briot couture

User Manual-Edger

FC001198-rev02

VISIONIX

INNOVATION TO UNLOCK YOUR POTENTIAL

Dear Customer,

You have purchased a BRIOT COUTURE edger, and the entire team of Briot, a brand belonging to the Luneau Technology group, would like to thank you for the confidence you have shown us.

The BRIOT COUTURE edger is an equipment for ophthalmic professionals and practitioners and is used for edging spectacle lenses.
Connected to an external server, the edger receives data relating to the assembly (shape).

We advise you to read this manual carefully and keep it near the machine in order to be able to refer to it easily.

The information contained in this manual is not contractually binding and can be modified without prior notice. This document has been prepared with great care, but some unintentional errors or omissions may occur, although every effort has been made to avoid them. The manufacturer cannot, under any circumstances, be held responsible for any operating faults that may result from such errors or omissions.

THE MANUFACTURER DOES NOT GUARANTEE THE PERFORMANCE OF YOUR BRIOT COUTURE EDGER IF THE INSTRUCTIONS CONTAINED IN THIS MANUAL ARE NOT OBSERVED.

DEPENDING ON THE MACHINE VERSION AND OPTIONS AND ON THE DATE AND COUNTRY OF SALE, SOME EQUIPMENT ITEM(S)/FUNCTION(S) DESCRIBED IN THIS MANUAL MAY NOT BE INCLUDED IN YOUR MACHINE.

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GRAPHIC CODES

Different graphic codes have been used in this manual to allow the user to distinguish between different types of information and easily spot the items which demand special attention (e.g. safety-related items).
The table below lists all the codes and describes them:

TABLE 1: DESCRIPTION OF THE PICTOGRAMS

Graphic code	Description
	Vital warning: Risk of human injury or material damage and machine malfunction. Follow the instructions carefully.
	Vital recommendation: Risk of machine damage or malfunction. Follow the instructions carefully.
	Vital preliminary action Before undertaking any action, check that the machine is disconnected.
	Electrical hazard
	Heavy component In particular, a second person is necessary to carry and move the edger.
	Rotating component In particular, do not put your hands near the wheel unit.
	Attaching component In particular, beware of the clamping shafts closing.
	Protective gloves must be worn Especially for cleaning and changing the tanks.
	Protective goggles must be worn Especially for cleaning and changing the tanks.
	Overalls must be worn Especially for cleaning and changing the tanks.

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (APPLICABLE IN THE EUROPEAN UNION AND IN EUROPEAN COUNTRIES USING A SELECTIVE WASTE COLLECTION SYSTEM)

This symbol affixed to the product or to its packaging indicates that the product will not be treated like household waste. Instead, it must be delivered to the designated collection point where electric and electronic equipment may be recycled. By ensuring that this product is correctly disposed of, you will help prevent potentially harmful environmental and human consequences due to improper handling when improperly disposed of. The use of recovered materials preserves natural resources.
For more information about where you can drop off this product for recycling, please contact your local waste disposal service or the agent from whom you purchased this product.

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REVISION FOLLOW-UP

Revision 00

Page	New/Modified Item

1. INSTALLATION

briot Couture

UNPACKING THE MACHINE

#1&2

#4

Keep the case, the small carton and the hose near the machine.

#5

#6

#8

#10

#11

1.1. UNPACKING THE MACHINE

1.1.1. WARNING

> Ensure that the machine is placed in accordance with the TOP and BOTTOM signs on the box.
> Place the machine on a flat and stable surface.

1.1.2. PROCEDURE

Follow the steps below to unpack the machine:

#1	**Place the machine on the floor in its packing with the help of another person.**
#2	**Cut the two straps on the main packaging carton.**
#3	**Cut the adhesive tapes on the main packaging carton.**
#4	**Check that the accessories (small box, case and tube) have been supplied and keep them close to the machine.**
#5	**Pull the main packaging carton upwards and remove it.**
#6	**Cut the two straps on the second packaging carton.**
#7	**Cut the adhesive tape on the second carton.**
#8	**Pull the second packaging carton upwards and remove it.**
#9	**Remove the plastic protection from the machine.**
#10	**Remove the 4 fixing screws from the rails on the pallet.**
#11	**With the help of a second person, lift the machine by the rails and place it on the work bench.**
#12	**Keep the packaging cartons. We advise you to store them flat.**

Flow chart 1-1: Unpacking the edger

1.2. REMOVING THE SHIPPING RAILS

1.2.1. CONDITIONS

> The machine is placed on the workbench.
> There is enough space around the machine.

1.2.1.1. PROCEDURE

To remove the shipping rails, follow the procedure below:

#1	**With the help of a second person, tip the machine gently to the rear in order to gain access to the 4 rail fixing screws.**
#2	**With a 13 mm Allen wrench, take out the 4 fixing screws and remove the rails.**
#3	**Keep the shipping rails with the rest of the packaging cartons.**

Flow chart 1-2: Removing the shipping rails

→ As shown...

Illustration 1-1: Removing the fixing screws from the shipping rails

1.3. HANDLING THE COVERS

1.3.1. REMOVING THE COVERS

1.3.1.1. WHEN?

> The machine is clamped during transport to ensure maximum stability. To reach the clamping screws, the machine covers must be taken off by a technician.

1.3.1.2. HOW?

To remove the machine covers, follow the procedure below:

#1	**Open the drawer on the front of the machine, and remove the 2 M5 BHC screws located at the bottom of the front cover.**
#2	**Lift the bottom of the front cover to pivot it upwards and pull it up.**
#3	**Remove the 4 M5 BHC screws located at the rear.**
#4	**Remove the rear cover.**
#5	**For each side cover, remove the M5 BHC screw located on the top.**
#6	**For each side cover, partially unscrew an M5 BHC screw located at the rear bottom of each side cover.**
#7	**Remove the side cover by pulling on the cover around the clip located on each side at the bottom towards the front of the machine.**

Flow chart 1-3: Removing the covers

→ As shown...

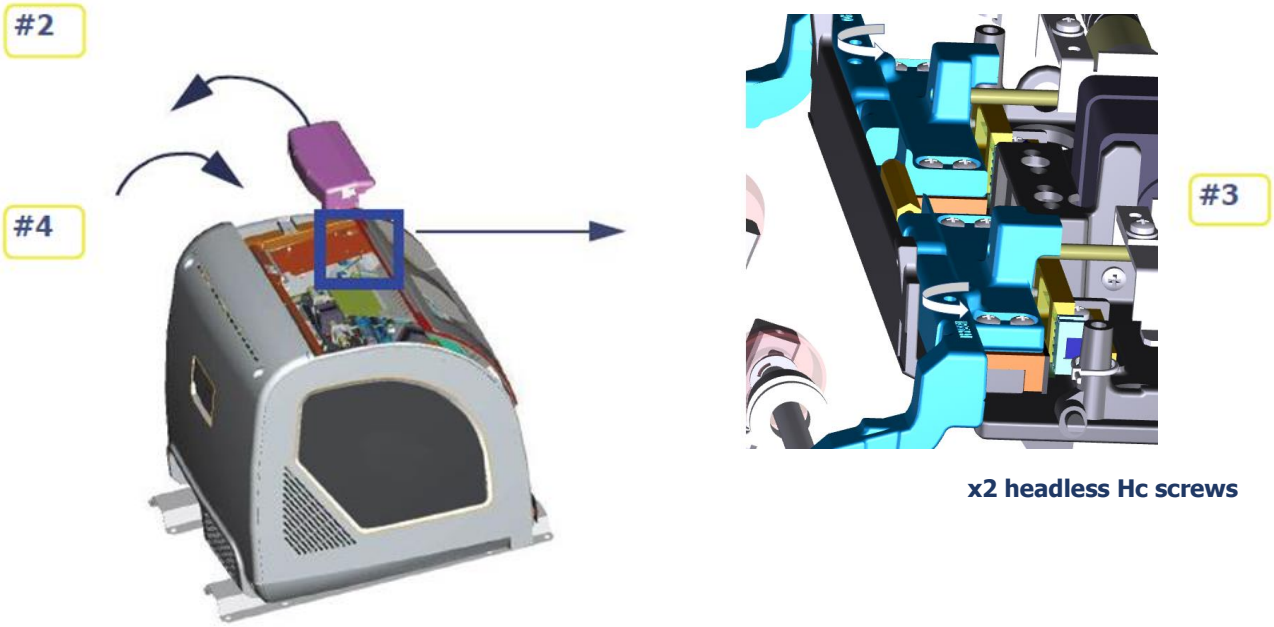
Illustration 1-2: Removing the covers

1.3.2. REPLACING THE COVERS

⇒ To replace the machine covers, follow the above procedure in reverse order.

Illustration 1-3: Removing the internal clamps from the edger

⇒ **REMOVING THE CLAMPING SCREWS FROM THE FEELING SYSTEM**



x2 headless Hc screws

=> UNCLAMPING THE CARRIAGE #9

OK!

Unscrew until the carriage moves freely and add one more turn of the spanner!

=> UNCLAMPING THE WHEEL UNIT

1.4. REMOVING THE INTERNAL CLAMPING SCREWS

> **Before undertaking any operation, ensure that the machine is switched off: On/Off switch OFF and mains plug disconnected.**

1.4.1. REMOVING THE LOCKING SCREWS

> The wheel unit, the carriage and the lens feeling system are immobilized by locking screws which must be removed before the machine is started.

To remove the locking screws, follow the procedure below:

#1	**Remove the machine covers: <u>see Remove the covers.</u>**
#2	**Unclip and remove the covers of the feeling system.**
#3	**Loosen the 2 headless screws with a No. 2 Allen key.** **DO NOT REMOVE THE SCREWS! Leave them in place.**
#4	**Re-install the cover of the feeling system.**
#5	**Go to the wheel unit clamping screw.**
#6	**Loosen and remove the clamping screw and the spacer.**
#7	**Reassemble the clamping screw and the spacer in the hole below the initial socket so as to keep them in a safe place.**
#8	**Go to the carriage clamping screw.**
#9	**Loosen the carriage clamping screw and free it from the body until the carriage moves freely. DO NOT REMOVE THE SCREW! Leave it in place so as to keep it safe.**
#10	**Reassemble the machine covers: <u>see Reassemble the covers.</u>**

Flow chart 1-4: Removing the locking screws

1.5. PREPARING THE BENCH

1.5.1. MACHINE DIMENSIONS

The following illustrations show the machine dimensions.

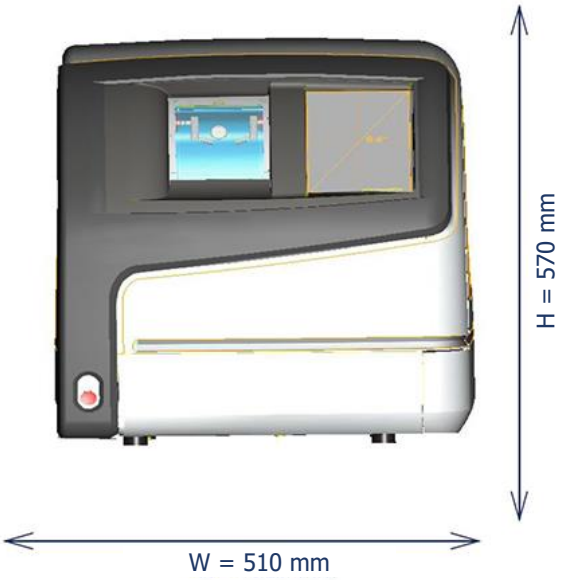


Illustration 1-4 : Edger dimensions

→ Height = 570 mm
→ Width = 510 mm
→ Depth = 615 mm
→ Weight = 69 kg

1.5.2. SPACE AND DRILLING REQUIRED

Θ ILLUSTRATION

The following sketch shows the positioning of the machine on the bench and the openings which must be provided.

⇒ Position your machine correctly before drilling the bench!

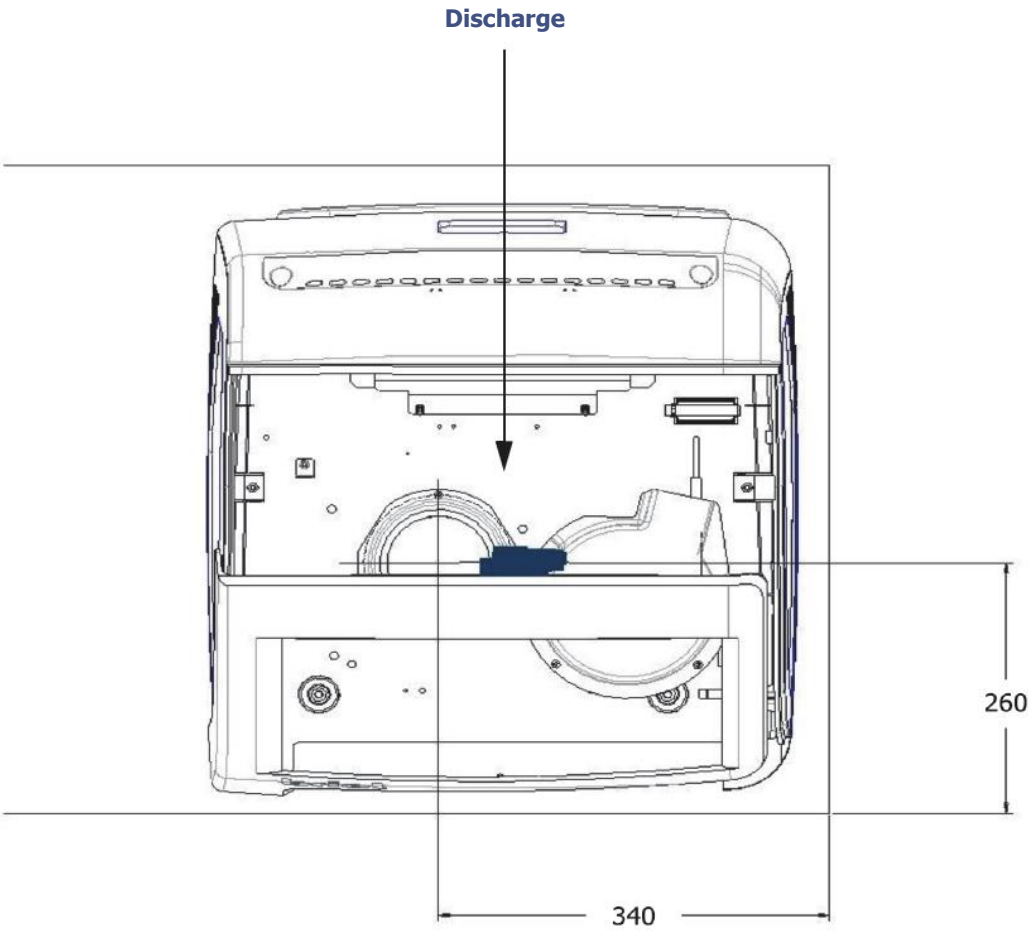


Illustration 1-5 : Positioning the machine on the bench and drilling to be made

Θ RECOMMENDATIONS

⇒ Follow the dimensions given.
⇒ Leave enough space around the edger.
⇒ Ensure that the bench is stable and level.
⇒ Install the edger away from any source of heat.

1.6. WATER CONNECTIONS

1.6.1. SPECIFICATIONS

1.6.1.1. GENERAL

> Water intake with a stop-valve fitted with a 20 x 27 mm female connector and a filter seal.

This stop-valve must be reserved for the machine and placed at a maximum of 80 cm from the place provided for the machine.

The stop-valve must be easy to reach and closed when not in use.

> Water pressure = 4 - 7 bars
> Water discharge through a 100 mm diameter pipe.

The slope must be at least 5% to ensure proper evacuation of the refuse.

1.6.1.2. FILTRATION TANK WITH PUMP

> W 600 x H 400 x D 315 mm
> 60-liter capacity
> Two levels of filtration

1.6.1.3. PUMP

> W 400 x H 230 x D 300 mm
> Power = 450 W max.
> Q = 20/220 l/min
> V = 220 - 240 V
> H = 8 - 1 m
> F = 50 Hz
> IP = 68

1.6.2. PIPE CONNECTIONS

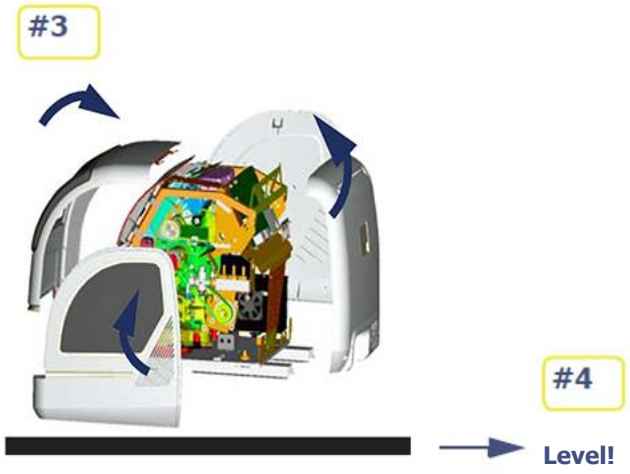
1.6.2.1. FIND THE OPENINGS ON THE CHASSIS

Illustration 1-6 : Chassis openings

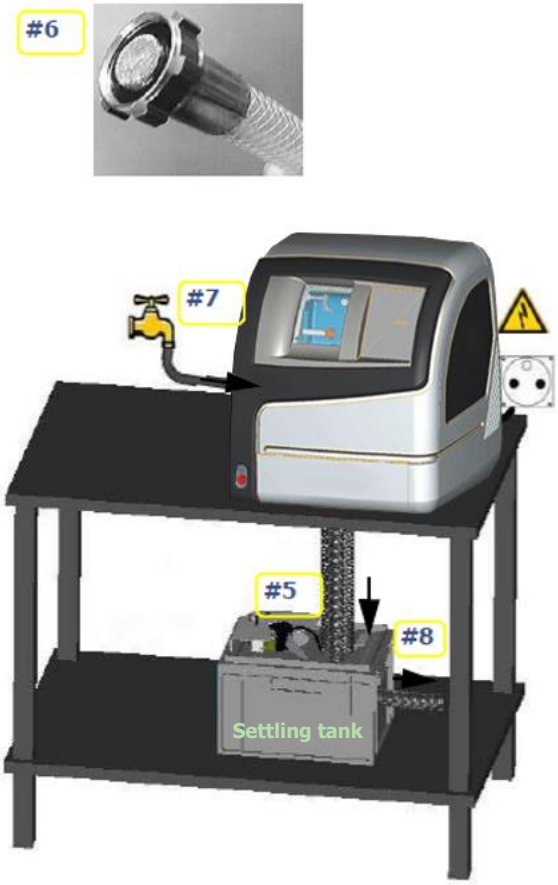
1.6.2.2. PROCEDURE

→ As shown...

=> DIRECT WATER SUPPLY



=> CLOSED CIRCUIT



→ Flow chart

To connect the water supply to the edger and fit the pipes, follow the procedure below:

#1	**Check that the machine is switched off: On/Off switch OFF and mains plug disconnected.**
#2	**Check that the water supply is closed.**
#3	**Remove the machine covers.**
#4	**Ensure that the machine is level => screw or unscrew the four feet.**
#5	**Connect the water drain pipe to the chassis.**
#6	**Fit the filter seal between the water supply connection and the valve if you operate in direct water supply.**
#7	**Connect the water supply pipe to the valve (if direct water) or to the pump (in closed circuit).**
#8	**Connect the used water discharge pipe if you operate in direct water supply.**
#9	**When the water circuit is being filled, check the watertightness of the unit, especially around the solenoid valves.**

Flow chart 1-5: Pipe connections

1.7. ELECTRICAL CONNECTIONS

1.7.1. SPECIFICATIONS

> **2P+T - 15A - 120V** or **200/240V** - plug protected by a 30 mA differential circuit-breaker.
> The socket must be earthed.
> Position the equipment so that it is easy to be disconnected by the operator.

1.7.2. EDGER WIRING

1.7.2.1. PROCEDURE

→ Flow chart

To connect the peripheral equipment to the edger, proceed as follows:

#1	**Check that the machine is switched off: On/Off switch OFF and mains plug disconnected.**
#2	**Connect the machine to the LAN network or the blocking unit via the RJ45 port.**
#3	**Connect the bar code reader**
#4	**If you operate in closed circuit, plug in the pump.**

Flow chart 1-6: Electrical connections

→ As shown...

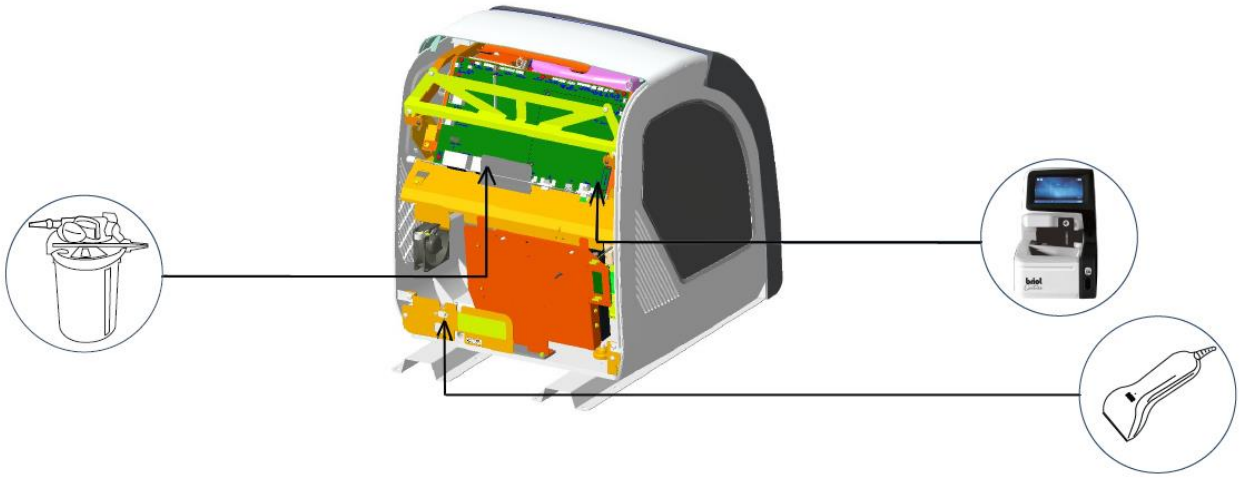


Illustration 1-7 : Electrical connections

Note: The pump and reader illustrations are not the property of the manufacturer and are used purely as examples.

1.8. STARTING THE EDGER

1.8.1. PROCEDURE

→ Flow chart

To start the edger, proceed as follows:

#1	**Check that the machine is switched off: On/Off switch OFF and mains plug disconnected.**	
#2	**Reassemble the machine covers.**	
#3	**Fit the lens clamping and lens holder adaptors on the shafts.** (Corresponding to the finishing to be completed, see "Inserting / Removing the lens")	
#4	**Plug in the machine and switch on (On/Off switch lit).**	
#5	**Start a dummy cycle and adjust the flow of the visor and edging chamber sprays using the adjustment knobs (to reach the knobs, remove the upper cover: see "Handling the covers").**	

Flow chart 1-7: Starting the edger

CAUTION IT IS IMPORTANT TO RUN THE MACHINE WITH THE ADAPTORS ON IN ORDER TO PREVENT THE RISK OF CLAMPING BLOCKAGE.

→ As shown...

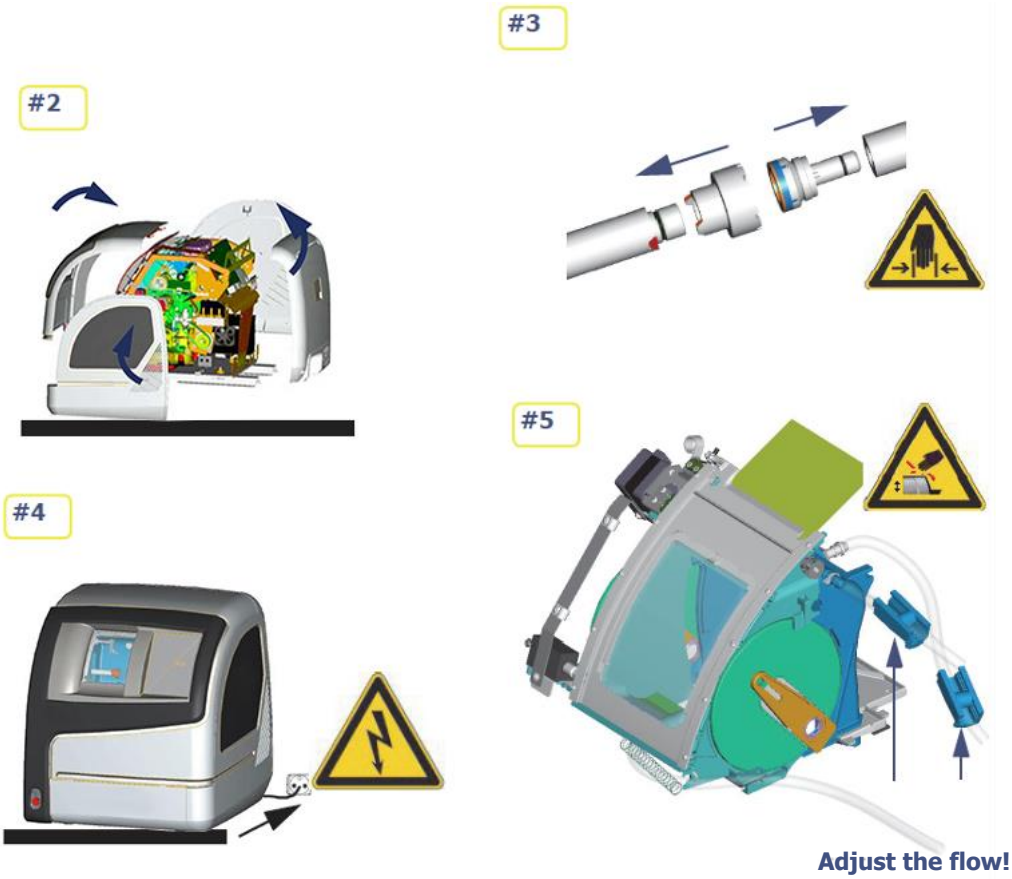
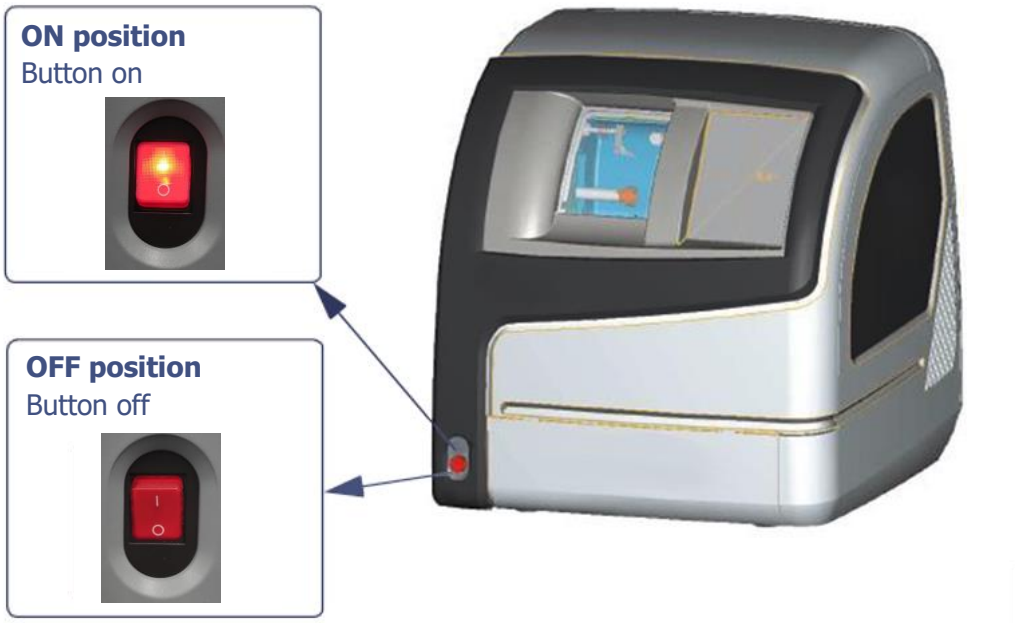


Illustration 1-8 : Starting the edger

1.8.2. SWITCHING THE MACHINE ON/OFF



Flow chart 1-8: Switching the machine ON/OFF

⇒ To switch the machine off, first press  for 5 seconds, then press the On/Off switch.

2. PRECAUTIONS FOR USE

2.1. SAFETY

2.1.1. OPERATOR

> **Read the instructions carefully** and always keep the manual near your machine so you can refer to it easily.
> This is a rotary machine: the wheels are potentially dangerous. Be very careful and keep your **hands away** from the set of wheels.
> Two people are necessary to **move** the machine.
> When you activate the **clamp shafts**, keep your fingers outside the contact areas.
> Make sure that the **installation is perfectly water-tight**.
> **Before servicing the edger, check that the mains cable is unplugged.**

2.1.2. MACHINE

> Make sure your **voltage source corresponds to the voltage specified on the identification plate** located at the rear of the machine. If you are unsure of the type of current available in your premises, contact your electricity company.
> If the **machine is not going to be used for a long period of time, disconnect** the power cords from the wall outlet.
> **Unplug the machine if there is an electrical storm or when the machine is left unattended for a long period.**
> Keep the machine **away from any source of heat**. A radiator is a heat source which can be detrimental to the correct operation of the machine.
> The **openings in the cover are designed to ventilate the machine** and contribute to its normal operation. Do not obstruct them or cover them.
> Make sure that the machine is installed in a **correctly ventilated room**.
> **Do not overload the wall sockets or plugs** because you would increase the risk of fire or electric shock.
> Avoid **using electric extension leads**.
> Keep the machine **away from any source of dust**.
> Any servicing or work on the machine (with the cover open or closed) must be undertaken by a Briot technician.
> The symbol  defines a general hazard, and you will find it: on the edging chamber: risk of bodily hazard.

THE MANUFACTURER CANNOT BE HELD RESPONSIBLE FOR DAMAGE CAUSED BY ANY USE OF THE MACHINE WHICH DOES NOT COMPLY WITH THE INSTRUCTIONS IN THIS MANUAL OR DISPLAYED ON THE MACHINE ITSELF.

2.2. RECOMMENDATIONS

> Ensure that the edger is cleaned regularly.
> Comply with the machine maintenance messages.
> Protect the machine's power cords.
> Remove dust daily (glass, CR39, polycarbonate, Tribrid, Trivex™ and HI) using clean water and a soft sponge or a brush so as not to scratch the plastic surfaces.
> Before blocking the lens, always check which type of block is required and ensure that the lens blocking and lens holder adaptors are appropriate for the job to be done.
> Use blocks designed and supplied by Briot.
> Change the blocks regularly. Their lifespan is 100 blocking operations.
> Use new adhesives.
> Clean the visor regularly.
> Make regular checks of the condition of the feeler tips and change them if they are worn, chipped or damaged.
> Before starting the machine, check that the water supply is working (valve open).
> Make sure that the installation is perfectly water-tight.
> Change the water in the tank regularly if your machine operates in closed water circuit mode.
> Contact a Briot technician for all repairs and always order Briot spare parts.
> To remove the cover from the machine, the technician must use the locking spanner supplied with the edger.
> Use only products delivered and specified by Briot.
> The machine is guaranteed to function correctly if the procedures stipulated in this manual are complied with.

3. USING YOUR EDGER

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3.1. PRESENTATION

3.1.1. PRESENTATION OF THE MACHINE

Θ GENERAL ILLUSTRATION

The illustration below (Illustration 3-1) is an overall view of the machine and shows its main parts.

Illustration 3-1 : Overall view of the edger

Θ MAIN PARTS

The exploded view below (Illustration 3-2) shows the main parts of the edger.

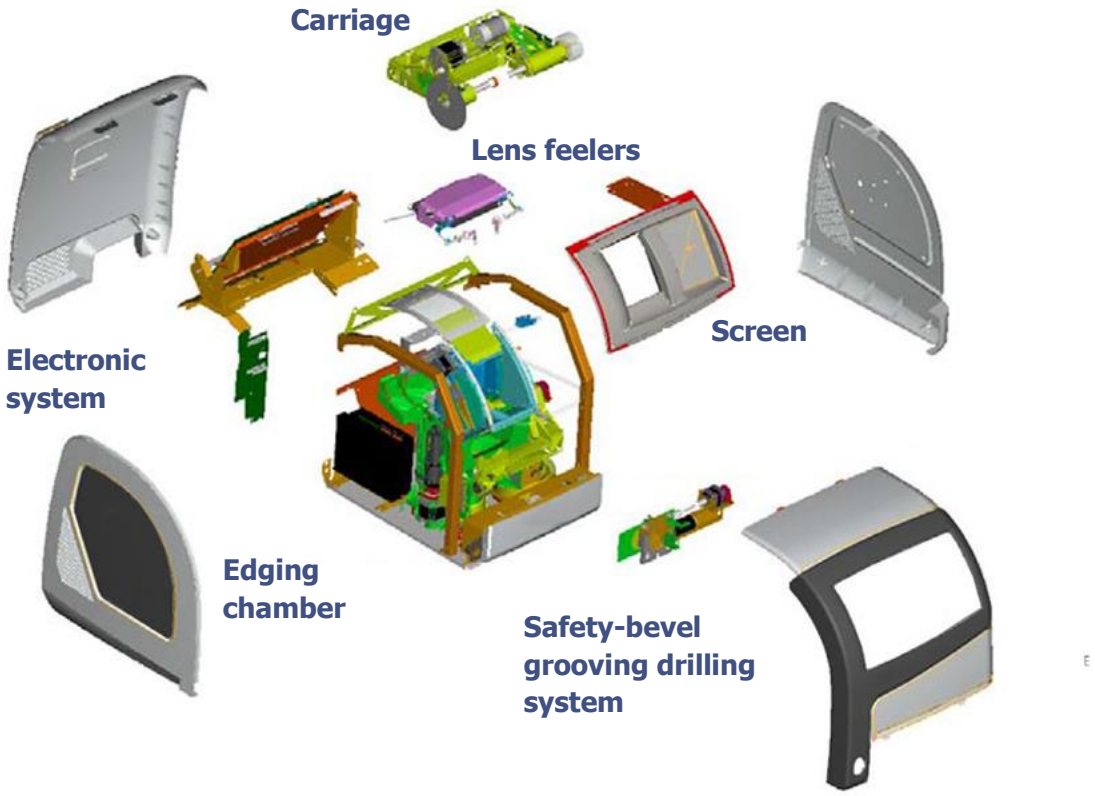
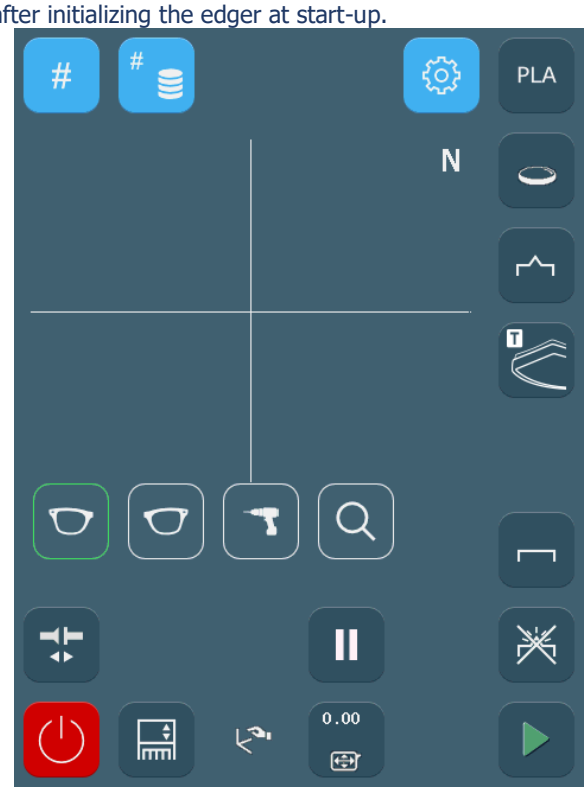


Illustration 3-2 : Exploded view of the edger

3.1.2. PRESENTATION OF THE APPLICATION SCREEN

3.1.2.1. WORK INTERFACE

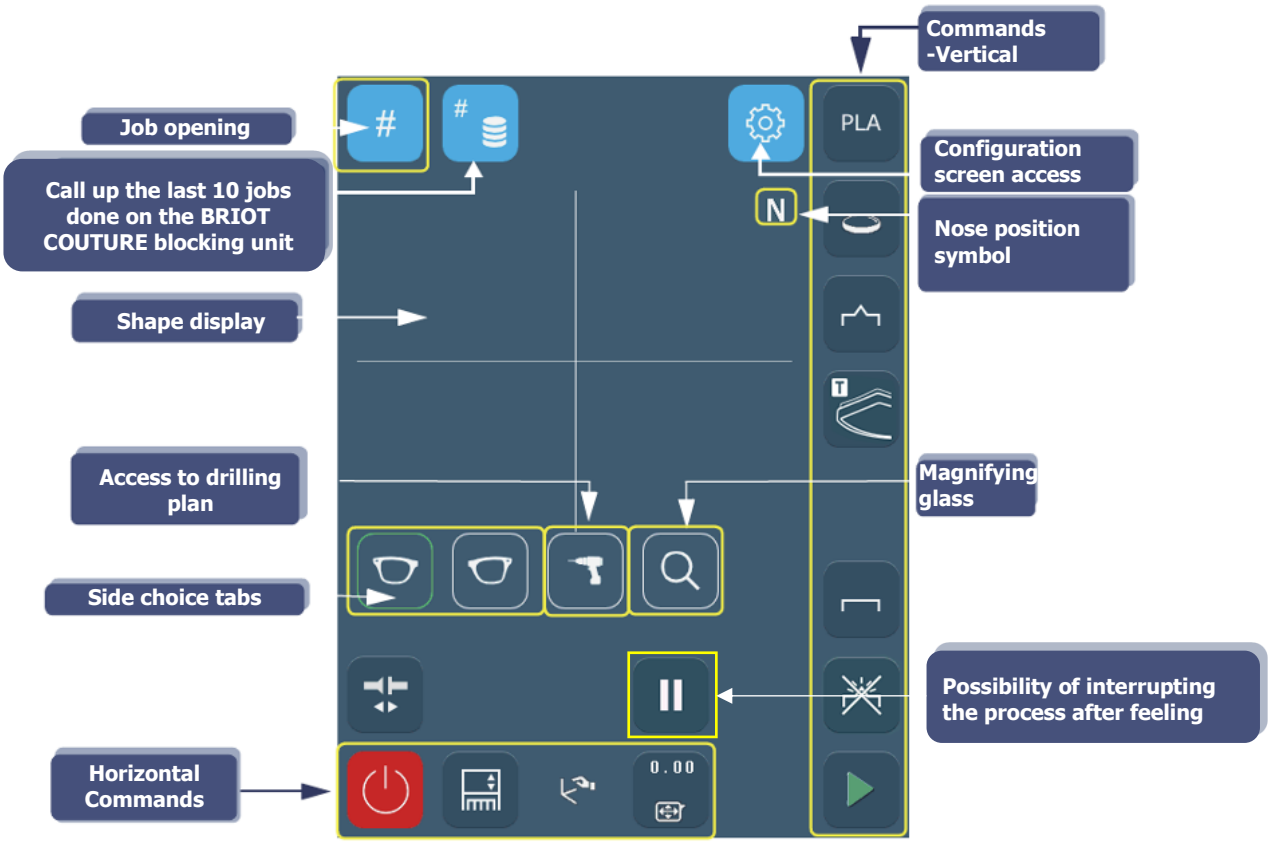
The screen below (Screen 3-1) is displayed after initializing the edger at start-up.



