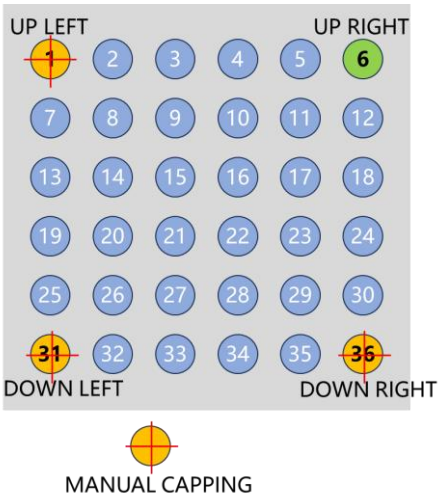
The system supports up to 50 different bottle types. For each bottle profile, it store the following information:

SN	Parameter	Range	Memo
1	Profile ID	1 ~ 50	
2	Capping Speed:	1 ~ 555 rpm	
3	Function	Capping or Uncapping	
4	Cap Type	Round or Square	
5	Capping times	1 or 2	for capping only
6	Torque	5 ~ 31	
7	Thread Pitch	0.1 ~ 9.9mm	
8	Z-axis compensation for uncapping	0 ~ 9 turns	for uncapping only
9	Standard for successful capping	[0.1 ~ 9.0] ~ [0.1 ~ 9.0] turns	
10	Tray UP LEFT Position Coordinates		
11	Tray UP RIGHT Position Coordinates		no calibration needed
12	Tray DOWN LEFT Position Coordinates		
13	Tray DOWN RIGHT Position Coordinates		
14	MANUAL CAPPING Position Coordinates		
15	Tray Type	4x4 5x5 6x6 7x7 8x8 9x9 10x10	

Note: The Z-axis top point coordinate is a common setting and not related to bottle type.

5.5.2 Bottle Positions and Calibration Points

Taking a 6x6 tray as an example, the bottle positions and points that need calibration are shown in the following diagram:



Note: The UP RIGHT position does not need calibration. This position will be automatically completed based on the UP LEFT, DOWN LEFT, and DOWN RIGHT three positions.

5.5.3 Creating a New Profile

The machine comes preset with 50 bottle profiles, but they are all the same. Customers should plan and record the bottle profile ID corresponding to each type of bottle according to their actual situation. When adjusting, do not overwrite bottle profiles that have already been set up.

The following example uses bottle profile ID 1 to illustrate how to create a new bottle profile.

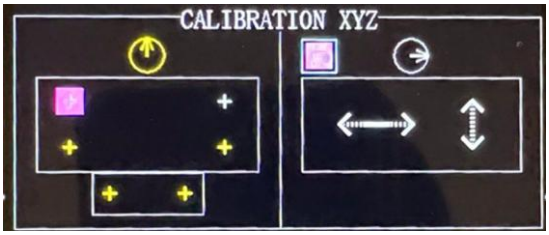
1. Enter the password to enter the toolbox. The factory default password is 0000.
2. Turn the knob to move the cursor to the "xx" number on the right side of [PROF.], then click.
3. Continue turning the knob to "1", then click to confirm and exit.

5.6 Manual Capping Position Calibration

The manual capping position is used for manual capping. The factory default three-dimensional coordinates are XYZ=12454,100,1600. If its position does not meet actual needs, it needs to be recalibrated.

5.6.1 Calibration Steps

1. Enter the password to enter the toolbox. The factory default password is 0000.
2. Turn the knob to move the cursor to  , then click this button to notify the tray to move to the [Manual Capping Position], and the capping head will also descend to the corresponding height.
3. Long press this button until the calibration menu on the right is enabled, as shown in the following figure:



4. In the calibration menu, first calibrate the XY coordinates:

   X-axis (Left/Right): 

   Y-axis (Up/Down): 

   Click the X or Y coordinate adjustment button, then turn the knob left or right. Fast rotation means fast movement, slow rotation means slow movement. When the tray is in the correct position, click the X or Y coordinate button to exit the calibration mode.

5. Calibrate Z coordinate

   After adjusting the XY coordinates, you can adjust the Z-axis coordinate. Move the cursor to Z, first click the knob to let the capping head (Z-axis) descend, then press the knob for more than 2 seconds and release to enter Z-axis calibration mode. In Z-axis calibration mode, turn the knob to adjust the descent height of the capping head. When the height is adjusted properly, click the knob to exit Z-axis calibration mode.

