Auto Lens Edger

User Manual

Dear Valued Customer,

Thank you for choosing our product and for your trust in our company.

The edger is a lens processing device designed specifically for optical shops.

Please read the manual carefully and keep it near the edger for easy reference.

The information in the manual is not contractually binding and is subject to change without prior notice. While every effort has been made to ensure the accuracy of the content, errors or omissions may occur. If there are any inaccuracies in the manual, the manufacturer will provide updates.

Please note that any malfunctions caused by not following the instructions outlined in the manual are not covered under the manufacturer's warranty.

Note: The some model is equipped with grooving and Safe beveling functions.

SAFETY SYMBOLS

The safety symbols in this manual help to draw users' attention and differentiate between various safety-related notices.

The table below lists all the safety symbols and their descriptions:

SYMBOL	DESCRIPTION
	**Important Warning:** Indicates potential risks of personal injury, property damage, and machine malfunction.Please read the instructions carefully.
	**Important Advisory:** Indicates potential risks of machine damage or malfunction.Please read the instructions carefully.
	**Necessary Preparations** Ensure the device is powered off before performing any operations.
	**Electrical Malfunction**
	**Heavy Object Reminder** The machine is heavy and requires at least two people to carry it.
	**Rotating Parts Warning** Be cautious and avoid placing hands near the rotating grinding wheel.
	**Pinch Hazard** Exercise caution when the clamping device is closing.
	**Protective Gloves Required** Especially when cleaning or replacing the water tank.
	**Protective Clothing Required** Especially when cleaning or replacing the water tank.

CONTENTS

1. INSTALLATION

#1

#2、#5

Please retain the packaging materials.

#3

#4

#6

1.1 UNPACKING THE MACHINE

1.1.1 WARNINGS

- Ensure that the machine is placed according to the directional markings on the packaging; it must not be inverted.
- Place the machine on a flat, stable surface.

1.1.2 STEPS

FOLLOW THESE STEPS TO UNPACK:

#1 At least two people should lift the machine onto the ground.

#2 Cut the four packing straps on the box.

#3 Remove the packaging box.

#4 Check the provided accessories (toolbox, water hose, etc.).

#5 Remove the protective plastic material from the machine.

#6 Remove the four screws securing the transportation rail on the machine.

#7 With the help of at least two people, lift the machine and place it on the workbench.

#8 Remove the head locking device.

#9 Retain the packaging, and it is recommended to open it flat for storage.

1.2 REMOVING TRANSPORTATION RAIL LOCKS

1.2.1 CONDITIONS

- Place the machine on the workbench.
- Ensure there is enough space around the machine.

1.2.2 STEPS

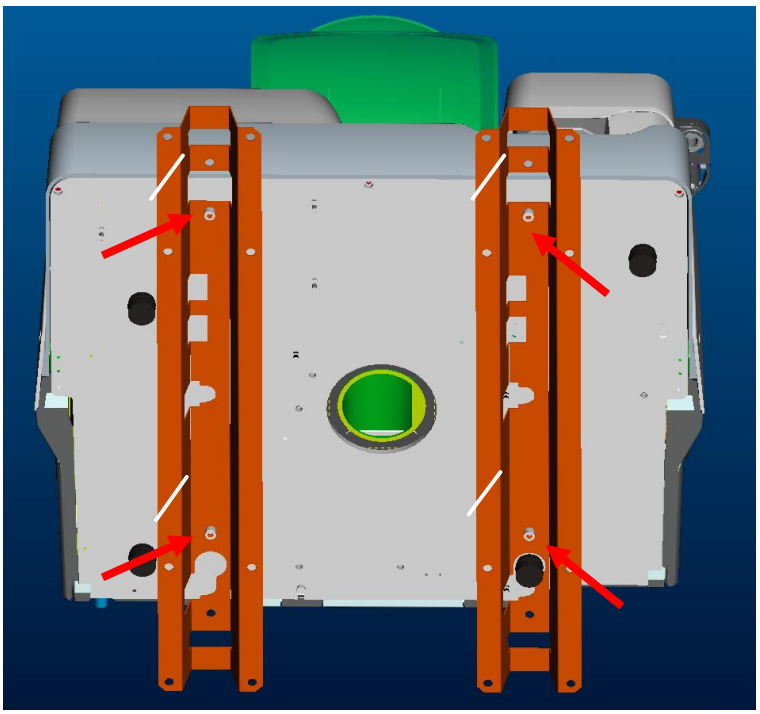
Follow these steps to remove the transportation rail:

#1 With the assistance of another person, gently tilt the machine to access the four screws securing the rail.

#2 Use a 13mm hex wrench to remove the four screws, then detach the rail.

#3 Store the transportation rail with the packaging materials.

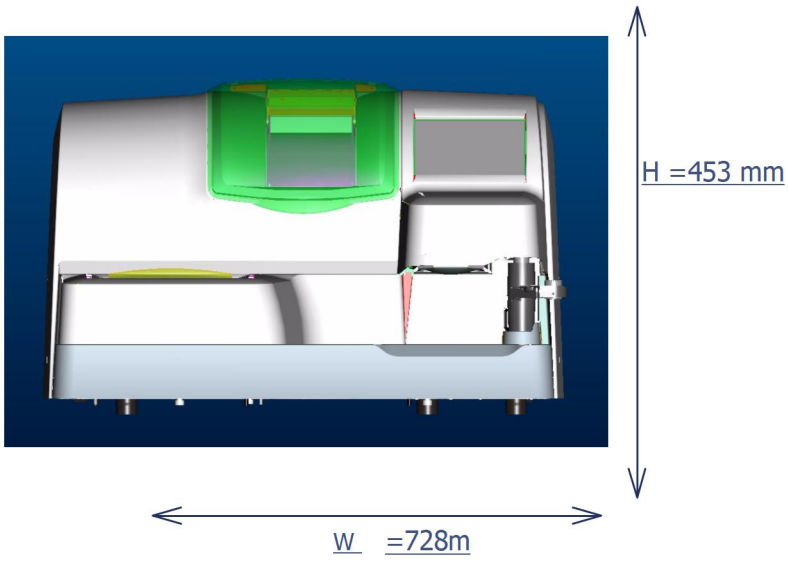
As shown in the diagram.

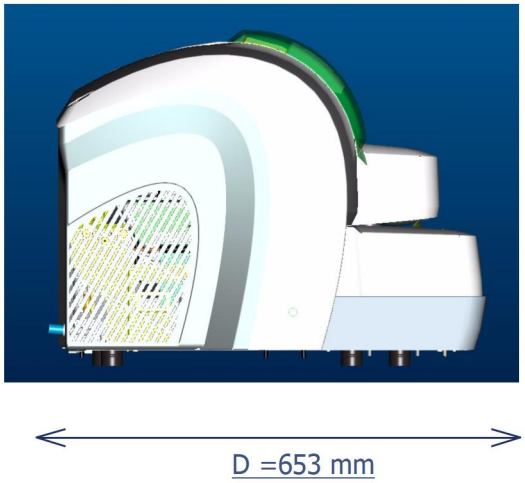


1.3 PREPARING THE WORKBENCH

1.3.1 MACHINE SPECIFICATIONS

The machine specifications are as follows:

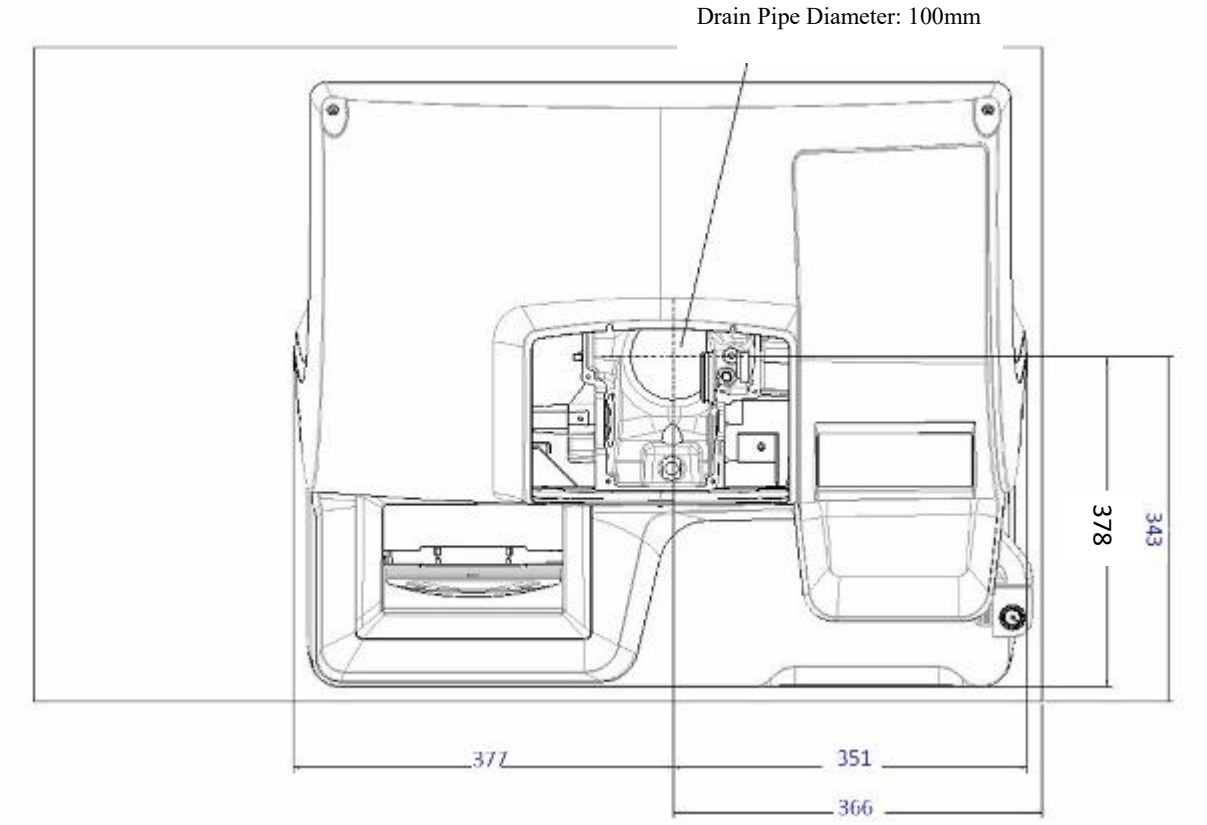




- Height (H) = 453 mm
- Width (W) = 653 mm
- Depth (D) = 728 mm
- Total weight = 75 kg

1.3.2 Workbench Area and Drilling Requirements

The diagram below shows the required position for the edger on the workbench and the necessary hole placements. Position the machine first to confirm the drilling points.



Notes

- **Positioning Details:**
  - Machine Length: 728 mm
  - Machine Width: 653 mm
  - Distance from the drain hole center to the right side of the machine: 351 mm
  - Distance from the drain hole center to the front of the machine: 378 mm
- **Follow the dimensions provided.**
- **Ensure adequate space around the edger.**
- **The workbench should be stable and level.**
- **The installation location should be away from heat sources.**

1.4 WATER SUPPLY SYSTEM

1.4.1 DESCRIPTION

1.4.1.1 GENERAL OVERVIEW

The machine must be installed with a shut-off valve, positioned no higher than 80 cm above the edger.

The valve should be easily accessible to allow immediate shutdown when not in use.

The drain pipe diameter should be 100 mm, and it should have at least a 5% slope to ensure smooth disposal of debris.

1.4.1.2 FILTER BOX WITH WATER PUMP

Dimensions: Length = 500 mm, Width = 400 mm, Height = 280 mm

Capacity: 50 liters

1.4.1.3 WATER PUMP

Power: 100 W

Flow Rate: 4500 L/H

Lift Height: 4.2 meters

Voltage: 220V-230V/50Hz or 110V-115V/60Hz

1.4.1.4 SOLENOID VALVE

Voltage: 220V-230V/50Hz or 110V-115V/60Hz

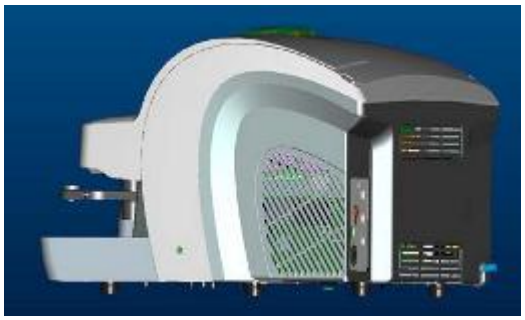
Power: 20 W

1.4.1.5 Water Pump Connection Steps

As shown in the diagram.

#1

#3



Power supply for water pump or solenoid valve

Connect water pump for recirculating water

Connect solenoid valve for direct water supply

Follow these steps to connect and secure the water supply hose to the edger.

#1 Check that the machine switch is off, with the ON/OFF switch in the OFF position, and the main power plug disconnected.

#2 Confirm that the water supply system is sealed.

#3 Ensure the machine is level; adjustments can be made using the four leveling

#4 Connect the drainpipe to the base.

#5 Connect the water supply line to either a mains water source or the water pump (front spray with PUMP1, rear spray without).

#6 If using mains water, connect the drain pipeline.

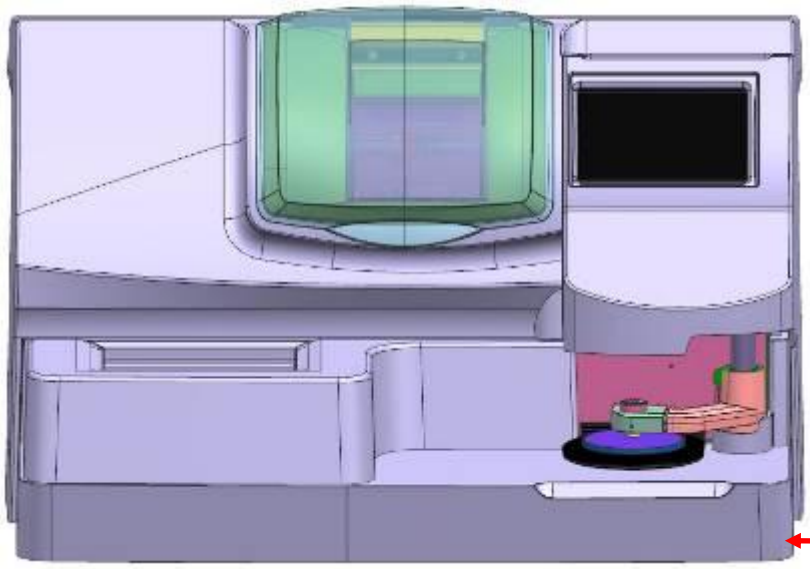
#7 If the water system is clogged, check the pipes for obstructions, especially around

#8 Connect the water pump or solenoid valve to the power supply for the water pump.

1.5 ELECTRICAL CONNECTIONS

1.5.1 WIRING THE EDGER

>The power outlet must be grounded, and the machine's casing should be properly grounded during installation.