Screen 3-1: Application screen

3.1.2.2. ZONE IDENTIFICATION

The application screen below (Screen 3-2) can be divided into zones.



Screen 3-2: Identification of the application screen zones

3.1.2.3. READING SEQUENCE

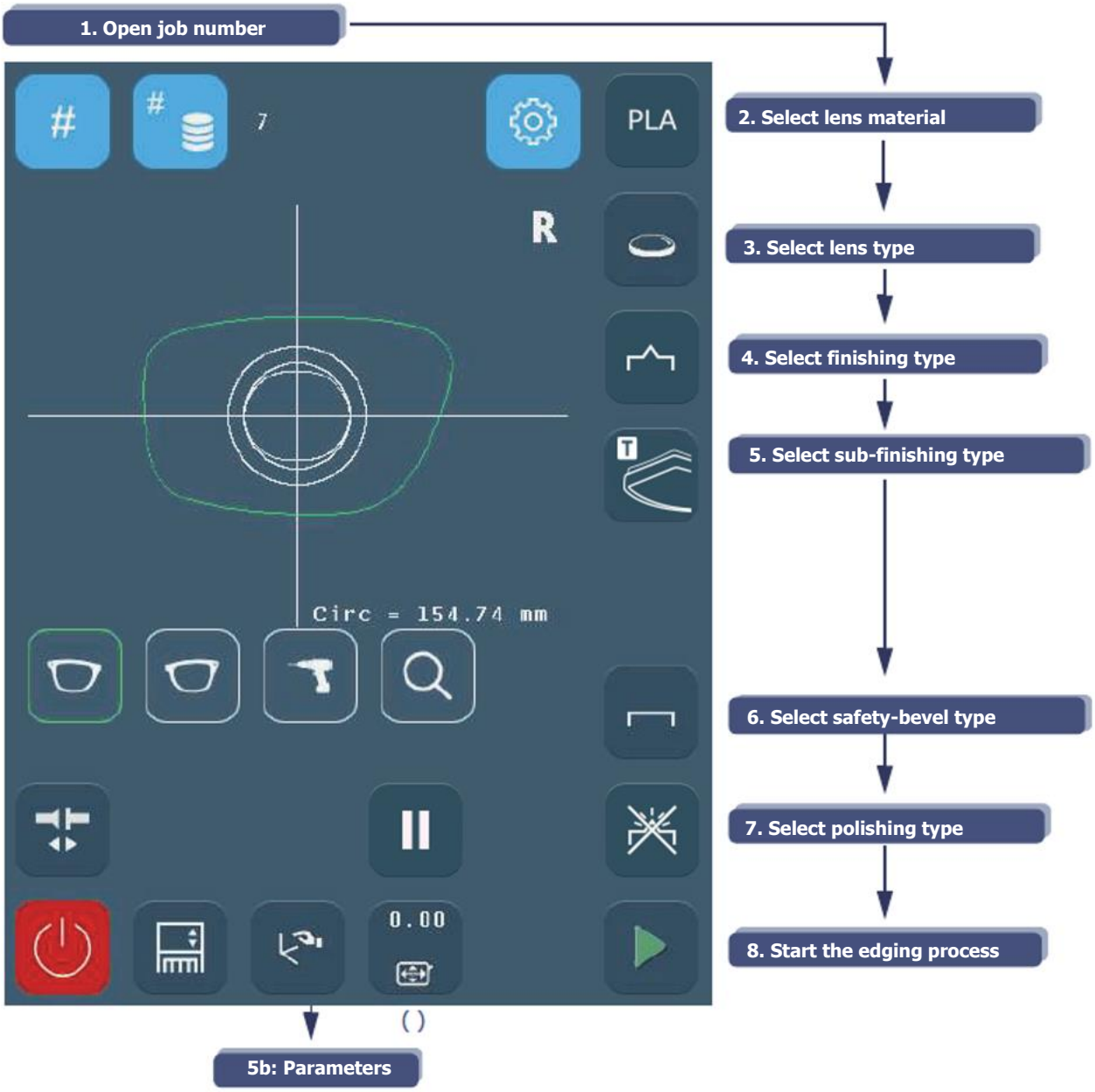
The screen is organised so that you can follow the steps in logical order.

The choice of job characteristics is made in eight steps.

⇒ Begin by opening a job, on the top left of the screen - Step 1.

⇒ Finish by confirming the job, on the bottom right of the screen - Step 8.

> The screen below (Screen 3-3) shows the reading sequence and the job characteristics.
> For a more detailed description of the use of the edger, see General principles of use.



Screen 3-3: Reading sequence of the application screen

Note: The numbers and arrows show the sequence of the procedure for general use. Parentheses ( ) indicate that a button is optional, since the action is not considered compulsory in general use.

3.1.2.4. VISUAL REFERENCES

3.1.2.4.1. TYPES OF BUTTONS

There are different types of buttons corresponding to the different types of action or information to be entered:

Θ IN ALL OF THE MENUS

> Root button: displayed on the screen, it opens a pull-down menu

>

Example:

> Action button: button causing an immediate action when activated.

Example:

> Entry button: used to enter a value using the number keypad and to display it.

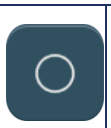
Example:

> Button to be defined: neutral button available for each finishing characteristic (see Personalization of pull-down menus, chapter 4).

Example:

Θ IN THE TECHNICAL MENUS

> The selection button: used to select a function.

SEVERAL POSSIBLE SELECTIONS You can enable one or more functions.		**ONE POSSIBLE SELECTION ONLY** You can enable one function only.	
	The function is not selected.		The function is not selected.
	The function is selected and enabled. Example: The type of Percentage bevel will be displayed in the Bevel sub-finishing menu of the main application screen. You can select all or part of the bevel types.		The function is selected and enabled exclusively. Example: When the Bevel finishing type is selected in the personalization menu, it will be displayed by default on the Finishing button of the main application screen. One finishing type only can be displayed by default.

3.1.2.4.2. ACCESSIBILITY OF FUNCTIONS

The accessible menus or functions also follow distinct graphic codes.

> The available buttons or menus are highlighted.

Example:

> The activated buttons or menus or in process of activation appear darker than the others. They remain activated as long as the button is not released or the menu is not closed.

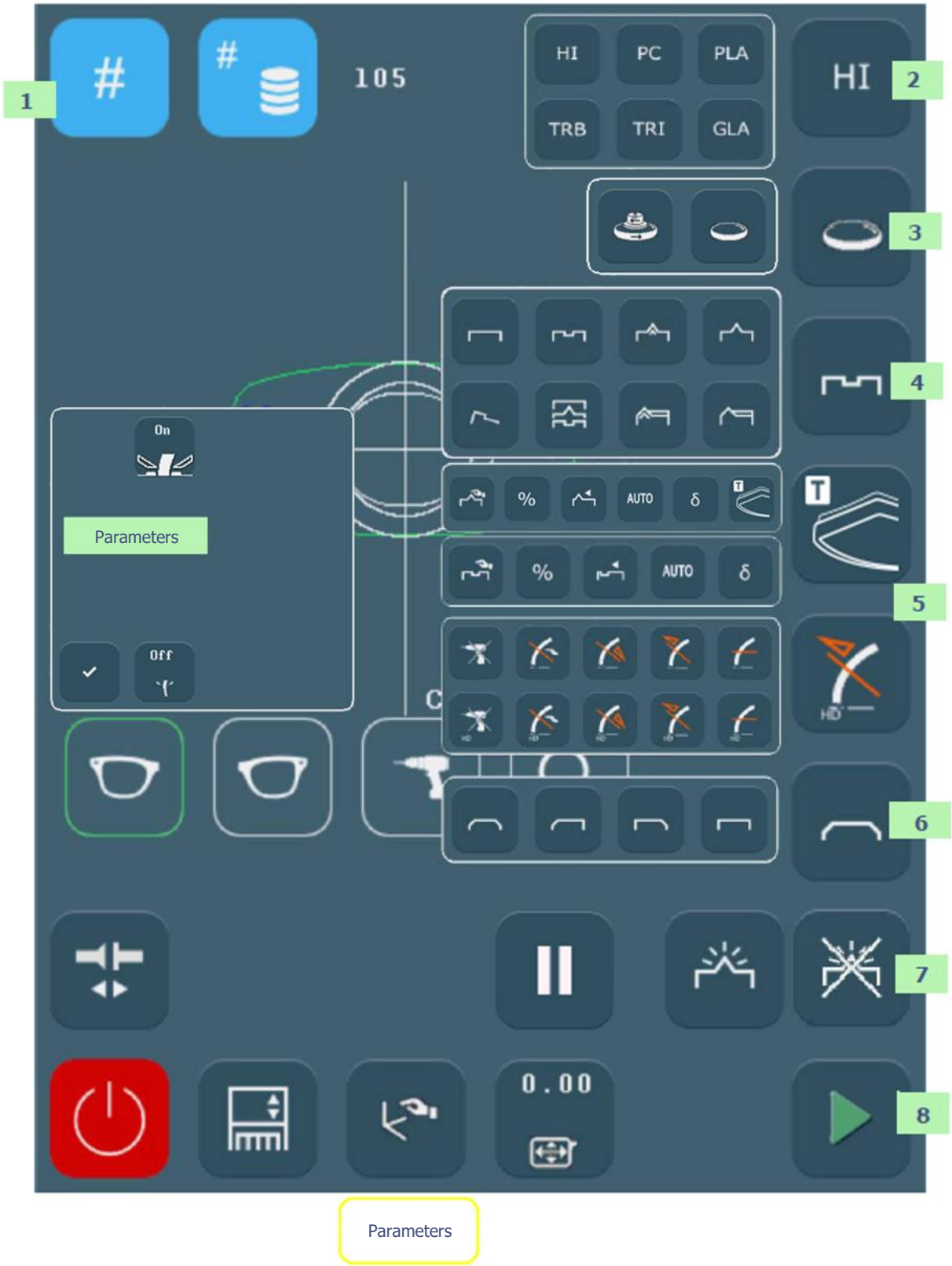
Example:

 from the menu 

> The unavailable buttons are shown in gray (there is no longer a contour around the icon).
> The function cannot be activated because the current configuration does not allow it.

Example:

MAIN APPLICATION SCREEN



Screen 3-4: Main application screen

Note: The screen shown above is a montage to show all the basic functions available to the user from the main screen.

3.2. GENERAL PRINCIPLES OF USE

3.2.1.1. USUAL PROCEDURE

3.2.1.2. FLOW CHART

The following flow chart shows the usual procedure for using the machine.

	See screen 3-4, mark no.
Load a job number.	**1**
↓	
Select the lens material.	**2**
↓	
Select the type of lens.	**3**
↓	
Select the finishing type.	**4**
↓	
Select the sub-finishing type.	**5**
↓	
From the Parameters menu, enter the finishing and safety-bevel values.	**6**
↓	
Select polishing, if desired.	**7**
↓	
Place the lens in the edging chamber.	
↓	
Start the edging process.	**8**
↓	
At the end of the cycle, open the lens camp shaft.	
↓	
Remove the edged lens carefully.	

Flow chart 3-1: Usual procedure

3.2.2. LOADING A JOB

Two functions are available to call up a job:

> Press briefly on this button 

When the numeric key pad is displayed, enter the job number and confirm it.

Result: The shape requested is displayed on the screen. The job number is displayed in the upper tab of the shape display zone. The display is modified according to the job characteristics and the default configuration values.

Example: If the lens material and finishing data are specified in the data given to the edger (e.g.: CR39), they are displayed automatically.

> Press briefly on the Joblist button 

Display the blocking unit's last ten un-edged jobs.

> Bar-code reading with hand-held scanner

Read your job's bar code with the hand-held bar-code scanner.

Result: The shape requested is displayed on the screen. The job number is displayed in the upper tab of the shape display zone. The display is modified according to the job characteristics and the default configuration values.

Example: If the lens material is specified in the data given to the edger (e.g.: Mineral), it is automatically displayed and the screen is modified (with a mineral lens, only Bevel and Rimless finishing are accessible).

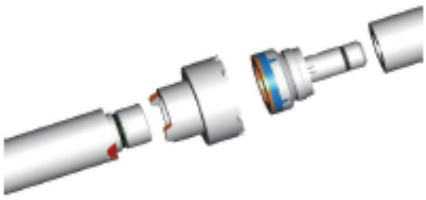
3.2.3. INSERTING / REMOVING THE LENS.

3.2.3.1. TO PLACE THE LENS IN THE EDGING CHAMBER

⇒ When all the edging characteristics have been entered, insert the lens in the edging chamber.

⇒ Always check that the correct clamping adaptors for the job have been fitted.

Machine equipped with universal adapters:



Note: If the job being run requires special adaptors, a warning message will be displayed automatically.

CAUTION **OPERATE THE CLAMPING SYSTEM ONLY IF METAL ADAPTORS HAVE BEEN FITTED ON THE LENS CLAMPING AND DRIVE SHAFTS.**

3.2.3.2. TO REMOVE THE LENS FROM THE EDGING CHAMBER

When the edging cycle is stopped or interrupted, the visor opens.

⇒ Press this button  .

Result: the lens clamp shaft opens automatically.

⇒ Remove the edged lens without removing the block so as to be able to do a retouch if necessary.

3.2.4. STARTING / INTERRUPTING AN EDGING CYCLE

3.2.4.1. STARTING AN EDGING CYCLE

When all the edging characteristics have been entered and the lens is fitted on the lens holder adaptor,

⇒ press this button  .

Result: The visor closes automatically; the lens clamp shaft closes automatically; the edging cycle is run.

3.2.4.2. STOPPING/PAUSING AN EDGING CYCLE

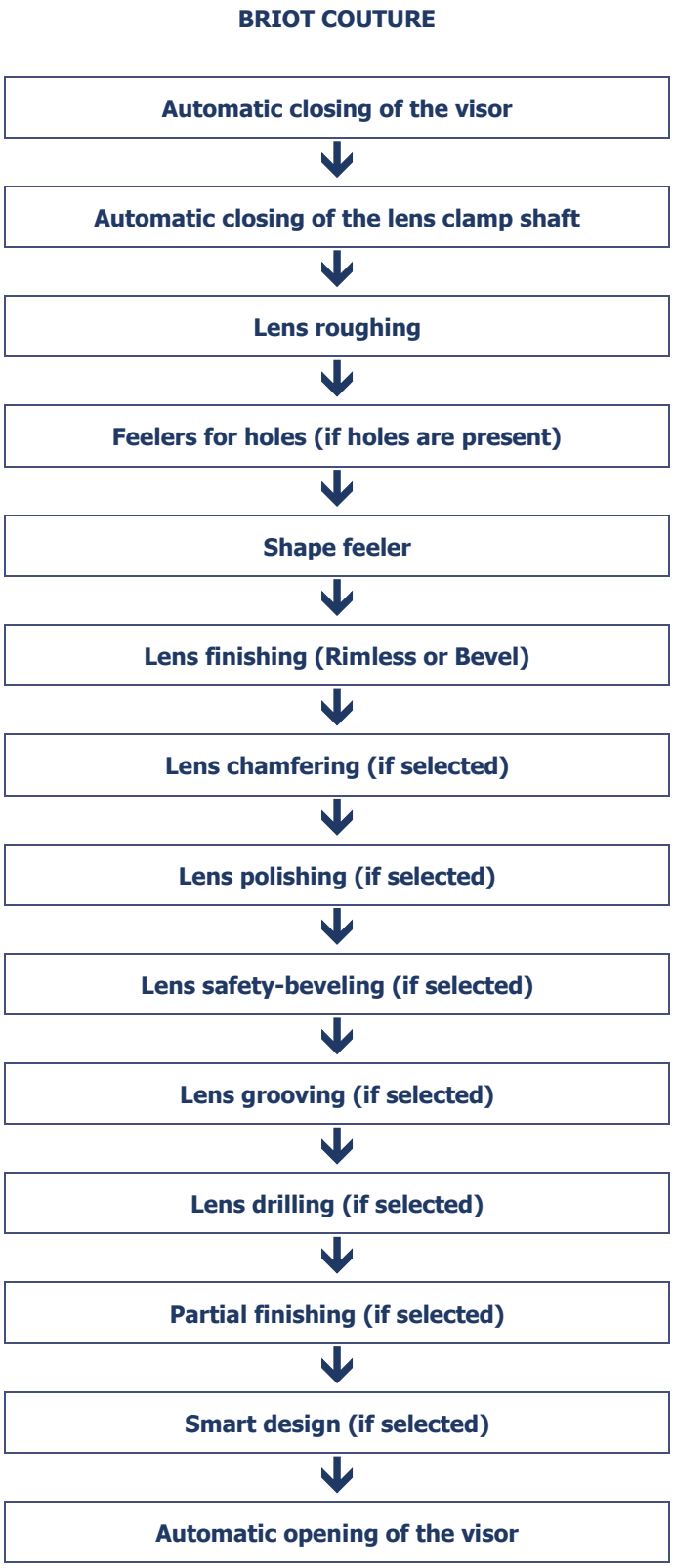
If you wish to stop/pause the current edging cycle,

⇒ press this button  .

Caution! Do not confuse it with the machine shut-down procedure which is activated with this button 

3.2.5. NORMAL EDGING CYCLE SEQUENCE

Once you have started the edging cycle, the following steps follow automatically:
(except if the cycles are personalised)



Flow chart 3-2: Edging cycle sequence

Note: Selecting Manual finishing (beveling, grooving and chamfering) leads to a modification in the standard edging cycle sequence.

3.2.6. IMPORTANT NOTES

3.2.6.1. WHEN JOB DATA ARE RECEIVED

> If the job provides the edging data, they are displayed automatically.

Example: If the job finishing is a bevel, the finishing displayed will automatically be Bevel.

> If the job does not provide edging data, the default characteristics (see Configuration of finishing default parameters, chapter 4) will be displayed automatically.

Example: If the default finishing is Bevel and the type is Auto, the displayed finishing will be Bevel and the sub-finishing Bevel Auto.

> If the job specifies data which have been excluded from the edger configuration, an « Incompatible edger configuration » message is displayed (see Messages, chapter 5).

Example: If the job called up specifies the Mineral lens material and you have excluded the Mineral lens material from the personalization screens (Personalization of pull-down menus, chapter 4), an "Incompatible edger configuration" message is displayed.

> If you modify the job data before starting to edge one of the lenses, the new characteristics will be memorized automatically and applied to both lenses.

Caution! Check the parameter values of the two lenses.

> The lens characteristics (**material** and **type**) determine the types of finishing available.

Example: A mineral lens cannot be drilled. Drilling finishing is therefore not available in the Finishing pull-down menu when Mineral lens material is selected.

3.2.6.2. DURING EDGING OF THE SECOND LENS

⇒ Always check that the preselected type of finishing is the finishing that you wish to apply.

In fact, the finishing selected for the first lens is automatically memorized and preselected for the following lens (see "Edging several lenses identically" and see "Edging the left lens with different parameters from those of the right lens").

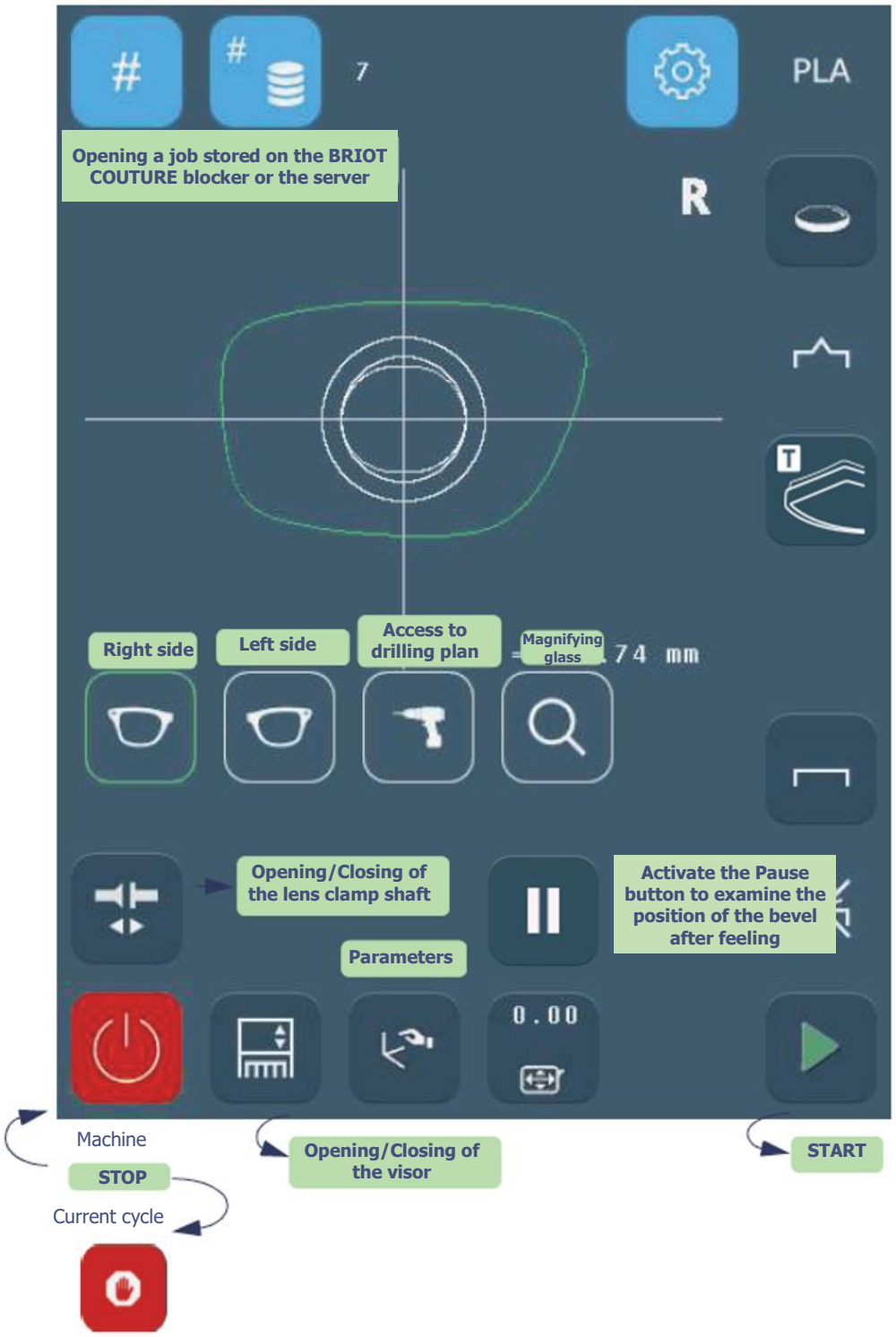
⇒ Check the parameter values.

3.3. APPLICATION SCREEN ICONS

The screens and tables below present and describe all the icons of the user interface classified in type or menu order.

3.3.1. GENERAL

Note: The presence and the order of the icons displayed on the screen depend on the job data (see "When job data are received") and on the preference configuration (see Personalization of pull-down menus, chapter 4).



Screen 3-5: Screen icons

3.3.2. FEELING BEFORE ROUGHING

> Lens feeling is started before roughing when the 

"X" key is activated, if not 

.

> This function is deactivated automatically when the next job is called.

> Feeling after roughing is always run, even if feeling before roughing has been selected.

3.3.3. FEELING AN EXECUTIVE LENS

> This function is applicable only for "executive" lenses to prevent damage to the feeler tips.

> The lens feeling cycle is started when the key 

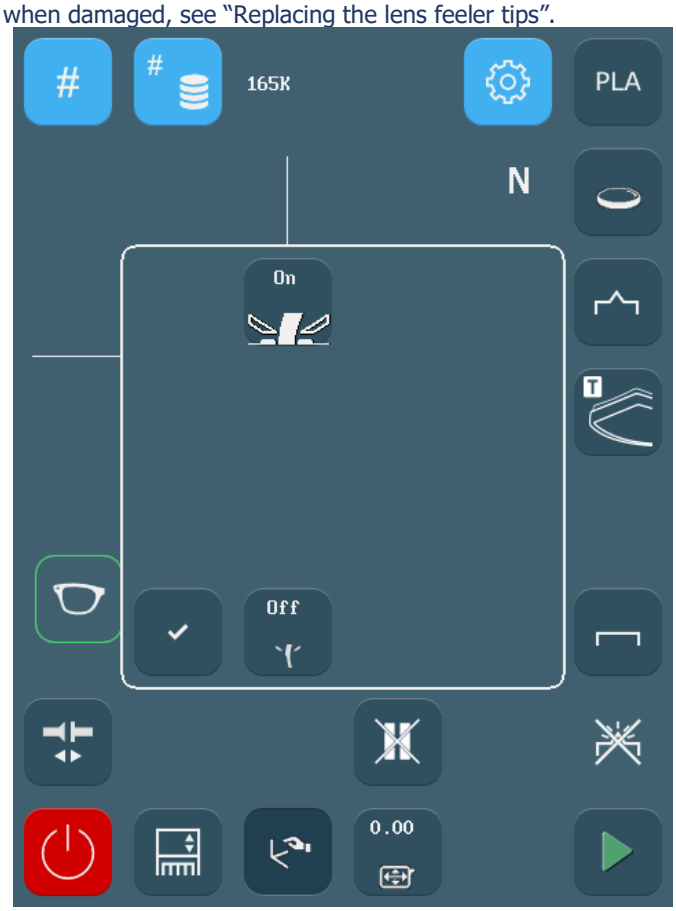
is activated, if not select 

.

> The feeling process is run as follows:
- Feeling from top through bottom of lens, to nasal side then temporal side.

> This operation prevents the front face feeler from getting out of "step".

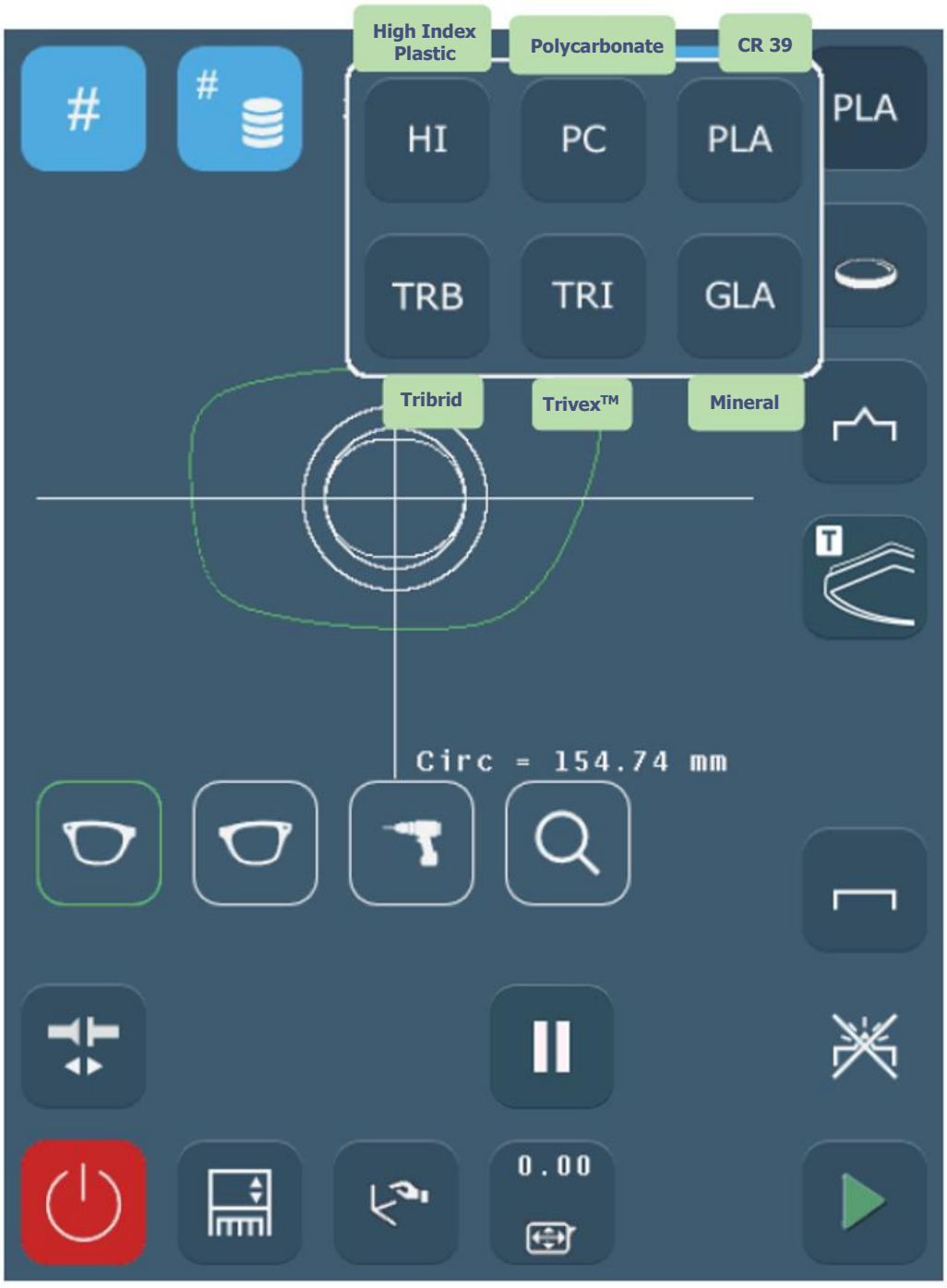
⇒ Replace the feeler tip when damaged, see “Replacing the lens feeler tips”.



Screen 3-6: Parameter screen for lens feeling before roughing and executive lens feeling functions

3.3.4. LENS MATERIALS

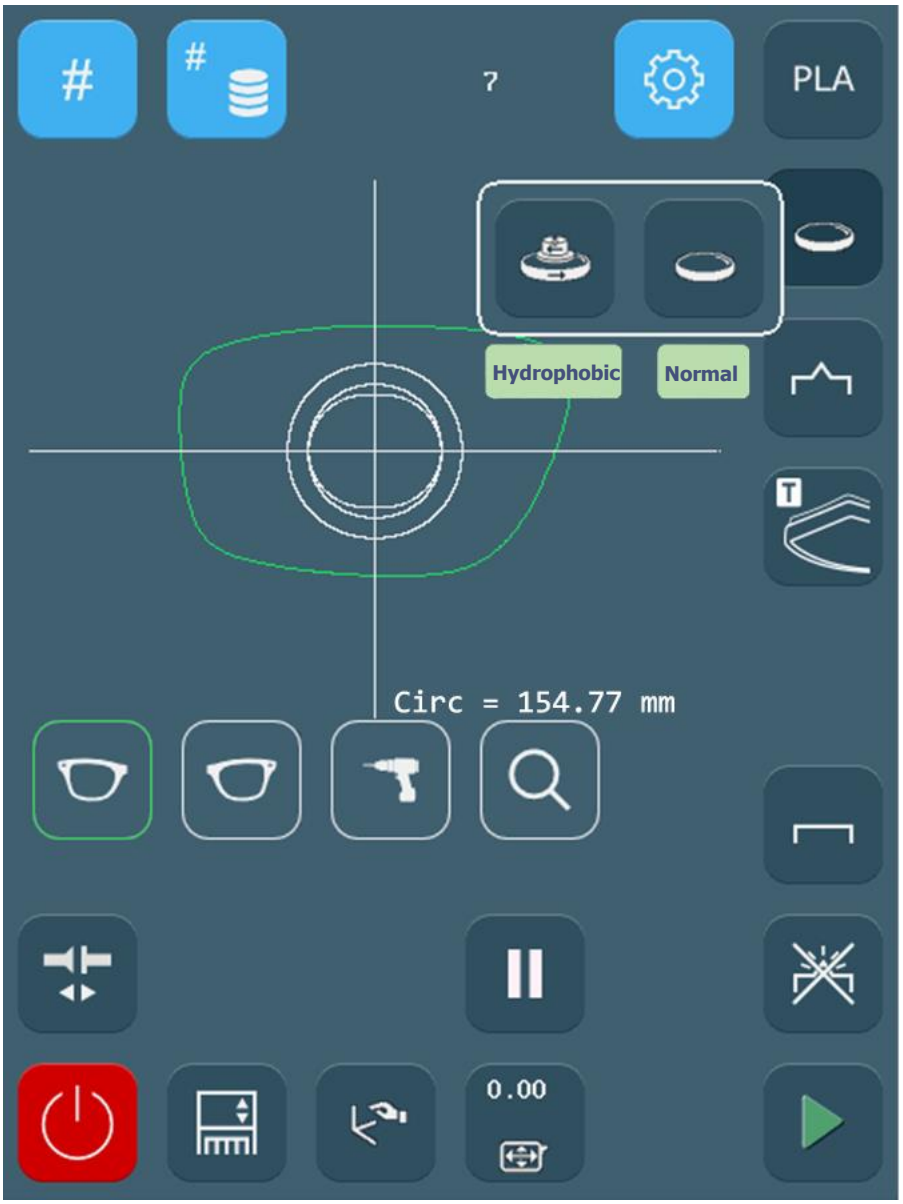
Note: The presence and the order of the icons displayed on the screen depend on the job data ("When job data are received") and on the preference configuration (see Personalization of pull-down menus, chapter 4).