6. When all three XYZ axis coordinates are calibrated, turn the knob to move the cursor to ⮌, then click to return.

5.7 Rough Calibration of Empty Tray (XY coordinates only)

5.7.1 Precautions

1. Please place the empty tray to be calibrated on the platform (do not place any bottles), and lock the tray pins.
2. First perform the [UP LEFT] and [DOWN LEFT] bottle position calibration, then perform the [DOWN RIGHT] bottle position calibration.

3. The [UP RIGHT] bottle position does not need calibration, the system will automatically calculate it based on the data from the other three positions.
4. The purpose of this calibration step is to roughly ensure that during tray movement, the capping head does not knock over the bottles.
5. Only calibrate the XY two axes, the Z-axis can be calibrated later in the fine calibration of the tray with bottles.

5.7.2 UP LEFT Bottle Position Calibration

1. Enter the password to access the toolbox. The factory default password is 0000.
2. Turn the knob to move the cursor to  , then click this button to notify the tray to move to the [UP LEFT] position, and the capping head will also descend to the corresponding height.
3. Long press this button until the calibration menu on the right is illuminated.
4. Calibrate the XY coordinates, refer to "5.6 Manual Capping Position Calibration" for operation steps.
5. When the XY two-axis coordinates are calibrated, turn the knob to move the cursor to ⮌, then click to return.

5.7.3 DOWN LEFT Bottle Position Calibration

Please refer to “5.7.2 UP LEFT Bottle Position Calibration”

5.7.4 DOWN RIGHT Bottle Position Calibration

Please refer to “5.7.2 UP LEFT Bottle Position Calibration”

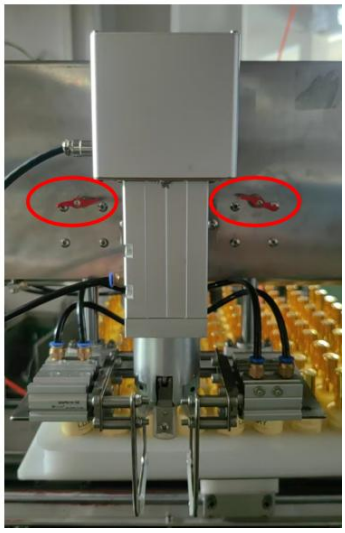
5.8 Fine Calibration of Tray with Bottles (XYZ)

5.8.1 Precautions

1. Please place the tray with bottles to be calibrated on the platform and lock the pins.
2. First perform the [UP LEFT] and [DOWN LEFT] bottle position calibration, then perform the [DOWN RIGHT] bottle position calibration.
3. The [UP RIGHT] bottle position does not need calibration, the system will automatically calculate it based on the data from the other three positions.
4. The purpose of this calibration step is to precisely ensure that the XYZ three-axis coordinates of each bottle position are accurate.

5.8.2 Adjusting the Bottle Clamp to the Highest Position

To avoid collision accidents, before calibrating the tray, please raise the bottle clamp to the highest position. The bottle clamp is fixed by two red handles. After loosening the two handles, raise the bottle clamp to the highest position, then lock the handles again.



5.8.3 UP LEFT Bottle Position Calibration

1. Enter the password to access the toolbox. The factory default password is 0000.
2. Turn the knob to move the cursor to  , then click this button to notify the tray to move to the [UP LEFT] bottle position, and the capping head will also descend to the corresponding height.
3. Adjust the bottle clamp to an appropriate height.
4. Long press the button  until the calibration menu on the right is illuminated.
5. First calibrate the XY coordinates, refer to "5.6 Manual Capping Position Calibration" for operation steps.
6. Then calibrate the Z coordinate, refer to "5.6 Manual Capping Position Calibration" for operation steps.
7. When all three XYZ axis coordinates are calibrated, turn the knob to move the cursor to ⮌, then click to return.

5.8.4 DOWN LEFT Bottle Position Calibration

Please refer to “5.8.3 UP LEFT Bottle Position Calibration”.