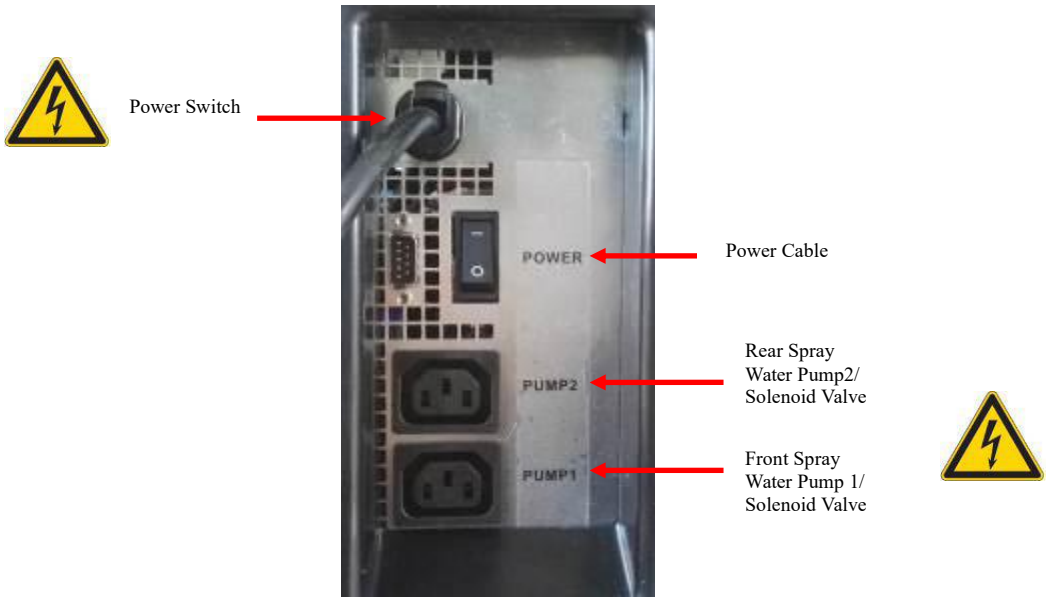


#1 Ensure the machine's power switch is in the OFF position, and the main power plug is disconnected。

#2 Connect the Frame Tracer to the RS232 port.

#3 Plug in the power cord, and connect the water pump or solenoid valve's power supply.

When connecting the edger with its compatible equipment, refer to the diagram below:



1.6 STARTING THE EDGER

Follow these steps to start the edger:

#1 Ensure the machine switch is off, with the ON/OFF switch in the OFF position and the main power plug disconnected.

#2 Install the chuck and chuck holder onto the spindle.

#3 Plug in the machine and turn the switch to the ON position.

#4 Test the machine by simulating startup, adjusting the flow control screw located on the left side of the machine to regulate the water flow from the spray nozzle and within the grinding chamber.

#5 Retrieve one or two tasks to check if the machine is operating correctly.

Water Output Adjustment in the Processing Chamber:

0: OFF

1: ON

2. SAFETY PRECAUTIONS

2.1 IMPORTANT NOTES

2.1.1 OPERATOR

- Carefully read the manual and keep it near the machine for reference.
- The machine has rotating components, and the grinding wheel poses potential hazards. Avoid placing hands near the grinding wheel.
- The machine is heavy and requires at least two people to transport it.
- When starting the clamping shaft, ensure hands are outside the contact area.Disconnect the power before handling fuses.
- Ensure the water circulation system is properly sealed during installation.
- Always unplug the edger before performing maintenance.

2.1.2 MACHINE

- Verify that the supply voltage matches the rated voltage marked on the machine's nameplate. Contact a qualified electrician if unsure about the installation location's voltage.
- Disconnect the power if the machine will not be used for an extended period.
- The power switch is located on the rear of the machine, marked ON/OFF, and the plug disconnects the main power.
- Disconnect the machine from the main power supply during lightning storms or if unused for long periods.
- Place the machine away from heat sources, as exposure to heat may affect performance.
- Do not block or cover the ventilation openings on the machine's casing to ensure proper operation.
- Install the machine in a well-ventilated room.
- Avoid overloading the outlet or plug, as this may lead to fire or electric shock.
- Do not use an extended power line to avoid pulling on the power cord.
- Keep the machine away from sandy or dusty environments.
- Any maintenance requiring opening or closing the casing must be authorized by the manufacturer or distributor.
- Take note of safety labels  in various areas to prevent potential injuries.

Control Pump Socket: Risk of electric shock.
Grinding Chamber: Risk of physical injury.
Water Supply System: Risk of hazard if water pressure exceeds 1 bar.

2.2 USAGE RECOMMENDATIONS

- Follow maintenance requirements for the equipment.
- Position power cables securely.
- Contact the distributor and qualified technicians for all maintenance needs, using appropriate parts.
- Connect only with distributor-designated equipment.
- Strict adherence to the manual's operating instructions ensures normal functionality.
- Regularly clean the equipment.
- Use a soft, clean damp cloth with a small amount of alcohol to wipe the casing.

Note: Avoid using the following cleaning agents:

Solutions containing ammonia, soda, or acetic acid.

Organic solvents containing acetone, benzene, or trichloroethylene.

Touch Screen Guidelines:

- Do not press the touch screen too hard, as this may crack it.
- Avoid using sharp objects like pens, scissors, or pliers on the touch screen.
- Ensure hands are dry when operating the touch screen.
- Clean the screen with a soft, clean, dry cloth.

Edging System:

- Before starting the machine, confirm that the water supply system is ready (valve open).
- Ensure a proper seal in the water supply system.
- If using a recirculating water system, change the water in the tank regularly.
- Periodically check the status of the probes, and replace them if worn, chipped, or damaged.
- Daily, use clean water and a soft sponge or brush to remove dust from the CR39 surface to avoid scratching the plastic.
- Regularly clean the splash guard.

NOTE: **THE MANUFACTURER IS NOT RESPONSIBLE FOR MACHINE MALFUNCTIONS RESULTING FROM IMPROPER OPERATION OR DISREGARDING MANUAL INSTRUCTIONS OR WARNING LABELS ON THE**

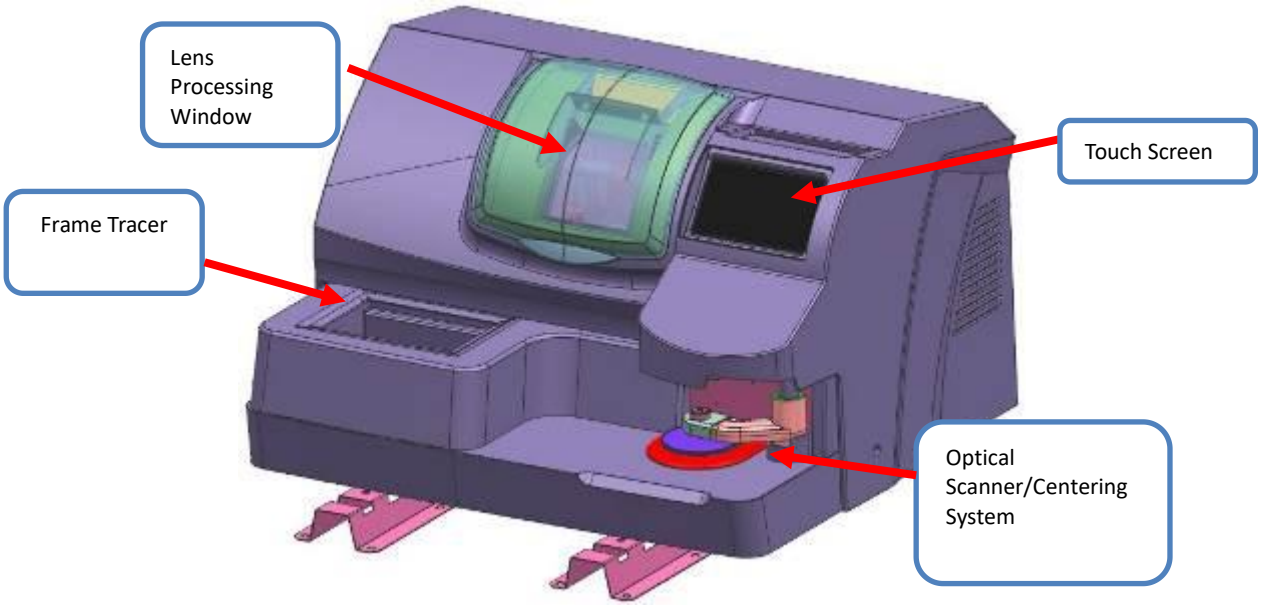
MACHINE.

3. USING THE EDGER

3.1 OVERVIEW

3.1.1 MACHINE APPEARANCE

The diagram below shows an overview of the machine.



3.1.1.1 TOUCH SCREEN

> Touch Screen Function:

- The touch screen allows users to operate the edger interface and enter data for processing tasks.
- It displays the shape of the frame and lens, along with the input edging data.

3.1.1.2 FRAME TRACER, OPTICAL SCANNER, AND CENTERING SYSTEM

FRAME TRACER FUNCTION:

- Scans 3D data of frames and templates.

OPTICAL SCANNER FUNCTION:

- Automatically identifies lens templates and determines size data for templates.

CENTERING FUNCTION:

- Manually centers marked standard lenses, bifocals, and progressive lenses.

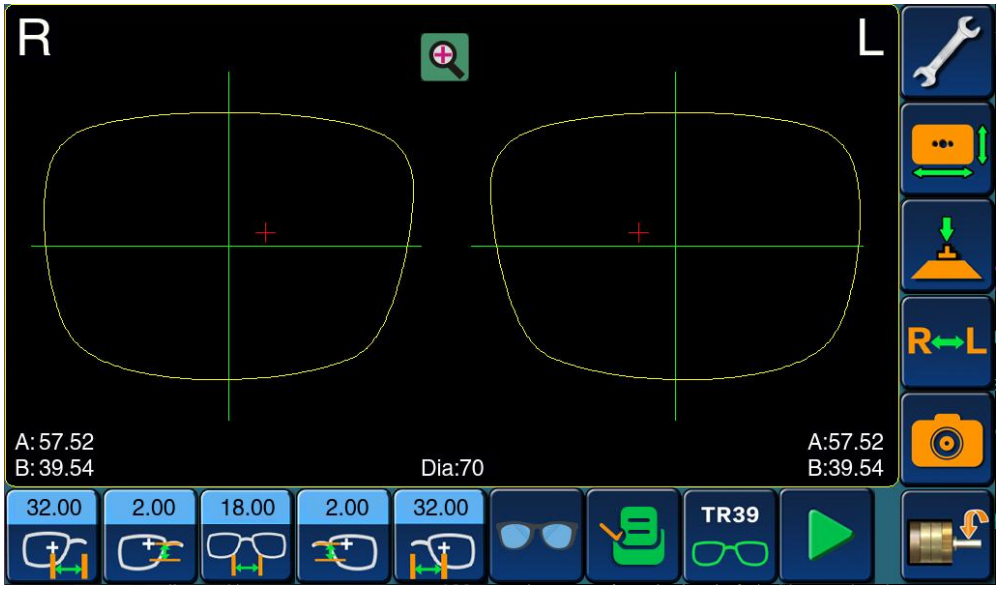
3.1.1.3 LENS PROCESSING WINDOW

- Edger Function:

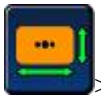
Processes lenses based on frame material, shape, and other parameters obtained.

3.2 Introduction to the Operation Screen

3.2.1 Display Interface



 >>Menu Interface

 >>Modify Lens Shape Data

 >>Enter Optical Centering System

 >>Left and Right Eye Data Display

 >>Enter Optical Scanner System for Lens Template Scanning

 >>Enter Lens Processing Interface

 >> Enter right eye pupillary distance.  >>Enter left eye pupillary distance

 >> Enter right eye pupil height.  >> Enter left eye pupil height

 >> Enter bridge distance

 >> Enter the 1:1 display interface.

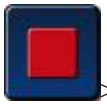
 >>Both-side Scan  >>Right Side Scan  >>Left Side Scan

 >> Probe Insertion Position for Scanning (Upper Edge of Frame Groove)

 >> Probe Insertion Position for Scanning (Middle of Frame Groove)

 >> Probe Insertion Position for Scanning (Lower Edge of Frame Groove)

 >> Hard Material Frame  >>Soft Material Frame  >> Metal Frame

 >> Start Scanning  >> Stop Scanning

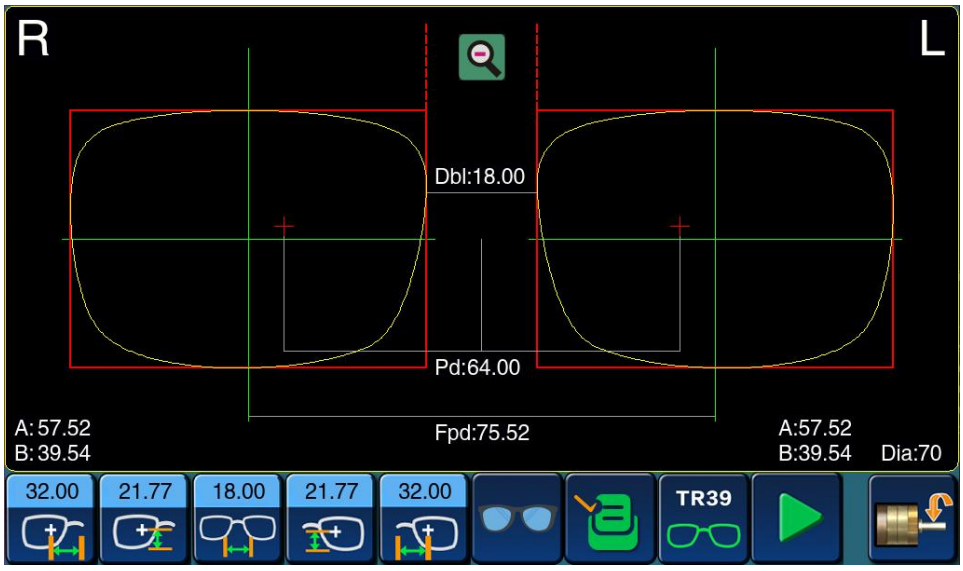
Dia: Minimum blank lens diameter required for processing the current lens.

A: Maximum Template Width

B: Maximum Template Height

3.2.2 1:1 DISPLAY SCREEN

> Tap the icon  , to enter the 1:1 display interface for the frame shape.