Screen 3-7: Lens material icons

3.3.5. TYPES OF LENSES

Note: The presence and the order of the icons displayed on the screen depend on the job data (see "When job data are received") and on the preference configuration (see Personalization of pull-down menus, chapter 4).



Screen 3-8: Lens type icons

> Hydrophobic/Fragile

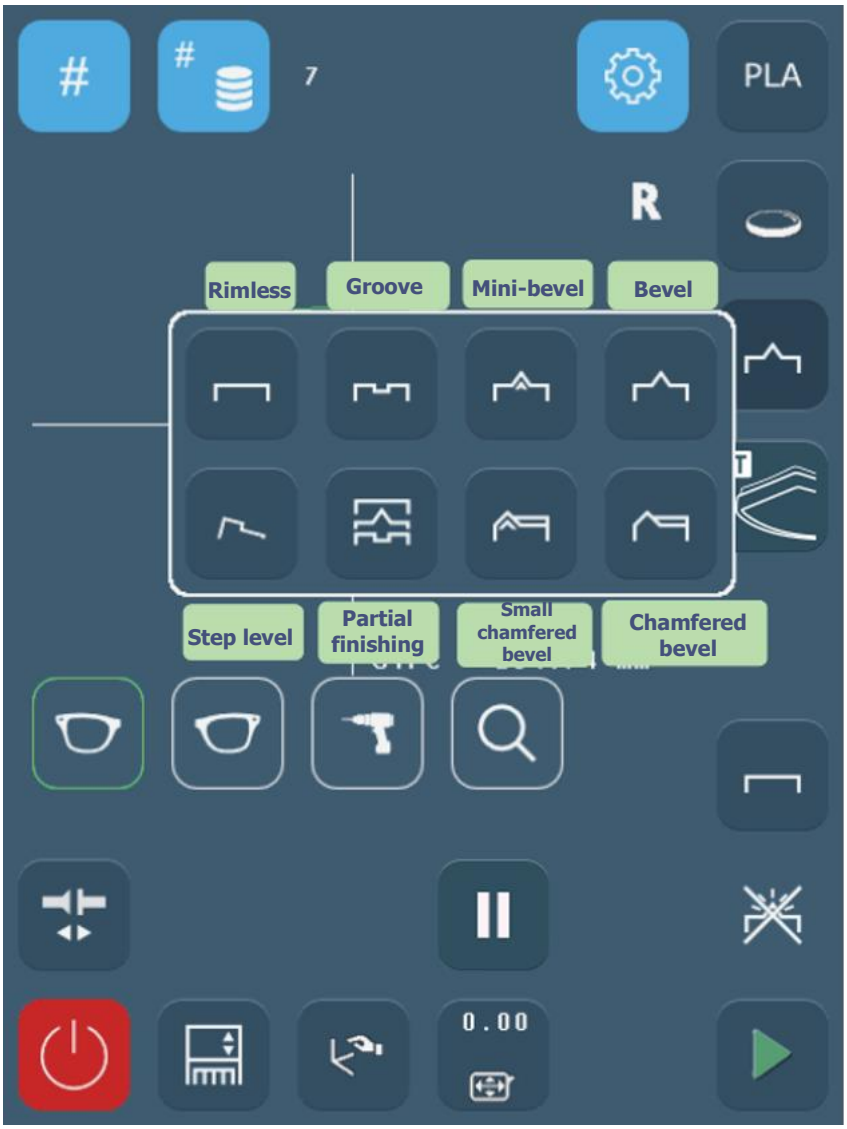
Specific cycle suitable for lenses with hydrophobic treatment and fragile mineral lenses.

> Normal

Cycle suitable for the majority of lenses.

3.3.6. FINISHINGS

Note: The presence and the order of the icons displayed on the screen depend on the job data (see "When job data are received") and on the preference configuration (see Personalization of pull-down menus, chapter 4).



Screen 3-9: Finishing Type Icons

3.3.6.1. PARTIAL FINISHING

By selecting the "Partial Finishing" function, you can define a two-zone (top and bottom) lens finishing type.

3.3.6.1.1. PRESENTATION

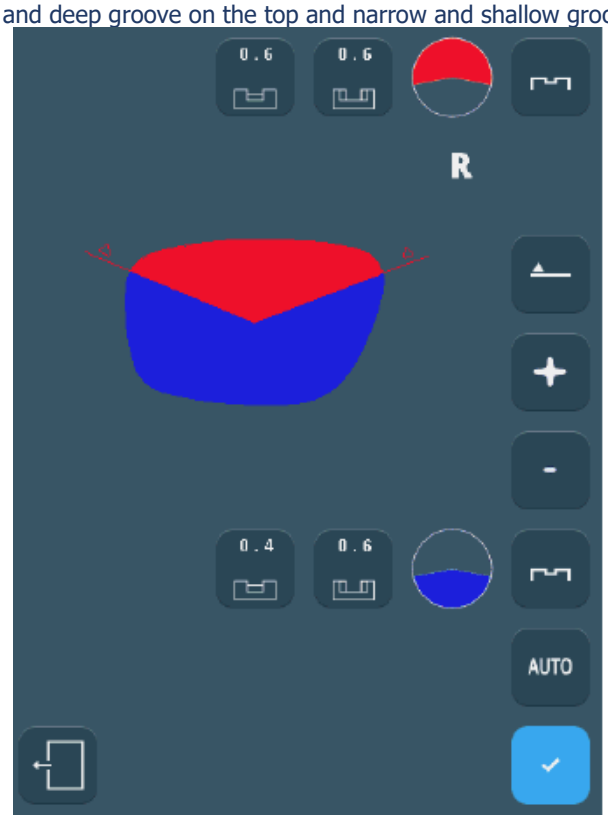
Screen 3-10: Partial Finishing Screen

1- Define the finishing type for the red zone.
2- Adjust the finishing parameters for the red zone.
3- Define the finishing type for the blue zone.
4- Adjust the finishing parameters for the blue zone.
5- Select and adjust the general parameters for the blue and red zones.
6- Select the index side to be modified (temporal or nasal).
7- Press + or- to position the index on the desired point.
8- Do not confirm the partial finishing selection and return to previous screen.
9- Confirm the partial finishing selection and return to previous screen.

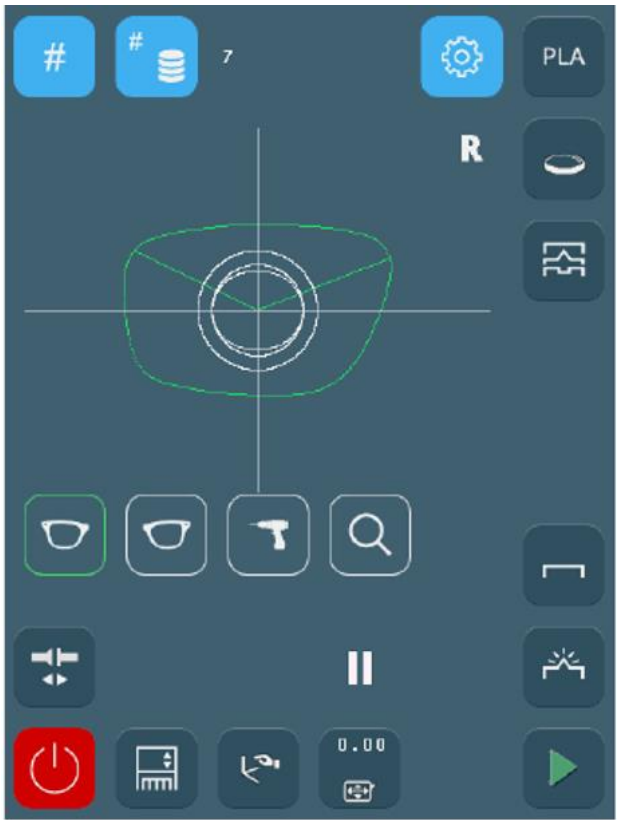
Note: The index position (temporal or nasal) can be changed by directly pressing the red cursor and sliding it to the desired position.

3.3.6.1.2. EXAMPLE

This is an example of a wide and deep groove on the top and narrow and shallow groove on the bottom.

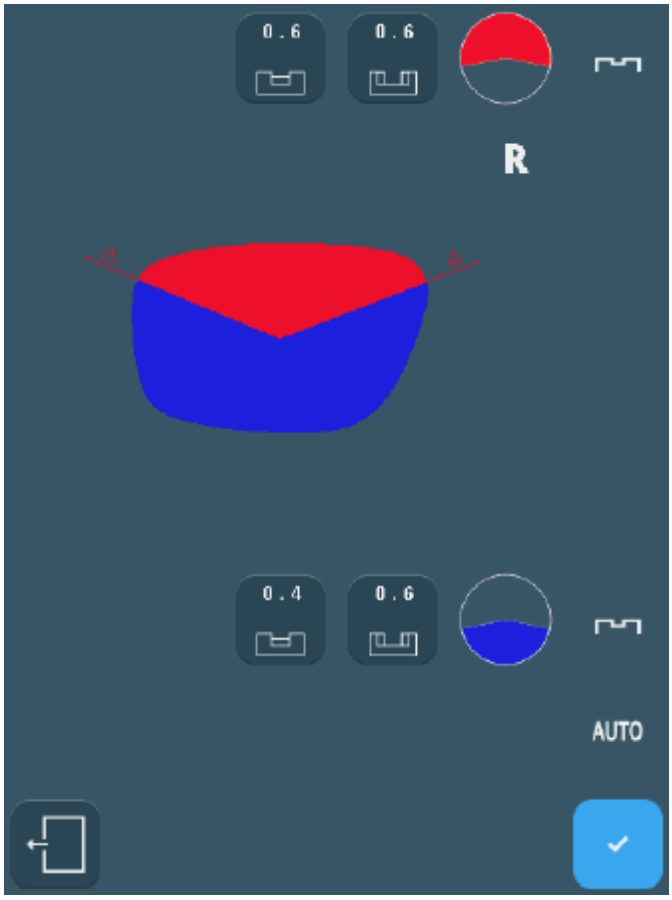


Screen 3-11: Example of partial finishing



Screen 3-12: Edging Screen

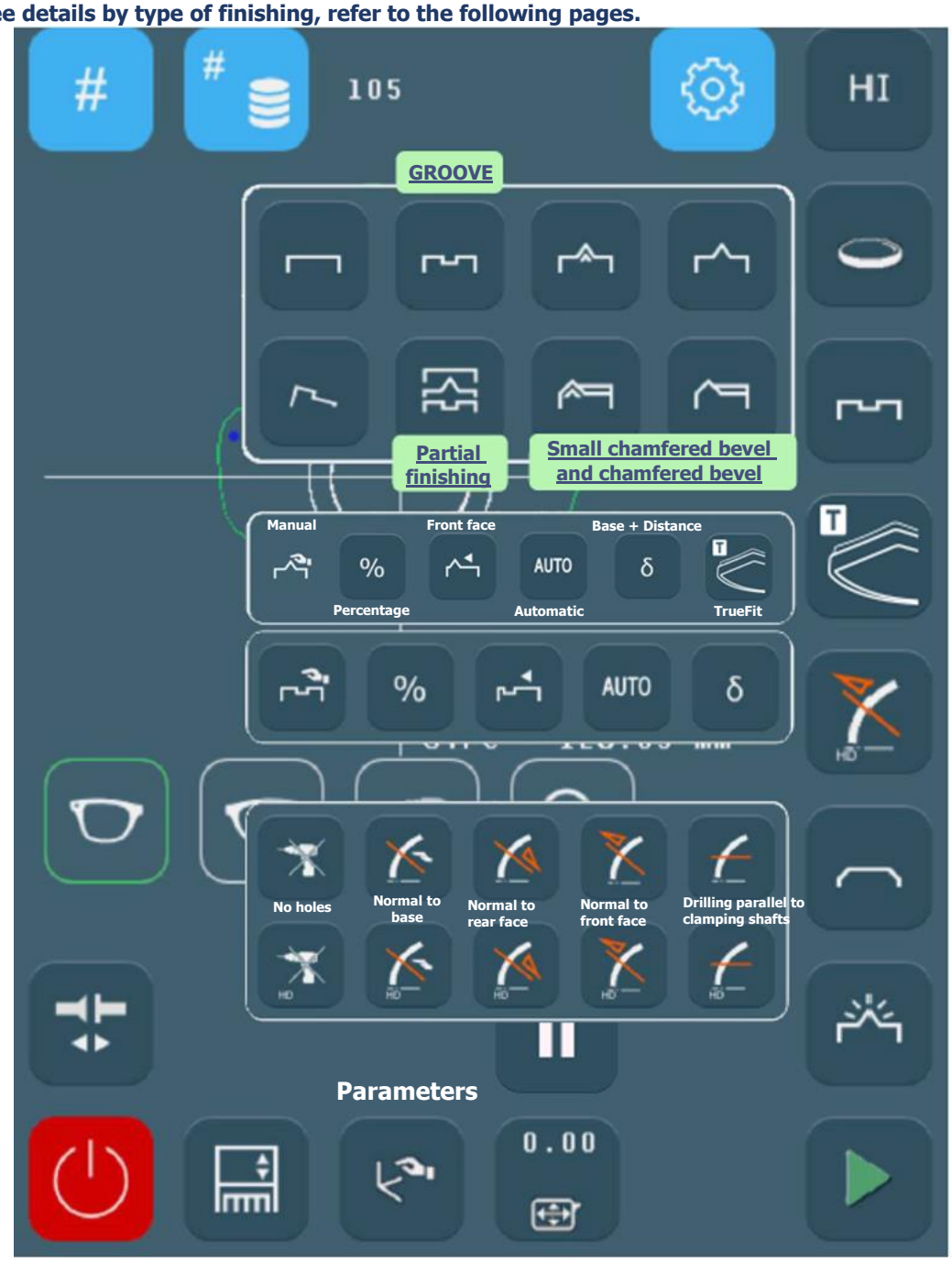
Note: The « Partial Finishing » key remains accessible after edging to display the edging parameters.
Note: The "Partial Finishing" key can also be used to rework a groove (increasing width or depth). To do this, you must switch to "Retouch" mode in the main menu.



Note: If "Retouch" mode has been activated in the main menu, you can then increase the widths and depths of the grooves.

3.3.7. SUB-FINISHINGS AND ASSOCIATED PARAMETERS

> The following screen is a montage to show all possible sub-finishing.
> **To see details by type of finishing, refer to the following pages.**



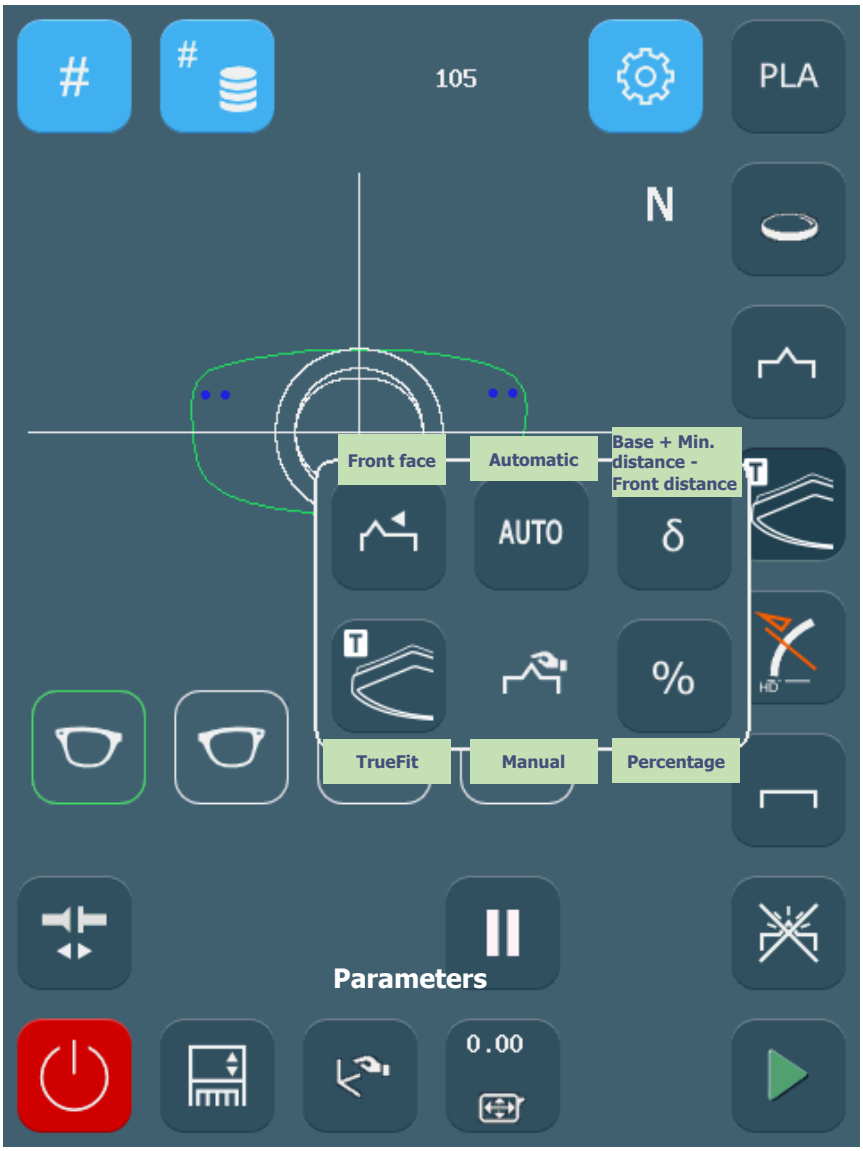
Screen 3-13: Sub-finishing type icons

Note: The presence and the order of the icons displayed on the screen depend on the type of machine used, job data (see "When job data are received") and on the preference configuration (see Personalization of pull-down menus, chapter 4).

⇒ More information about limits: See "Operating principle".

3.3.7.1. BEVEL, MINI-BEVEL OR FACETTING/CHAMFERING

3.3.7.1.1. TYPES OF BEVELS, MINI-BEVEL OR FACETTING/CHAMFERING



Screen 3-14: Bevel Sub-Finishing Icons

CAUTION **FOR BEVEL, SMALL BEVEL, CHAMFERED BEVEL, SMALL CHAMFERED BEVEL FINISHING.**

> If "TrueFit" sub-finishing

The bevel is positioned automatically, so that its position is esthetically pleasing and parallel to the front face, while adapting as much as possible to the curvature of the frame.

> If "Percentage Bevel" sub-finishing:

The apex of the bevel is positioned at a percentage of the lens thickness from the front face.

Enter the desired percentage using the Parameters button  .
Example: for a bevel situated at 1/3 of the lens thickness from the front face, enter 33%.

> If "Front Face Bevel" sub-finishing":

The bevel follows the front face of the lens and is positioned at a given distance in mm between the apex of the bevel and the front face of the lens.

Enter the desired distance using the Parameters button  .
Example: Apex of bevel situated 2.2 mm from the front face of the lens.

> If "Automatic Bevel" sub-finishing:

The apex of the bevel is automatically positioned at 1/3 of the lens thickness from the front face.

> If "Base bevel + minimum distance from front face":

The bevel is positioned at a minimal distance in mm between the apex of the bevel and the front face of the lens, and its curvature depends on the desired base.

Enter the base values and the distance using the Parameter button  .

Example: bevel of base 2 whose apex is located at 1 mm from the front face at its closest point to the front face.

3.3.7.1.2. BEVEL, MINI-BEVEL PARAMETERS

⇒ Using the  button, go to the following parameters

Bevel Parameters				
Finishing	**Sub-finishing**	**Parameters**	**Limits**	**Description**
			0,25 to 12,00 D	Base of bevel to be made, expressed in dioptres. The default base is 4.00 D.
			-5.00 to 5.00 mm	Distance in mm between front face of the lens and the point on the apex of the bevel which is closest to the front face.
		ø	ø	No parameters to enter. The bevel is automatically positioned at 1/3 of the lens thickness from the front face
			-5.00 to 5.00 mm	Distance in mm between the front face of the lens and the apex of the bevel.
			0 to 100 %	Distance between the apex of the bevel and the front face of the lens expressed as a percentage of the lens thickness.
		ø	ø	Parameters to be set using the manual finishing screen (see "Produce a manual bevel").
		No parameters	No parameters	The TrueFit system places the bevel in parallel at the front with a flexibility that allows it to adapt to the curve of the frame base (as far as possible given the configuration).

Table 3-1: Bevel and Mini-Bevel Finishing Parameter Icons

IMPORTANT NOTE

> If the maximum thickness of the lens is less than 2 mm, the applied bevel will automatically be of 1/2 - 1/2 type, whichever type of bevel is selected initially.

⇒ More information about limits: See "Operating principle"

3.3.7.2. GROOVE

3.3.7.2.1. TYPES OF GROOVES

Screen 3-15: Groove Sub-Finishing Icons

> If "Percentage Groove" sub-finishing:

The middle of the groove is positioned at a percentage of the lens thickness from the front face.

Enter the desired percentage using the Parameters button .

Example: If the middle of the groove is situated at 1/3 of the lens thickness from the front face, enter 33 %

> If "Front Face Groove" sub-finishing:

The groove follows the front face of the lens and is positioned at a given distance in mm between the middle of the groove and the front face of the lens.

Enter the desired distance using the Parameters button .

Example: The middle of the groove is located at 3 mm from the front face

> If "Automatic Groove" sub-finishing:

The middle of the groove is automatically positioned at 1/3 of the lens thickness from the front face.

> If "Base Groove + Front face" sub-finishing:

The groove is positioned according to the desired base at a minimum distance (in mm) between the middle of the groove and the front face of the lens.

Enter the base values and the distance using the Parameter button  .

Example: groove of base 2 whose centre is situated at 3 mm from the front face at its closest point to the front face.

3.3.7.2.2. GROOVE PARAMETERS

⇒ Using this button  , go to the following parameters

Groove Parameters				
Finishing	**Sub-finishing**	**Parameters**	**Limits**	**Description**
			0,25 to 12,00 D	Base of groove to be made, expressed in dioptres. The default base is 4.00 D.
			-5.00 to 5.00 mm	Distance in mm between front face of the lens and the point on the centre of the groove which is closest to the front face.
			0 to 0.80 mm	Depth of groove in mm
			0.60 to 1.20 mm	Width of groove in mm
			0 to 0.80 mm	Depth of groove in mm
			0.60 to 1.20 mm	Width of groove in mm

Groove Parameters				
Finishing	**Sub-finishing**	**Parameters**	**Limits**	**Description**
			-5.00 to 5.00 mm	Distance in mm between the front face of the lens and the middle of the groove.
			0 to 0.80 mm	Depth of groove in mm
			0.60 to 1.20 mm	Width of groove in mm
			0 to 100 %	Distance between the middle of the groove and the front face of the lens expressed as a percentage of the lens thickness.
			0 to 0.80 mm	Depth of groove in mm
			0.60 to 1.20 mm	Width of groove in mm
		ø	ø	Parameters to be set using the manual finishing screen (see "Produce a manual groove").

Table 3-2: Groove Finishing Parameter Icons

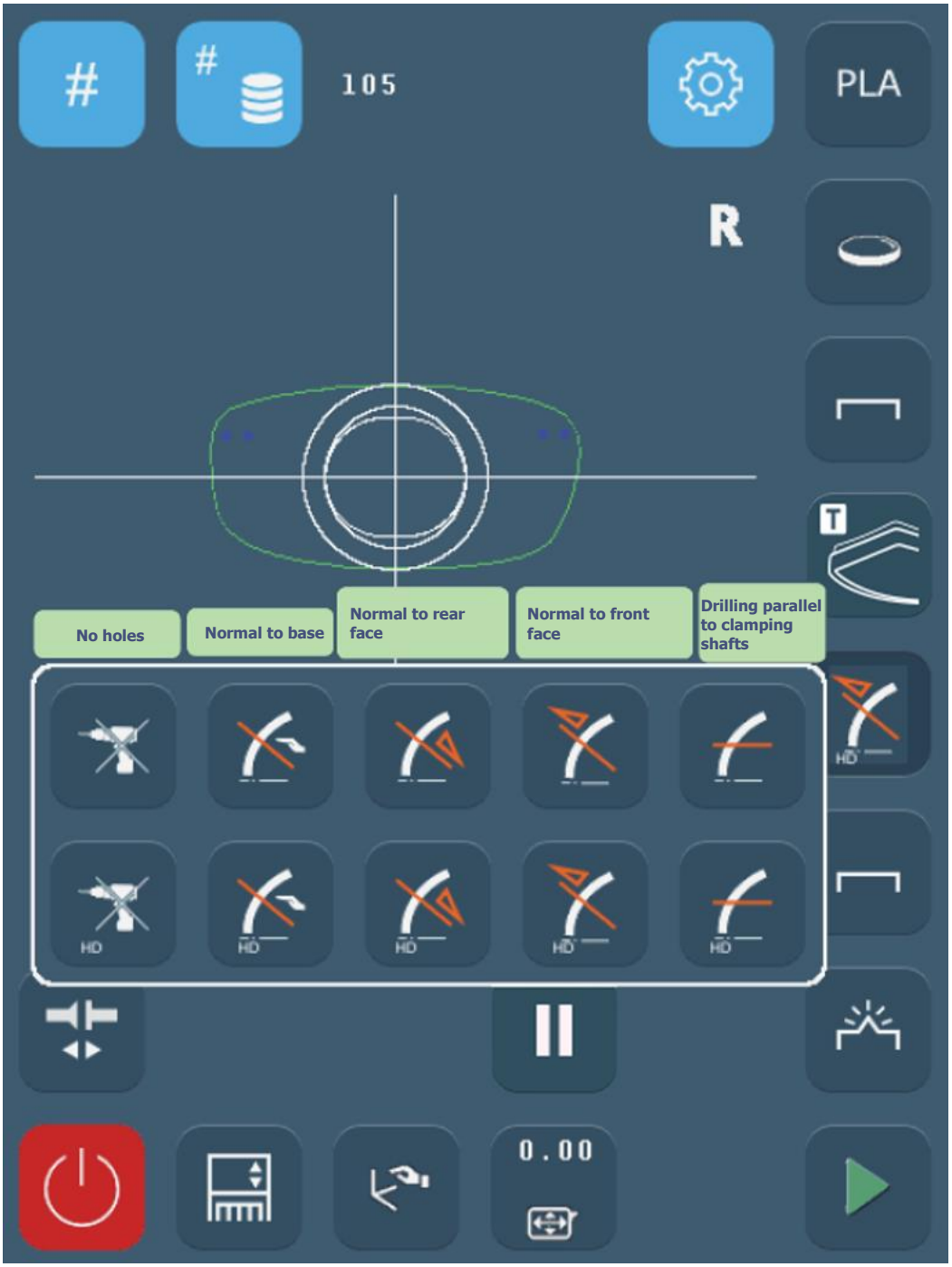
IMPORTANT NOTE

> If the maximum thickness of the lens is less than 2 mm, the applied groove will automatically be of 1/2 - 1/2 type, whichever type of groove is selected initially.

⇒ More information about limits: See "Operating principle".

3.3.7.3. DRILLING

3.3.7.3.1. TYPES OF DRILLING



Screen 3-16: Drilling Sub-Finishing Icons

> Drilling normal to the rear face of the lens

Illustration: see " Producing a job with drilling finishing.

> Drilling normal to the front face of the lens

Illustration: see " Producing a job with drilling finishing".

> Drilling parallel to clamping shafts

Illustration: see " Producing a job with drilling finishing".

> Drilling normal to the base of your choice

⇒ More information about limits: See "Operating principle".

NOTA : HD drilling enables optimal drilling quality (notching axis or hole diameters) with standard adhesives available on the market. Since drilling precision is a high priority, drilling time is, as a result, extended.

NOTA : HD drilling must be used whenever the precision and quality of drilling are a priority and the adhesive used for assembly is a standard one.
Standard drilling, which is faster than HD drilling, offers the same precision as HD drilling, if and only if the adhesive used is of the 3M Leap 3 type (thickness: 0.6 mm) or its equivalent.

3.3.8. SAFETY BEVELS

Note: The presence and the order of the icons displayed on the screen depend on the job data (see « When job data are received ») and on the preference configuration (see Personalisation of pull-down menus, chapter 4).

Screen 3-17: Safety-Bevel type icons

- Safety bevels on the front and rear faces of the lens (available only if the facet (chamfer) is not selected)
- Safety bevel on the rear face (available only if the facet (chamfer) is not selected)
- Safety bevel on front face
- No safety bevel

3.3.8.1. SAFETY BEVEL PARAMETERS

⇒ Using the  button, go to the following parameters:

Parameters of the safety-bevel option			
Option	**Parameters**	**Limits**	**Description**
		0 to 0.6 mm	Depth in mm of safety-bevel from the front face of the lens
		0 to 0.6 mm	Depth in mm of safety-bevel from the rear face of the lens Available only if the facet (chamfer) is not selected
		0 to 0.6 mm	Depth in mm of safety-bevel from the front face of the lens Available only if the facet (chamfer) is not selected
		0 to 0.6 mm	Depth in mm of safety-bevel from the rear face of the lens

Table 3-3: Safety-bevel parameter icons

IMPORTANT NOTES

> A safety-bevel can only be made when:

- The distance between the apex of the bevel and the front/rear face of the lens is greater than 1.6 mm.

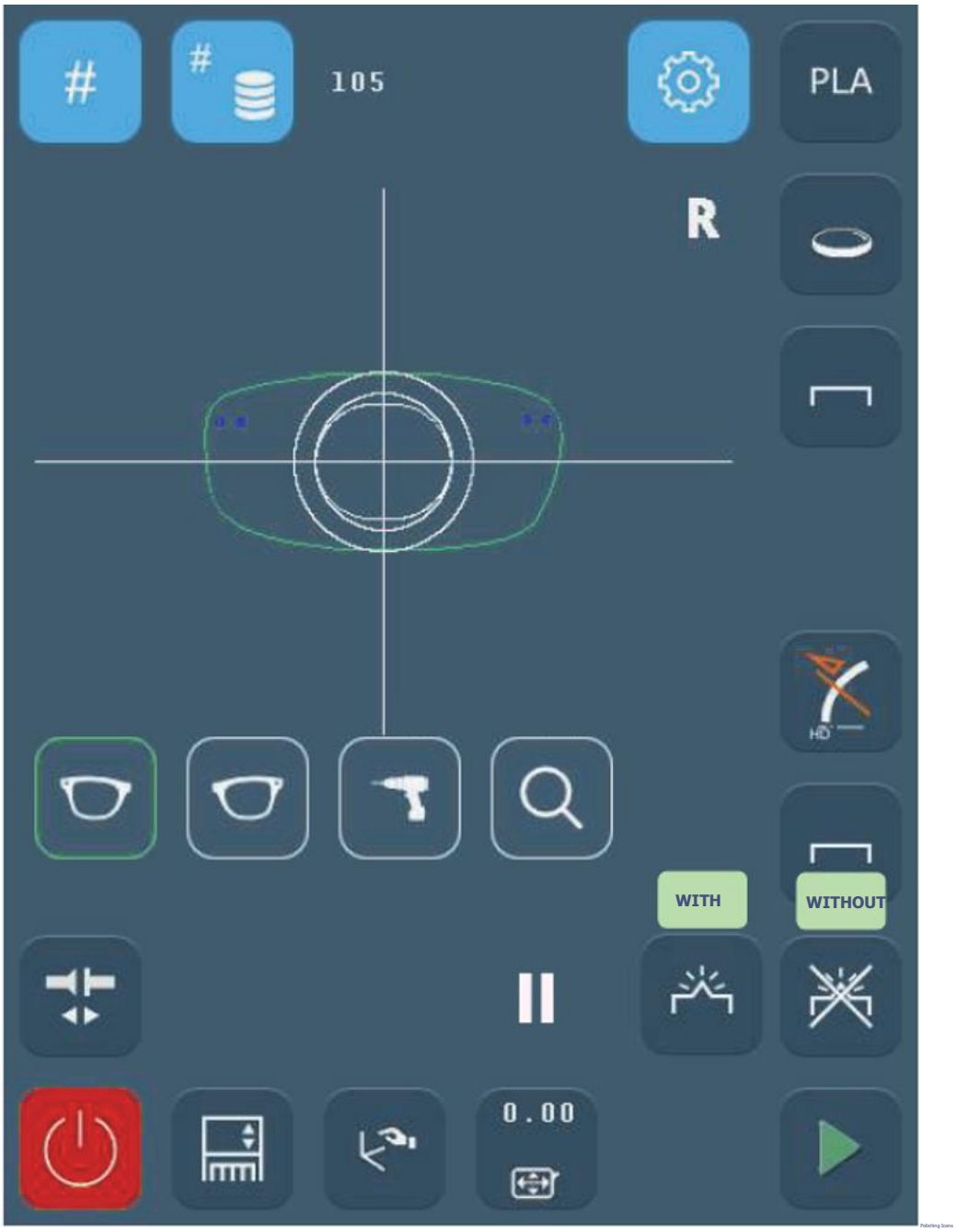
the distance between the front edge of the bevel and the front face of the lens is greater than 0.2 mm, and the distance between the rear edge of the bevel and the rear face of the lens is greater than 0.2 mm.

> If you make a retouch whose value is greater than 0.20 mm, the lens will be retouched but the safety-bevel(s) will be machined or even removed.

⇒ More information about limits: See "Operating principle".

3.3.9. POLISHING

Note: The presence and the order of the icons displayed on the screen depend on the job data (see "When job data are received") and on the preference configuration (see Personalization of pull-down menus, chapter 4).



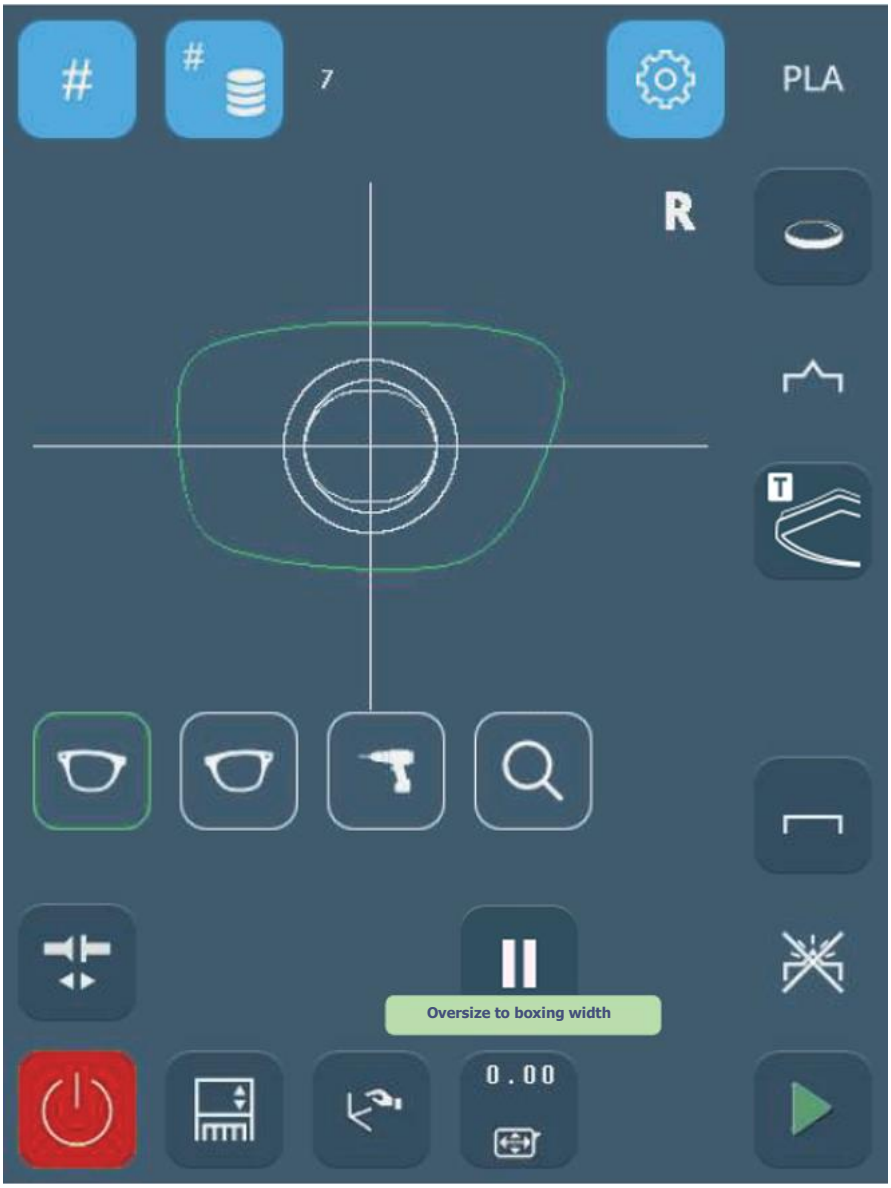
Screen 3-18: Polishing Icons

> With polishing (available only if the facet (chamfer) is not selected)

> Without polishing

3.3.10. LENS SIZE

Note: The presence and the order of the icons displayed on the screen depend on the job data (see "When job data are received") and on the preference configuration (see Personalisation of pull-down menus, chapter 4).