5.8.5 DOWN RIGHT Bottle Position Calibration

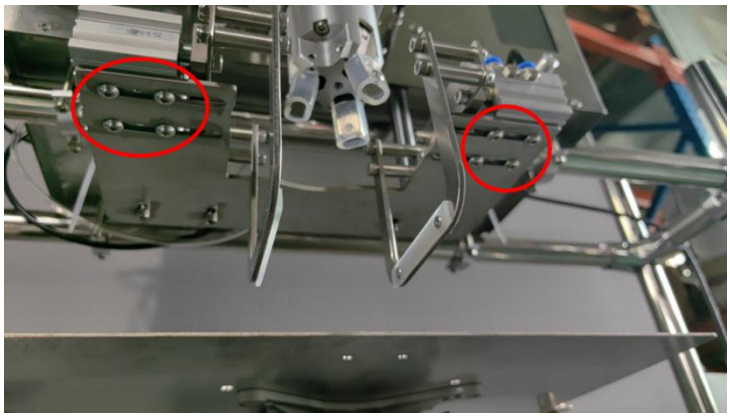
Please refer to “5.8.3 UP LEFT Bottle Position Calibration”.

5.9 Capping Parameter Settings

5.9.1 Clamps Settings

5.9.1.1 Adjusting the Left-Right Spacing of the Bottle Clamp

As shown in the figure below, the bottle clamp is divided into left and right parts, each part has 4 fixing screws. Loosen these screws, but you don't need to remove them completely. Now you can move the left and right clamp to adjust the distance between them. Adjust the spacing according to the size of the bottle to ensure the clamp can just hold the bottle. Retighten all screws to ensure the clamp doesn't move.



5.9.1.2 Adjusting the Height of the Bottle Clamp

Adjust the height of the bottle clamp to accommodate bottles of different heights. For operation steps, please refer to "5.8.2 Adjusting the Bottle Clamp to the Highest Position".

5.9.1.3 Adjusting the Air Pressure of the Cap and Bottle Clamps

1. Move the Tray

   On the screen, find the [DOWN LEFT] button, lightly tap this button, and the tray will automatically move to the DOWN LEFT bottle position.

2. Hold and Release the Bottle

   After entering the "Toolbox":

   Click the [HOLD] button, the machine will first hold the bottle cap and then the bottle body.

   Click the [REL.] button, the machine will first release the bottle body and then the bottle cap.

3. Adjust the Force of the Body Clamp

   We need to adjust the force of holding the bottle body, this force is called "Bottle Holding Air Pressure".

   --Goal: The clamp should just be able to hold the bottle, neither too loose nor too tight.

--Note: Don't make the force too strong, otherwise it will scratch the bottle or deform it.

4. Adjust the Force of the Cap Clamp

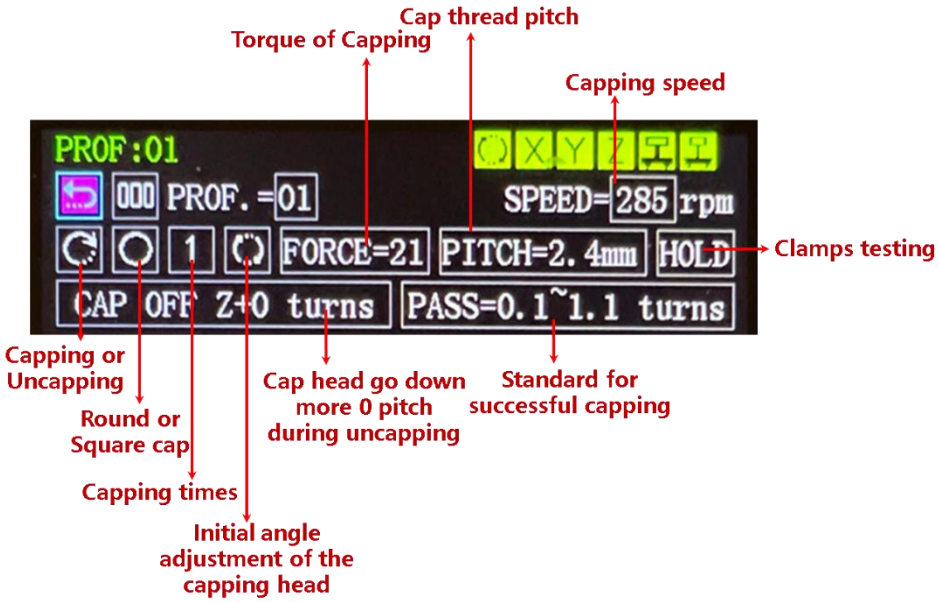
Similarly, we also need to adjust the force of holding the bottle cap, this is called "Cap holding Air Pressure".

--Goal: The clamp should just be able to hold the bottle cap, neither too loose nor too tight.

--Note: Don't make the force too strong, otherwise it will deform the bottle cap.

5.9.2 Other Parameter Settings

As shown in the figure below, there are 9 parameters that can be set. For the meaning and operation of each parameter, please refer to "4.4 Toolbox Menu".