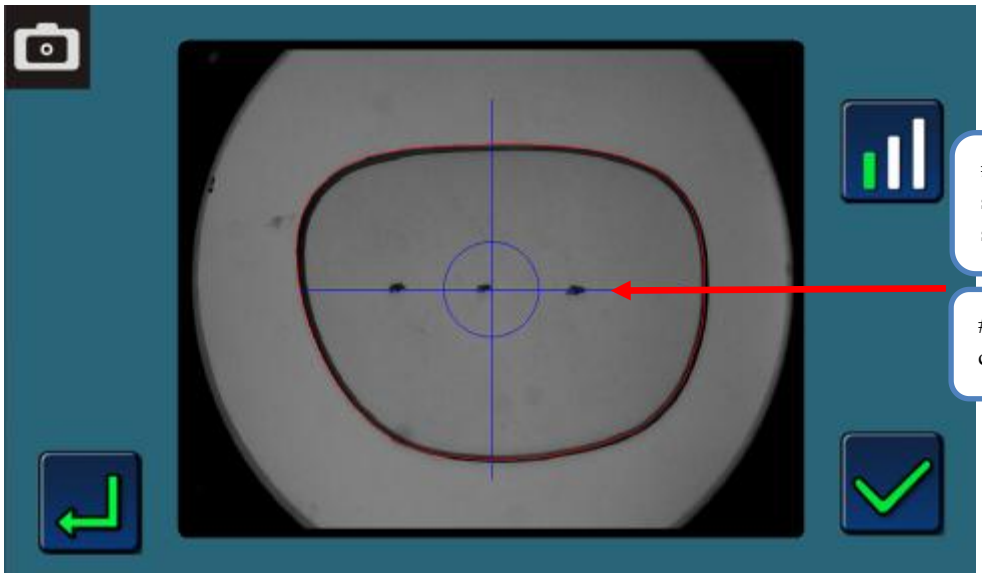
> Tap the icon  , to return to the main interface.

- DBL: Distance Between Lenses (bridge width).

- PD: Pupillary Distance.
- FPD: Geometric center distance of the frame.
- Dia: Minimum blank lens diameter required for current lens processing.
- A: Maximum template width.
- B: Maximum template height.

3.2.3 Optical Photography and Scanning

> Tap the main interface icon  to enter the Optical Scanner interface.



 >> CCD Brightness  >>Confirm  >>Back

Lens template scanning operation:

#1 Mark the lens template with a lensometer.

#2 Clean the lens stage to ensure no dust or debris on the edges during contour scanning.

#3 Place the template with the convex side facing down and the concave side up.

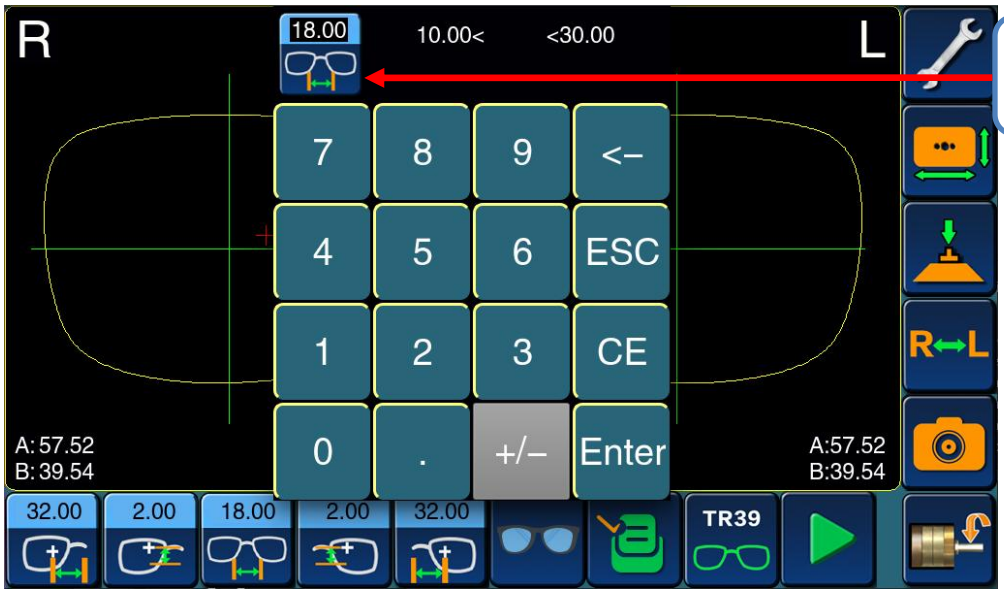
#4 Align the mark with the blue crosshair line.

#5 The system automatically identifies the template contour data, displayed with a red line.

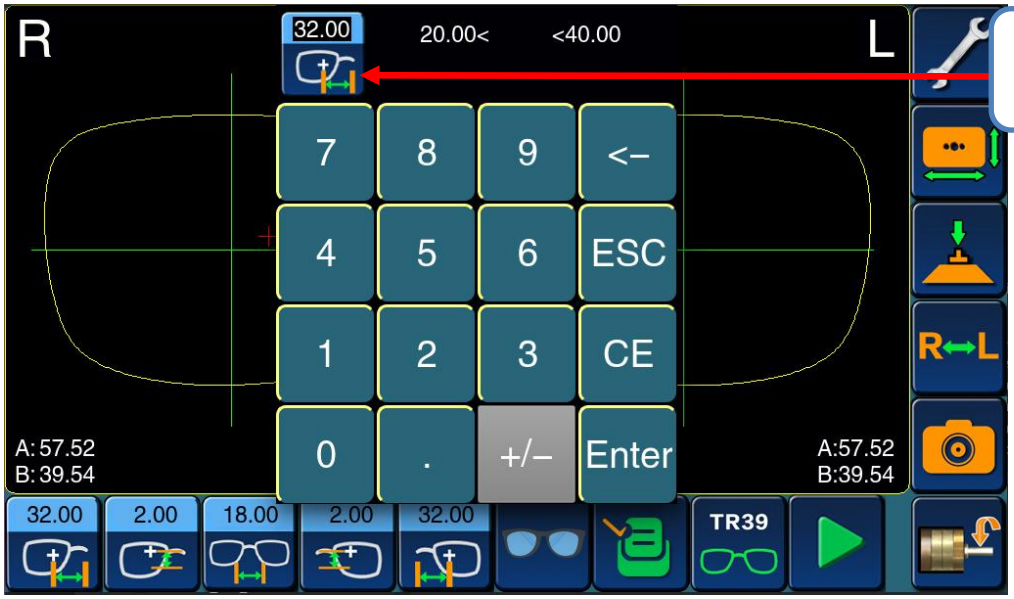
#6 Confirm the scanned data, then enter the bridge width.

#7 Enter the pupillary distance.

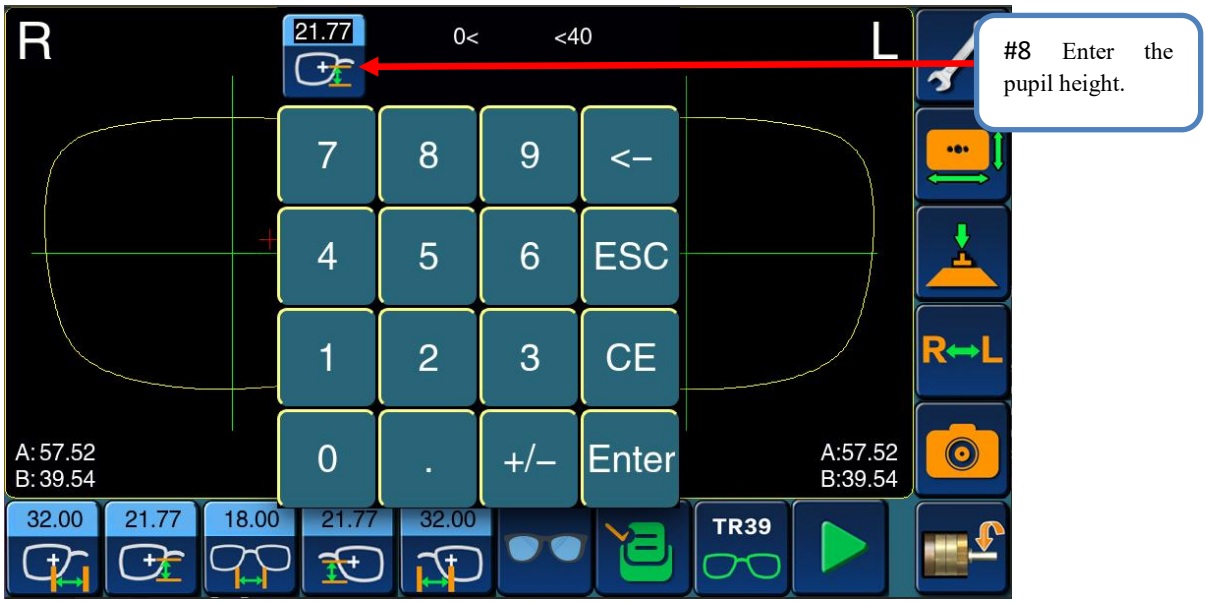
#8 Enter the pupil height.



#6 Enter the bridge width.

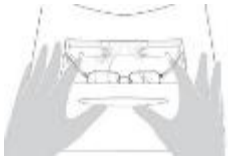


#7 Enter the pupil height.



3.2.4 FRAME SCANNING

>Insert the mirror frame into the scanning frame system and try to place it in the center for more accurate scanning.

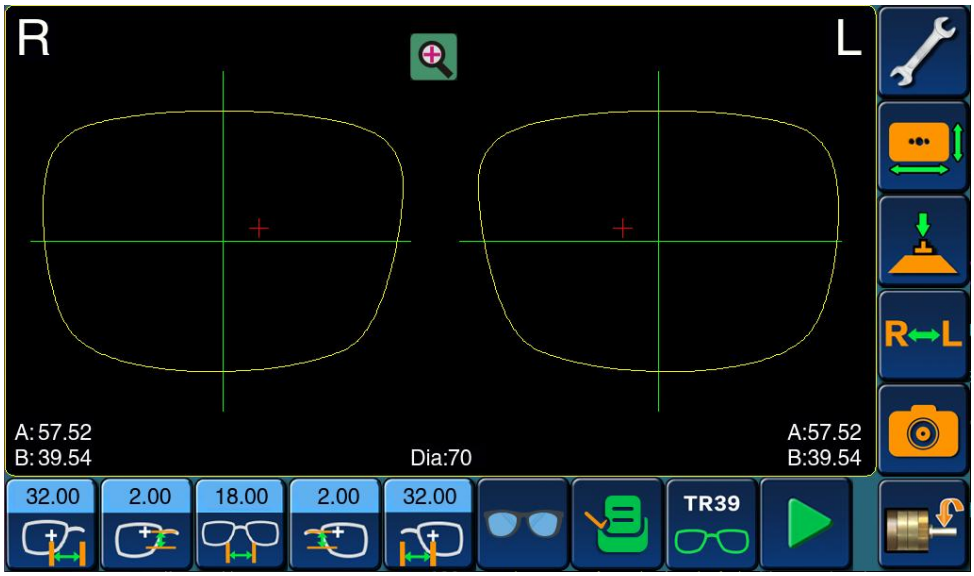


>Choose left eye, right eye or both eye scans  .

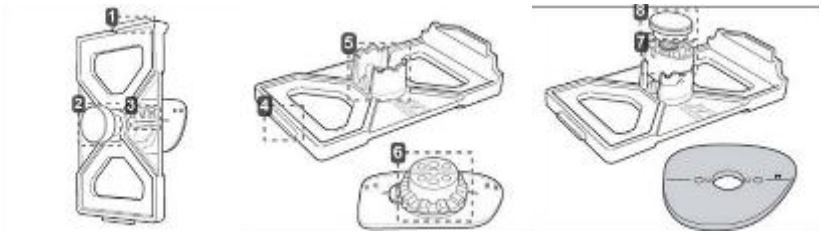
>Select frame material  .

>Select the probe slot position  , it is recommended to select the middle of the probe into the slot  .

> Click  to start scanning, the system automatically completes the scan and displays the graphic data.



3.2.5 TEMPLATE SCANNING



1 Front fixing buckle of the template frame.

2 Suction cup or template three-hole seat fixing screws.

3 The right eye template is marked, and the template nose tip is in the same direction as the mark.

4 Fix the clips at the rear of the template frame.

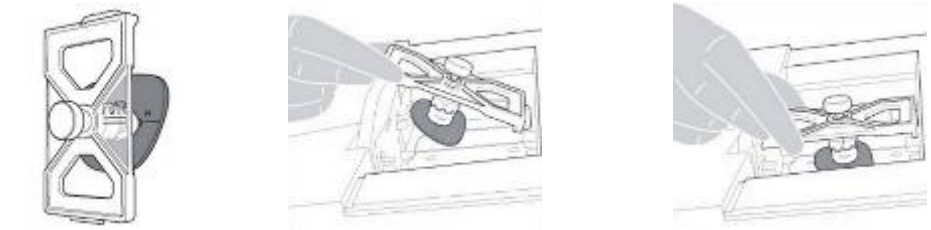
5 Suction cup fixed limit.

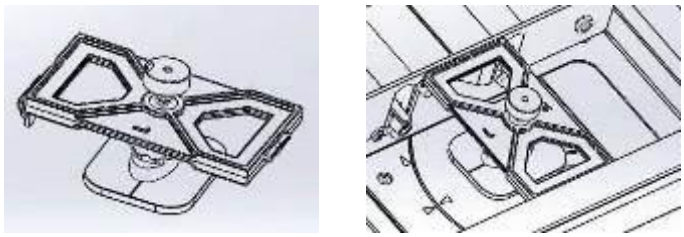
6 Suction cups (use double-sided tape to fix the template).

7 Template three-hole seat.

8 Template three-hole fixing screws.

>The template is punched with a three-hole puncher, or the template is fixed with a suction cup and double-sided tape. After the template is fixed, the scanning bracket is loaded into the scanner.





>Choose left eye, right eye or both eye scans 

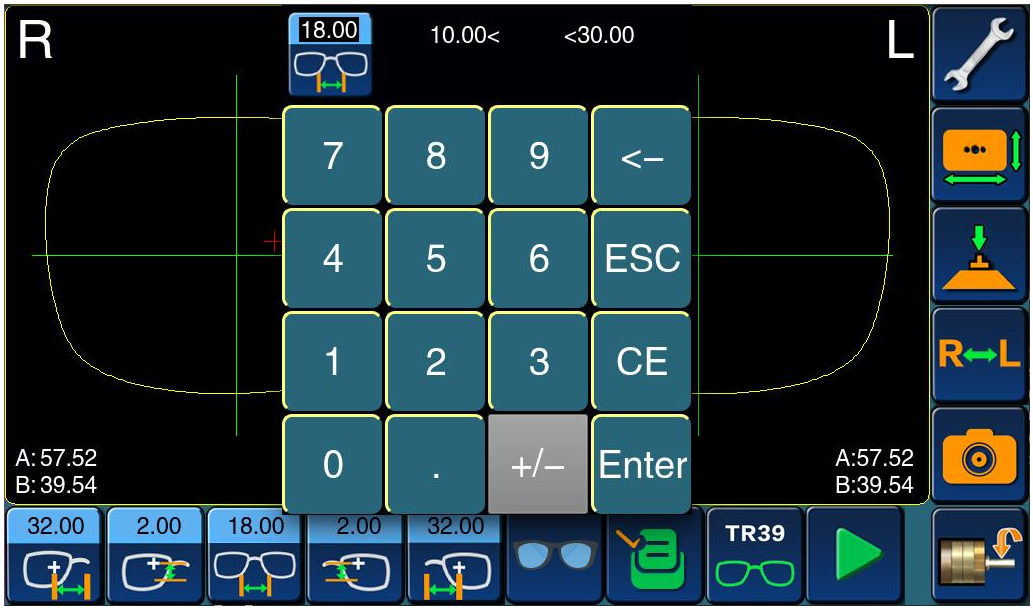
.