Screen 3-19: Lens Size Icons

> Oversize to boxing width

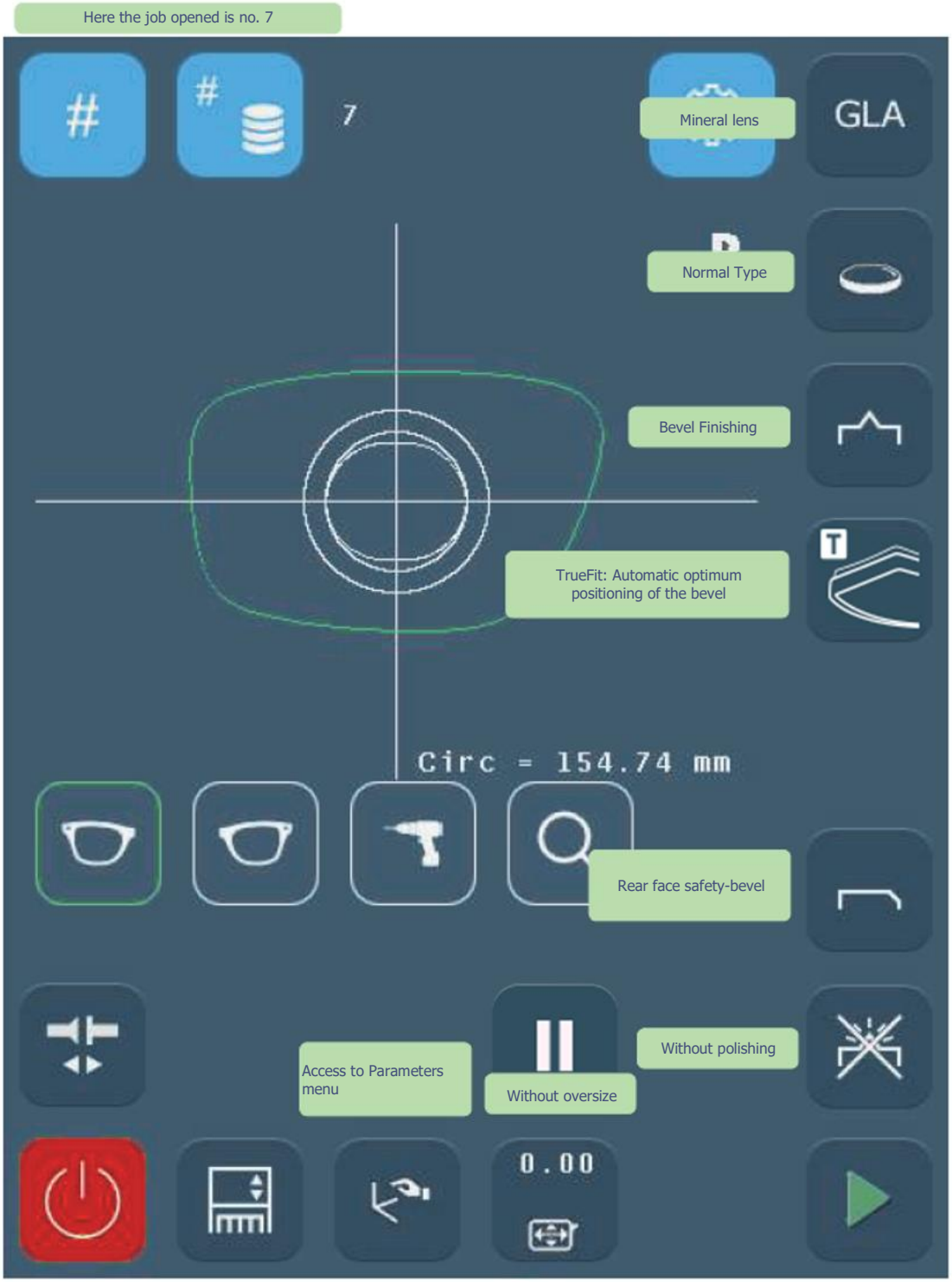
> Oversize to circumference 

> Retouch to boxing width 

> Retouch to circumference 

⇒ More information about limits: See "Operating principle".

PRODUCING A JOB WITH BEVEL FINISHING



Screen 3-20: Example of the production of a job with a bevel

3.4. USUAL PROCEDURE

To familiarize you with the edger interface and its general operation, we suggest that you carry out the following jobs.

3.4.1. PRODUCING A JOB WITH BEVEL FINISHING

3.4.1.1. OBJECT

Produce a job with the following characteristics:

Mineral > Fragile lens > 1/2-1/2 bevel > Rear safety-bevel = 0.40 mm > Without polishing

3.4.1.2. PROCEDURE

To carry out the job described above, proceed as follows:

Load a job number.

↓

Select MINERAL lens material.

↓

Select NORMAL lens type.

↓

Select BEVEL finishing.

↓

Select TrueFit sub-finishing.

↓

Select REAR safety-bevel type.

↓

Using the Parameters menu, enter the following values:

- **bevel positioning percentage = 50%;**
- **depth of rear safety-bevel = 0.40 mm.**

↓

Place the lens in the edging chamber.

↓

Start the edging process.

Flow chart 3-3: Production of a job with Bevel finishing

Tip! To familiarize yourself with the icons associated with each step or obtain more details of the action required, refer to the screen on the left page.

3.4.1.3. HINTS

⇒ When the edging cycle is finished, remove the edged lens without removing the block so as to be able to retouch it if necessary.

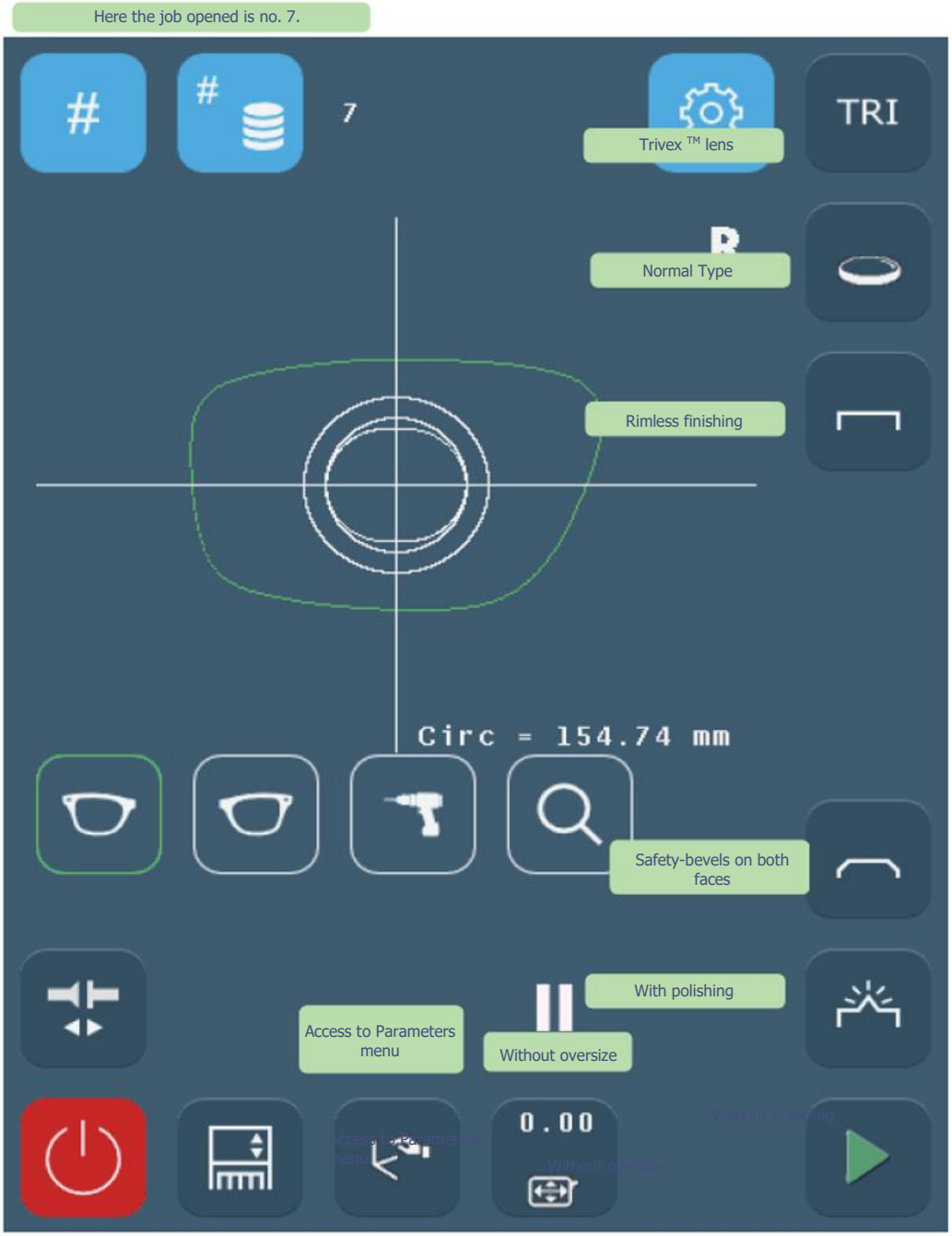
⇒ If you are unsure about the type of bevel positioning, we advise you to choose Manual type from the main screen. During the cycle, when the manual finishing screen is displayed, press the Manual Bevel button, select the type of bevel you wish and visualise the position of the bevel apex directly on the screen.

3.4.1.4. LIMITS

> If the maximum thickness of the lens is less than 2 mm, the applied bevel will automatically be of 1/2 - 1/2 type, whichever type of bevel is selected initially.

⇒ See also "Produce a manual bevel" and "Operating principle".

PRODUCING A JOB WITH RIMLESS FINISHING



Screen 3-21: Example of the production of a job with rimless finishing

3.4.2. PRODUCING A JOB WITH RIMLESS FINISHING

3.4.2.1. OBJECT

Produce a job with the following characteristics:

Trivex™ > Normal lens > Rimless > Front and rear safety-bevel > Polishing

Safety-bevel parameters: front depth = 0.20 mm / rear depth = 0.30 mm

3.4.2.2. PROCEDURE

To carry out the job described above, proceed as follows:

Load a job number.

↓

Select TRIVEX™ lens material.

↓

Select NORMAL lens type.

↓

Select RIMLESS finishing type.

↓

Select FRONT and REAR safety-bevel type.

↓

Using the Parameters menu, enter the following values:

- **depth of front safety-bevel = 0.20 mm;**
- **depth of rear safety-bevel = 0.30 mm.**

↓

Select POLISHING option.

↓

Place the lens in the edging chamber.

↓

Start the edging process.

Flow chart 3-4: Production of a job with Rimless finishing

Tip! To familiarize yourself with the icons associated with each step or obtain more details of the action required, refer to the screen on the left page.

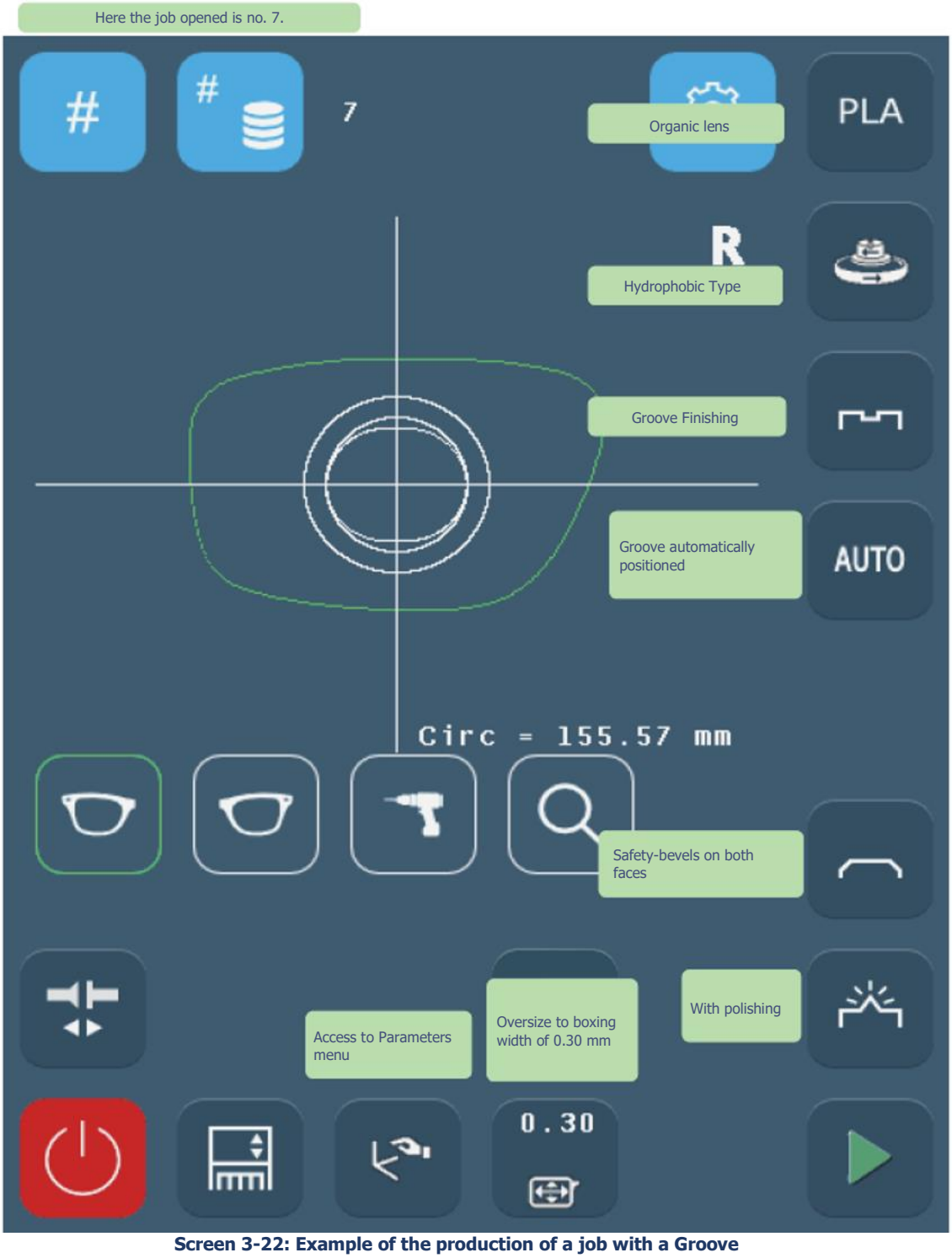
3.4.2.3. HINTS

⇒ When the edging cycle is finished, remove the edged lens without removing the block so as to be able to retouch it if necessary.

3.4.2.4. LIMITS

> See also "Operating principle".

PRODUCING A JOB WITH GROOVE FINISHING



Screen 3-22: Example of the production of a job with a Groove

3.4.3. PRODUCING A JOB WITH GROOVE FINISHING

3.4.3.1. OBJECT

Produce a job with the following characteristics:

CR39 > Hydrophobic lens > Automatic groove > Front and rear safety-bevel > Polishing

Groove parameters: width = 1 mm / depth = 0.30 mm

Safety-bevel parameters: front depth = 0.30 mm / rear depth = 0.20 mm

3.4.3.2. PROCEDURE

To carry out the job described above, proceed as follows:

Load a job number.

↓

Select CR39 lens material.

↓

Select HYDROPHOBIC lens type.

↓

Select AUTOMATIC GROOVE finishing type.

↓

Using the Parameters menu, enter the following values:

- **width of the groove = 1 mm;**
- **depth of the groove = 0.30 mm.**

↓

Select FRONT and REAR safety-bevel type.

↓

Using the Parameters menu, enter the following values:

- **depth of front safety-bevel = 0.30 mm;**
- **depth of rear safety-bevel = 0.20 mm.**

↓

Select POLISHING option.

↓

Using the Oversize button, enter the value of 0.30 mm.

↓

Place the lens in the edging chamber.

↓

Start the edging process.

Flow chart 3-5: Production of a job with Groove finishing

Tip! To familiarize yourself with the icons associated with each step or obtain more details of the action required, refer to the screen on the left page.

3.4.3.3. HINTS

⇒ When the edging cycle is finished, remove the edged lens without removing the block so as to be able to retouch it if necessary.

⇒ If you are unsure about the type of groove positioning, we advise you to choose Manual type from the main screen. During the cycle, when the manual finishing screen is displayed, press the Manual Groove button, select

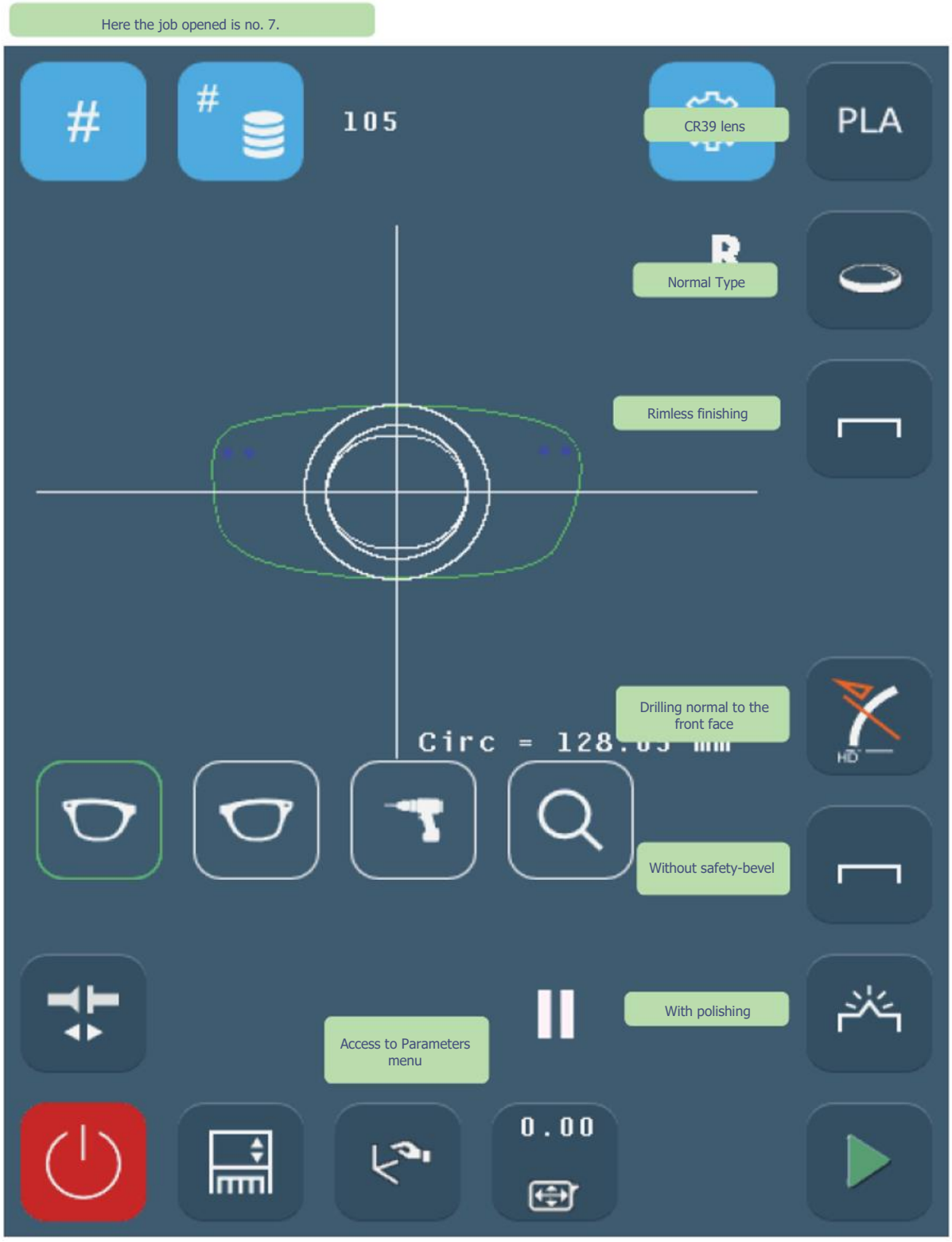
the type of groove you wish and visualise the position of the middle of the groove directly on the screen.

3.4.3.4. LIMITS

> If the maximum thickness of the lens is less than 2 mm, the applied groove will automatically be of 1/2 - 1/2 type, whichever type of groove is selected initially.

⇒ See also "Produce a manual groove" and "Operating principle".

PRODUCING A JOB WITH GROOVING AND DRILLING FINISHING



Screen 3-23: Example of the production of a job with drilling finishing

3.4.4. PRODUCING A JOB WITH DRILLING FINISHING

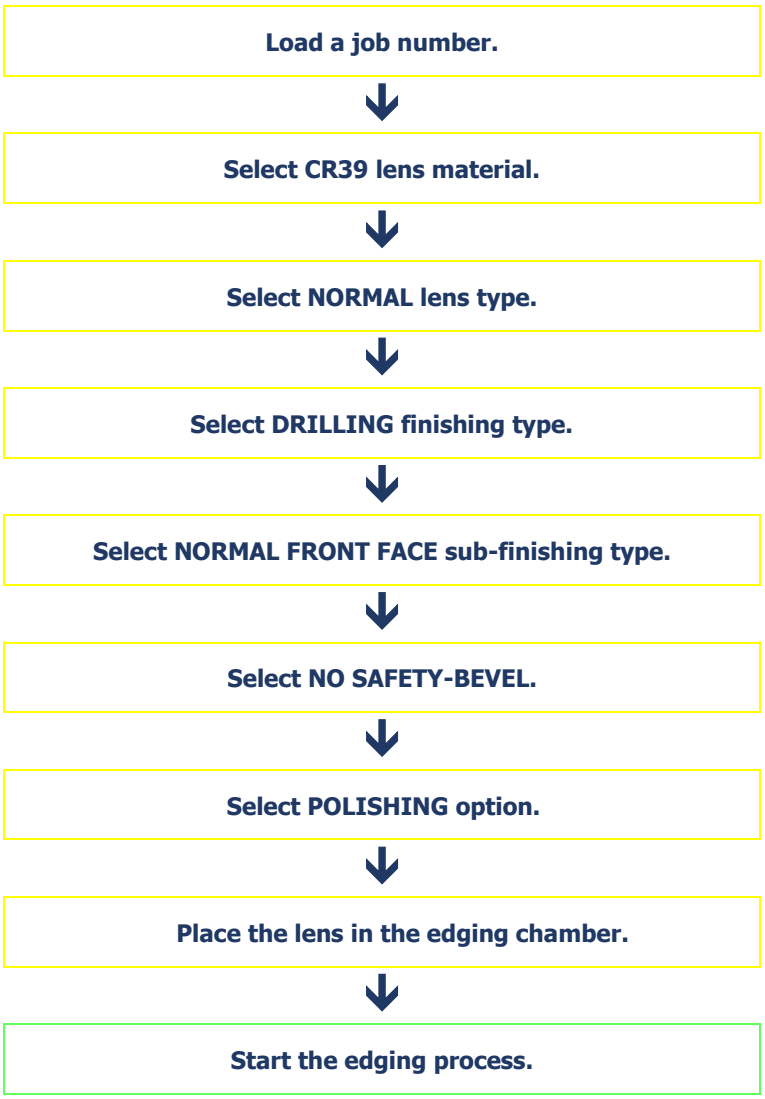
3.4.4.1. OBJECT

Produce a job with the following characteristics:

CR39 > Normal lens > Drilling normal front face > No safety-bevel > Polishing

3.4.4.2. PROCEDURE

To carry out the job described above, proceed as follows:



Flow chart 3-6: Production of a job with Drilling finishing

Tip! To familiarize yourself with the icons associated with each step or obtain more details of the action required, refer to the screen on the left page.

PRODUCING A JOB WITH GROOVING AND DRILLING FINISHING

Screen 3-24: Example of the production of a job with Grooving and Drilling finishing

3.4.5. PRODUCING A JOB WITH GROOVING AND DRILLING FINISHING

3.4.5.1. OBJECT

Produce a job with the following characteristics:

HI plastic > Normal lens > Grooving + Drilling > Groove % > Front and rear safety-bevel > Polishing

Position of middle of groove = 33% from the front face

Groove parameters: width = 1 mm / depth = 0.30 mm

Safety-bevel parameters: front depth = 0.30 mm / rear depth = 0.20 mm

3.4.5.2. PROCEDURE

To carry out the job described above, proceed as follows:

Load a job number.

↓

Select HI plastic lens material.

↓

Select NORMAL lens type.

↓

Select GROOVING + DRILLING finishing type.

↓

Select % sub-finishing type.

↓

Select FRONT and REAR SAFETY-BEVELS.

↓

Using the Parameters menu, enter the following values:

- **position of middle of groove from the front face = 33 %**
- **depth of front safety-bevel = 0.30 mm;**
- **depth of rear safety-bevel = 0.20 mm.**

↓

Select POLISHING option.

↓

Place the lens in the edging chamber.

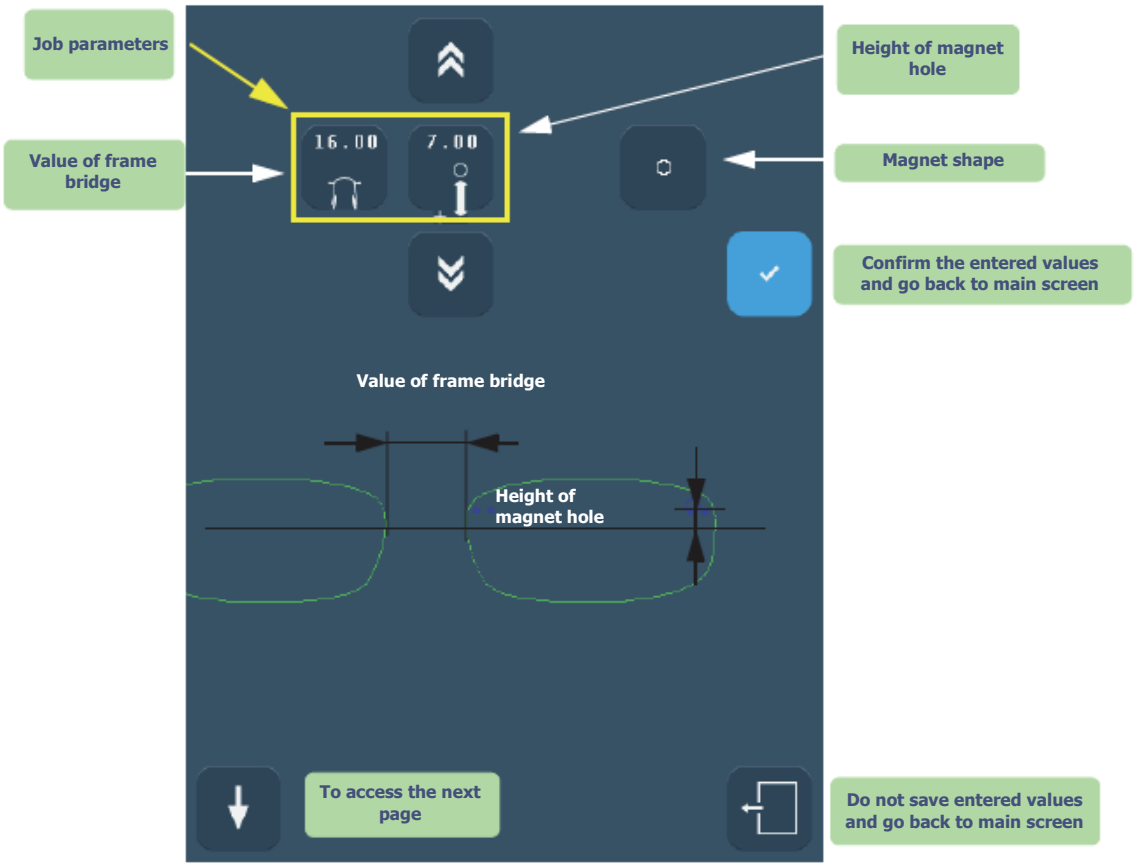
↓

Start the edging process.

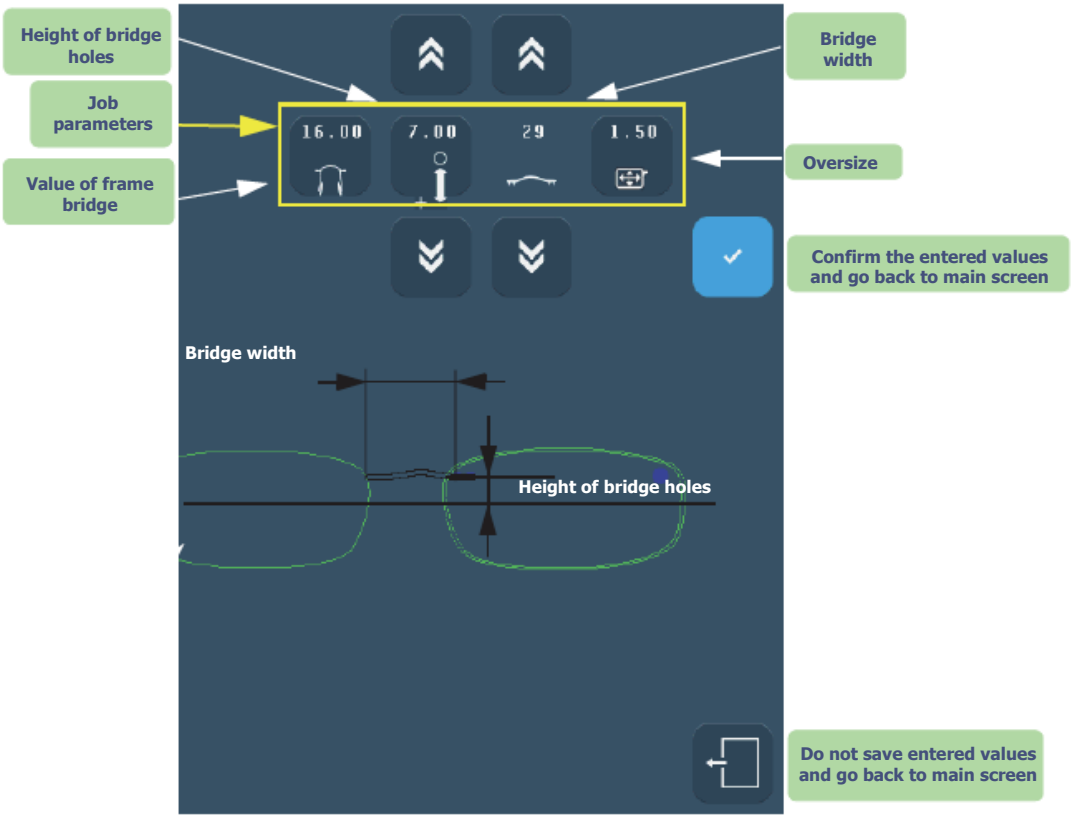
Flow chart 3-7: Production of a job with Drilling finishing

Tip! To familiarize yourself with the icons associated with each step or obtain more details of the action required, refer to the screen on the left page.

PRODUCING A JOB WITH « CHEMISTRIE TM » FINISHING



Screen 3-25: Producing a job with "Chemistrie ™" finishing on prescription lens



Screen 3-26: Producing a job with "Chemistrie ™" finishing on sun lens

3.4.6. PRODUCING A JOB WITH "CHEMISTRIE ™" FINISHING

3.4.6.1. TO PRODUCE THE JOBS DESCRIBED BELOW, MAKE SURE THAT THE "CHEMISTRIE ™" FUNCTION IS SELECTED.

The function is disabled by default, see "Enable Chemistrie™ function".

> **Step 1:** Edging the prescription lens with a non-through hole in which a magnet will be bonded.

Load a job number.

↓

Select a hole programming menu. — **see "Producing a job with drilling finishing"**

↓

Select the next page. → 

↓

Select the magnet shapes. →

↓

If necessary, press the icon shown opposite on the screen then enter the value of the frame bridge using the numeric key pad. → 

↓

Enter the height of the magnet hole:

- after pressing the icon shown opposite on the screen using the numeric key pad.

- or using the arrows on each side. → 

↓

Confirm the entered values.

You are back in the main screen

↓

Select the type of job to be carried out.

↓

Start the edging process.

Flow chart 3-8: Producing a job with « Chemistrie ™ » finishing on prescription lens

Note: The value of the frame bridge is transmitted by the tracer.

Note: The position of the hole from the edge of the shape is calculated automatically according to the « Chemistrie ™ » specifications.

Note: The hole diameter and depth are calculated automatically according to Specifications "Chemistrie™".

Note: To go back to the main screen without confirming the changes by pressing on the  key.

Tip! To familiarize yourself with the icons associated with each step or obtain more details of the action required, refer to the screen on the previous page.

> **Step 2:** Edging a sun lens to the same shape as the prescription lens with through holes in which a magnet will be clipped on and a bridge attached.

Load a job number.

↓

Select a hole programming menu. — **see "Producing a job with drilling finishing"**

↓

Select the next page. →  x2

↓

If necessary, press the icon shown opposite then enter the value of the frame bridge using the numeric key pad. → 

↓

Enter the height of the bridge holes:

- Press the icon shown opposite then enter the value using the numeric key pad.

- or using the arrows on each side. → 

↓

Enter the bridge value:

- Press the icon shown opposite then enter the value using the numeric key pad.

- or using the arrows on each side. → 

↓

Enter the oversize value using the numeric key pad.

↓

Confirm the entered values.

You are back in the main screen

↓

Select the type of job to be carried out.

↓

Start the edging process.

Flow chart 3-9: Producing a job with "Chemistrie ™" finishing on sun lens

Note: When the bridge height varies, its width is automatically adjusted.

Note: By default, the sun lens is edged to a 1.5 mm oversize value with respect to the prescription lens. The oversize value can be modified.

Note: The value of the frame bridge is transmitted by the tracer.

Note: To go back to the main screen without confirming the changes by pressing on the  key.

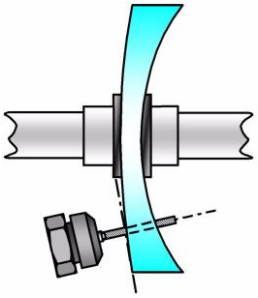
Tip! To familiarize yourself with the icons associated with each step or obtain more details of the action required, refer to the screen on the previous page.