5.9.3 Manual Capping Test

1. In the home screen, rotate the cursor to the [**MANUAL**] button.

   If the tray position is not at the [Manual Capping Position] at this time, click the [**MANUAL**] button to notify the tray to move to the [Manual Capping Position].

2. Click the [**MANUAL**] button to let the system run once empty

   Check the rotation direction of the capping head. If the direction is wrong, enter the toolbox and click or to switch the direction.

3. Start testing

Prepare a bottle to be capped, place it in the capping clamp and hold it tightly by hand. With the other hand, click the [**MANUAL**] button to start capping. After capping is complete, check the capping effect.

4. Repeatedly adjust the capping parameters based on the capping effect until the capping effect is satisfactory.

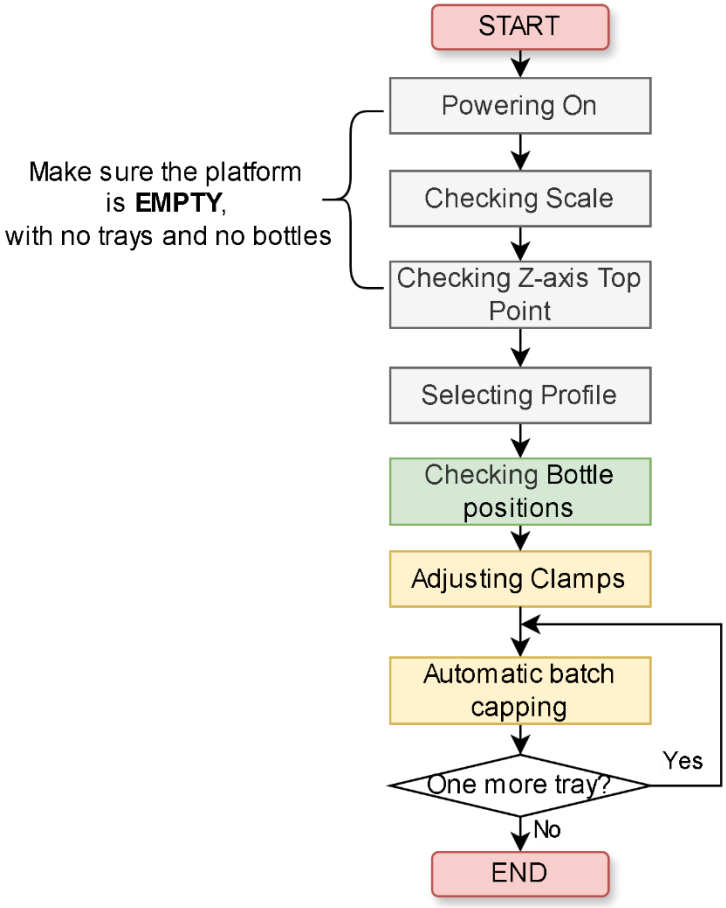
5.9.4 Automatic Capping Test

Note: Check if the bottle profile ID in the upper left corner of the screen matches the actual bottle.

1. Place a full tray of bottles and caps, lock the pins
2. Click the [**DOWN LEFT**] button on the home screen, check the down-left bottle position, confirm that the bottle's body clamp and cap clamp are suitable for the corresponding bottle position.
3. Click the [**UP LEFT**] button on the home screen, check the up-left bottle position, confirm that the bottle's body clamp and cap clamp are suitable for the corresponding bottle position.
4. If the number of bottles is less than a full tray, please click [**xx BOTTLES**], then modify the number of bottles in this tray by rotating the knob left or right, then click to exit
5. Click the [**AUTO**] button, and automatic capping will begin.
6. During the automatic capping process, please monitor for any accidents. If you want to stop automatic capping, you can hit the tray hard to stop it.
7. During the automatic capping process, you can randomly take down a capped bottle to check if the bottle cap tightness is appropriate. You can adjust the torque parameter in the toolbox interface to increase or decrease the capping torque.

6 Batch Capping Guide

6.1 Batch Capping Process



6.2 Powering On

Please refer to “5.2 Powering On”.

6.3 Checking Scale

1. Click [**TARE**] on the home screen.
2. Place a 1000g weight on the platform, check if the screen displays a weight of 1000g. If the weight is inaccurate, please refer to "7.2 How to calibrate the large scale?".

6.4 Checking Z-axis Top Point

After the equipment is powered on, observe if the capping head is at the highest point. If not, please refer to "5.4 Z-axis Top Point Calibration".