>Select frame material 

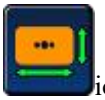
.

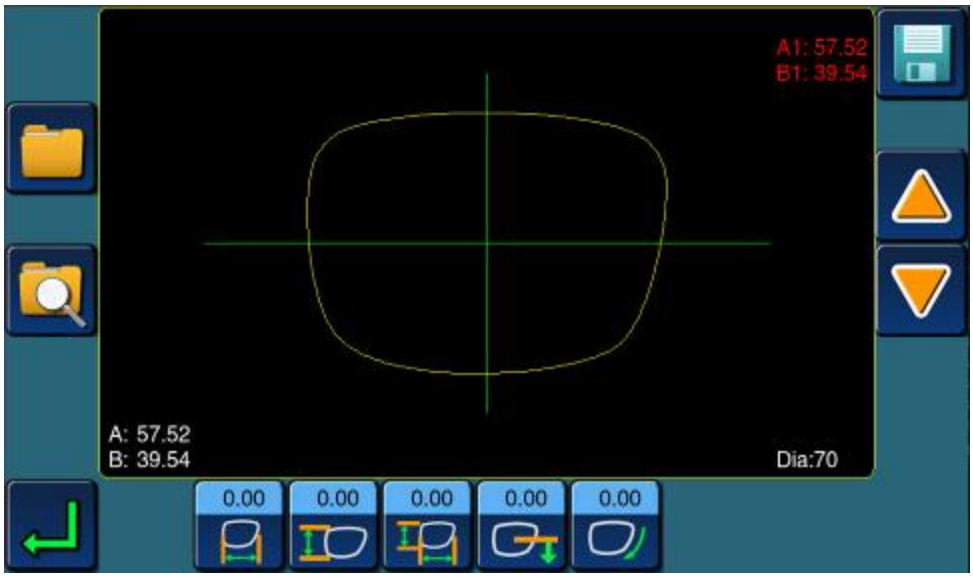
>Select the probe slot position  , it is recommended to select the middle of the probe into the slot  .

> Click  to start scanning, the system will complete it automatically. After the scan is completed, you need to enter the nose bridge distance.



3.2.6 TEMPLATE DATA RESHAPING

> Click the main interface  icon to enter the template data modification interface.



 >> Recall the existing template data from the memory.

 >> Find the template data in memory.

 >> Save the current template data to memory.

 >>The template height remains unchanged, but the width is modified.

 >>The template width remains unchanged, but the height is modified.

 >>The template width and height are modified at the same time.

 >>Reshape the lower edge of the template.

 >> Template data rotation.

 >>Template data angle rotation.

 >> Return.

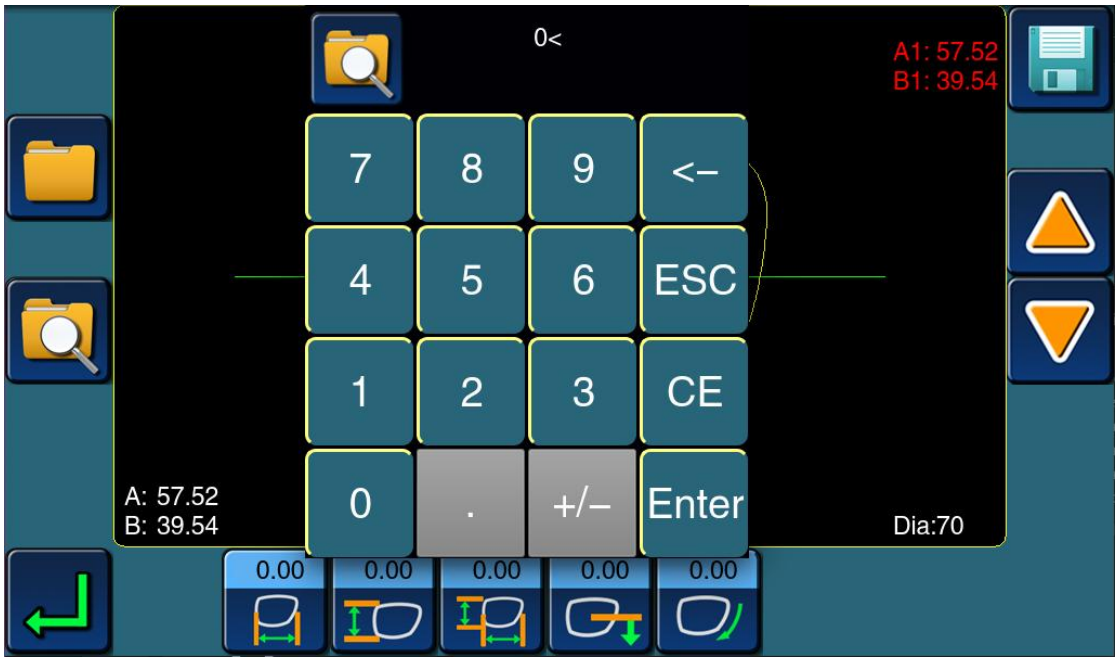
3.2.6.1 TEMPLATE DATA STORAGE

> Click the reshape interface icon  , a save window will pop up, enter the template digital code, as shown below.

> Click the "OK" button on the numeric keypad and the system will automatically save the current template data.

3.2.6.2 TEMPLATE DATA SEARCH

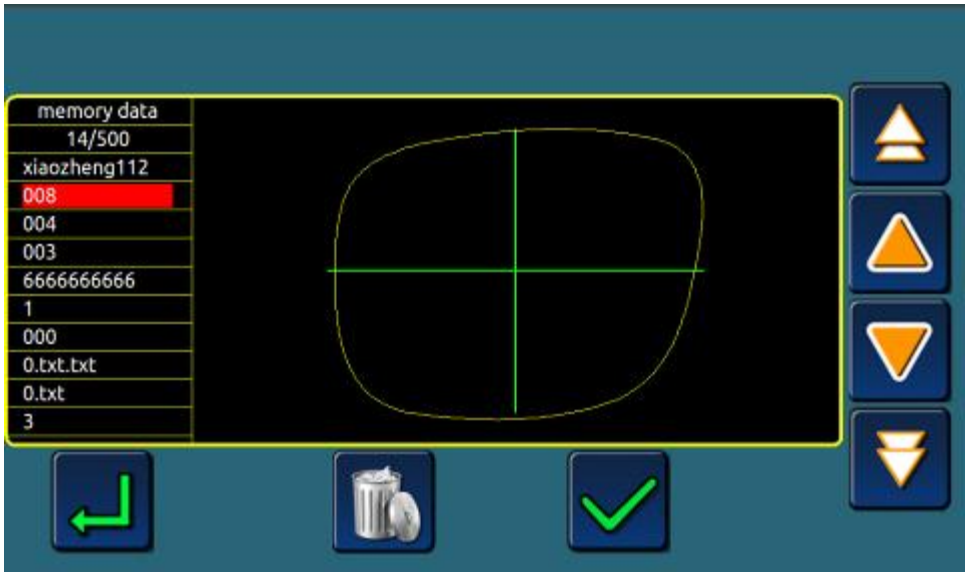
> Click the shape change interface icon  , and the system pops up a search window, as shown below:



> Enter the template numeric code you want to search for, click the "OK" button on the numeric keypad, and the system will automatically search for the current template data.

3.2.7 MEMORY DATA RETRIEVAL

>CLICK THE SHAPE MODIFICATION INTERFACE ICON  TO ENTER THE TEMPLATE DATA RETRIEVAL INTERFACE AND DISPLAY THE MEMORY DATA LIST.



 >>Show the previous page of data.

 >>Display the next page of data.

 >>Show the previous data.

 >>Show next data.

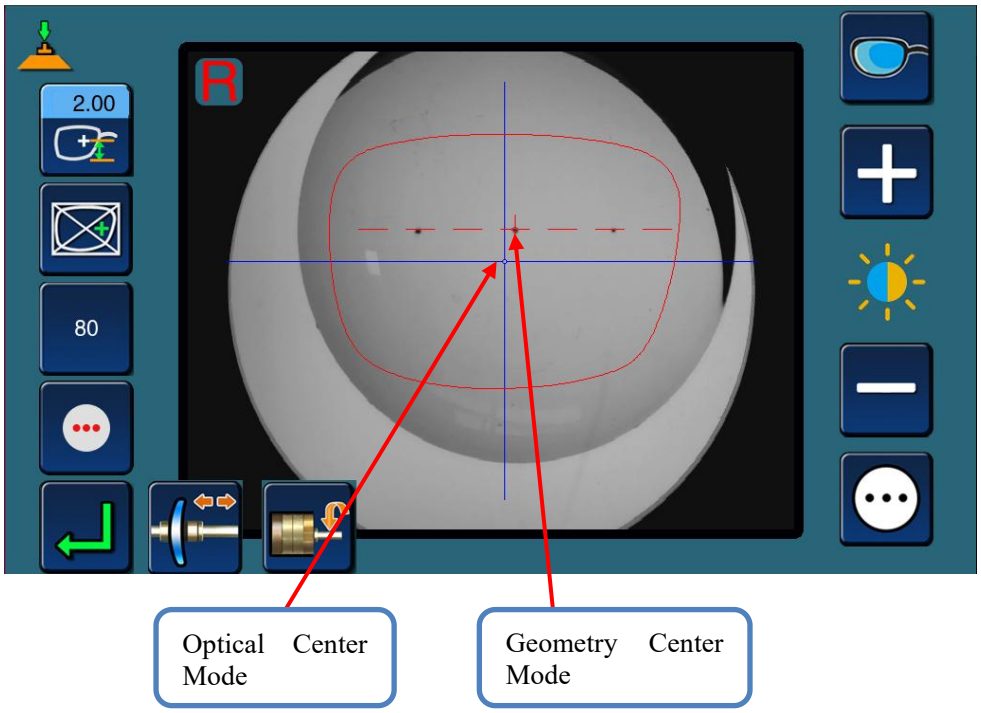
 >>Retrieve current data.

 >>Delete memory data.

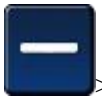
 >> Return.

3.2.8 CENTERING THE LENS AND APPLYING THE SUCTION CUP

>CLICK THE MAIN INTERFACE ICON  TO ENTER THE OPTICAL CENTERING INSTRUMENT INTERFACE.



 >>Right eye  >>Left eye

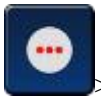
 >>CCD brightness plus  >>CCD brightness minus

 >>Normal Mode  >>Dual Focus Mode  >>Progressive Film Mode

 >>Pupil height setting

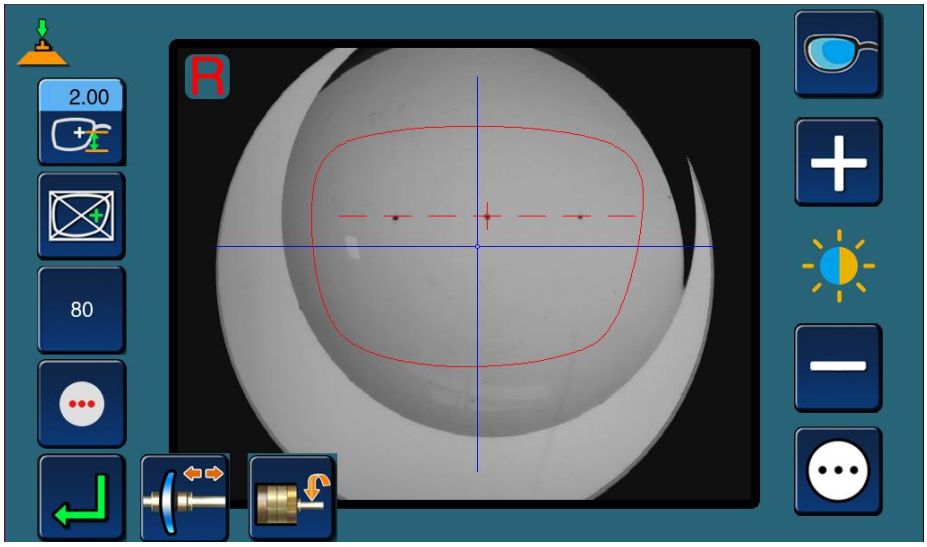
 >>Geometry Center Mode  >>Optical Center Mode

 >> Initial diameter of processed lens  >>Clip and eject film

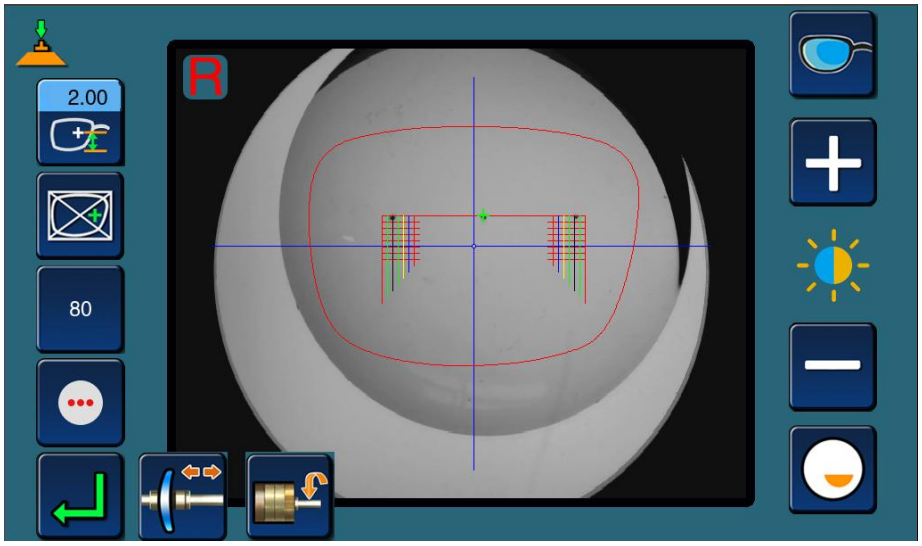
 >>Ordinary lens dotting  >>Black sunglasses

 >>Enter the processing interface

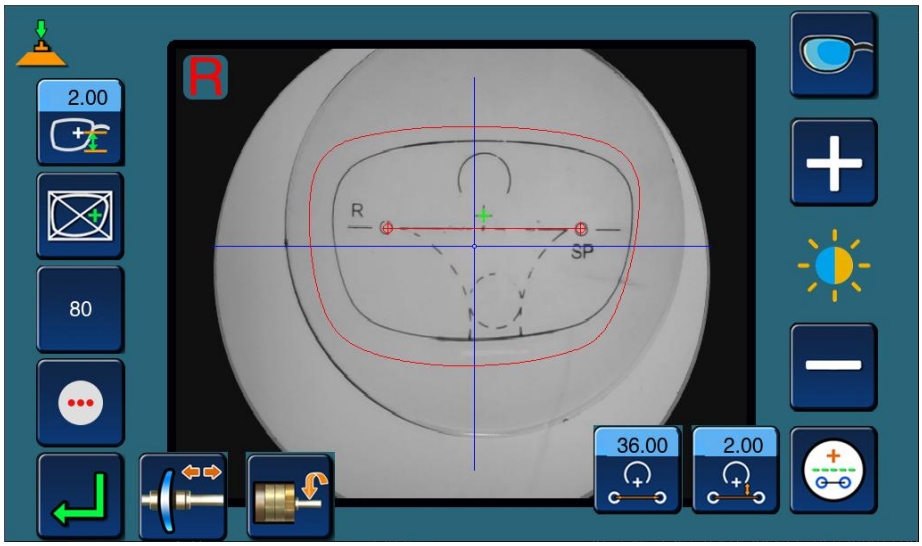
> CENTERING OF SINGLE-VISION LENSES.