3.4.7. DRILLING: FACTS WORTH KNOWING

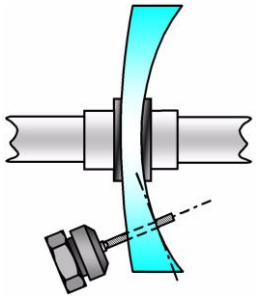
> Drilling, if it is selected, is the last step in the edging process.
> Elongated holes and notches are always machined from the edge of the lens towards the centre.
> Characteristics of the diameter of a hole:

→ The diameter of a drilled hole is always greater or equal to that of the mill bit which is fitted.
→ Special case: If the diameter of the fitted bit is greater than the diameter of the hole and you have confirmed the warning message "Bit diameter > hole diameter. Do you wish to drill?", the hole diameter will be equal to the diameter of the bit.
→ A lens may be drilled in four ways:

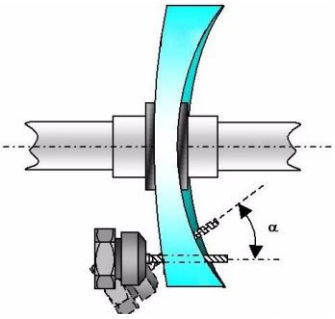
Normal to front face



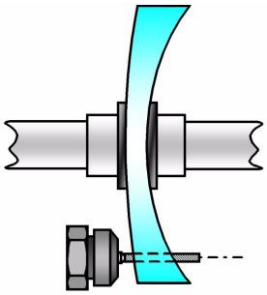
Normal to rear face



Normal to the desired base

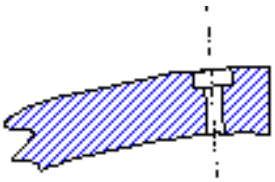


Parallel to the lens clamp and lens holder shafts

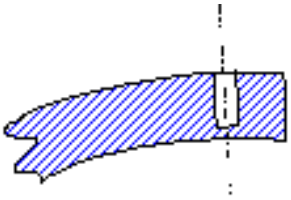


> The drilling function allows drilling the following special holes:

Countersunk hole



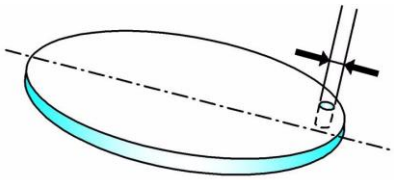
Blind holes relative to the front face



Countersinking is the superimposition of a blind hole over a through hole of smaller diameter.

> The smallest diameter of the reusable hole corresponds to the mill bit diameter (two possible choices: 1 mm or 0.8 mm).

Dia. Min. hole diameter = bit diameter



Note: When the job is received on the edger, if it includes at least one hole whose diameter is smaller than that of the bit, the machine will display the following warning message: Bit diameter > hole diameter. Do you want to drill?" If you reply Yes: the minimum diameter of the holes will be equal to the bit diameter. If you reply No: the entire drilling plan will be ignored and no hole will be drilled. The lens will be finished in rimless.

3.4.7.1. HINTS

⇒ When the edging cycle is finished, remove the edged lens without removing the block so as to be able to retouch it if necessary.

3.4.7.2. LIMITS

> **The total number of holes and notches is limited.**

→ The limit is **twenty holes per lens**, for all types of holes.

→ An elongated hole or a notch **count for one hole**.

⇒ See also "Drilling"

3.5. SPECIAL CASES

3.5.1. RETOUCHING A LENS

3.5.1.1. WHY?

When the lens has been edged and you find that its diameter is too large for the frame, you may decide to rework it by carrying out a retouch.

3.5.1.2. HOW?

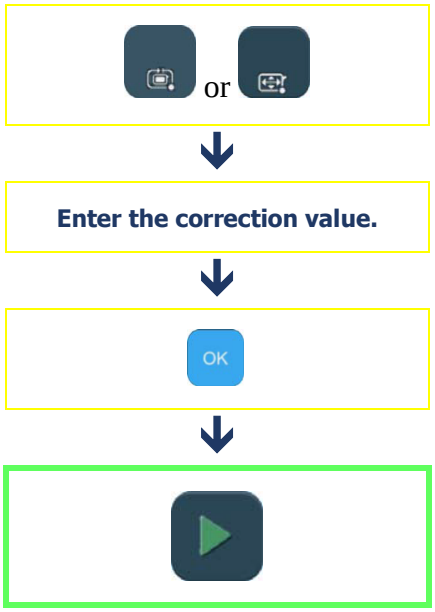
3.5.1.2.1. PRELIMINARY CONDITIONS

> The block must not have been removed from the lens when the lens was taken out of the edging chamber.
> A lens with drilling data cannot be retouched.

3.5.1.2.2. PROCEDURE

From the main application screen, after edging the lens, proceed as follows.

Note: Using the touch screen, press the zones or buttons shown.



Flow chart 3-10: Entering an oversize value

3.5.1.2.3. RESULT

= The lens is edged to the new dimension.

3.5.1.3. HINTS

⇒ Always check that the type of oversize displayed - circumference or boxing width - is indeed that which you wish to apply.

⇒ Note the difference between re-edging a lens and retouching a lens:

Re-edging corresponds to a second edging of the lens previously edged, or the edging of a new lens: in both cases, the characteristics of the first lens to be edged are saved and applied to the second lens.

Example: Edging the same lens twice.

Retouching corresponds to a negative size correction value applied during a second edging to the diameter of the lens initially edged.

3.5.1.4. IMPORTANT NOTES

> The retouch value is negative by default (the sign "-" is already displayed on the numeric key pad screen).
> The retouch is applied to the width of the lens. The height of the lens is recalculated to retain the proportions of the initial shape.
> The selection of the type of retouch - to circumference or to boxing width - is done from the pull-down menus personalization menu (see Personalisation of pull-down menus, chapter 4).
> The type of retouch is the same as that of oversizing.

Example: if you have selected an oversize at the circumference, the retouch will also be made at the circumference.

> You can retouch the first lens after edging the second. The retouch function is always accessible.

Example: You have edges both lenses of the job and wish to apply a final retouch to the right lens. Return to the right lens screen and enter the retouch value.

3.5.1.5. LIMITS

> The retouch is also applied to the safety-bevel, if present.
> The safety-bevel(s) of a lens will be maintained if the retouch value is less than 0.20 mm to the diameter.
> The groove shall be maintained if the retouch value is less than 0.60 mm for the diameter.

3.5.2. RETOUCHING A DRILLED HOLE

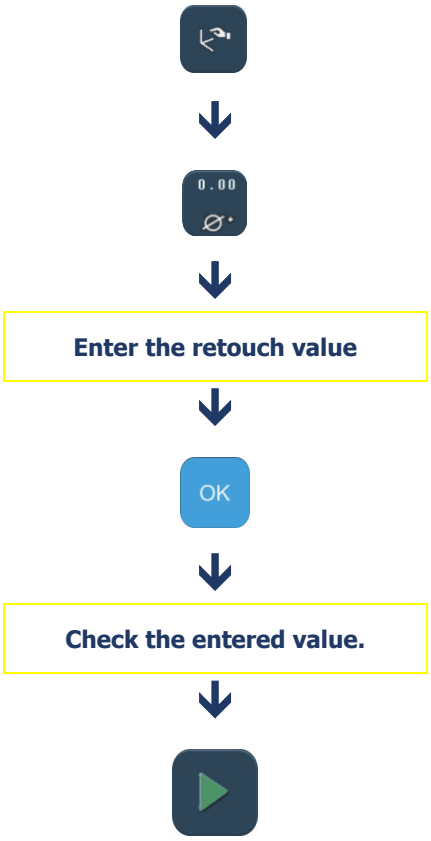
3.5.2.1. HOW?

3.5.2.1.1. PRELIMINARY CONDITION

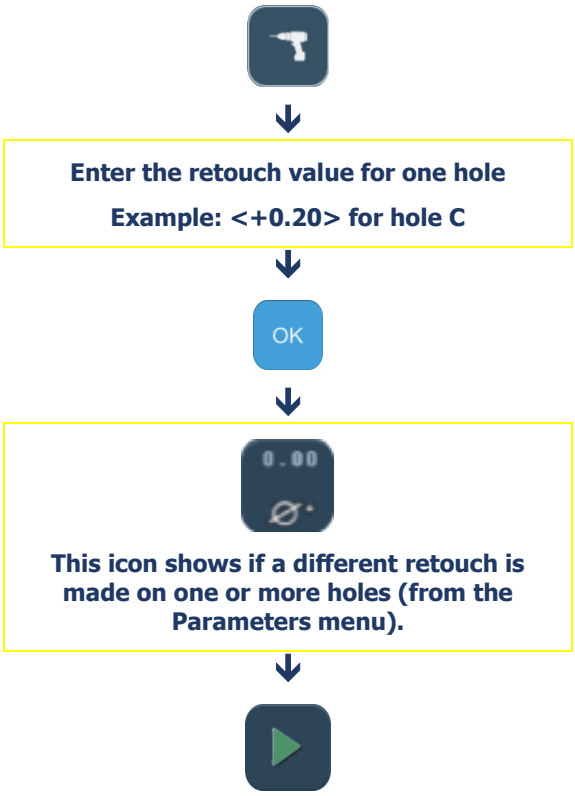
> The lens must have been subject to HD drilling and polished. Otherwise, retouch is not possible.
> The retouch value can be identical for all the holes. It can also be different for one or more holes.
> Retouching the holes involves retouching the lens by 0.1 mm on the polishing wheel.
This dimensional retouch is automatic.

3.5.2.1.2. PROCEDURE

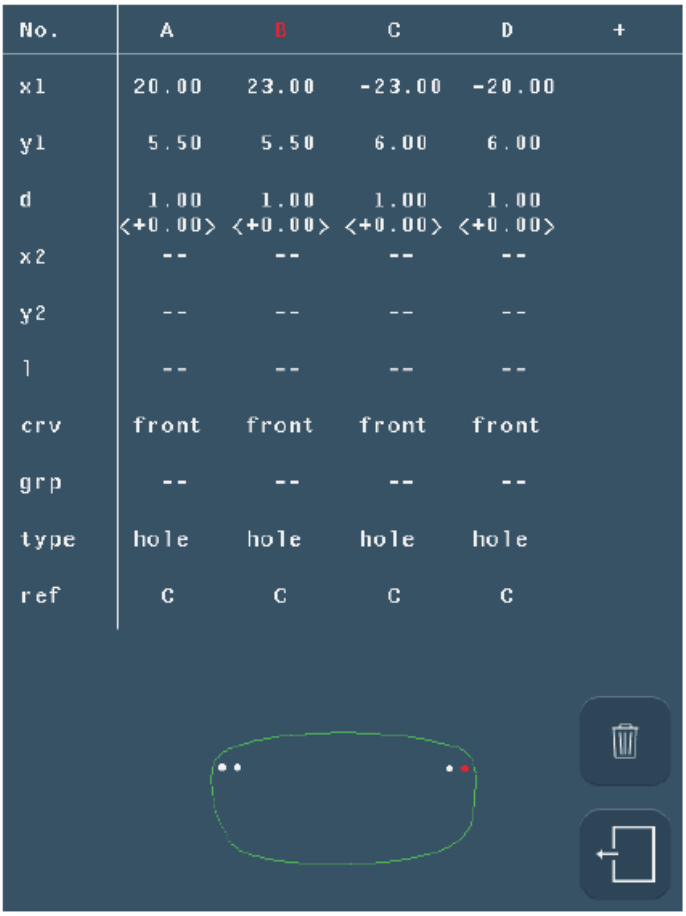
Note: Using the touch screen, press the zones or buttons shown.



Flow chart 3-11: rework of drilling identical for all the holes



Flow chart 3-12: Different retouch for one or more holes.



Screen 3-27: Example of a retouch on one hole

3.5.3. RETOUCHING A GROOVE

3.5.3.1. HOW?

3.5.3.1.1. PROCEDURE

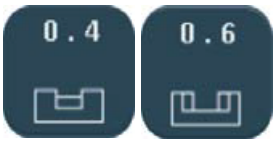
Once the lens has been ground, the  button appears on the screen.

Note: Using the touch screen, press the zones or buttons shown.

To switch to Retouch mode, you have to enter a value less than or equal to zero.

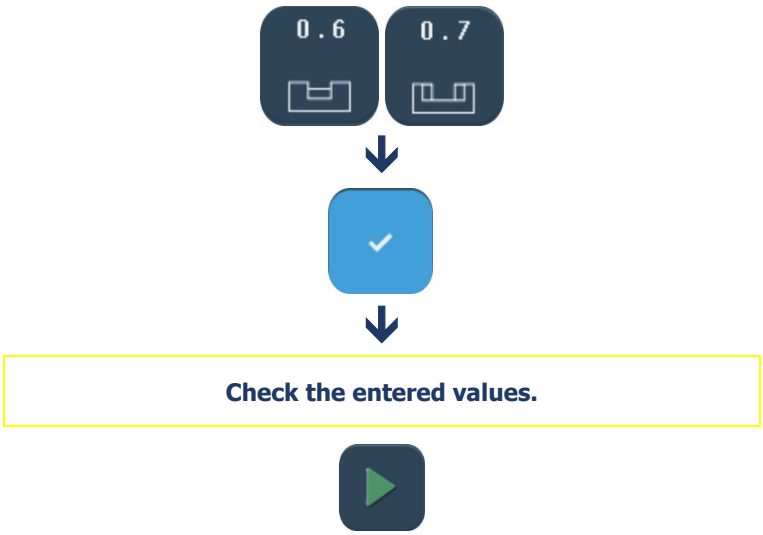
Enter the retouch value using the numeric keypad.
Example: "0.00"

The value "0.00" enables you to modify the groove without modifying the external size of the lens.



"0.40" and "0.60" are the default values.

Enter the retouch values using the numeric keypad.
Example: depth "0.60" and width "0.70".



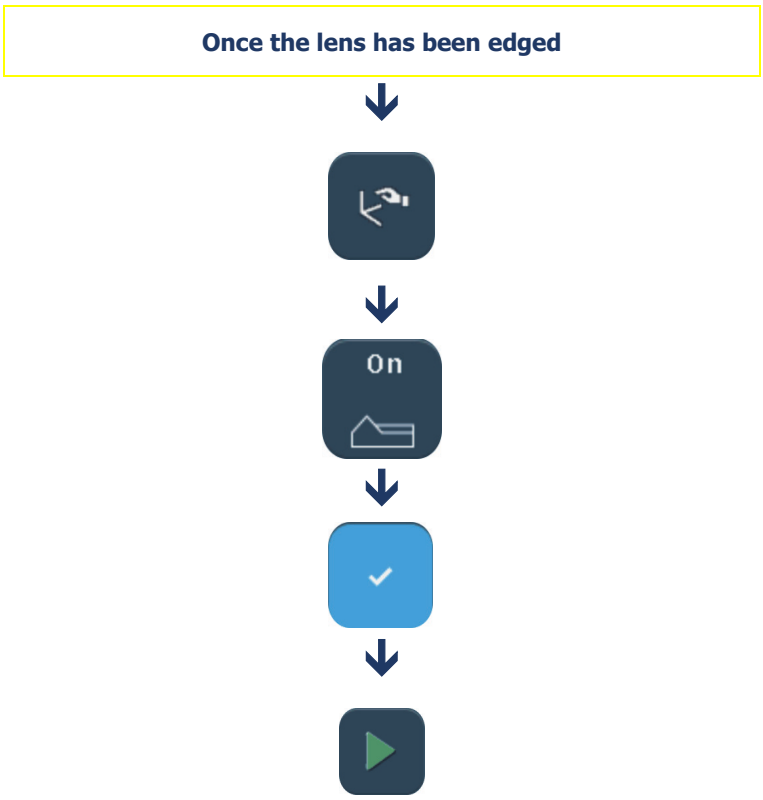
Flow chart 3-13: Example of a retouch on a groove

3.5.4. RETOUCHING A CHAMFER

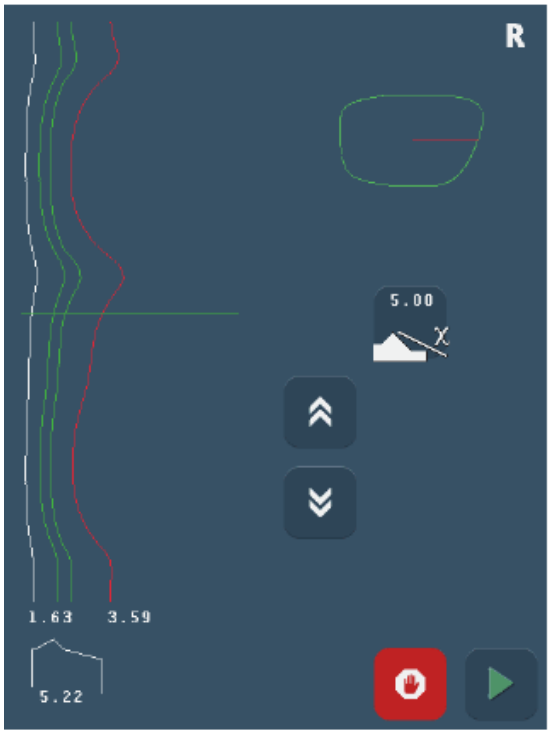
3.5.4.1. HOW?

3.5.4.1.1. PROCEDURE

Note: Using the touch screen, press the zones or buttons shown.



You then access one of the two following screens



Chamfer in line with frame base

Other chamfer types

You can increase the depth of the chamfer by pressing one of the buttons and using the numeric keypad.

Flow chart 3-14: Example of a retouch on a chamfer

3.5.5. APPLYING AN OVERSIZE TO THE LENS

3.5.5.1. WHY?

If you find that the differential applied to the job by default is not suitable, you can decide to apply an oversize which will be applied to the lens to be edged.

3.5.5.2. HOW?

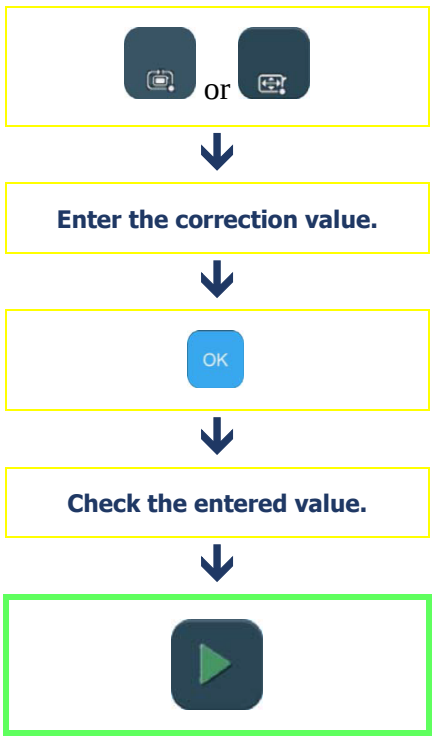
3.5.5.2.1. PRELIMINARY CONDITION

> You must enter the oversize value BEFORE edging the lens.

3.5.5.2.2. PROCEDURE

From the main application screen, after selecting all the job characteristics, proceed as follows.

Note: Using the touch screen, press the zones or buttons shown.



Flow chart 3-15: Entering an oversize value

3.5.5.2.3. RESULT

= The lens is edged and the initial dimension has been increased or decreased by the entered value.

> You may check the lens diameter with a digital caliper and retouch it if necessary.

3.5.5.3. HINTS

⇒ Always check that the type of oversize displayed - circumference or boxing width - is indeed that which you wish to apply.

3.5.5.4. IMPORTANT NOTES

> The retouch is applied to the width of the lens. The height of the lens is recalculated to retain the proportions of the initial shape.
> The selection of the type of oversize, to circumference or to boxing width - is done from the pull-down menus personalization menu (see Personalisation of pull-down menus, chapter 4).
> The type of oversizing determines the type of retouching.

Example: if you select an oversize at the circumference, the retouch will also be made at the circumference.

> For the same job, the oversizing applied to the right lens is not automatically applied to the left lens.
> In the case of a new edging cycle for the same lens (also called "**re-edging**"), the oversizing applied to the first lens will be automatically applied to the second.

3.5.5.5. LIMITS

> +/- 99.99 mm to boxing width
> +/- 99.99 mm to circumference

3.5.6. EDGING THE LEFT LENS WITH DIFFERENT PARAMETERS FROM THOSE OF THE RIGHT LENS

3.5.6.1. PRINCIPLE

> If the left and right lenses of your job do not have the same characteristics, you may modify the edging data from one lens to another.

CAUTION

For the same job, the following characteristics cannot be modified from one lens to another:

- Lens material
- Finishing type
- Polishing type.

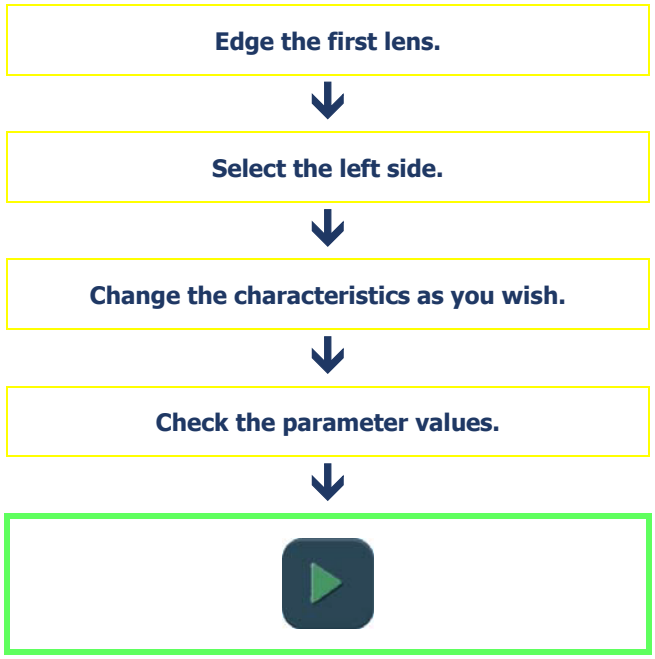
You may only modify the following characteristics:

- Lens type
- Sub-finishing type
- Safety-bevel type.

3.5.6.2. PROCEDURE

To modify the parameters from one lens to another, proceed as follows.

Note: Using the touch screen, press the zones or buttons shown.



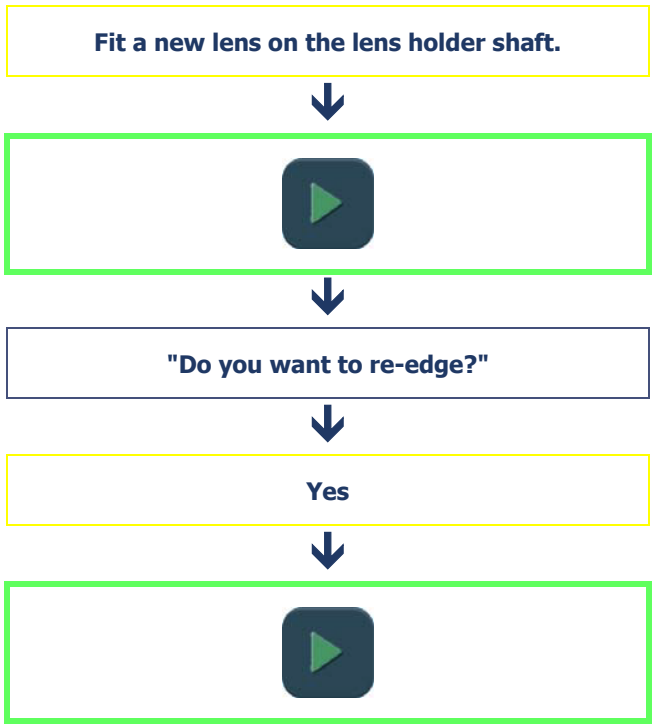
Flow chart 3-16: Modification of parameters from one lens to another

3.5.7. EDGING SEVERAL LENSES IDENTICALLY

3.5.7.1. PRINCIPLE

> You wish to edge several lenses with similar characteristics.

3.5.7.2. PROCEDURE



Flow chart 3-17: Edging lenses with identical characteristics

= The lens is edged again, with the same characteristics as the previous edging.

Tip! In this way you can group together similar lenses without entering the same characteristics for each new edging cycle.

3.5.8. CHECKING A FINISHING BEFORE THE LENS IS EDGED

3.5.8.1. PRINCIPLE

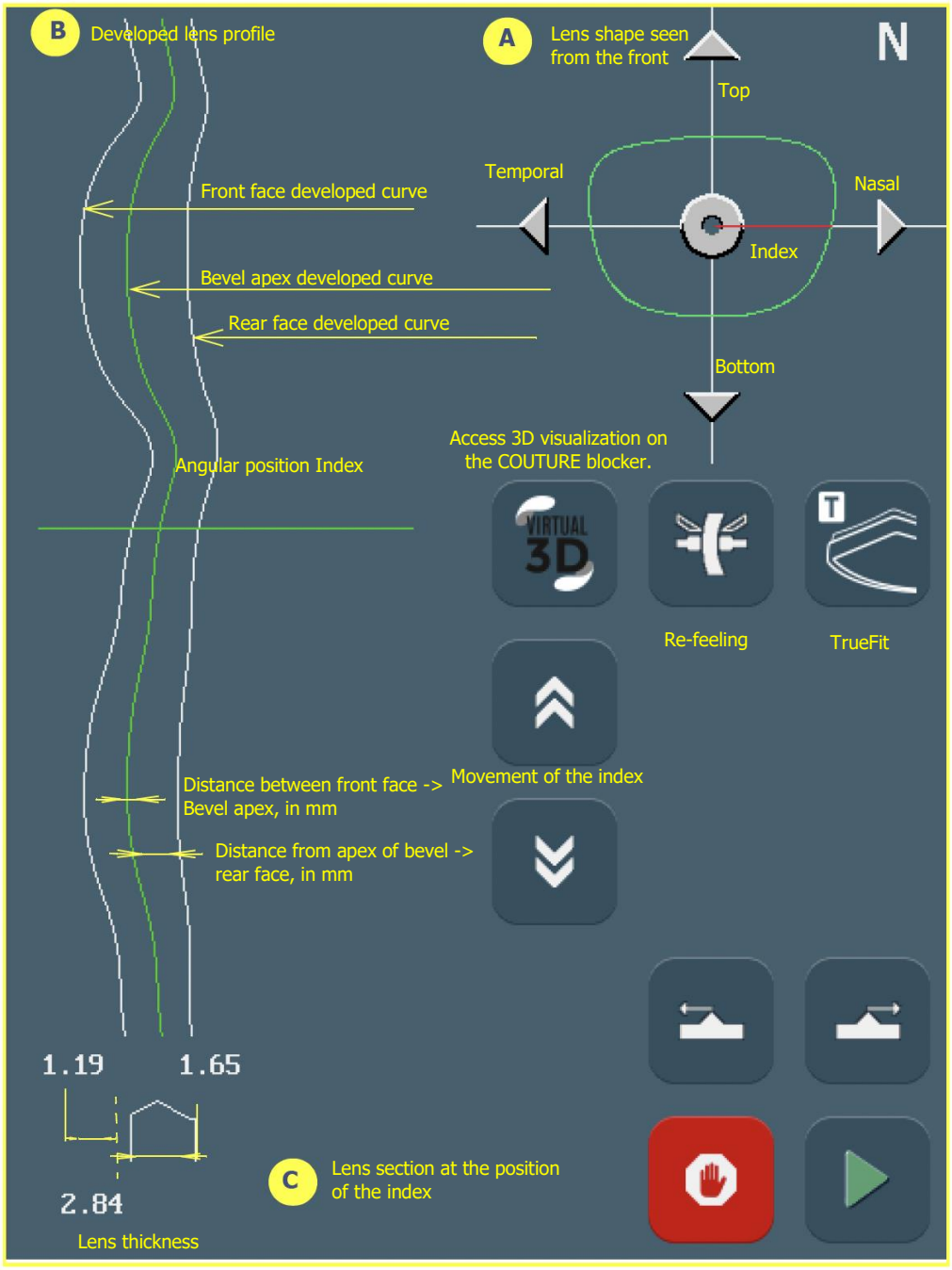
> You may wish to check the position of the desired finishing - bevel and groove - before beginning the lens edging cycle.
> You may also wish to position the finishing yourself when running a job. To do this, press the Pause button.
> You may be automatically redirected to this screen.

Example: The desired finishing position cannot be applied to the lens being edged.

A special screen allows you to visualize the finishing and modify its position, if desired.

3.5.8.2. PRESENTATION

3.5.8.2.1. MANUAL BEVEL SCREEN

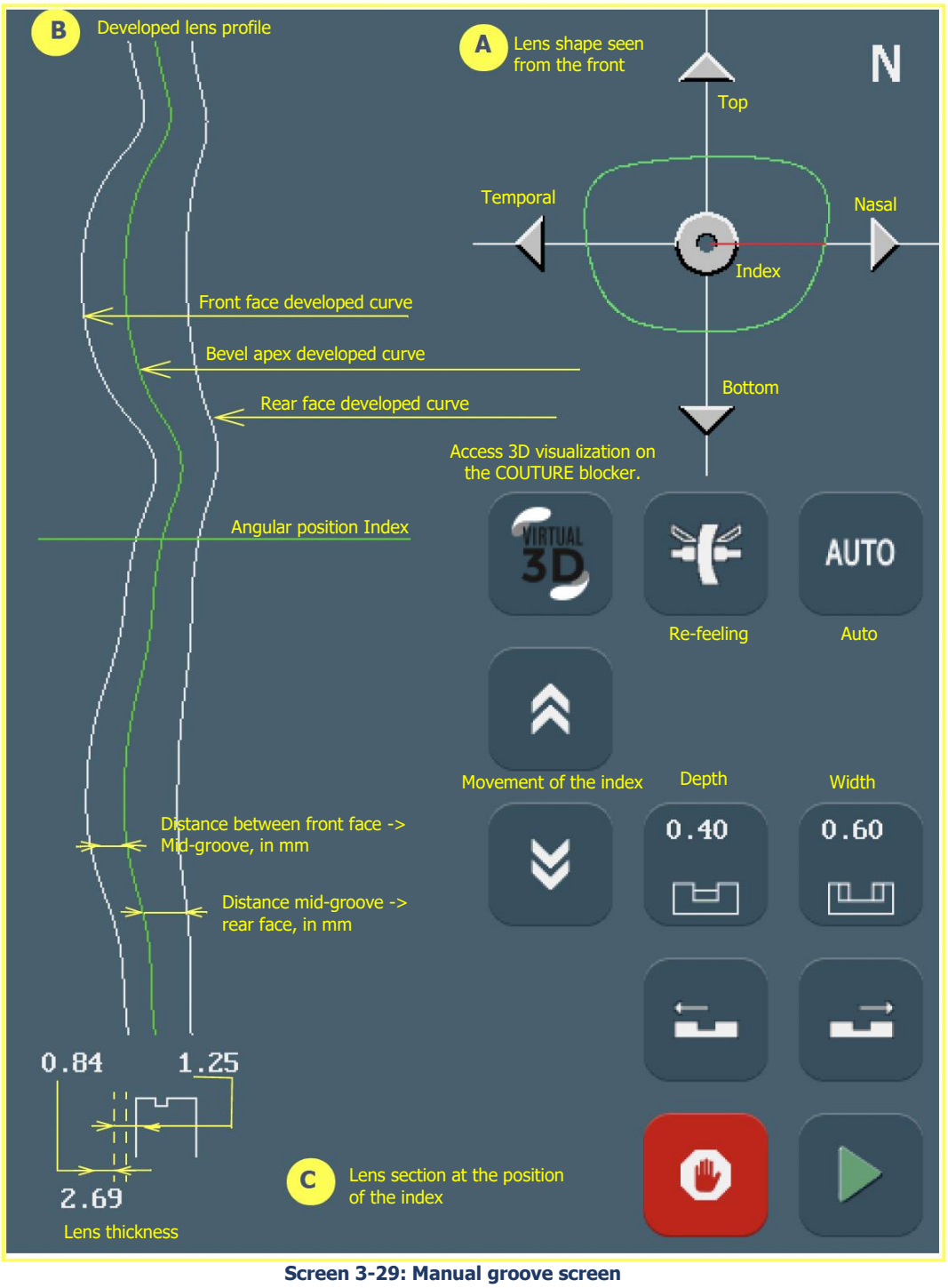


Screen 3-28: Manual bevel screen

IMPORTANT NOTE

> The indices of zones A and B indicate the same finishing angular position. When you move one, the other moves as well.

3.5.8.2.2. MANUAL GROOVE SCREEN



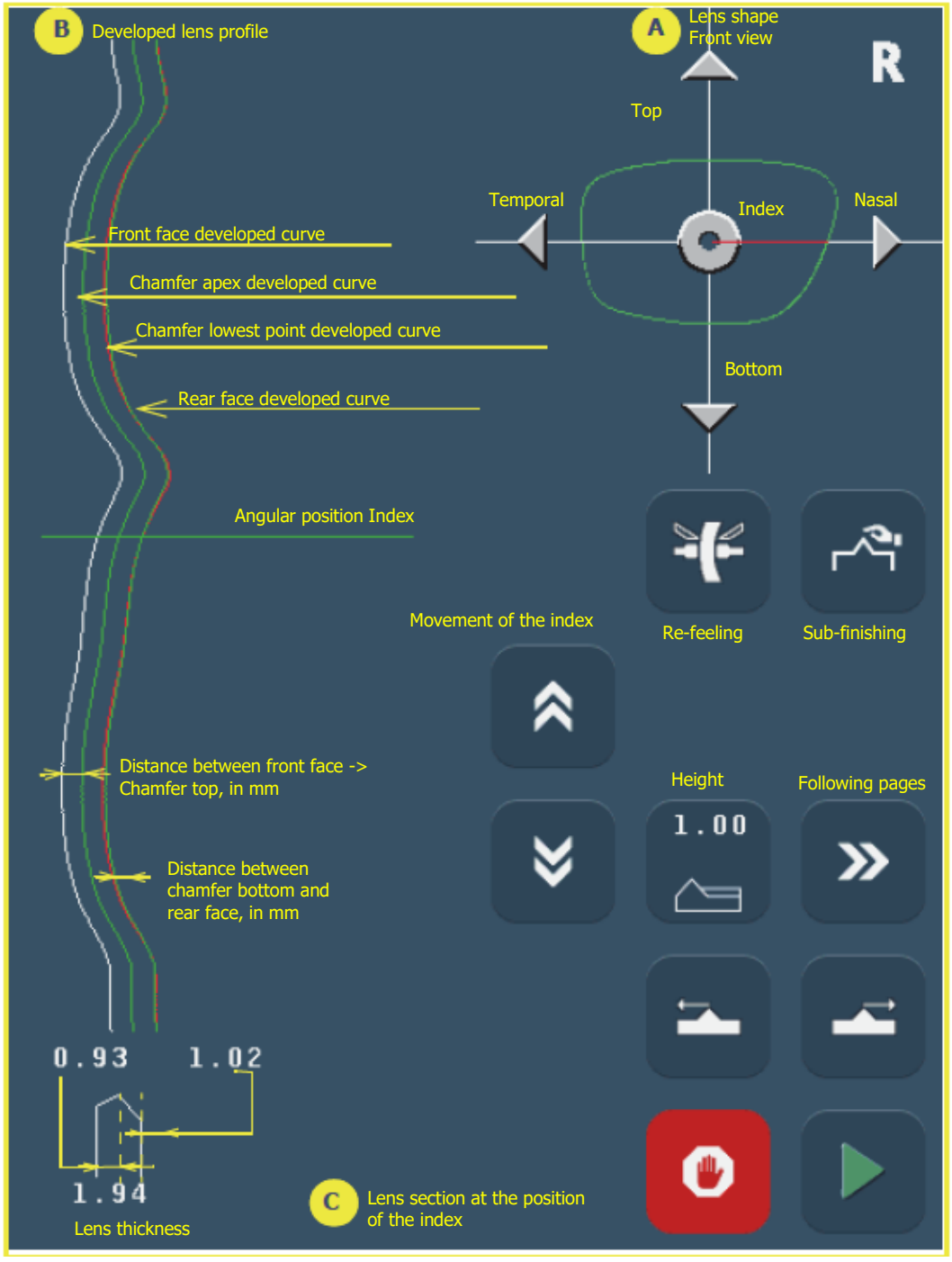
Screen 3-29: Manual groove screen

IMPORTANT NOTE

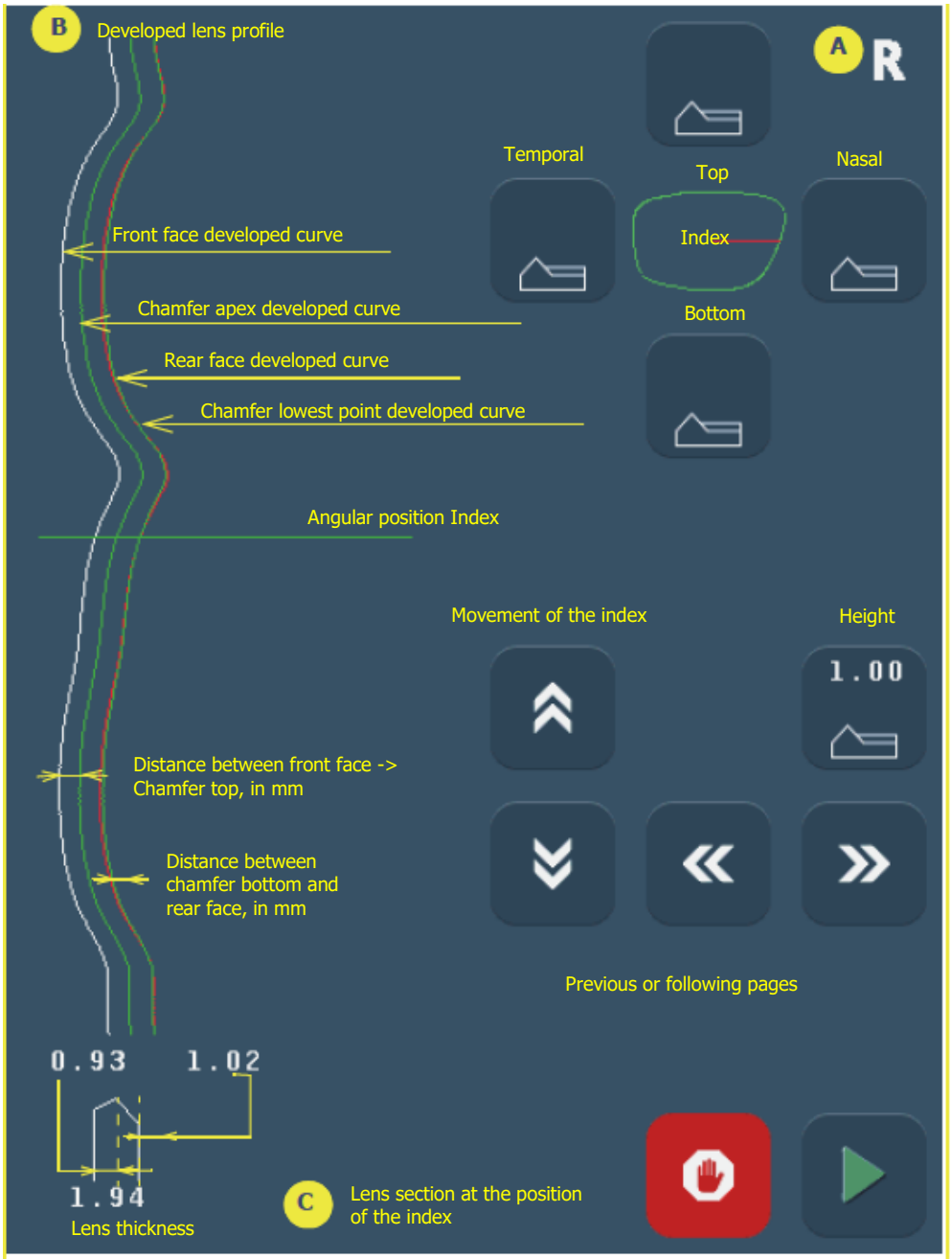
> The indices of zones A and B indicate the same finishing angular position. When you move one, the other moves as well.