6.5 Selecting Profile

1. Click [**LOAD BOTTLE**], the tray moves to the bottle loading position. Place an empty tray (**DO NOT put bottles** on it, in case the coordinates are incorrect and cause damage to the bottles).
2. Enter the password (factory default password is 0000) to access the toolbox, select the corresponding bottle profile ID.
3. Confirm if the tray type matches the actual one.

6.6 Checking Bottle positions

1. Click [DOWN LEFT] on the Home Screen to check the bottle position in the last row and first column to see if the bottle's clamp is aligned with the bottle mouth
2. Click [UP LEFT] again to check the bottle position in the first row and first column to see if the bottle's clamp is aligned with the bottle mouth
3. If the position is incorrect, please refer to "5.8 Fine Calibration of Tray with Bottles (XYZ)" for calibration.

6.7 Adjusting Clamps

Please refer to "5.9.1 Clamps Settings" to adjust the spacing, height, and air pressure of the clamps.

6.8 Batch Automatic Capping

1. Fill the tray with bottles and caps, then place it on the platform, and lock the pins securely.
2. Click [**AUTO**] on the home screen to start formal capping.

7 Questions and Answers

7.1 How to enter the toolbox?

On the home screen (after startup), turn the knob to move the cursor to [TOOL], then click:

- Turn the knob to change the 1st digit of the password, then click;
- Turn the knob to change the 2nd digit, then click;
- Turn the knob to change the 3rd digit, then click;
- Turn the knob to change the 4th digit, then click. If the password is correct, you'll enter the toolbox.

7.2 How to calibrate the large scale?

7.2.1 Preparation

- Finish any current capping task (if any)
- Clear all items from the platform
- Prepare a 1000g weight

7.2.2 Large Scale Calibration

Step 1: Enter the password to access the toolbox. The default password is 0000.

Step 2: Turn the knob to move the cursor to the "0g" position for large scale calibration. Don't put any weight on. Press and hold this button for more than 2 seconds, then release. The "0g" background will turn yellow and show the current weight in real-time. Click again to complete the 0g calibration.

Step 3: Turn the knob to the "1000g" position. Place the 1000g weight in the center of the platform. Press and hold this button for more than 2 seconds, then release. The "1000g" background will turn yellow and show the current weight in real-time. Click again to complete the 1000g calibration.

Step 4: Place the 1000g weight anywhere on the platform. Check if the large scale shows 1000g. If not, repeat the calibration.

Step 5: Turn the knob to move the cursor to ⮌, then click to return to the home screen.

7.3 How to check software and hardware versions?

Enter the toolbox and look at the bottom few lines of the screen. For example:

SC: 6.30 [20230726]

This means the main control unit software is version 6.30, and the hardware version is 20230726.

Note:

SC - Main control unit

BX - X-axis unit

BY - Y-axis unit

BZ - Z-axis unit

DS - Scale unit

CM - Capping and clamping control unit

7.4 What do the icons in the upper right corner of the screen mean?

Icon	Represents	Background Color Meaning
	Capping and clamping control unit	Green: Online Yellow: Running Red: Offline
	X-axis motor	
	Y-axis motor	
	Z-axis motor	
	Large scale	Green: Online Red: Offline Pink: Sensor fault
	Small scale	

7.5 Will the device go to sleep if not used for a long time?

Yes. If there's no motor action and no menu operation for 30 minutes, the device will enter power-saving sleep mode. An alert dialog will pop up to indicate this.

When the system is in sleep mode, all motors switch to low-power mode.

To exit sleep mode, click  on the screen. The system will immediately wake up.

7.6 Will the counter automatically reset to zero?

Yes. The system will reset the "Power-on Time" and "Accumulated Bottles" counters to zero when either of these conditions is met:

- Total Power-on Time ≥ 100 hours
- Total Accumulated Bottles > 99999

8 Technical Parameters

Rated Voltage	AC 110V or AC 220V (set at factory, not interchangeable)
Rated Power	
Dimensions (with packaging)	Width x Height x Depth mm
Dimensions (net)	Width x Height x Depth mm
Total Weight (with packaging)	Xx kg
Total Weight (net)	Xx kg
Number of Bottle Profiles	50
Tray Specifications	6 × 6，diameter：XX ~ XXmm 7 × 7，diameter：XX ~ XXmm 8 × 8， diameter：XX ~ XXmm 9 × 9， diameter：XX ~ XXmm 10 × 10，diameter：XX ~ XXmm

9 Electrical schematic