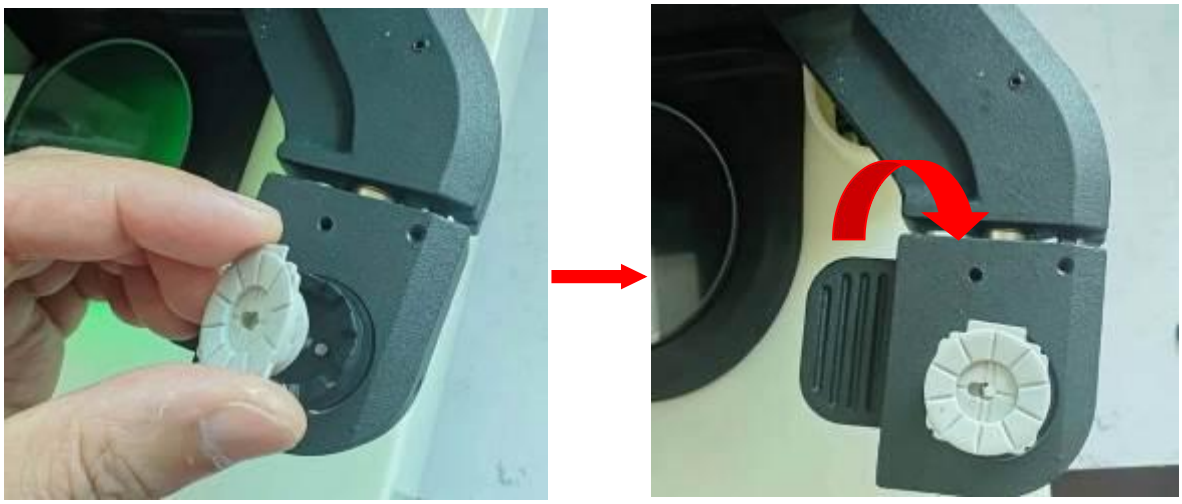
> BIFOCAL LENS CENTERING.



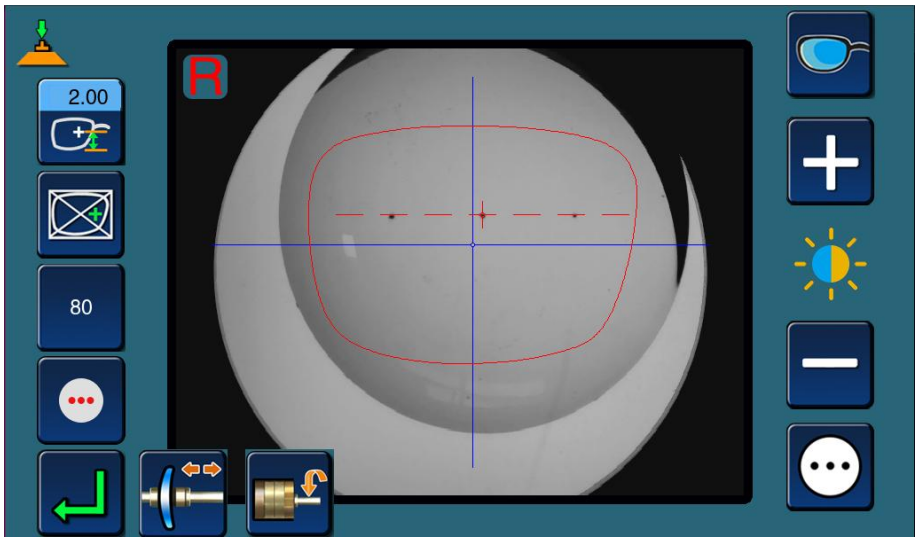
> PROGRESSIVE LENS CENTERING.

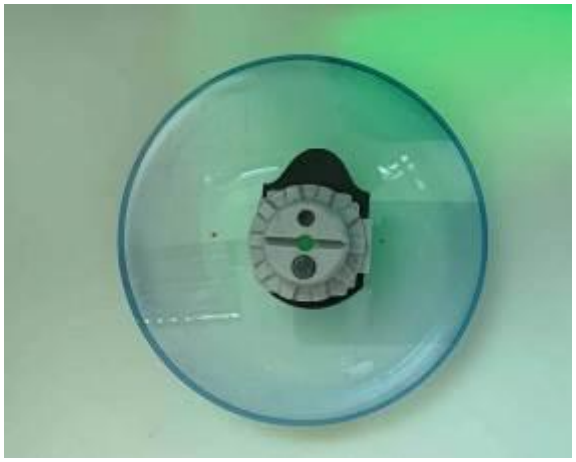


> INSERT THE SUCTION CUP AND TURN THE SUCTION CUP HOLDER OVER.



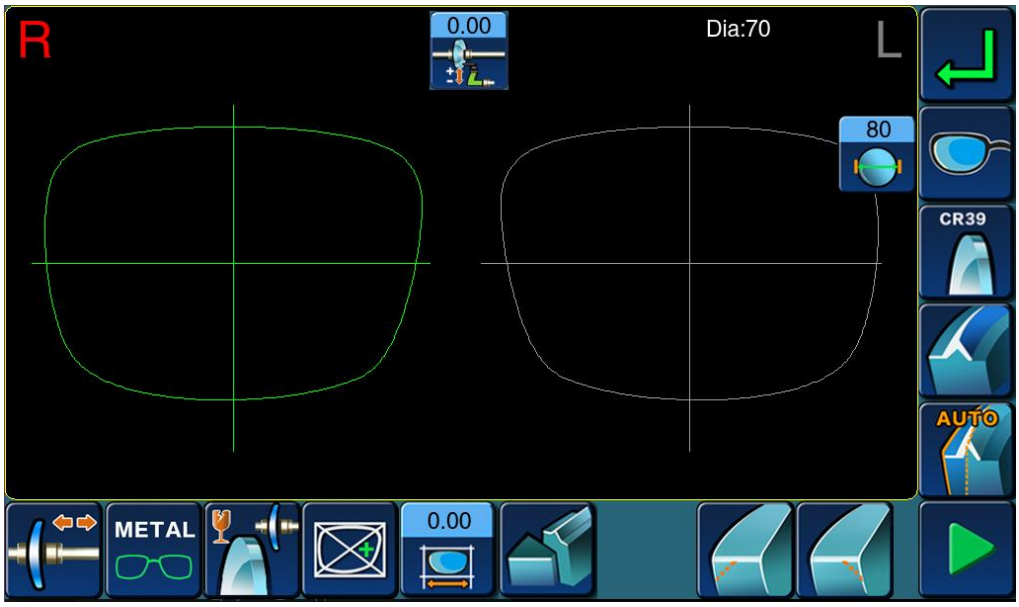
>SELECT THE GEOMETRIC CENTER MODE OR OPTICAL CENTER MODE, ROTATE THE SWING ARM, AND PRESS THE SUCTION CUP.





3.2.9 LENS PROCESSING INTERFACE

>CLICK THE MAIN INTERFACE ICON  TO ENTER THE LENS PROCESSING SETTINGS INTERFACE.



1. Left and right eye processing selection:

 >>Right eye  >>Left eye

2. Lens material selection:

>>Resin sheet 

>>PC sheet 

>>Quan Ai Shi  >>Glass sheet 

>>High refractive index sheet

3. Polygon selection:

 > >Sharp edge  >>Flat edge

4. Sharp edge ratio:

>>Automatic 

>>33% 

>>50%  >>Manual  >>Front surface  >>Rear surface

5. Slotting ratio **(only for machines with slotting function)** :

>>Automatic 

>>33% 

>>50%  >>Manual  >>Front surface  >>Rear surface

6. Chamfer the front surface **(only for machines with chamfering function)** .

 >>No chamfering  >>Chamfering on the front surface

7. Back surface chamfering **(only for machines with chamfering function)** .

 >>No chamfer  >>Back surface chamfer (small)  >>Back surface chamfer (medium)

 >>Back surface chamfer (large)

8. Lens processing mode:

 >>Optical Center Mode  >>Geometric Center Mode

9. Polishing options:

 >>Polishing  >>No polishing

10. Others:

 >>Clamp and unload film  >>Start processing  >>Stop processing 

>>Processing size

 >>Rebuild

11. Clip pressure:

 >>(1st pressure) fragile pieces  >>(2nd pressure) ordinary pieces  >>(3rd pressure) water sliding diaphragm

 >>Probe detection height.

 >>Set the initial lens processing diameter.

 >>Machine head drop speed (processing speed setting, the smaller the value, the slower the speed and the safer the processing).

 >> Return.

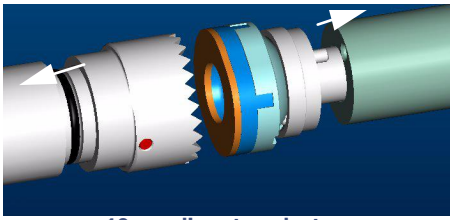
3.3 LENS PROCESSING

3.3.1 CLAMPING / REMOVING LENSES

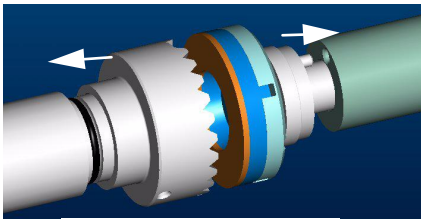
> CLAMP THE LENS INTO THE GRINDING WINDOW

After all the edge grinding data is entered, clamp the lens.

Care should be taken to select the appropriate chuck for each lens.

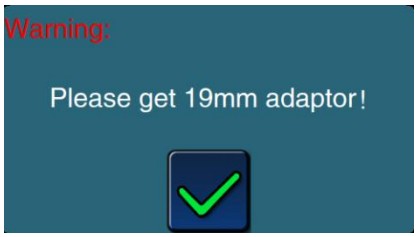


19mm small clamp



22mm big clamp

If the processed lens requires a special chuck, a warning message will automatically be displayed, as shown below.



> REMOVE THE LENS FROM THE GRINDING WINDOW

WHEN THE EDGE GRINDING STOPS OR IS INTERRUPTED, OPEN THE WATER RETAINING COVER.

ACCORDING TO  KEY, THE CLAMP SHAFT OPENS AUTOMATICALLY.

Remove the machined lens but do not remove the suction cup, so it can be re-finished if necessary.

3.3.2 START / STOP THE EDGE GRINDING PROCESS

> STARTING THE EDGING PROGRAM:

AFTER ENTERING ALL THE EDGING PARAMETERS AND LOADING THE LENS INTO THE CHUCK,

ACCORDING TO 

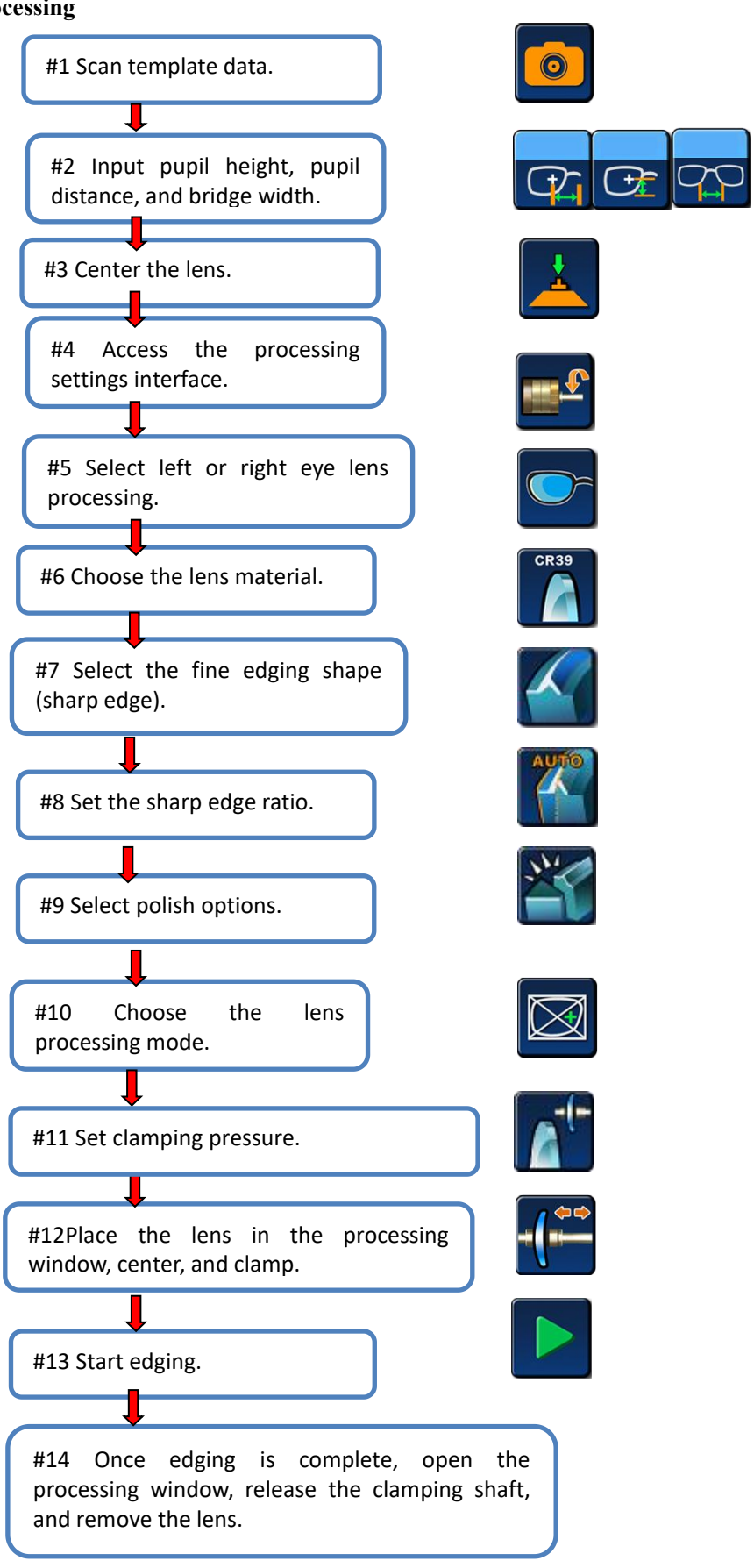
> TERMINATION OF THE EDGING PROCESS

To abort the current edging process, according to 

While edging is in progress, you can jump to this button from other jump buttons.