> When you press the "Virtual 3D" button, the data is sent to the blocker.

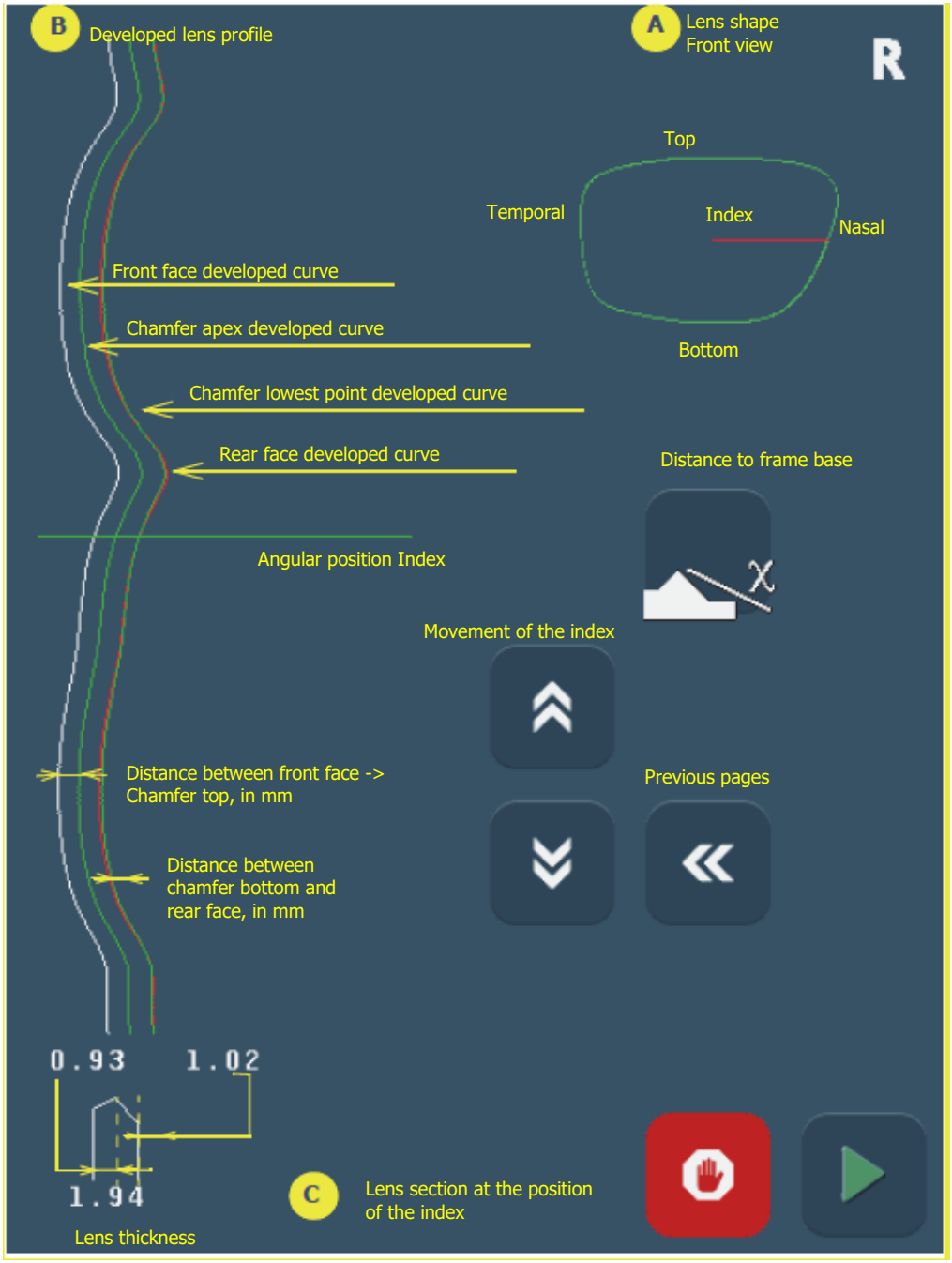
3.5.8.2.3. CHAMFER CHECK SCREEN



Screen 3-30: Constant chamfer screen (page 1)



Screen 3-31: Constant chamfer screen (page 2)



Screen 3-32: Control screen of chamfer at frame base (page 3)

IMPORTANT NOTE

> The indices of zones A and B indicate the same finishing angular position. When you move one, the other moves as well.

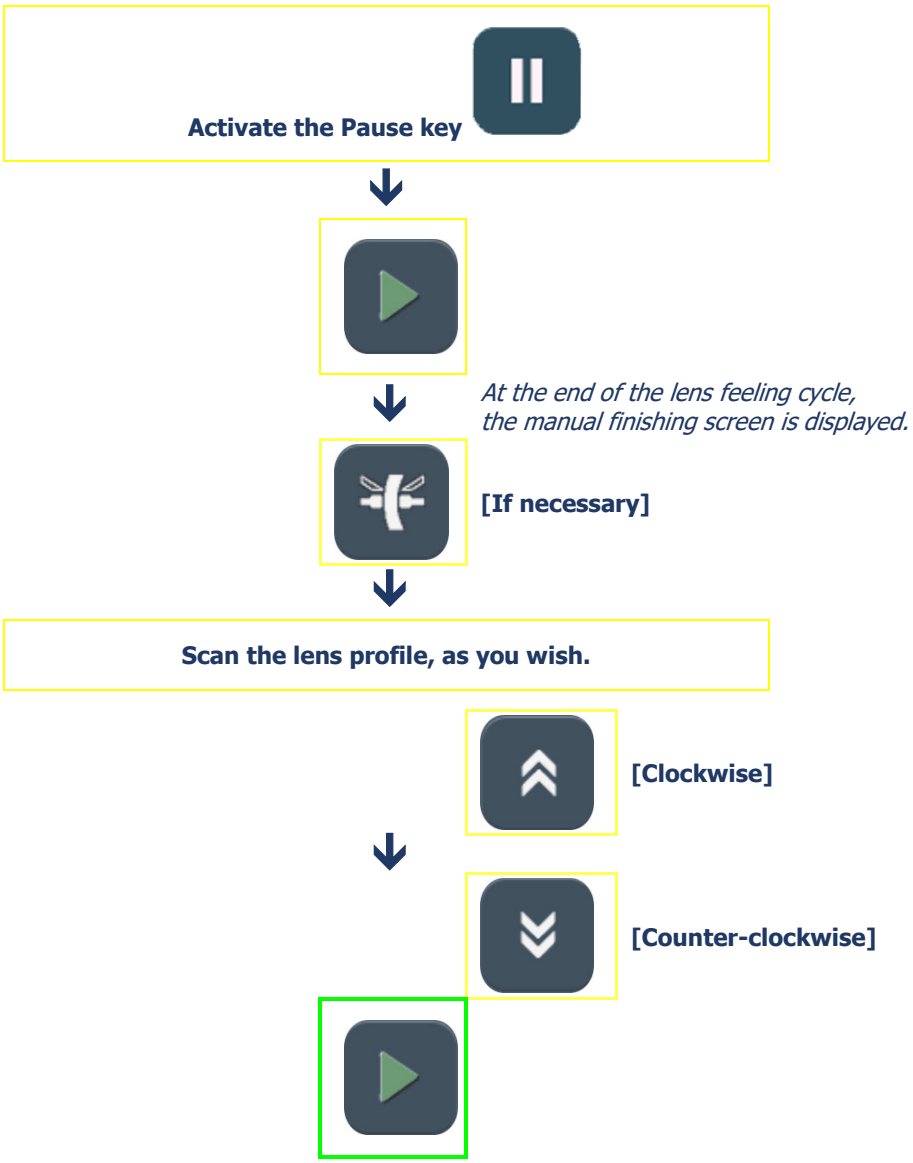
3.5.8.3. VISUALISE A FINISHING

3.5.8.3.1. SITUATION

> You are not sure about the finishing position and wish to displaying it before it is run.

3.5.8.3.2. PROCEDURE

After opening the job and entering the characteristics, proceed as follows:



Flow chart 3-18: Finishing display screen

3.5.8.3.3. SPECIAL CASES

After the lens feeling, you may have been redirected automatically to the manual finishing screen for the following reasons:

- The bevel or the groove are outside the lens.
- The bevel is too far back.
- Irregular points were detected during feeling.

⇒ In this case, scan the lens profile to visualise the position of the bevel compared to the lens thickness.

⇒ You may also reposition the finishing: see"Place a finishing manually".

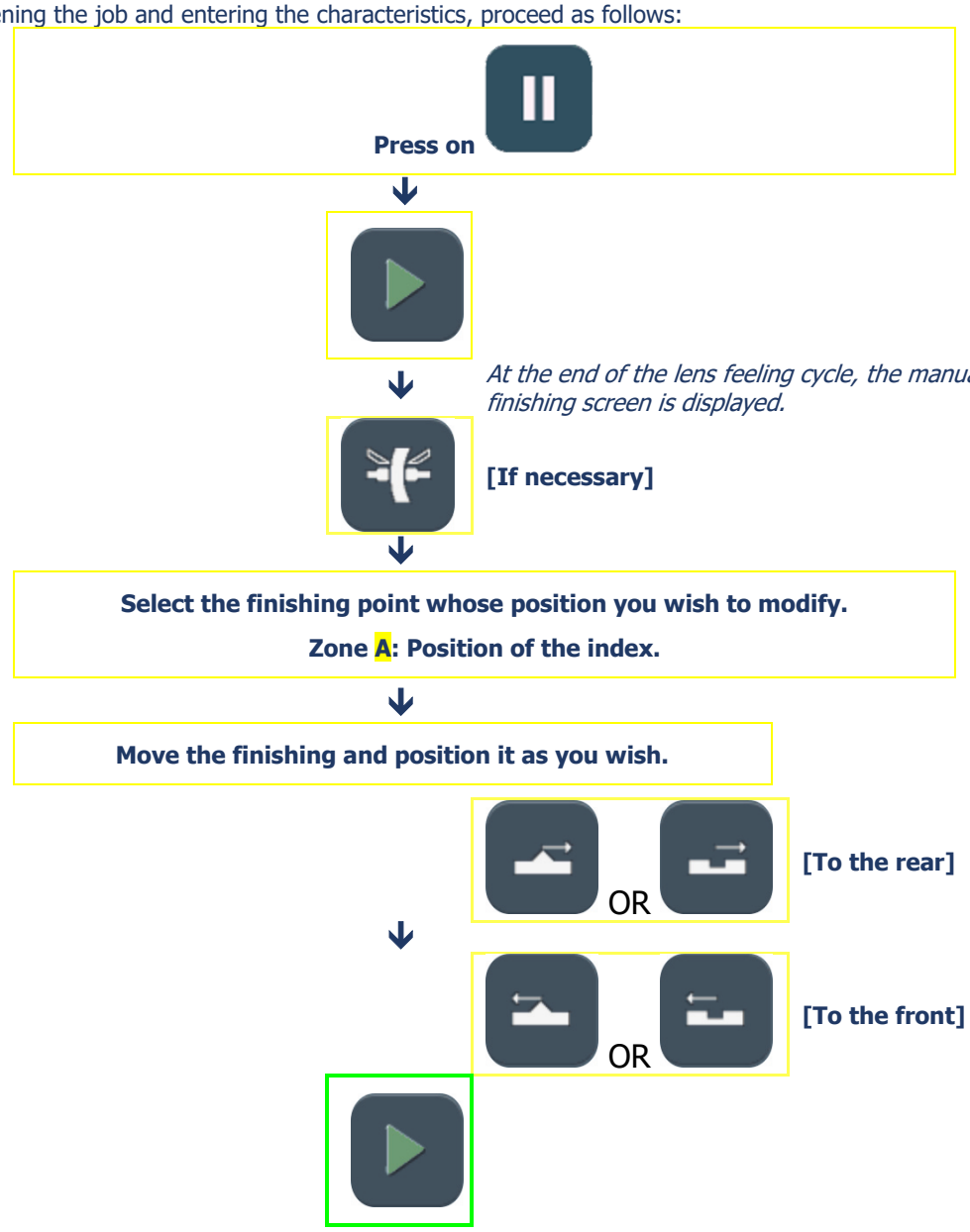
3.5.8.4. PLACE A FINISHING MANUALLY

3.5.8.4.1. PRINCIPLE

> You wish to display the lens thickness and adjust the finishing position.

3.5.8.4.2. GENERAL PROCEDURE

After opening the job and entering the characteristics, proceed as follows:

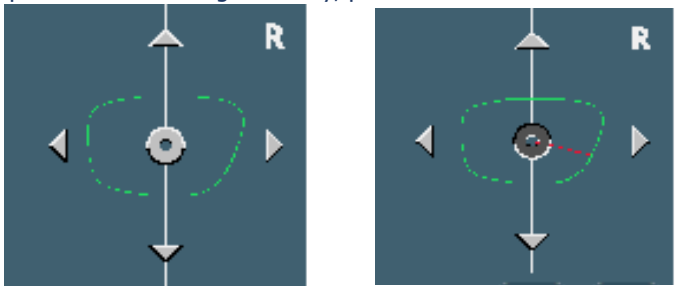


Flow chart 3-19: Placing a finishing manually

IMPORTANT NOTES

> The finishing position is modified at the place where the index is positioned. Only the middle of the bevel or the middle of the groove is displaced along this point. The opposite side remains fixed and the curve of the finishing is unchanged.

> If you would like to reposition the finishing assembly, press the button located in the middle of the lens drawing.



The button remains pressed in

3.5.8.4.3. SPECIAL CASES

After the lens feeling, you may have been redirected automatically to the manual finishing screen for the following reasons:

- The bevel or the groove are outside the lens.
- The bevel is too far back.
- Irregular points were detected during feeling.

⇒ You may then reposition the finishing as shown in the flow chart above.

3.5.8.5. PRODUCE A MANUAL BEVEL

3.5.8.5.1. PRINCIPLE

> You wish to display the lens thickness and adjust the finishing position.

3.5.8.5.2. PROCEDURE

To produce a manual bevel:

1. Open the job.
2. Enter its characteristics.
3. Proceed as shown on the flow chart on the following page - Flow chart 3-15.

3.5.8.5.3. HINTS

⇒ When the edging cycle is finished, remove the lens from the edging chamber without removing the block so as to be able to retouch it if necessary.

⇒ Check the lens dimensions and finishing.

3.5.8.5.4. IMPORTANT NOTES

> The maximum distance between the apex of the bevel and the front face is 5 mm.

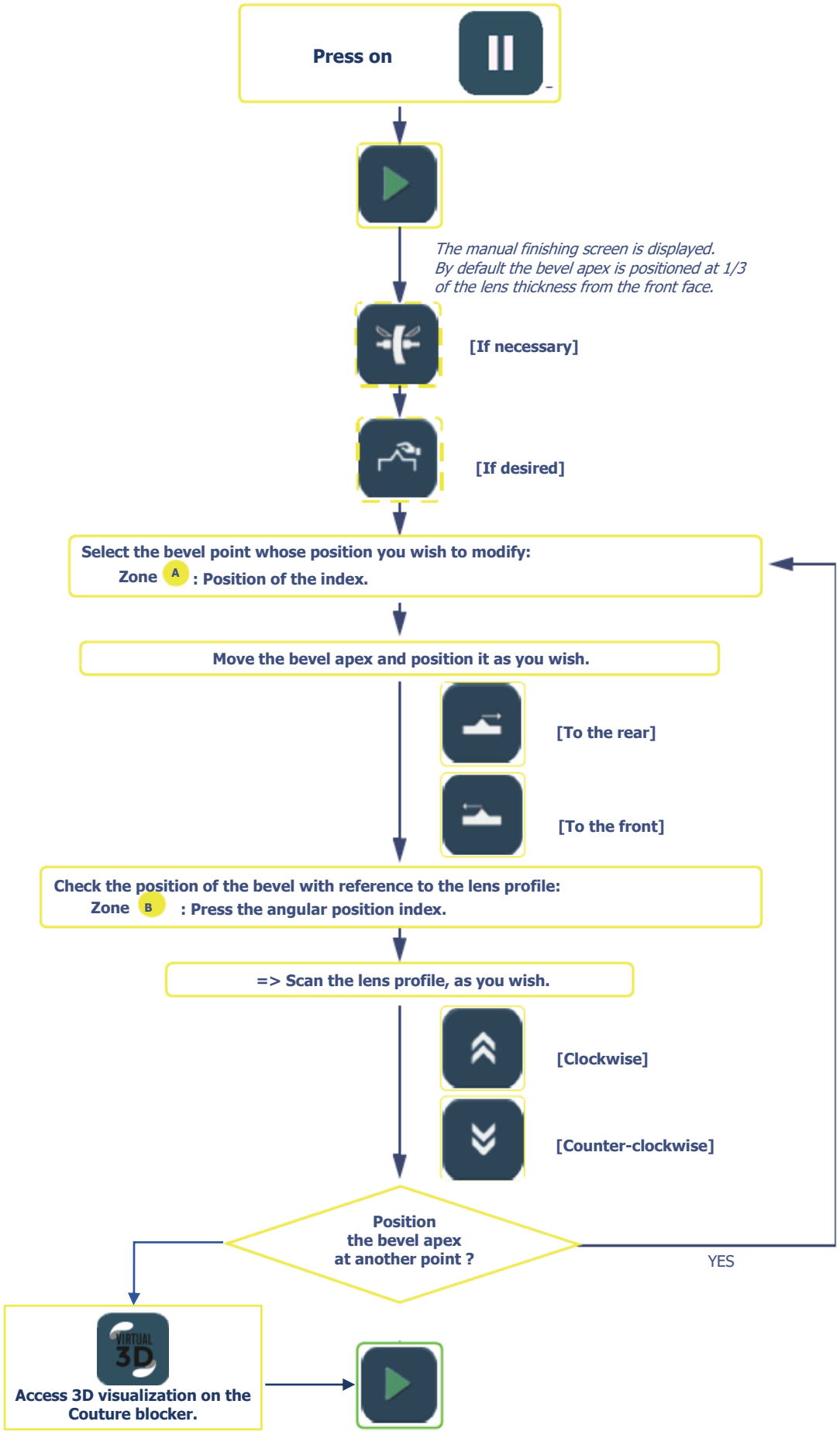
> The finishing position is modified at the place where the index is positioned. Only the bevel apex is displaced along this point. The opposite side remains fixed and the curve of the bevel is unchanged.

> If you would like to reposition the bevel assembly, press the button located in the middle of the lens drawing.

3.5.8.5.5. LIMITS

> If the maximum thickness of the lens is less than 2 mm, the applied bevel will automatically be of 1/2 - 1/2 type, whichever type of bevel is selected initially.

> To make a safety-bevel of any type, the minimum distance between the bevel apex and the front/rear face must be greater than 1.6 mm. If it is less than 1.6 mm at any point of the lens, the safety-bevel will not be produced at this point.



Flow chart 3-20: Produce a manual bevel

3.5.8.6. PRODUCE A MANUAL GROOVE

3.5.8.6.1. PRINCIPLE

> You wish to visualise the lens thickness and define the curve and the position of the groove.

3.5.8.6.2. PROCEDURE

To produce a manual groove:
1. Open the job.
2. Enter its characteristics.
3. Proceed as shown on the flow chart on the following page - Flow chart 3-16.

3.5.8.6.3. HINTS

⇒ When the edging cycle is finished, remove the lens from the edging chamber without removing the block so as to be able to retouch it if necessary.

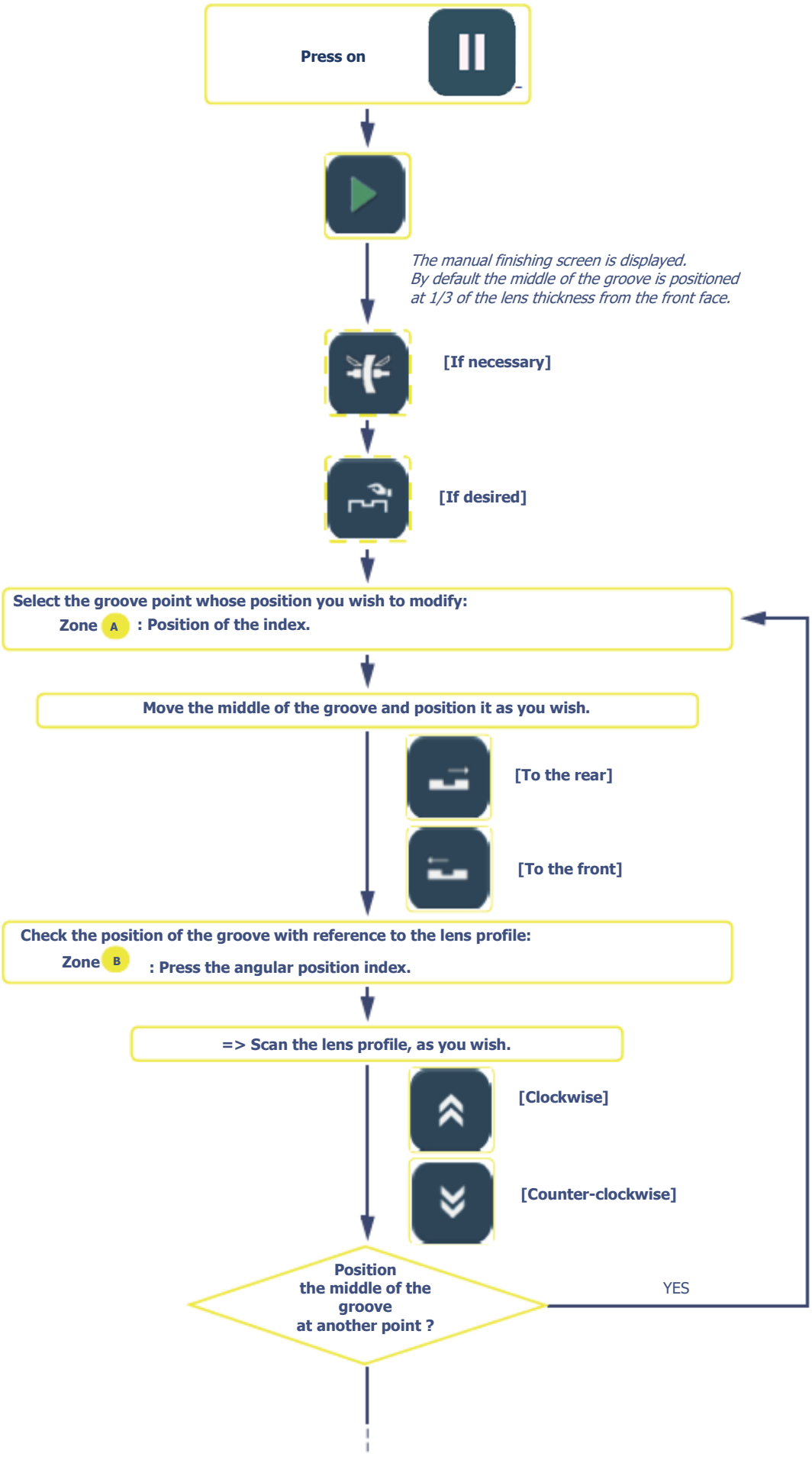
⇒ Check the lens dimensions and finishing.

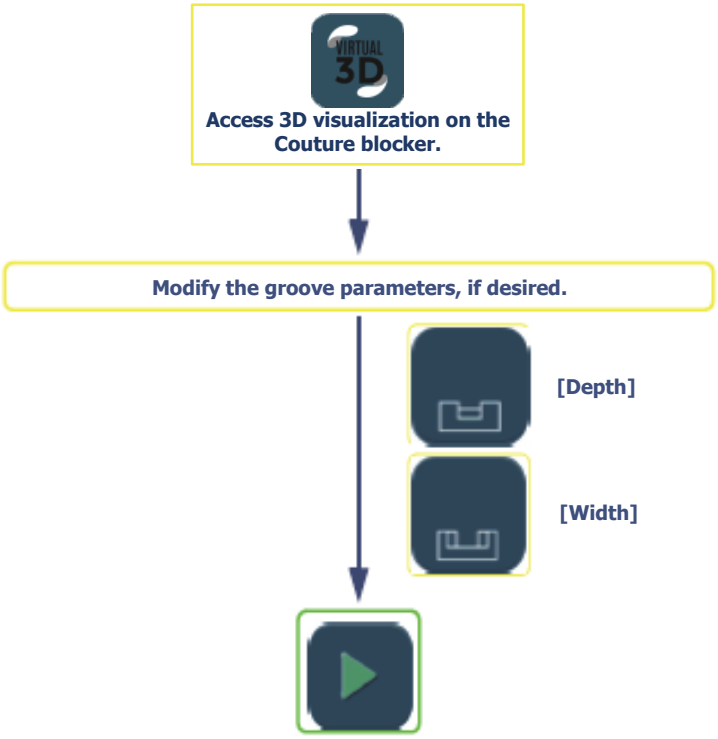
3.5.8.6.4. IMPORTANT NOTES

> Only plastics can be grooved.
> The minimum thickness of the lens must be equal to or greater than 1 mm to produce a groove.
> The groove position is modified at the place where the index is positioned. Only the middle of the groove is moved along this point. The opposite side remains fixed and the curve of the groove is unchanged.
> If you would like to reposition the finishing assembly, press the button located in the middle of the lens drawing.
> The relationship between the minimum Lens face - Groove edge distance and the depth of the groove will always be adjusted automatically to guarantee the lens resistance.

3.5.8.6.5. LIMITS

> If the maximum thickness of the lens is less than 2 mm, the applied groove will automatically be of 1/2 - 1/2 type, whichever type of groove is selected initially.
> To make a safety-bevel of any type, the minimum distance between the front face of the lens and the front edge of the groove (or the rear face and rear edge) must be greater than 0.40 mm. If it is less than 0.40 mm at any point of the lens, the safety-bevel will not be produced at this point (by steps of 0.20 mm).
> The safety-bevel(s) of a grooved lens will be maintained if the retouch value is less than 0.20 mm to the diameter.
> The groove shall be maintained if the retouch value is less than 0.60 mm for the diameter.


Press on
The manual finishing screen is displayed.
By default the middle of the groove is positioned
at 1/3 of the lens thickness from the front face.
[If necessary]
[If desired]
Select the groove point whose position you wish to modify:
Zone A : Position of the index.
Move the middle of the groove and position it as you wish.
[To the rear]
[To the front]
Check the position of the groove with reference to the lens profile:
Zone B : Press the angular position index.
=> Scan the lens profile, as you wish.
[Clockwise]
[Counter-clockwise]
Position the middle of the groove at another point ?
YES



Flow chart 3-21: Produce a manual groove

3.5.8.7. FEEL THE LENS AGAIN

> If the diameter of the lens being felt is too small, the warning message "Lens too small" is displayed and you transfer to the manual finishing screen.

You may then feel the lens three times successively. The lens is felt 0.5 mm closer to the interior each time.

If the three successive feeling operations are not enough, the lens is too small and cannot be edged.

Confirm the message.

Complete the cycle and retrieve the lens.

> Irregular points have been detected during the first phase of the cycle, the message "Irregular points" is displayed and you transfer to the manual finishing screen. We advise you to repeat the lens feeling cycle.

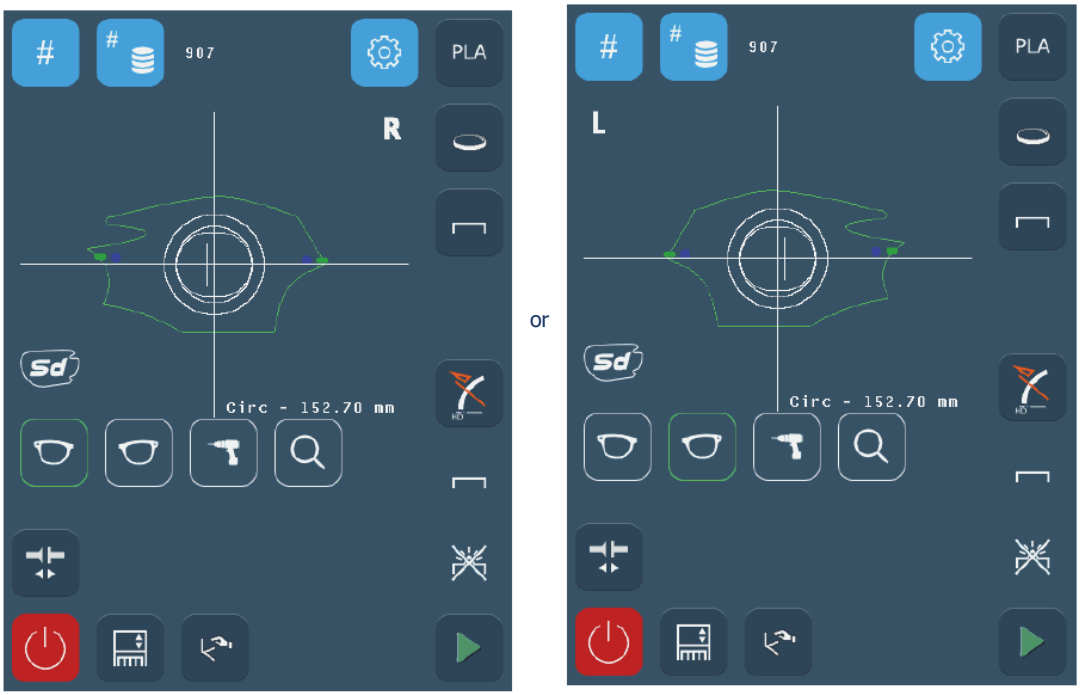
3.5.9. SMART DESIGN "SD" FINISHING (COMPLEX SHAPE)

3.5.9.1. PRINCIPLE

The icon  indicates that you have a shape which requires a "Smart Design" cut.

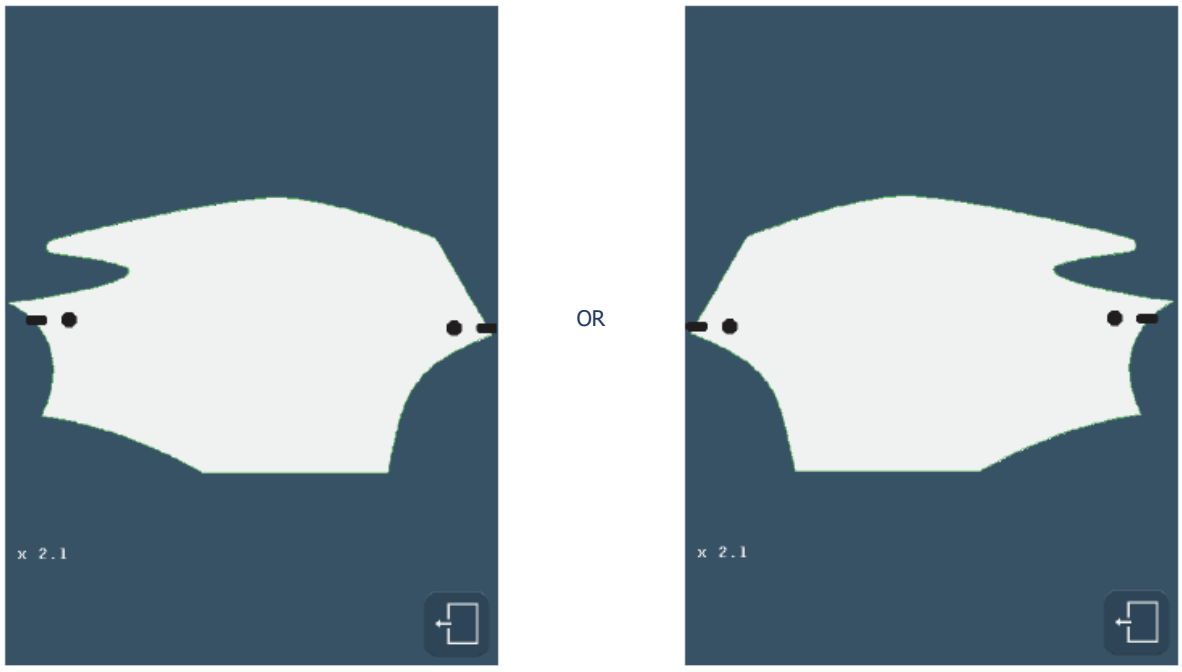
The shapes are generated on the blocking device/tracer.
When the contour of the shape has concavities whose bend radius is less than the edging radius (45mm), a signal is sent to the edger indicating that the "SD" function will be required to produce the shape.

3.5.9.2. PROCEDURE: CASE 1

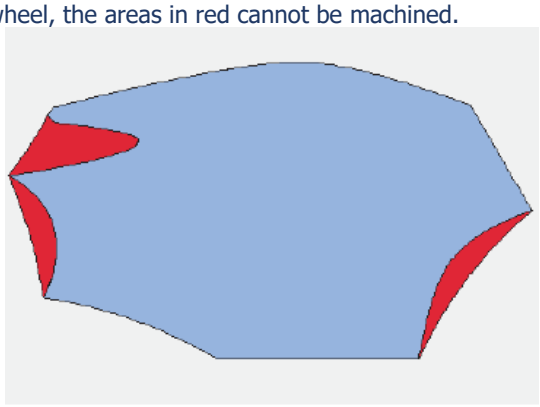


Screen 3-33: "Smart Design" without possibility of polishing and safety beveling

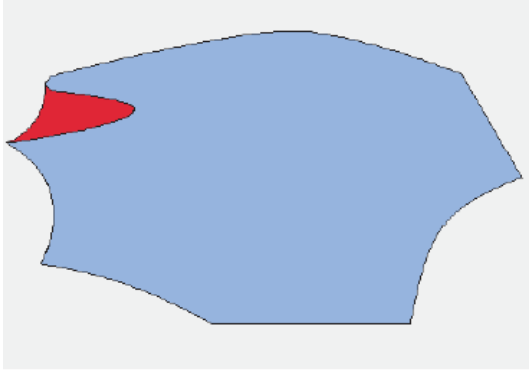
With the magnifying glass  tab you can access the following screens:



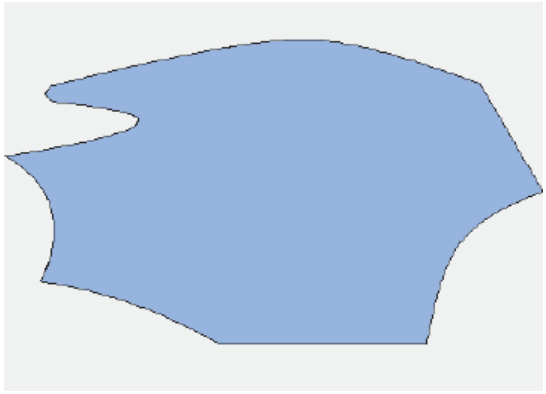
> With the 90 mm diameter wheel, the areas in red cannot be machined.



> With the 90 mm diameter wheel and the 12 mm diameter abrasive point, the red area cannot be machined.

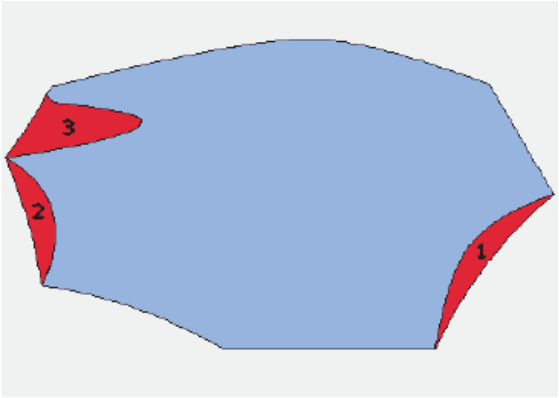


> The 1 mm diameter mill bit is used to machine the last area.



⇒ 1 and 2 are machined with the 12 mm abrasive point.

⇒ Area 3 is machined with the 1 mm mill bit.

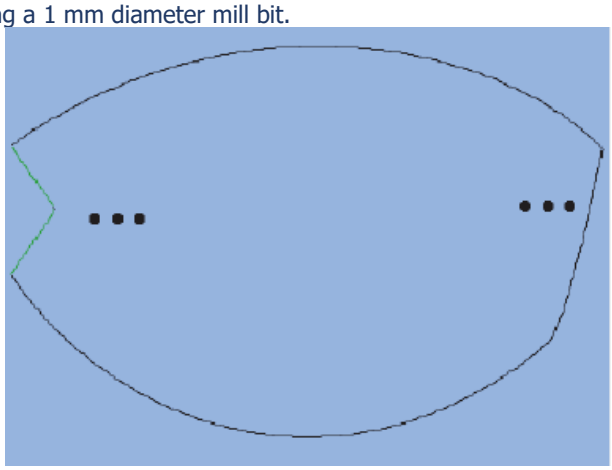


Note: For shapes such as this where some areas are only machined with the 12 mm abrasive point (areas 1 and 2), all of the edge of the shape will be lightly finished using the abrasive point. In this case, polishing and safety beveling are not possible.

3.5.9.3. PROCEDURE: CASE 2

Screen 3-34: "Smart Design" with possibility of polishing and safety beveling

> This result is obtained using a 1 mm diameter mill bit.



Note: For shapes such as this where the milled parts (shown in green) are produced using a 1 mm mill bit, polishing and safety beveling are possible. Finishing is carried out before cutting with the 1 mm mill bit (shown in green here).

3.6. OPERATING PRINCIPLE

3.6.1. POINTS TO REMEMBER

→ Lens

Diameter of the uncut lens before edging <= 80 mm

Thicknesses

BRIOT COUTURE (all materials)

Maximum thickness at the edge of the uncut (plastic) lens = 17 mm

Maximum thickness at the edge of the uncut (mineral) lens = 11 mm

Rimless finish maximum (detected during lens feeling) = 11 mm

Bevel finish maximum = 17 mm (plastic lens, mineral lens roughing being limited to 11 mm)

BRIOT COUTURE (all plastics)

Maximum thickness at the edge of the uncut (plastic) lens = 20 mm

Rimless finish maximum (detected during lens feeling) = 11 mm

Bevel finish maximum = 17 mm

→ Shape

Machine equipped with BRIOT adaptor

Minimum height of the shape in rimless = 17.00 mm

Minimum height of the shape in bevel = 18.60 mm.

Minimum height of grooving shape = 17.00 + (2 x depth of groove) (17.80 mm for D=0.4 mm)

BRIOT COUTURE (all materials)

Minimum height of chamfer shape = 19.20 + (2 x depth of chamfer) (20.80 mm for H=0.8 mm)

BRIOT COUTURE (all plastics)

Minimum height of chamfer shape = 20.20 + (2 x depth of chamfer) (21.80 mm for H=0.8 mm)

Machine equipped with WECO adaptor

Minimum height of the shape in rimless = 17.75 mm

Minimum height of the shape in bevel = 19.60 mm.

Minimum height of grooving shape = 17.30 + (2 x depth of groove) (18.10 mm for D=0.4 mm)

BRIOT COUTURE (all materials)

Minimum height of chamfer shape = 19.95 + (2 x depth of chamfer) (21.55 mm for H=0.8 mm)

BRIOT COUTURE (all plastics)

Minimum height of chamfer shape = 20.95 + (2 x depth of chamfer) (22.55 mm for H=0.8 mm)

→ Minimum lifespan of the edging wheels:

Mineral roughing = 10000 lenses

Plastic roughing = 50000 lenses

Finishing = 10000 lenses

Polishing = 6,000 lenses

Safety-bevel = 5000 lenses per wheel side
Grooving = 5000 lens

Chamfering = 10000 lenses

→ Beveling

Minimum lens thickness to produce the type of bevel desired = 2 mm

If maximum thickness of felt lens less than 2 mm, the bevel is automatically type 1/2 - ½

→ Grooving

Minimum/maximum width = 0.6 to 1.2 mm

Minimum/maximum depth = 0 to 0.8 mm.

Minimum distance between the front face of the lens and the front edge of the groove (or rear face and rear edge) to produce a groove = 0.2 mm.

→ Drilling

Min. hole diameter = milling diameter (2 milling diameters available:
1 mm and 0.8 mm)

Lifespan of the mill bit = 1 hr of total drilling, all lens materials together

Maximum hole depth (= length of the mill bit) = 8 mm

Minimum/maximum angles = 0 to 30°

Accuracy of the drilling angle = +/- 1°

Positioning of holes = +/- 0.1 mm

Non-through holes and countersinking can be drilled on the front face of lens.

Maximum twenty holes per lens, for all types of holes.

→ Safety-bevel

Maximum depth = 0.6 mm in steps of 0.1 mm

Retouching with safety-bevel is possible if the value of the retouch is less than 0.2 mm (at Boxing width)

Minimum distance between the apex of the bevel and the front/rear face to make a safety-bevel = 1.6 mm

Minimum distance between the front face of the lens and the front edge of the groove (or rear face and rear edge) to produce a safety-bevel = 0.4 mm

→ Accuracy of the edger

Dimensional accuracy = +/- 0.06 mm at diameter

Axis setting accuracy = +/- 0.5° per lens (entry+blocking+edging).

3.6.2. ILLUSTRATION OF FINISHING LIMITS

(machine equipped with Briot adaptors and edger types for all plastics for chamfering)

3.6.2.1. RIMLESS FINISHING

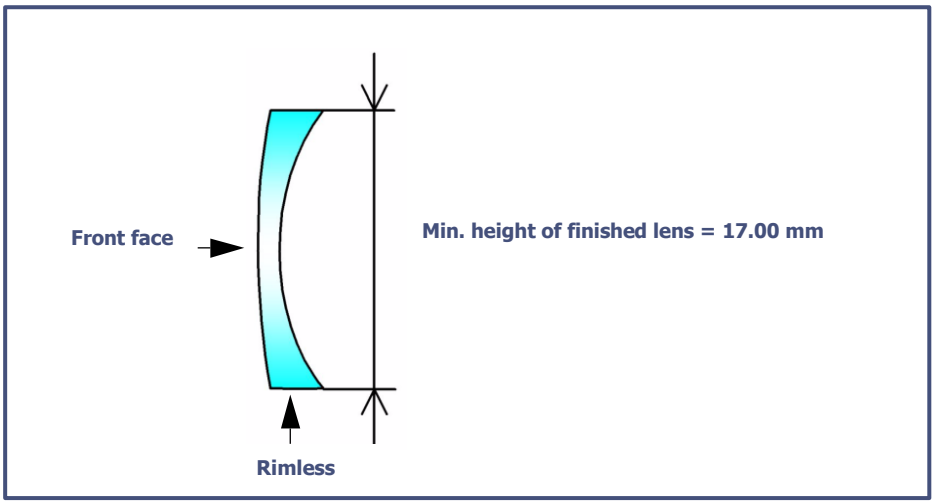


Illustration 3-3 : Limits of production of a rimless lens

3.6.2.2. BEVEL FINISHING

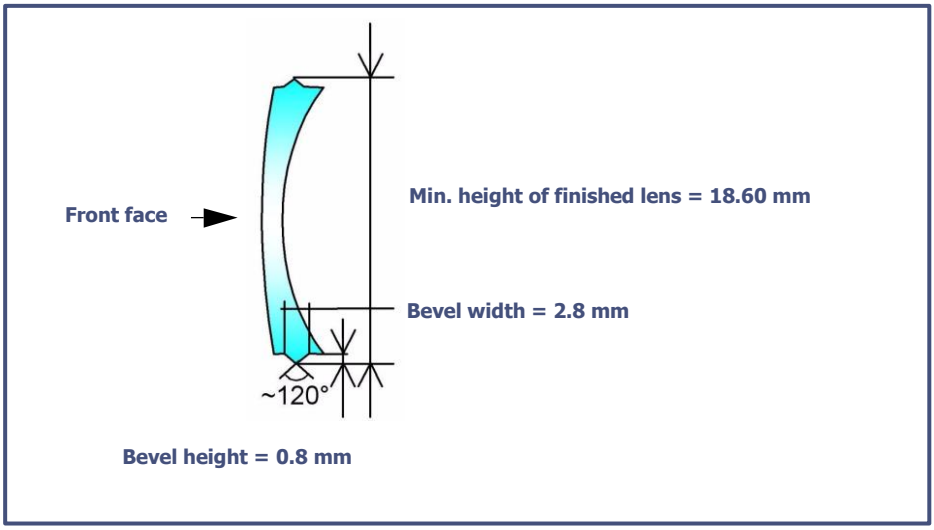


Illustration 3-4 : Limits of production of a bevel

3.6.2.3. FACET FINISHING

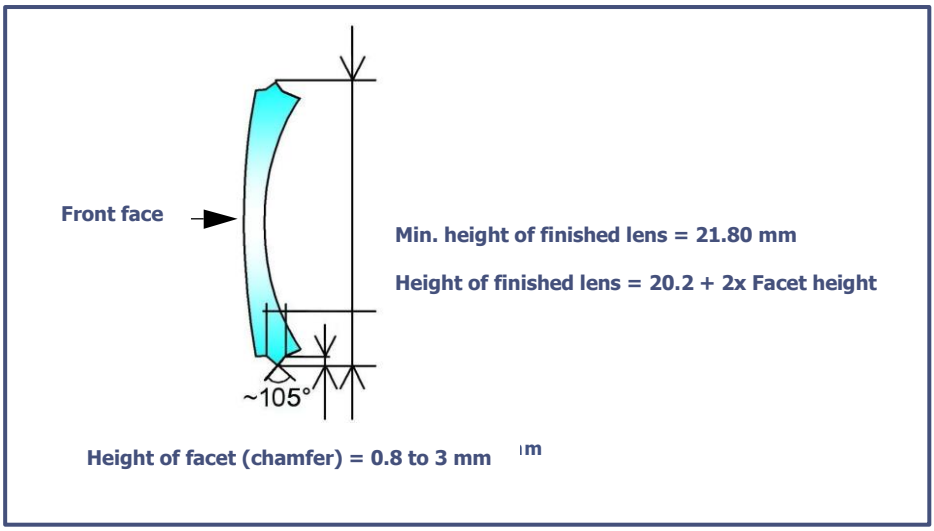


Illustration 3-5 : Limits of production of a facet

3.6.2.4. INCLINED GROOVE FINISHING

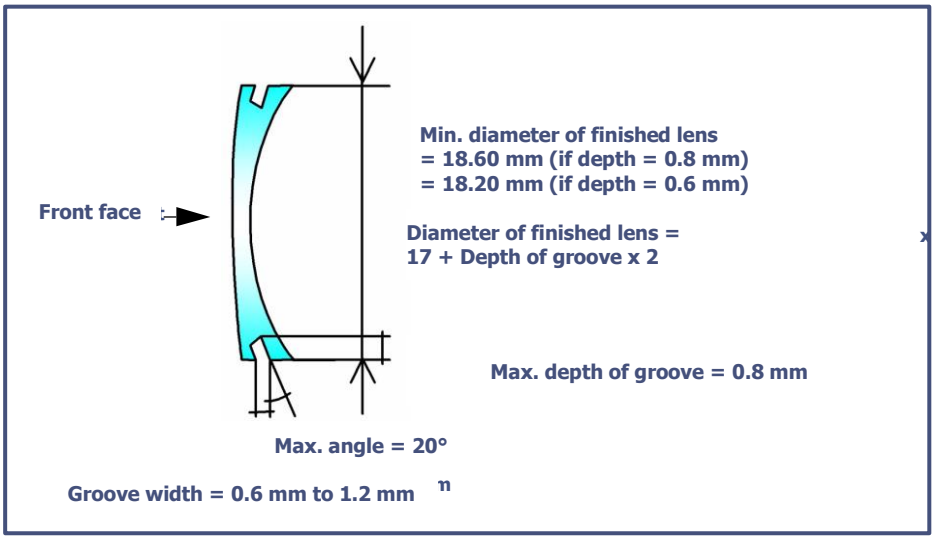


Illustration 3-6 : Limits of production of an inclined groove

3.6.3. DRILLING

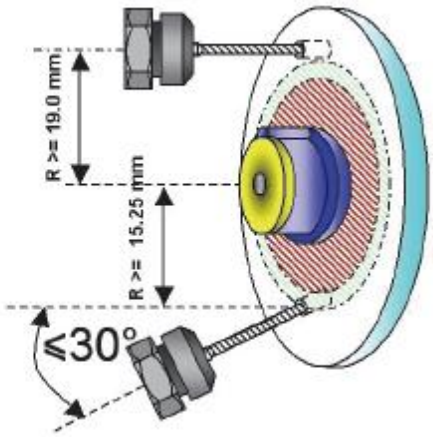
3.6.3.1. CONDITIONS

> Only CR39, polycarbonate, Tribrid, polycarbonate, high index (HI) and Trivex™ materials can be drilled.
> A mineral lens cannot be drilled.

3.6.3.2. LIMITS OF HOLE POSITIONING

> Whatever the type of hole, it must be drilled in a specific zone which is defined following the diagrams below.
> The following constraints must be observed:

→ **The circle radius beyond which drilling is possible:**



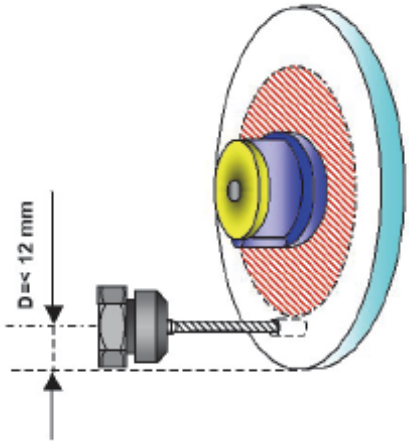
Min. distance from centre of block - centre of hole = 19 mm (0°) or 15.25 (30°)

Zone inside which drilling is not permitted.

Zone inside which drilling is permitted.

Note: When it is impossible to drill a hole (hole positioned in the end-pieces, notch passing through the centre of the shape, this hole is shown in black in the screen. Some holes displayed in blue in the screen may be impossible to drill after they have been felt (holes too deep, unadapted angle, unadapted end-piece, etc.). In this case, these holes will be displayed in gray in the screen and only marked with the mill bit end (inclined to the maximum) during the drilling phase, once the operator has accepted the marking.

→ **The ring formed by the edge of the lens and the internal perimeter of the lens beyond which drilling is not permitted:**



Max. distance from drill bit centre - edge of lens = 12 mm

Zone inside which drilling is not permitted.

Zone inside which drilling is permitted.

ALL HOLES, WHATEVER THE TYPE, MUST BE WITHIN A 12 MM RING.

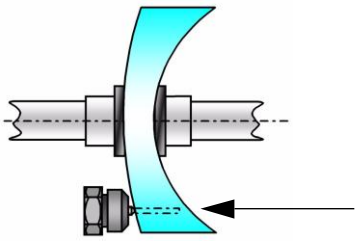
Note: If a job includes a hole placed at a distance of more than 12 mm from the edge of the shape, the following message is displayed: "Hole deleted. At least one of the holes cannot be drilled. Do you want to continue?". If you reply Yes: The entire drilling plan is ignored, the lens is not drilled and finished in rimless. If you reply No, you can remove the lens from the drilling chamber.

3.6.3.3. LIMITS RELATED TO THE THICKNESS OF THE LENS

The position of the hole and the strength of the lens to be drilled effect the drilling depth. These two parameters can cause non-through holes which must then be finished manually.

→ **Thick lenses** (= thickness in the direction of drilling > 8 mm)

For lenses of high thickness and for high drilling radii (distance from centre of block to centre of hole), it is possible that the maximum drilling length in the drilling direction may be exceeded. This results in a non-through hole.

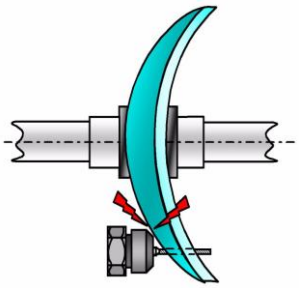


Caution!
Non-through hole for lens thickness > 8 mm

Example: Drilling 30 mm from the blocking centre at 0° in a lens of strength -7 D will produce a through hole.

→ **Lenses with high front base**

For lenses of high front base and for high drilling radii (distance from centre of block to centre of hole), it is possible that the mill bit retaining nut may interfere with the lens. If so, the edger automatically limits the drilling depth to avoid this type of damage to the lens. However, this may produce a non-through hole.



Example: Drilling 19 mm from the blocking centre at 0° in a lens of strength +7 D will produce a through hole.

The quality of the final job (accuracy of gaps, axis, diameter and angle of drilling) depends on the performance and the quality of all the elements in the chain:

- The quality of the frame used and its presentation lens;
- The use of new Briot blocks and adhesive patches;
- data entry and adjustment of centering, blocking, edging and drilling of the lenses.

THE MANUFACTURER DOES NOT GUARANTEE THE PERFORMANCE OF YOUR EDGER IF THESE BASIC RULES ARE NOT OBSERVED.

Commands -

4. CONFIGURATION

4.1. PRESENTATION OF CONFIGURATION MENUS

4.1.1. PRESENTATION OF THE CONFIGURATION MENU ACCESS SCREEN

4.1.1.1. SCREEN DESCRIPTION

The first user technical screen provides access to the user technical menus, including Personalisation, as shown in yellow below:

Screen 4-1: Configuration menu access screen

Tip! The type of menu is shown by the icon which is displayed on the top right of the current screen. If you are working with the Personalisation screen, the edger will be displayed on the top right of the screen.

4.1.1.2. ACCESS / EXIT

4.1.1.2.1. TO ACCESS THE SCREEN

⇒ To reach the configuration menus access screen, press  on the main application screen for a long time.

Result: The user technical menu screen is displayed.

4.1.1.2.2. TO EXIT THE SCREEN

⇒ To leave the configuration menu access screen, press the  button.
Result: The machine restarts. The main application screen is displayed again.

4.1.2. PRESENTATION OF THE PERSONALISATION MENU ACCESS SCREEN

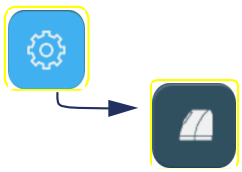
4.1.2.1. SCREEN DESCRIPTION

The personalisation menu access screen is shown below:

Screen 4-2: Personalisation menu access screen

4.1.2.2. ACCESS / EXIT

4.1.2.2.1. TO ACCESS THE SCREEN



4.1.2.2.2. TO EXIT THE SCREEN

4.2. CONFIGURATION OF FINISHING PARAMETER DEFAULT VALUES

4.2.1. PRESENTATION

4.2.1.1. PRINCIPLE

> You have your own way of working and wish to gain time by configuring your own default values.

4.2.1.2. SCREEN DESCRIPTION

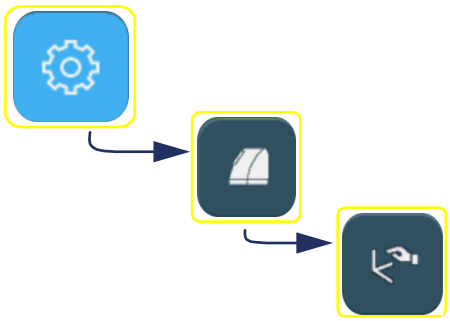
The configuration screen for the finishing parameter default values is shown below:

Screen 4-3: Default value configuration screen

⇒ For a detailed description of the buttons, see Sub-finishing and associated parameters, chapter 3.

4.2.1.3. ACCESS / EXIT

4.2.1.3.1. TO ACCESS THE SCREEN



4.2.1.3.2. TO EXIT THE SCREEN

x 3

4.2.2. GENERAL PROCEDURE

Follow the steps below to set the default value of a parameter:

#1	**Press the key-in button of the chosen parameter.**
#2	**Using the numeric key pad, enter your chosen default value within the limits displayed above the key pad screen.**
#3	
#4	**Continue in the same way for each default value that you wish to change.**

Flow chart 4-1: Configuration of finishing parameter default values

4.2.3. SAVING THE NEW CONFIGURATION

> When you leave the screen, the default values that you have selected are memorised automatically.
> When you return to the application screen, you will see that the default values displayed are those you have just entered.

4.2.4. LIMITS

The information given in the tables below completes the values referred to in Using > Application screen > icons Sub-finishing and associated parameters.

The default values that you wish to be memorised must be within the limits given by Briot. Any value outside the interval shown cannot be validated.
The number key pad will remain displayed until you have entered a correct value. If you wish to exit the number key pad, use the ESC key. The previous default value will then be applied again.

4.2.4.1. BEVEL, MINI-BEVEL, FACETED BEVEL, FACETED MINI-BEVEL

TABLE 1:

Sub-finishing type	Briot default values	Lower limit	Upper limit	Incrementation
	1 mm	0 mm	2 mm	0.1 mm
	1 mm	0 mm	5 mm	0.01 mm
	4 D	0.25 D	12 D	0.25 D
	33%	0	100%	1 %
	1 mm	0.8 mm	3 mm	0.1 mm
	2 mm	1 mm	2.8 mm	0.01 mm

4.2.4.2. GROOVE

TABLE 2:

Sub-finishing type	Briot default values	Lower limit	Upper limit	Incrementation
	0 mm	-5 mm	5 mm	0.01 mm
	4 D	0.25 D	12 D	0.25 D
	33%	0	100%	1 %

	0.4 mm	0	0.8 mm	0.1 mm
	0.6 mm	0.6 mm	1.2 mm	0.1 mm

4.2.4.3. SAFETY-BEVEL

TABLE 3:

Type of safety-bevel	Briot default values	Lower limit	Upper limit	Incrementation
	0.2 mm	0	0.6 mm	0.1 mm
	0.2 mm	0	0.6 mm	0.1 mm

4.2.4.4. DRILLING

TABLE 4:

Sub-finishing type	Briot default values	Lower limit	Upper limit	Incrementation
	4 D	0.25 D	12 D	0.25 D

4.3. PERSONALISATION OF PULL-DOWN MENUS

4.3.1. PRESENTATION

4.3.1.1. PRINCIPLE

> You wish to produce a series of a particular type of job and/or you nearly always work on the same type of job.
> You want the application screen to display your work.

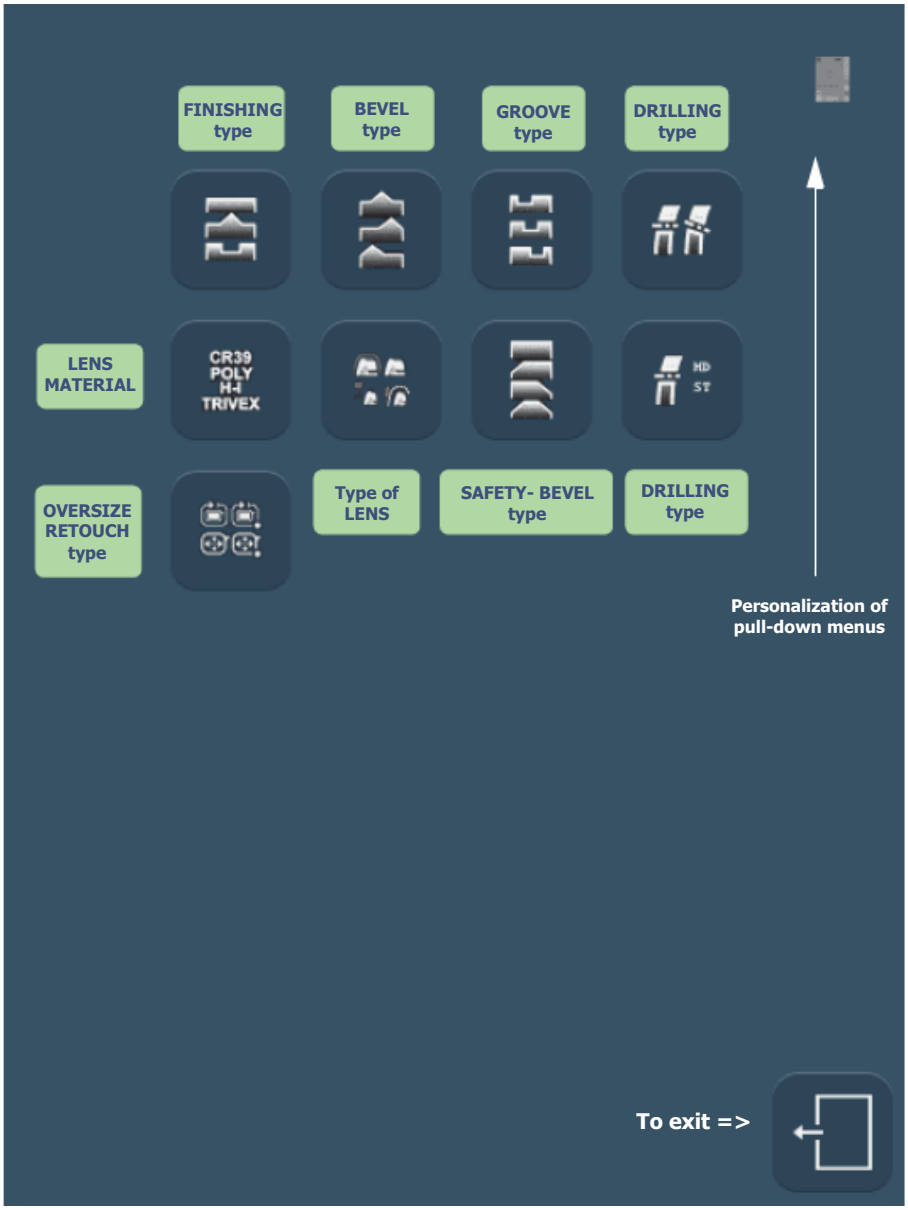
From this menu, it is possible to **designate**:

- **the elements to be displayed at the base of the menu** to obtain immediate acces to them;
- **the elements which must not be displayed** because you do not need to use them.

Accordingly, when the machine is started or when the job called up does not contain all the edging data, the application screen is displayed as you have personalized it.

4.3.1.2. SCREEN DESCRIPTION

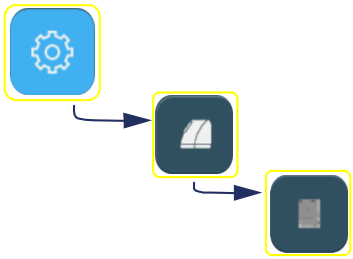
The pull-down menus personalization screen is shown below:



Screen 4-4: Personalization of pull-down menus (1)

4.3.1.3. ACCESS / EXIT

4.3.1.3.1. TO ACCESS THE SCREEN

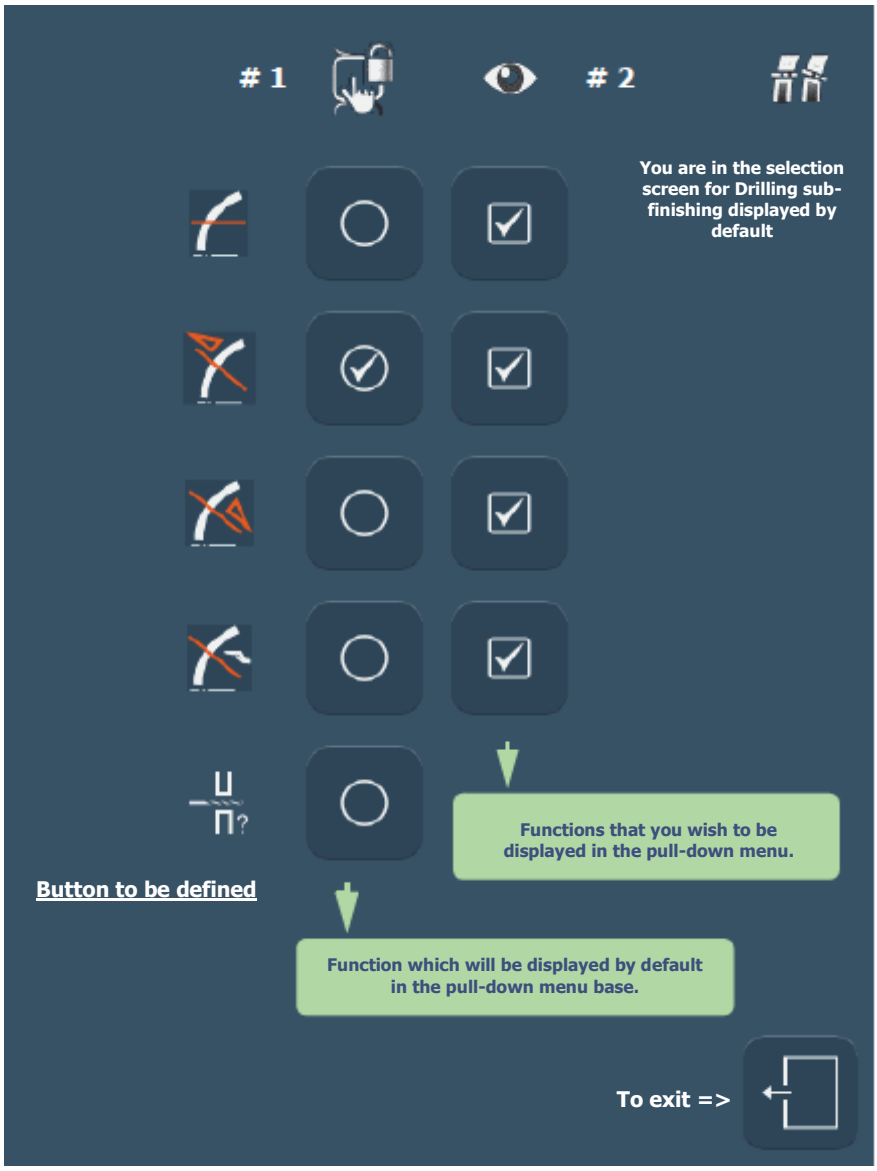


4.3.1.3.2. TO EXIT THE SCREEN

4.3.2. GENERAL PROCEDURE

⇒ To personalize a menu, press the corresponding button on the screen shown above.

Result: A screen of the type shown below is displayed.



Screen 4-5: Personalization of pull-down menus (2)

⇒ Proceed as follows:

#1	**Select the function that you wish to see in the base of the pulldown menu.**
#2	**Select the function(s) that you wish to see in the pulldown menu.**
#3	
#4	**"Do you want to save the new personalisation?"**
#5	**YES**

Flow chart 4-2: Personalization of pull-down menu

4.3.3. SAVING THE NEW PERSONALIZATION

When the message, "Do you wish to save the new personalization? " is displayed, you have three possibilities:

- **confirm** the message: the personalization is registered and you return to the menu buttons configuration screen.
- **do not confirm** the message: the personalization is not registered and you return to the menu buttons configuration screen. The previous setting is retained.
- **cancel** the personalization: You return to the personalization screen for the menu-button concerned. Select again the elements that you wish to be displayed.

4.3.4. NOTE

4.3.4.1. BUTTON TO BE DEFINED

Each pull-down menu can include a button whose icon has a question mark on it.

Example: 

⇒ Select this type of button if you wish the user to consult all the possibilities of a menu for each new job.

⇒ To start an edging operation, all the job criteria must have been selected. No "To be defined" button can be maintained.

Because of its function, this type of button can only be defined as a base-button.

NOTA : If you call up for a job including drillings with different drilling angles, the multi-angles icon appears on the screen. Any selection of an other orientation will erase all the individual datas of the drillings.

4.3.4.2. RETOUCH / OVERSIZE MENU

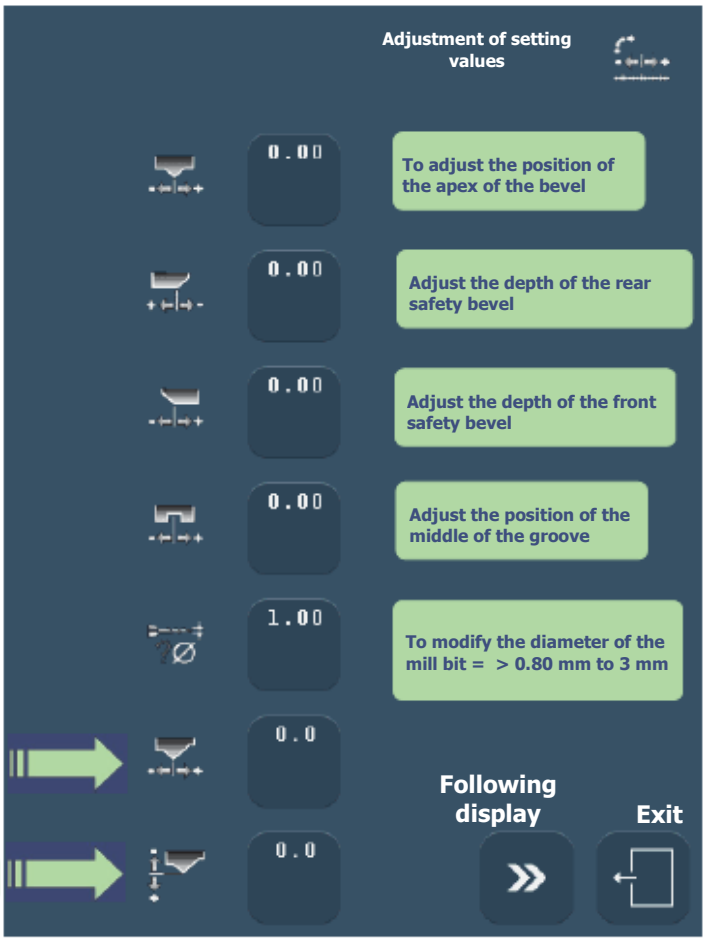
>  To boxing width: Decrease/Increase of the boxing width of the entered value. The proportions of the shape are retained.