3.3.3 LENS PROCESSING STEPS

> Full frame lens processing



IMPORTANT TIPS:

> Automatic sharp edge

The apex of the sharp edge is automatically located 1/3 of the way from the front surface of the lens .

> 33% sharp edges

The apex of the sharp edge is located 33% from the front surface of the lens .

> 50% sharp edge

The apex of the sharp edge is located 50% from the front surface of the lens .

> Sharp edge on front surface

The apex of the sharp edge is located on the front surface.

> Sharp edge on rear surface

The apex of the sharp edge is located on the rear surface.

> Manual sharp edge

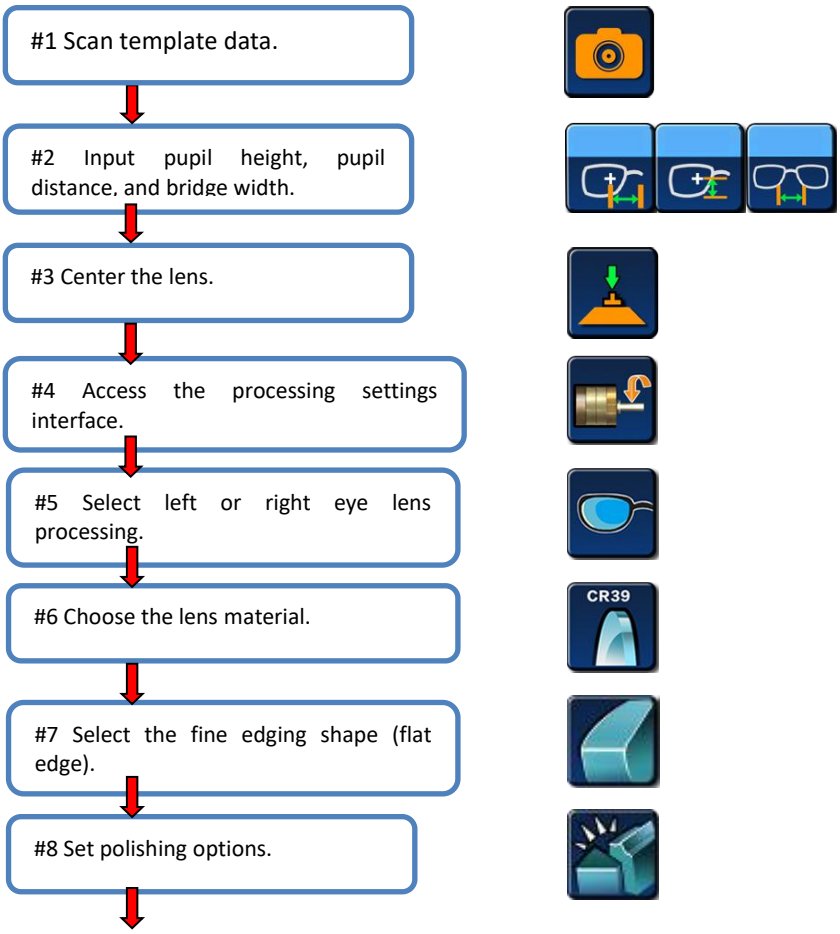
Users can enter the tip ratio (the position of the tip vertex from the front surface of the lens).

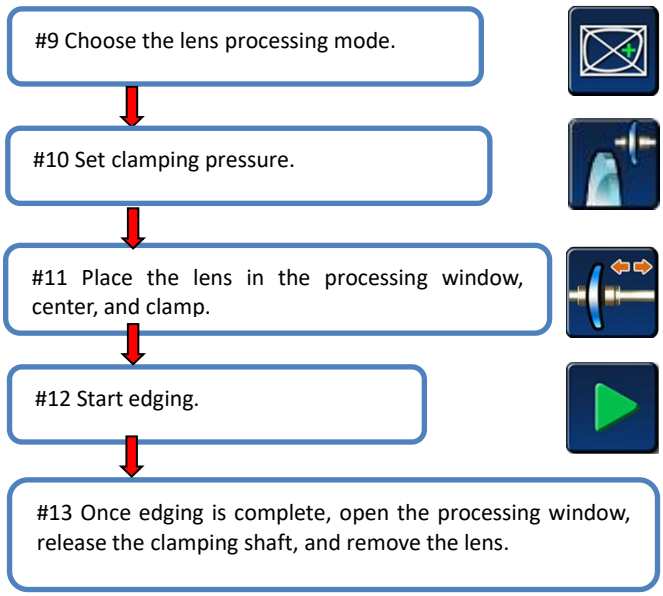
IMPORTANT TIPS:

> If the maximum thickness of the lens is less than 2mm , no matter how the sharp edge / groove position is set, the processing position is always automatically located at 1/2 thickness of the lens

Degree place.

> **Half-frame or frameless lens processing**





IMPORTANT TIPS:

> Automatic slotting

The groove is automatically located 1/3 away from the front surface of the lens .

> 33% slotting

The groove is located 33% from the front surface of the lens .

> 50% slotting

The groove is located 50% from the front surface of the lens .

> Front surface slotted

The grooved position is located on the front surface.

> Rear surface slotting

The grooved position is located on the rear surface.

> MANUAL SLOTTING

USERS CAN INPUT THE GROOVE POSITION (THE DISTANCE FROM THE FRONT SURFACE OF THE LENS)

3.3.4 PROCESSING SCOPE

> Lenses

Diameter: Unprocessed lens diameter 80mm plus 10mm offset, that is, maximum lens diameter without offset is 100mm.

thickness:

The maximum thickness of unprocessed resin lenses is 18mm.

Maximum thickness of unprocessed glass lens: 16mm.

Minimum center thickness of lens: 1.2mm.

Finished rough ground lens, maximum thickness of flat edge: 11mm.

Complete rough grinding of the lens, maximum thickness of the glass edge: 15mm.

Finished rough-ground lens, maximum thickness of resin tip edge: 15mm.

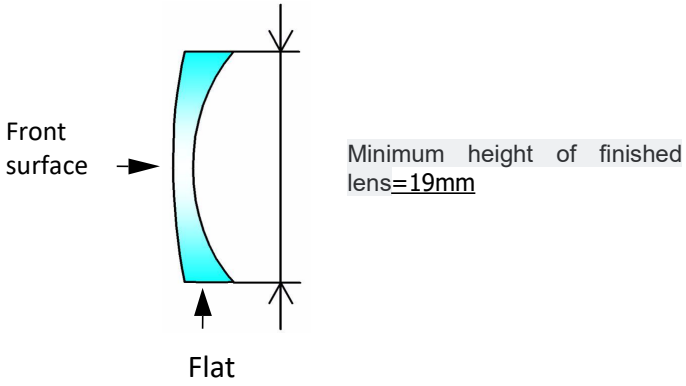
> Shape

Minimum flat edge height: 19.00mm.

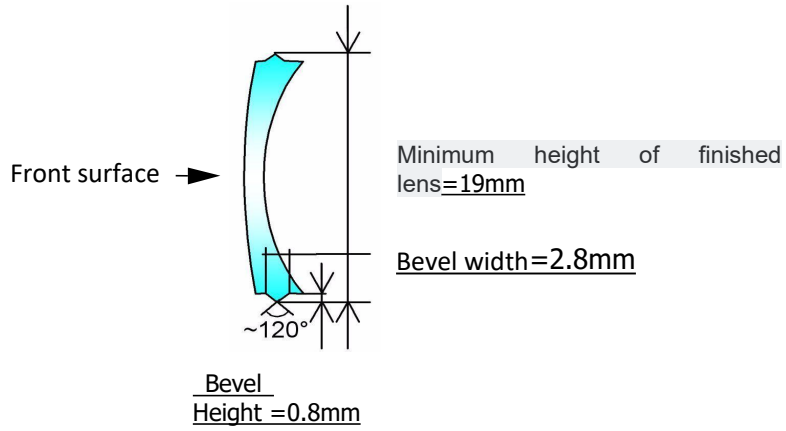
Minimum height of sharp edge: 19.00mm.

> Processing range diagram

>>Flat edge lenses



>>Pointed edge lenses

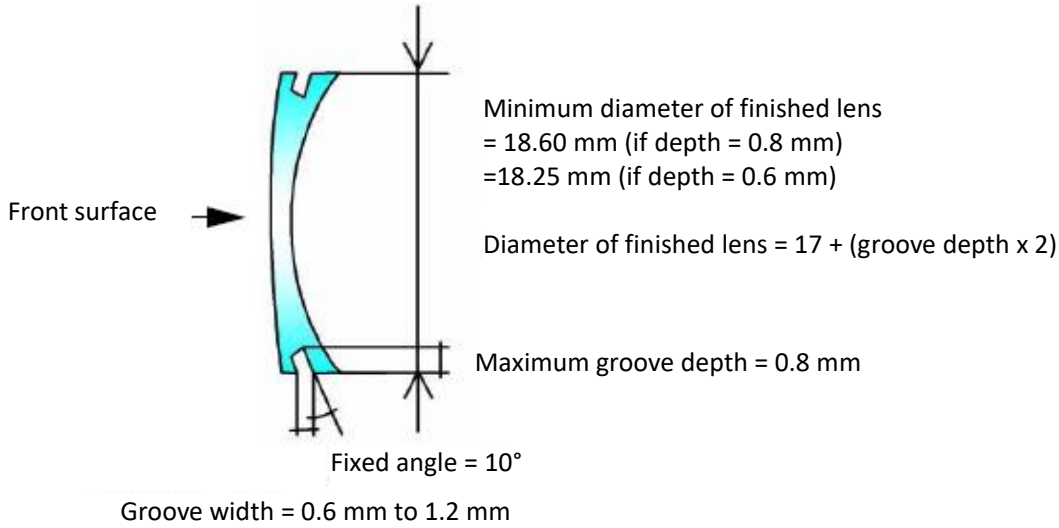


>>Slotted lenses

Slot width: 0.6-1.2mm

Grooving depth: 0.0-0.8mm

Minimum distance between the slot and the front and rear edges: 0.2mm

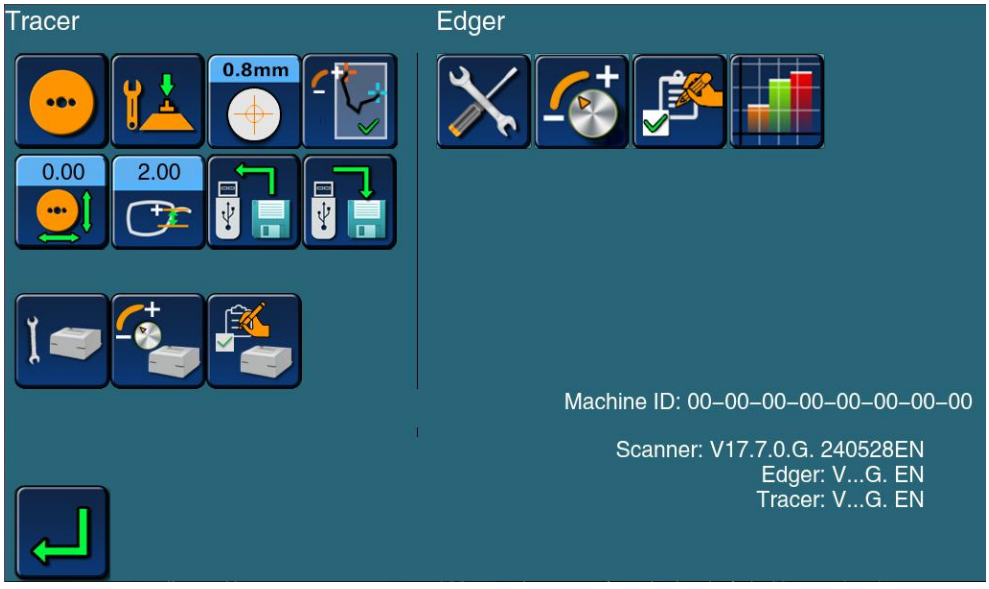


4. MENU CONFIGURATION

4.1 CONFIGURATION MENU INTRODUCTION

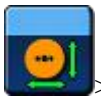
4.1.1 SYSTEM MENU INTERFACE

>CLICK THE MAIN INTERFACE ICON  AND ENTER THE MENU PASSWORD: 2800 TO ENTER THE MENU.



 >>Scanner size calibration.

 >>Optical centering calibration.

 >>Scan size compensation.

 >>Memory data export.

 >>Memory data import.

 >>Customize the initial value of pupil height.

 >> Mechanical scanner test.

 >>Mechanical scanner calibration.

 >> Mechanical scanner initialization.

 >>Touch screen test.

 >>Complete machine test.

 >>Complete machine settings.

 >> Initial setup.

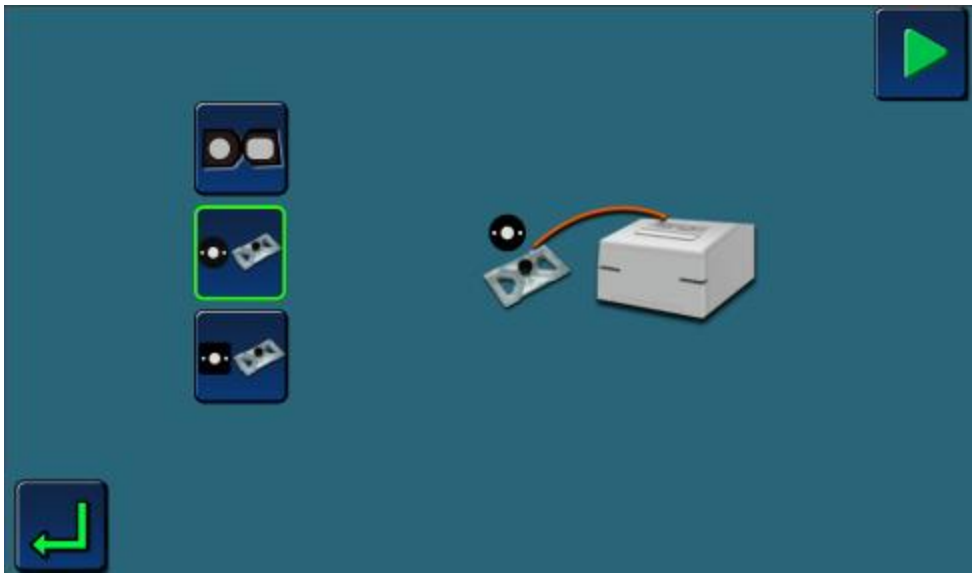
 >>Processing data statistics table.

4.2 EQUIPMENT CALIBRATION

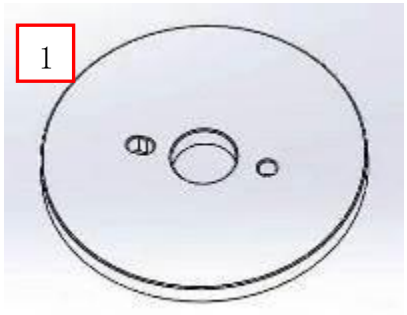
4.2.1 TEMPLATE SIZE CALIBRATION (MECHANICAL SCANNER)

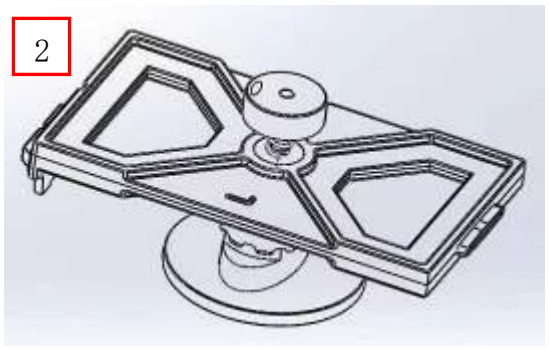
>Click the main menu interface icon  to enter the scanner calibration interface.

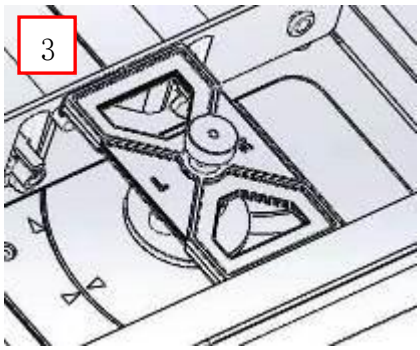
>Select Template Size Calibration  .



> Fix the circular correction plate with a diameter of 40mm on the template holder, and put the template holder into the scanning.





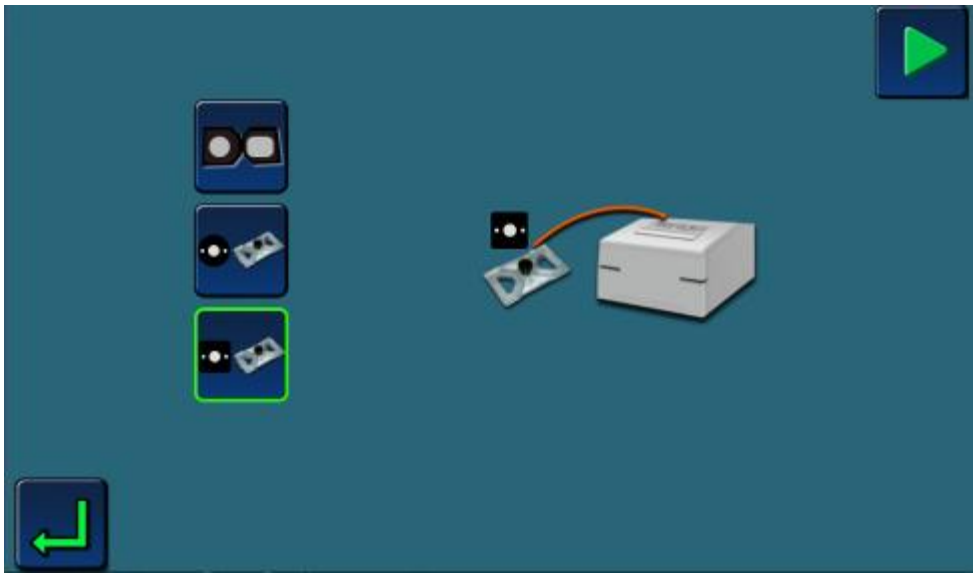


>Click the icon  and the system will automatically calibrate the template size.

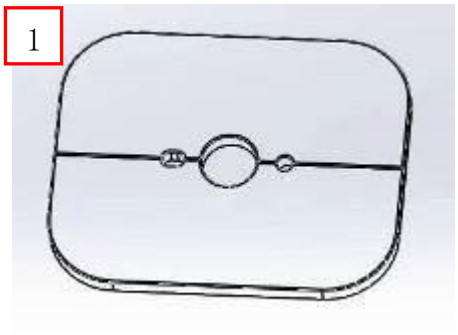
>After the template size calibration is completed, the system automatically calibrates the left and right probe heights.

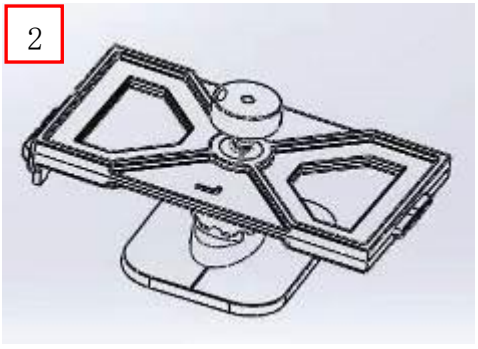
4.2.2 TEMPLATE AXIS CALIBRATION (MECHANICAL SCANNER)

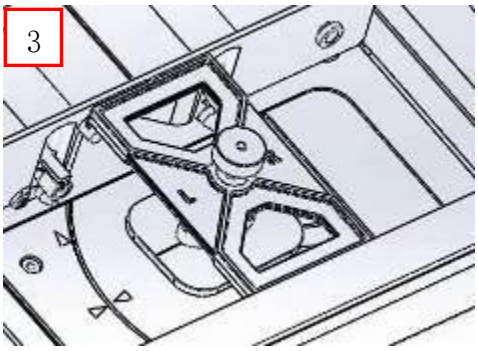
>Select Template Axis Alignment  .



> Fix the 50 * 40mm square correction plate on the template holder and put the template holder into the scanning process.



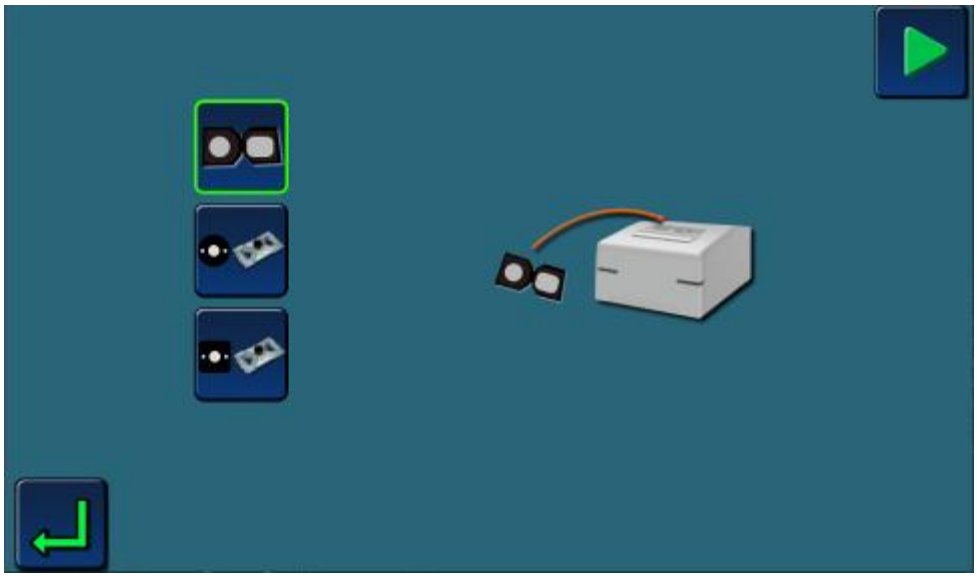




>Click the icon  and the system will automatically calibrate the template axis.

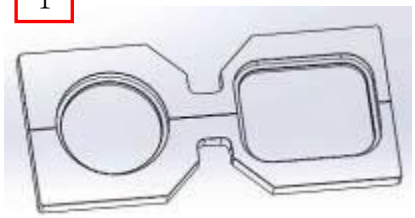
4.2.3 MIRROR FRAME SCANNING CALIBRATION (MECHANICAL SCANNER)

>Select Frame Scan Calibration  .

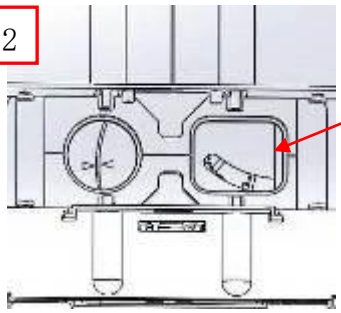


> Fix the calibration plate to the clamp frame system, place the calibration plate in the center, and pay attention to the direction of placement (circular on the left, square on the right), as shown in the figure below.

1



2

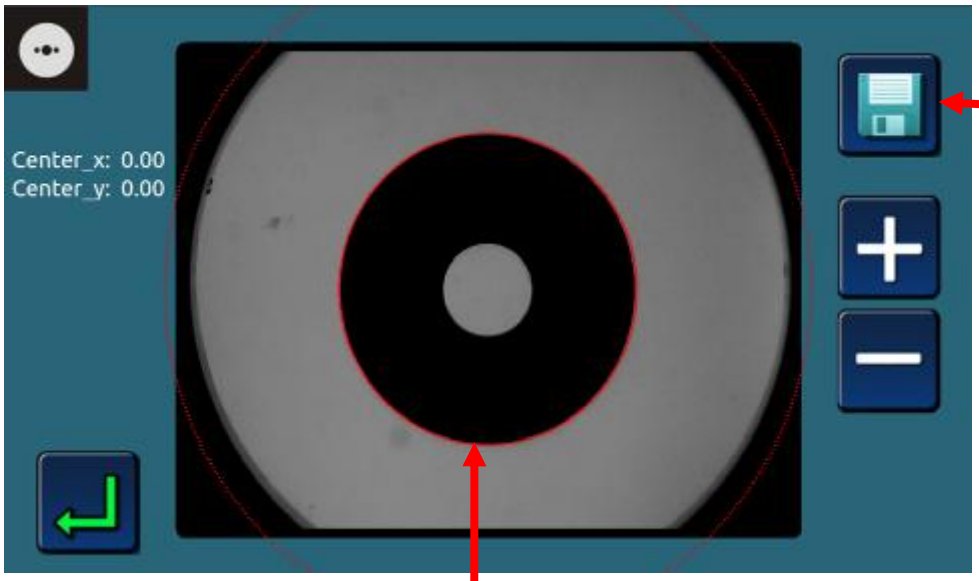


Circular on the left
Square on the right

>Click the icon  and the system will automatically calibrate the frame size and axis position.

4.2.4 Optical Scanner Dimension Calibration

>Click the main menu interface icon  to enter the scanner size calibration.



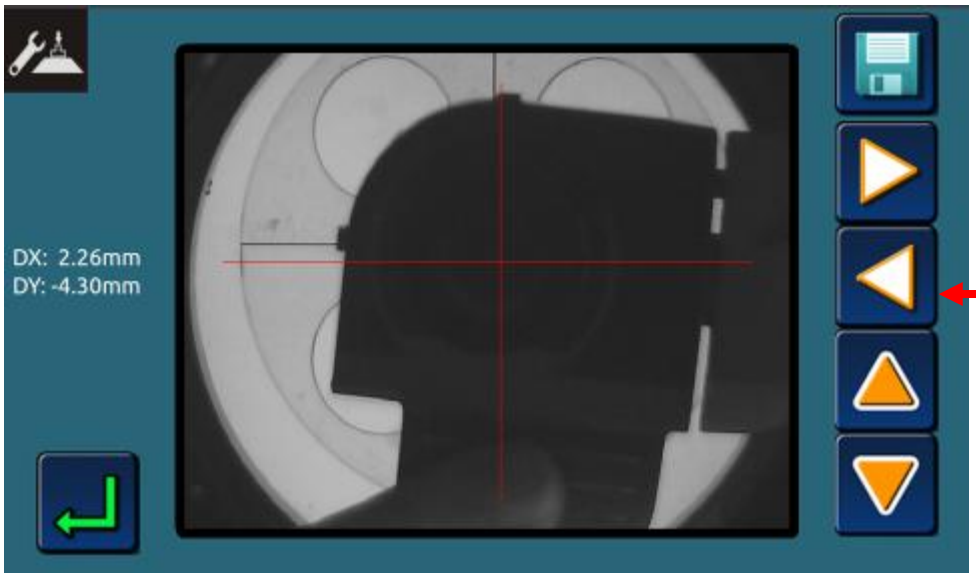
#2 After the red circle aligns with the calibration plate, click Save, and the system will automatically calibrate the dimensions.

#1 Move the calibration plate and use the + and - buttons to align the red circle with the calibration plate.

4.2.5 OPTICAL CENTER CALIBRATION

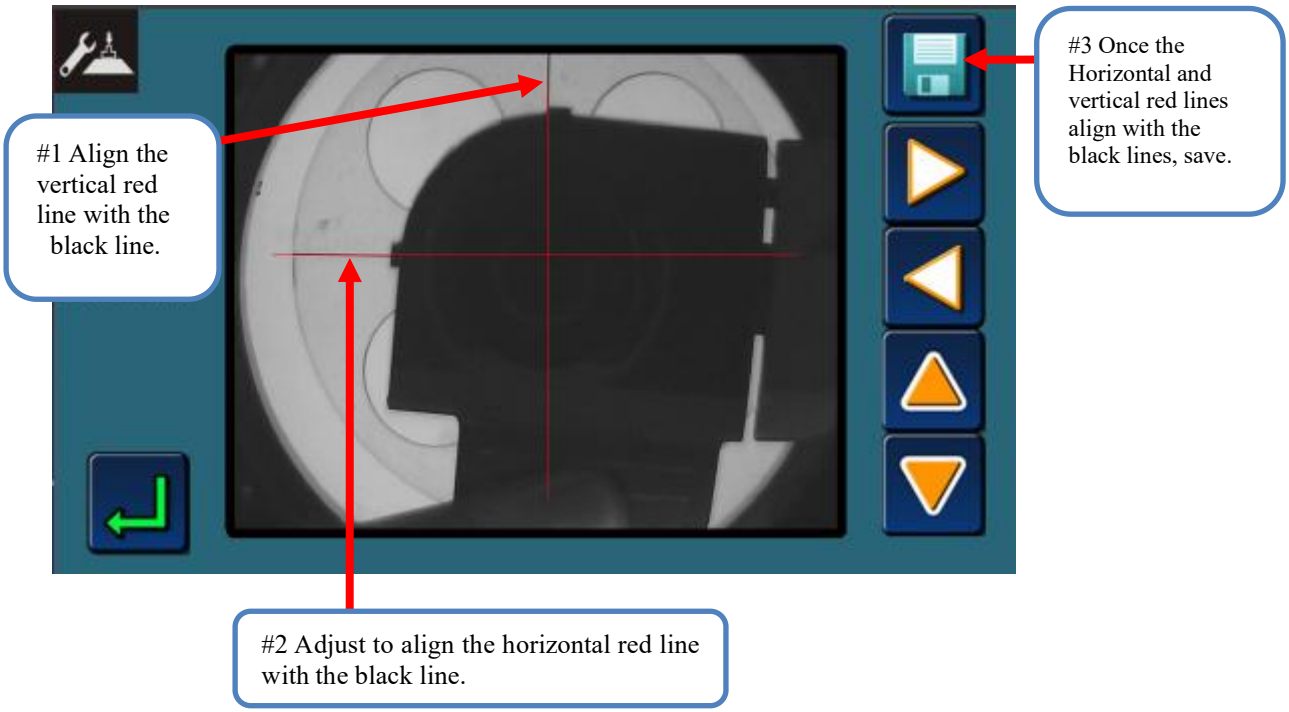
>CLICK THE MENU INTERFACE ICON  TO ENTER THE SIZE CORRECTION INTERFACE.

>Take the calibration tool, install it into the suction cup seat, rotate the centering instrument arm, and press down.



Adjust Button

>ADJUST THE HORIZONTAL AND VERTICAL RED AND BLACK LINES TO COINCIDE, AND CLICK THE SAVE BUTTON.



4.2.6 MECHANICAL SCANNER TEST MENU

>CLICK THE MAIN MENU INTERFACE ICON  TO ENTER THE SCANNER TEST INTERFACE.

 >> Scanning probe lifting test.

 >> Scanning probe shift test.

 >> Tower tray displacement test.

 >> Tower plate rotation test.

 >> Clamp frame assembly test.

 >> Mechanical scanning whole machine test.

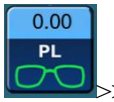
4.2.7 MECHANICAL SCANNER INITIALIZATION MENU

>CLICK THE MAIN MENU INTERFACE ICON  TO ENTER THE SCANNER INITIALIZATION MENU.

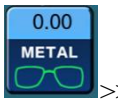
 >> Scanning probe slot position initialization . 

>> Scanning mirror frame material initialization.

 >>Probe scanning speed setting, the larger the value, the slower the scanning speed.

>>Soft plate frame size correction . 

>>Hard plate frame size correction .



>>Metal frame size correction .

>>Correct the upper and lower height dimensions of the scanned graphics .


>> Template scan size correction.


>> Template scanning axis correction.


>> Correction of mirror frame scanning dimensions.


>> Correction of mirror frame scanning axis position.


>> Right eye probe height corrected.


>> Left eye probe height corrected.

4.2.8 EDGE GRINDING MACHINE TEST MENU

>CLICK THE MAIN MENU INTERFACE ICON  TO ENTER THE WHOLE MACHINE TEST MENU.


>>Performance test of machine head lifting motor and encoder.


>>Performance test of machine head horizontal movement motor and encoder.

 >>Lens rotation motor and encoder PERFORMANCE test.

 >>Scanning probe assembly PERFORMANCE test.

 >>Main motor and water spray system PERFORMANCE test.

 >>Film clamping/unloading system PERFORMANCE test.

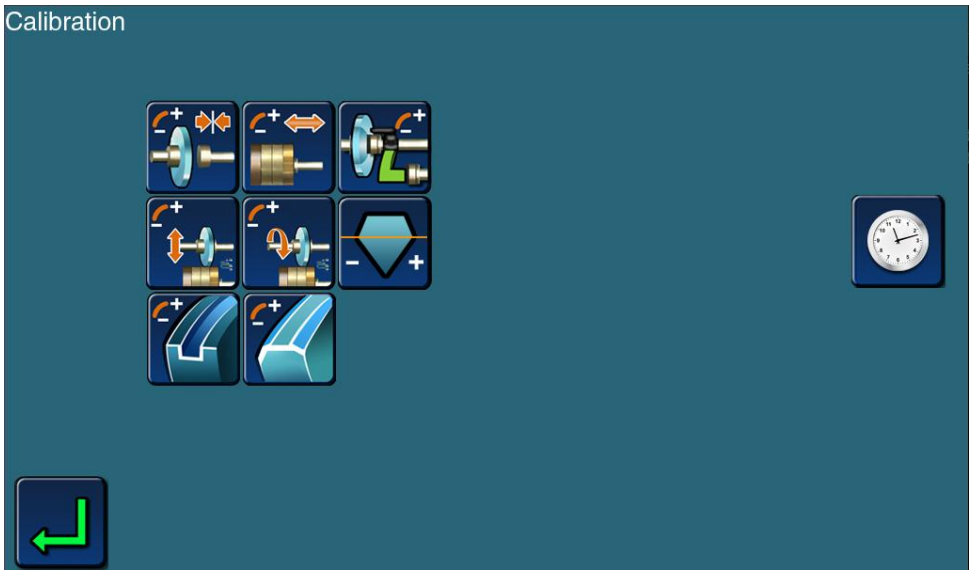
 >>Complete machine stress test.

 >>Slotting and chamfering performance test **(only for machines with slotting and chamfering functions)** .

>>Lock the machine head and pack the whole machine for transportation.

4.2.9 EDGE GRINDING MACHINE SETTINGS MENU

>CLICK THE ICON ON THE MAIN MENU INTERFACE  TO ENTER THE MACHINE SETTINGS MENU.



 >> Clip pressure correction.

 >>GRINDING WHEEL POSITION CORRECTION.

 >>Scanning probe calibration.

 >>Processing size setting.

 >>Set the number of processing turns.

 >>Set the reference axis position.

 >> Grooving setting **(only for machines with grooving and chamfering functions)** .

 >>Bevel setting **(only for machines with grooving and bevel functions)** .

Note: Parameter setting needs to be completed under the guidance of professional after-sales service personnel. Users should not enter the parameter setting menu by themselves, otherwise improper operation may affect the performance of machine processing.

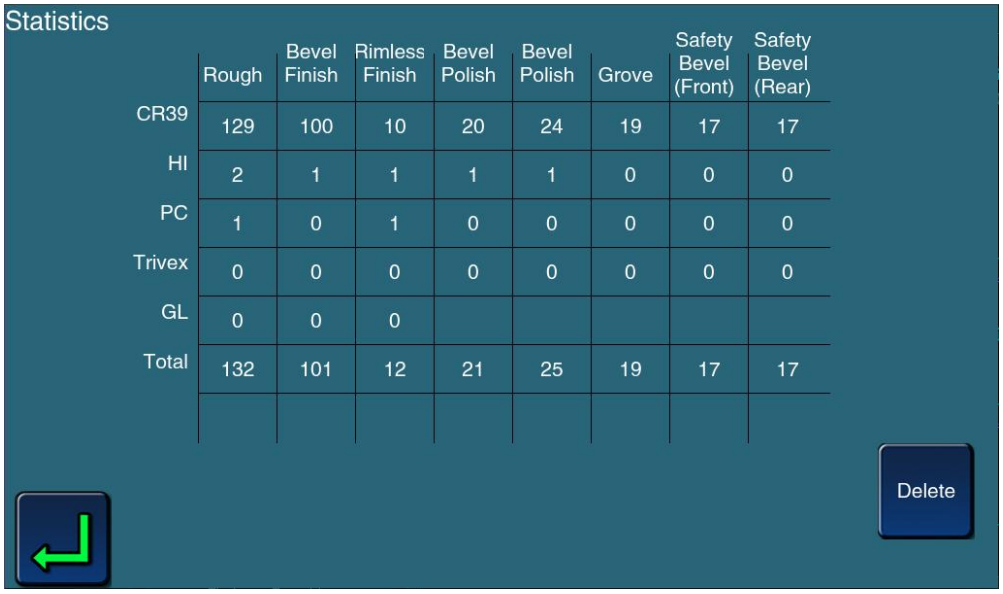
4.2.10 INITIAL PARAMETER SETTING OF EDGE GRINDING MACHINE

>CLICK THE MAIN MENU INTERFACE ICON  TO ENTER THE INITIAL SETTINGS MENU.

>AFTER COMPLETING THE SETTINGS, CLICK  TO SAVE THE INITIAL SETTING PARAMETERS.

4.2.11 EDGE GRINDING MACHINE PROCESSING STATISTICS

>CLICK THE ICON ON THE MAIN MENU INTERFACE  TO VIEW THE PROCESSING STATISTICS DATA.



5. DAILY MAINTENANCE OF THE MACHINE

5.1 MAINTENANCE INSTRUCTIONS

To ensure that your edge grinder operates in optimal condition and to achieve the results you want, you must perform several maintenance operations within a certain range.

> Cleaning the touch screen

> Edge grinding machine maintenance

>> Use a spray bottle filled with water to clean the edge grinding machine processing room frequently.

>> Replace the movable lens suction cup regularly (every 100 lenses processed).

>> Check the lens scanning probe regularly and replace it in time if it is found to be worn or damaged (or replace it every 3,000 lenses).

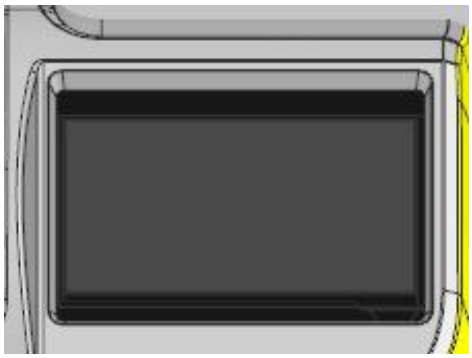
>> Clean the water baffle and replace it if necessary.

>> If the machine uses circulating water, replace the water in the water tank regularly.

>> Clean the filter and water tank regularly.

>> Check the condition of each grinding wheel and ask the technician to replace it if necessary.

5.2 TOUCH SCREEN COMPONENT MAINTENANCE



#1 If the machine is powered on, switch it off first.

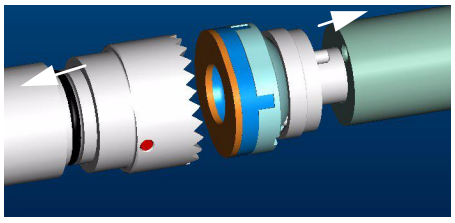
#2 Use a soft, dry cloth to gently wipe the touch screen.

Warning:

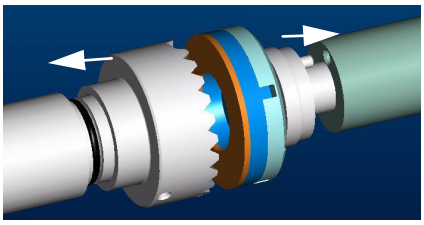
Do not use products such as water or chemical agents. For stains that are difficult to clean with a dry cloth, use alcohol. Damage to the touch screen caused by improper maintenance is not covered by the warranty.

5.3 REPLACEMENT OF THE REMOVABLE CHUCK

NOTE: The lens chuck is serrated and the lens probe is pointed. Make sure your hands are protected when touching the chuck and probe.



19mm small clamp



22mm big clamp

5.3.1 REPLACE THE RIGHT CHUCK RUBBER PAD

The procedure for replacing the chuck rubber pad is as follows:

#1 Carefully remove the right chuck from the clamping shaft.

#2 Remove the old rubber pad from the chuck and replace it with a new one.

#3 Reattach the right chuck to the clamping shaft.

As shown in the figure:

5.4 REPLACE THE SCANNING PROBE

> Check the lens scanning probe regularly and replace it in time if it is worn or damaged (or replace it every 3,000 lenses).

Unscrew and remove the existing probe.

Replace it with a new

> After the scanning probe is replaced, the probe position needs to be recalibrated.

The procedure for calibrating the probe is as follows:

#1 Enter the Menu. >>

#2 Access the Settings Interface. >>

#3 Access the Settings Interface. >>

>>

#4 Select Calibration Tools. >>

#5 Enter the calibration thickness value for the tool. >>

#6 Replace with a 25mm large chuck. >>

25mm large chuck

#7 Insert the calibration tool. >>

#8 Start calibration. >>

#9 The machine will initiate the calibration procedure, automatically saving the parameters. Once complete, remove the calibration tool. >>

5.5 Cleaning/Replacing the Water Retaining Plate

> Before starting any operation, make sure the machine is switched off: the On/Off switch is in the off position and the main power is disconnected.

The replacement procedure is as follows:

#1

#2

HINT:

> Regular cleaning of the cover allows for a clear view of the grinding room and processing progress.

> The use of circulating water will affect the cleanliness of the water baffle, so it is recommended to clean the water baffle frequently.

5.6 CLEAN THE FILTER AND WATER TANK

> Before performing any operation, make sure the machine is switched off: the On/Off switch is in the off position and the main power is disconnected.

> Frequent cleaning may not be based on the number of lenses processed, but the manufacturer recommends cleaning every approximately 100 lenses (glass and plastic) processed.

> Gloves and goggles must be wear-resistant. Work clothes are preferred.

Please clean the water tank and filter regularly.

6. TECHNICAL SPECIFICATIONS

6.1 FEATURES

> Automatically initialize.

> 3D detection of the curvature of the front and back surfaces of the lens.

> Grinding wheel configuration:

>> Glass coarse grinding wheel.

>> Resin coarse grinding wheel.

>> Sharp edge / Flat edge Fine grinding wheel.

>> Sharp edge / Flat edge Polishing wheel.

> Automatic lens clamping during processing , three levels of clamping pressure selection, suitable for processing lenses of different materials.

> Connect to the water pump when using circulating water, and connect to the solenoid valve when using tap water.

> Edge diameter

>> Less than or equal to 80 mm .

>> Flat edge (without safety sharp edge) > = 19.00mm.

>> Sharp edge (without safety sharp edge) > = 19.00mm.

> Automatic cleaning of lens fixing system and grinding chamber .

> Lens processing statistics.

> Mechanical Scanner Parameters:

B-Width scanning size: minimum 20mm, maximum 58mm.

A-length scanning size: minimum 30mm, maximum 68mm.

Frame thickness: minimum 2.0mm, maximum 16mm.

6.2 TECHNICAL PARAMETERS

> Designed for indoor use

> Dimensions

>> Length: 728 mm

>> Width: 653 mm

>> Height: 453 mm

> Machine weight: 75 kg

> Input voltage : 220V -230V / 50Hz , 110V -115V / 60Hz

> Machine power: 1500W

> Noise: 72 decibels

> Operating temperature: 5℃~40℃

> Relative humidity: 10% - 80%

> Water pump working voltage: 220V -230V / 50 Hz , 110V -115V / 60 Hz

> Rated power of water pump: < 350 W

> FUSE:

2 2 0V -230V / 50 Hz =15A

1 1 0V -115V /6 0 Hz = 30A

7. LIST OF ACCESSORIES (PACKING PARTS)

Serial	name	quantity
1	Suction cup pliers	1
2	Butterfly head correction tool	1
3	Scanning probe	3
4	Left and right clamps (25mm)	1
5	Left and right chuck (22mm)	1
6	Left and right chuck (19mm)	1
7	Chuck rubber pad (25mm)	2
8	Chuck rubber pad (22mm)	2
9	Chuck rubber pad (19mm)	2
10	Small suction cup (19mm)	5
11	Medium suction cup (22mm)	5
12	Double-sided tape	1
13	Power cord	1
14	Fuse (6*30mm) (220V-15A or 110V-30A)	5
15	Certificate	1
16	Warranty card	1
17	manual	1
18	Desiccant	2
19	Hexagon wrench (5*8mm)	1
20	Drain	1
21	Template size correction plate	1
22	Template axis correction plate	1
23	Frame size correction plate	1
24	Formwork support	1