>  To the circumference: Decrease/Increase of the finished lens circumference according to the entered value. The proportions of the shape are retained.

Example: Take a lens for which A (width) = 40 and B (height) = 20.
With a retouch of 0.2 in boxing width, its dimensions will be:
. A = 39.80 (reduction of 0.2 in width)
. B = 19.90 (reduction of 0.1 in height for a constant A/B ratio).

ADJUSTMENT OF SETTING VALUES

RESET ONCE YOU HAVE SAVED THE LATEST ADJUSTMENTS

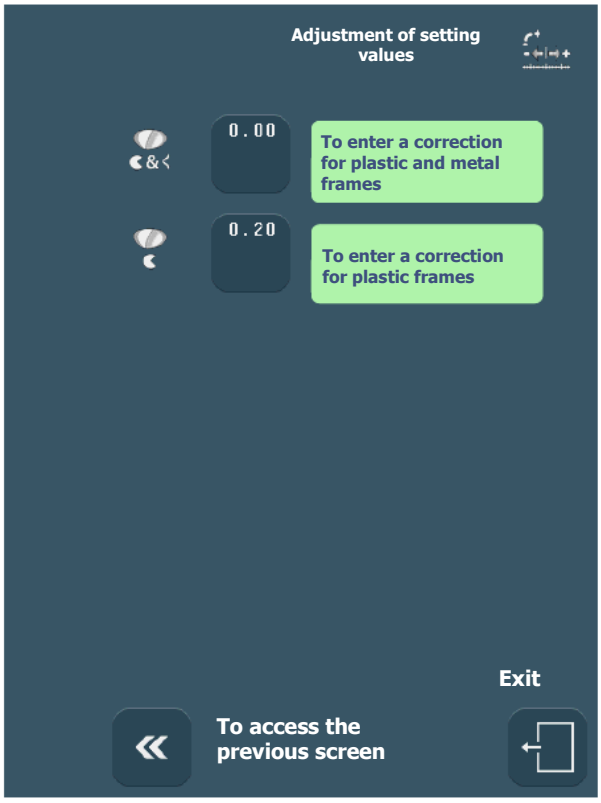


To adjust the position of the apex of the facet

To adjust the height of the facette

Screen 4-6: Adjustment of setting values (1)

NOT TAKEN INTO ACCOUNT IN THE ADJUSTMENTS



Screen 4-7: Adjustment of setting values (2)

4.4. ADJUSTMENT OF SETTING VALUES

4.4.1. PRELIMINARY REMARKS

> The machine is adjusted on factory so that the adjustments meet the needs and requirements of the majority of users.
> Any modifications of the standard setting values can affect the performance of the machine.
> If you wish nonetheless to use the value adjustment function, first target your needs with precision and then modify the values with full knowledge of our recommendations.

4.4.2. PROCEDURE

To adjust the setting values, proceed as follows:

#1	
#2	
#3	
#4	**Press the value to be corrected.**
#5	**Enter a value using the number key pad.**
#6	
#7	

Flow chart 4-3: Adjustment of setting values

4.5. CONFIGURATION OF GENERAL OPERATING PARAMETERS

4.5.1. PRESENTATION

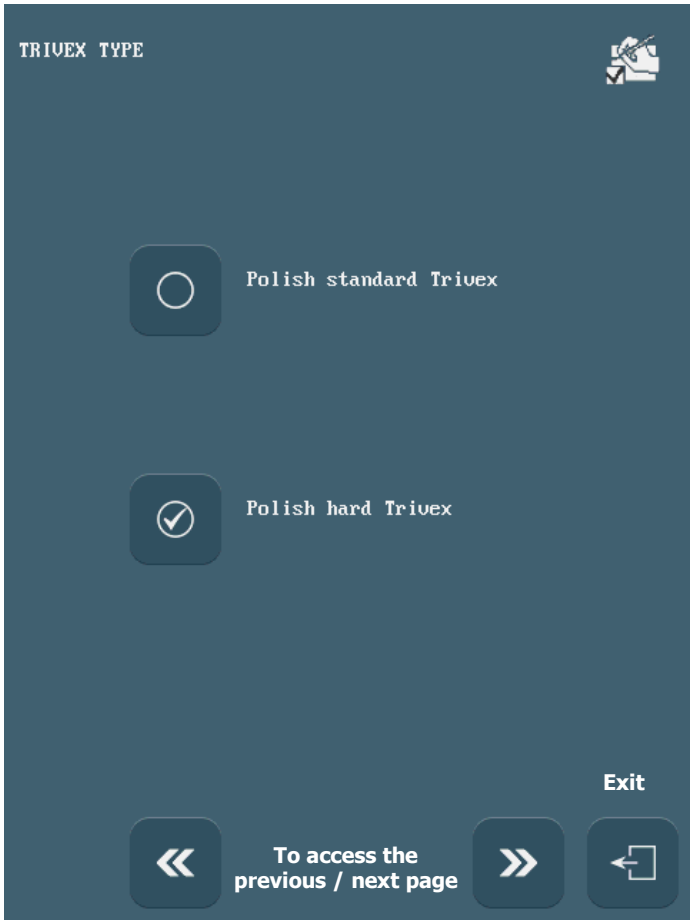
4.5.1.1. PRINCIPLE

> You define the machine's general operating mode.

4.5.1.2. SCREEN DESCRIPTION

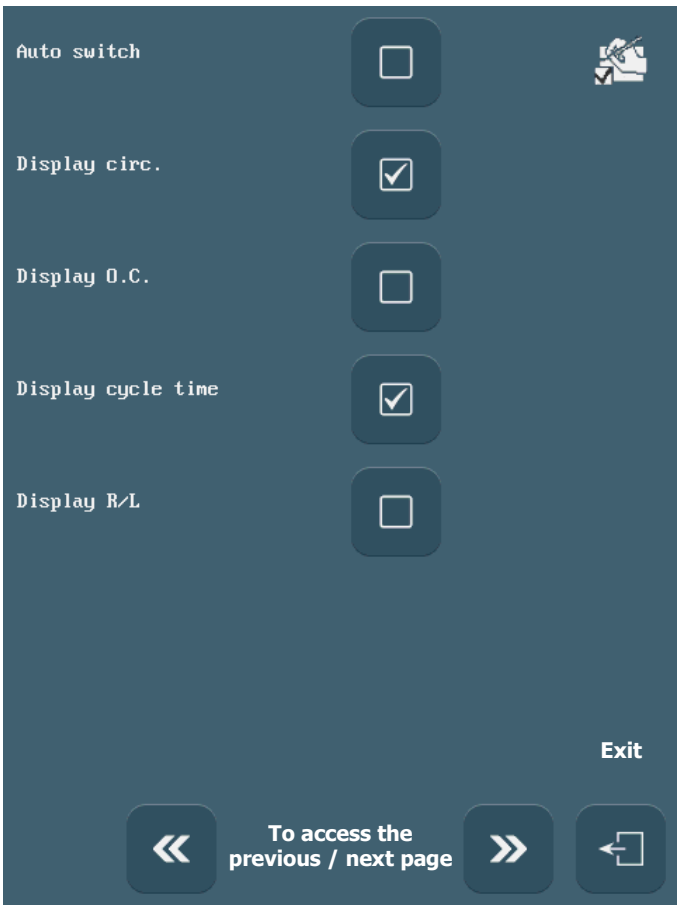
The setting screen for the machine's general operating parameters is shown below:

Screen 4-8: Setting the parameters of the machine's general operating functions (Page 1)

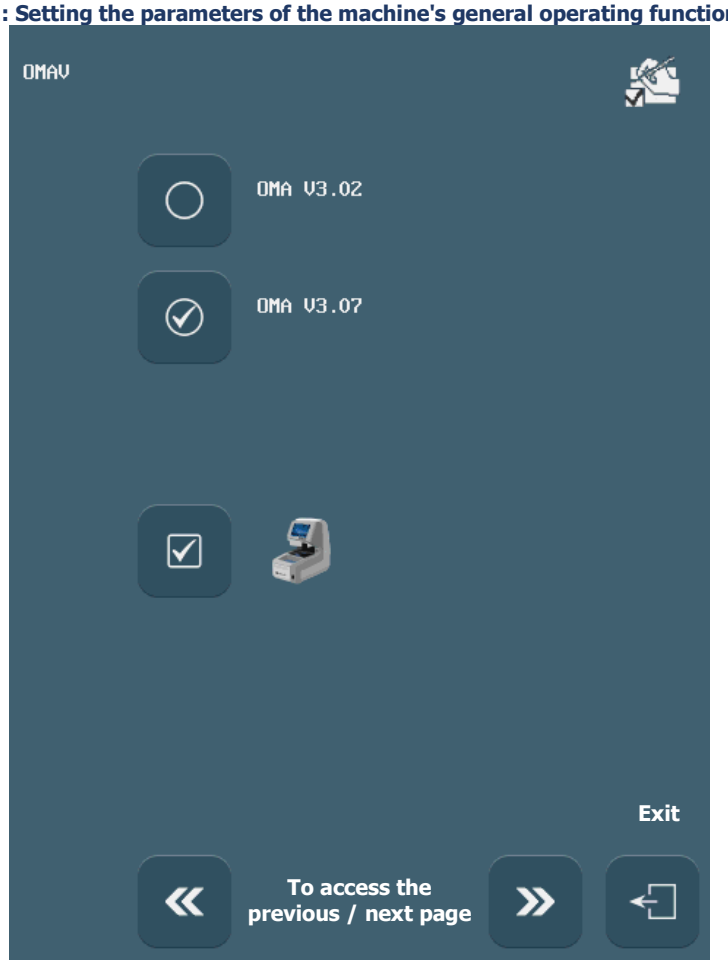


Screen 4-9: Setting the parameters of the machine's general operating functions (Page 2)

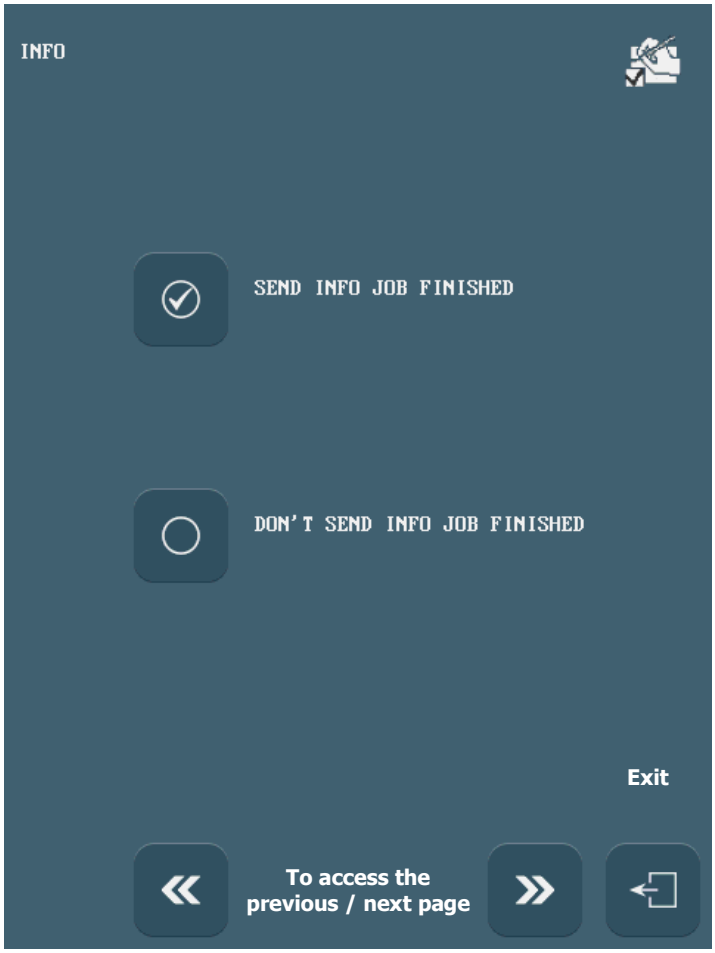
Screen 4-10: Setting the parameters of the machine's general operating functions (Page 3)



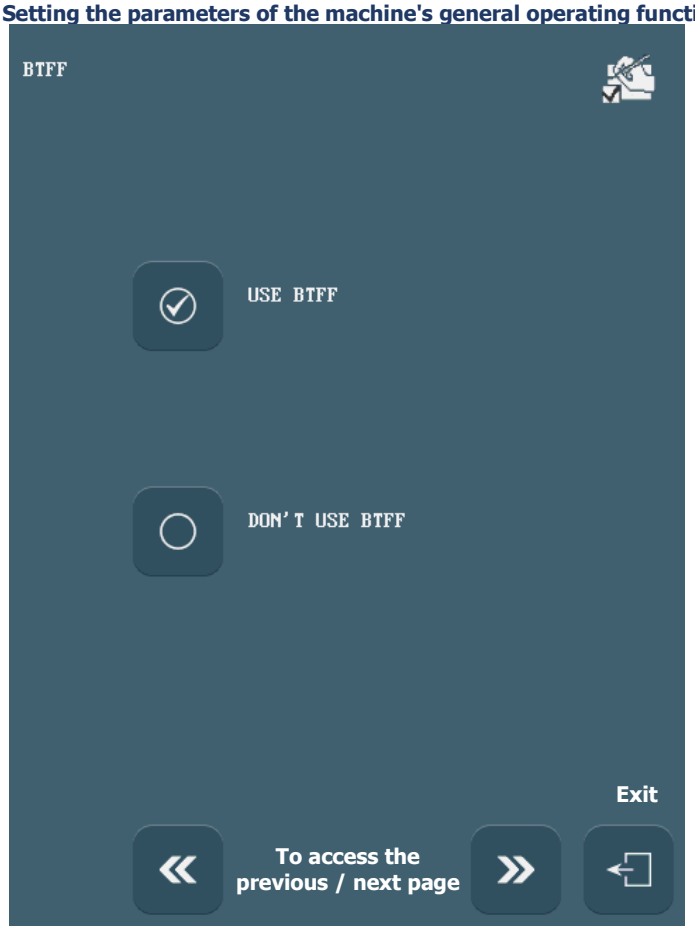
Screen 4-11: Setting the parameters of the machine's general operating functions (Page 4)



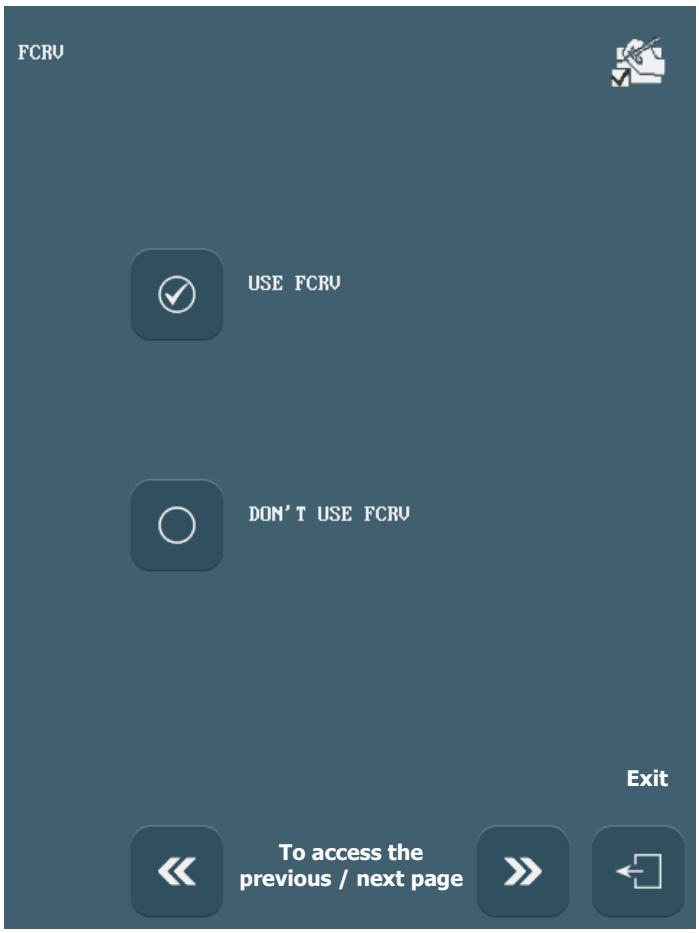
Screen 4-12: Setting the parameters of the machine's general operating functions (Page 5)



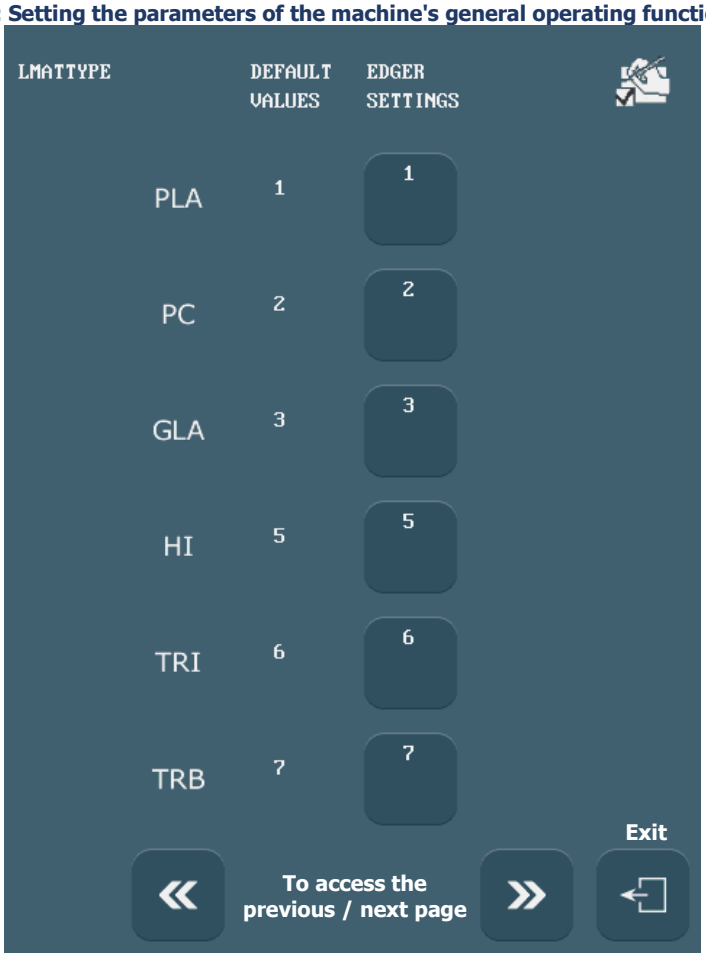
Screen 4-13: Setting the parameters of the machine's general operating functions (Page 6)



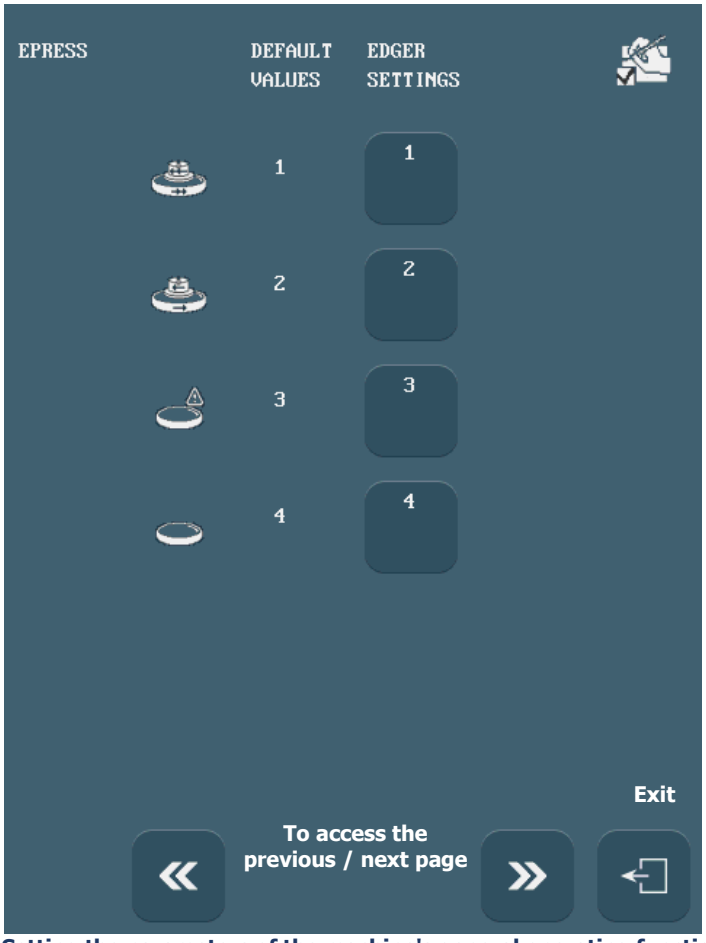
Screen 4-14: Setting the parameters of the machine's general operating functions (Page 7)



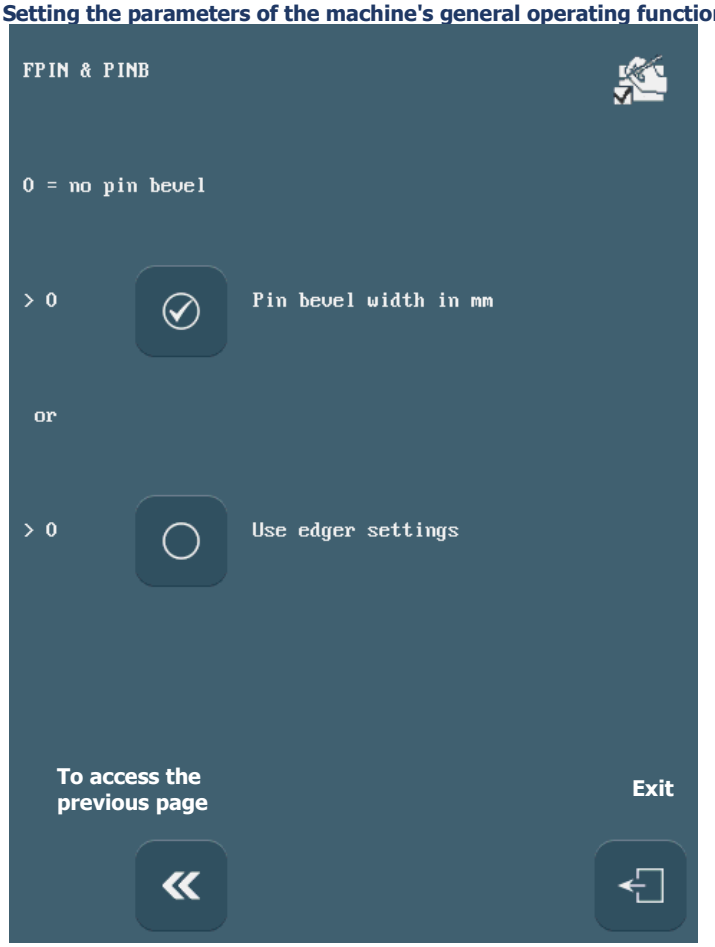
Screen 4-15: Setting the parameters of the machine's general operating functions (Page 8)



Screen 4-16: Setting the parameters of the machine's general operating functions (Page 9)



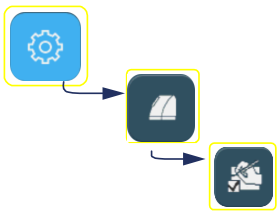
Screen 4-17: Setting the parameters of the machine's general operating functions (Page 10)



Screen 4-18: Setting the parameters of the machine's general operating functions (Page 11)

4.5.1.3. ACCESS / EXIT

4.5.1.3.1. TO ACCESS THE SCREEN



4.5.1.3.2. TO EXIT THE SCREEN

4.5.2. CONFIGURATION OF THE FUNCTIONS

4.5.2.1. SELECTING THE DIALOG LANGUAGE

4.5.2.1.1. PROCEDURE

⇒ To select the dialog language

4.5.2.2. SELECTING NOVICE OR EXPERT OPERATING MODE

4.5.2.2.1. PRINCIPLE

Two operating modes are available so that you can choose the mode that is best suited to what you require as well as to your method of working.

> NOVICE mode

In this mode, messages are displayed to inform, advise and guide the user during the operations under way or to be undertaken. This mode is intended for inexperienced operators, or those wishing to be accompanied when using the machine.

> EXPERT mode

In this mode, very few messages are displayed, to ensure faster system response. This mode is intended for expert operators, or those who know the machine well enough to dispense with advice or guidance when using the machine.

⇒ When the edger is installed, decide which operating mode is most suitable and configure the machine with the technician.

You may change the operating mode later, if you wish.

4.5.2.2.2. PROCEDURE

⇒ To select Novice operating mode:

⇒ To select Expert operating mode:

4.5.2.3. ACTIVATING RETOUCH VERIFICATION

4.5.2.3.1. PRINCIPLE

> At the beginning of a lens cycle, two points of the lens are checked to ensure that the lens fitted is the one you wish to retouch - right or left lens.

4.5.2.3.2. PROCEDURE

⇒ To select retouch verification:

4.5.2.4. ENABLING SIZE COMPENSATION ACCORDING TO TEMPERATURE

4.5.2.4.1. PRINCIPLE

> The water temperature affects the degree of expansion of the wheels.
> Activating the temperature compensation automatically corrects for the expansion of the edging wheels and the lens due to water temperature variations.

> Activating the temperature compensation is **strongly recommended** if you work **in closed circuit mode**.

4.5.2.4.2. PROCEDURE

⇒ To activate the temperature compensation:

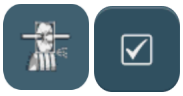
4.5.2.5. ACTIVATING SIZE COMPENSATION ACCORDING TO WHEEL CONDITION

4.5.2.5.1. PRINCIPLE

> A wheel becomes very abrasive after dressing. This can lead to some instability in the dimensions of edged lenses following wheel dressing.
> The wheel condition compensation function takes this effect into account and allows for compensation of the lens size after the wheel has been dressed.

4.5.2.5.2. PROCEDURE

⇒ To enable wheel condition compensation:



4.5.2.6. ENABLING SIZE COMPENSATION ACCORDING TO THE BOWING/FLATTENING OF THE FRAME

4.5.2.6.1. PRINCIPLE

> The lens dimension is adapted to the bowing/flattening of the frame in order to obtain a more aesthetic job. The circumference of the lens is then equal to the circumference of the frame.
> This function guarantees an optimal finishing quality and is particularly suitable for highly curved frames.

4.5.2.6.2. PROCEDURE

⇒ To activate the bowing/flattening compensation:

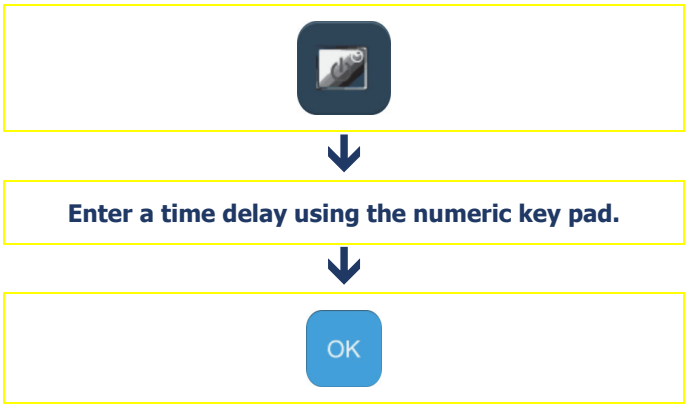
4.5.2.7. ENTERING A TIME DELAY BEFORE SWITCHING TO SCREEN STAND-BY MODE

4.5.2.7.1. PRINCIPLE

> Using the screen stand-by mode extends its working life.
> According to your method of working, you can decide how much time must elapse before stand-by mode is activated.

4.5.2.7.2. PROCEDURE

⇒ To enter your chosen time delay:



4.5.2.8. AACTIVATE THE CHEMISTRIE TM FUNCTION

4.5.2.8.1. PRINCIPLE

> The "Chemistrie ™" function is used to prepare sun lenses adaptable to prescription lenses.
> You can disable the "Chemistrie ™" function later on, if desired.

4.5.2.8.2. PROCEDURE

⇒ To enable the "Chemistrie ™" function: 

4.5.2.9. CONFIGURING THE OMA

4.5.2.9.1. PRINCIPLE

> The OMA 3.07 configuration is used to receive and drill rectangular holes sent from an OMA server also operating in the OMA 3.07 configuration

4.5.2.9.2. PROCEDURE

⇒ To select the OMA version 

4.5.3. SAVING THE NEW CONFIGURATION

When you quit the screen, the message "Do you wish to save the new configuration?" is displayed.
You have three possibilities:

> **Confirm** the message: The configuration is taken into account and you return to the personalization menu access screen.
> **Don't confirm** the message: The configuration is not taken into account and you return to the personalization menu access screen. The previous setting is retained.
> **Cancel** the configuration: You return to the configuration screen. Reselect the operating parameters you have chosen.

When you return to the application screen and begin an edging cycle, you will see that the general operating parameters have been saved.

5. MAINTENANCE

5.1. PRESENTATION OF MAINTENANCE MENUS

5.1.1. PRESENTATION OF THE MAINTENANCE MENU ACCESS SCREEN

5.1.1.1. SCREEN DESCRIPTION

The first user technical screen provides access to the user technical menus, including Personalization, as shown in yellow below:

Screen 5-1: Configuration menu access screen

Tip! The type of menu is shown by the icon which is displayed on the top right of the current screen. If you are working with the Maintenance screen, the hand holding the spanner will be displayed on the top right of the screen.

5.1.1.2. ACCESS / EXIT

5.1.1.2.1. TO ACCESS THE SCREEN

⇒ To reach the configuration menus access screen, press  on the main application screen.

Result: The user technical menu screen is displayed.

5.1.1.2.2. TO EXIT THE SCREEN

⇒ To leave the configuration menu access screen, press the  button.

Result: The machine restarts. The main application screen is displayed again.

5.1.2. PRESENTATION OF THE MAINTENANCE SCREEN

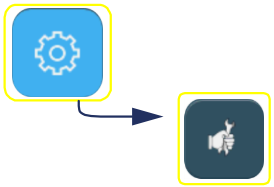
5.1.2.1. SCREEN DESCRIPTION

The maintenance menus access screen is shown below:

Screen 5-2: Maintenance menu access screen

5.1.2.2. ACCESS / EXIT

5.1.2.2.1. TO ACCESS THE SCREEN



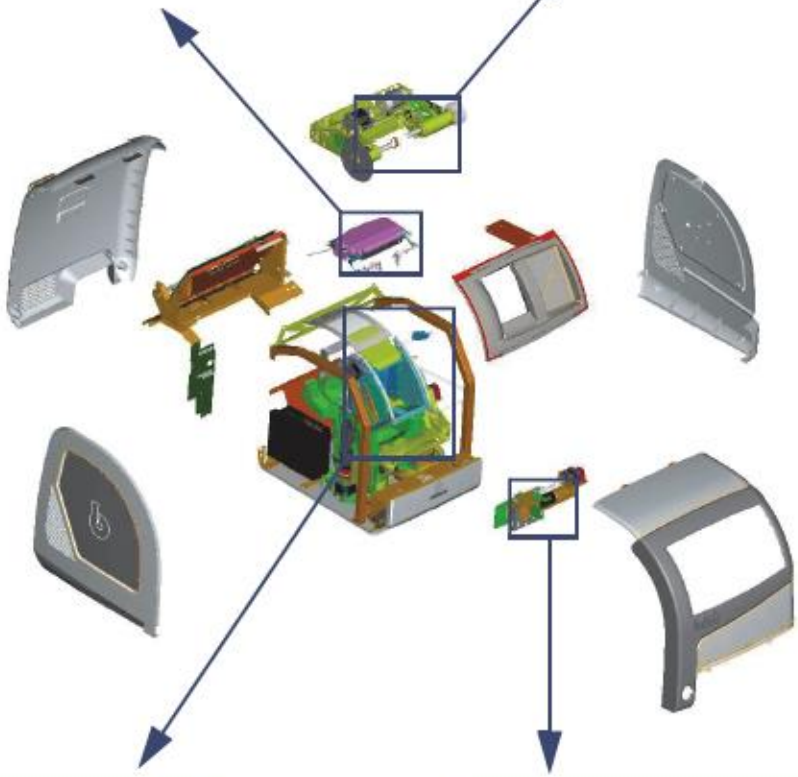
5.1.2.2.2. TO EXIT THE SCREEN

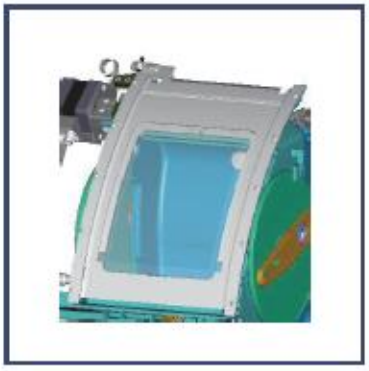
5.2. DISPLAYING THE COMPONENTS

The illustrations below will help you to identify the parts of the edger on which you will be working during maintenance operations.

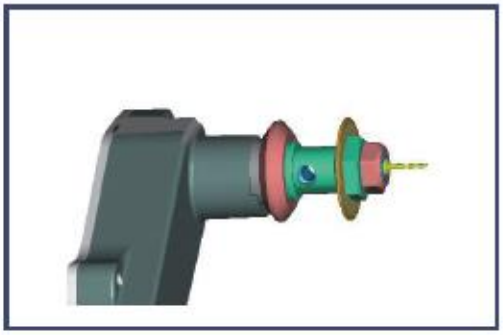
Lens feeler tip
> Replacement
> Settings

Lens clamp adaptor pad
> Replacement





Visor
> Cleaning and replacement



Mill bit
> Replacement
> Settings

5.3. TASK LIST

To keep your edger in perfect condition, we advise you to follow the instructions below:

→ Clean the edger daily with a spray bottle of water.

→ Replace the flexible lens clamp adaptor pad regularly (every 1000 lenses).

→ Replace the mill bit when a message asks you to do so (1 hour of total drilling time).

→ Check the condition of the lens feeler tips regularly and replace them as soon as they appear to be worn or damaged (or every 3000 lenses).

→ Dress the wheels when a message asks you to do so.

→ Clean the removable visor regularly, and replace it if necessary.

→ Change the water in the tank regularly if your machine operates in closed water circuit mode.

→ Clean the filters and the tanks regularly.

→ Check the condition of the safety-beveling and grooving wheels and have them replaced by a technician if necessary.

→ Check the condition of the wheels and have them replaced by a technician if necessary.

5.4. REGULAR MAINTENANCE OF THE EDGER

5.4.1. REPLACING THE FLEXIBLE LENS CLAMP ADAPTOR PAD

5.4.1.1. PRELIMINARY REMARKS

Caution! The lens holder adaptor is serrated and the lens feeler tips are pointed.

⇒ Make sure that your hands are protected when handling the lens holder adaptor and feeler tip.

5.4.1.2. PROCEDURE

To replace the flexible lens clamp adaptor pad, follow the procedure below:

#1	
#2	
#3	**Remove the lens clamp adaptor pad gently from the clamping shaft (on the right).**
#4	**Remove the worn blue lens clamp adaptor pad and replace it with a new one.**
#5	**Refit the lens clamp adaptor pad on the clamping shaft.**

Flow chart 5-1: Replacing the flexible lens clamp adaptor pad

→ As shown...

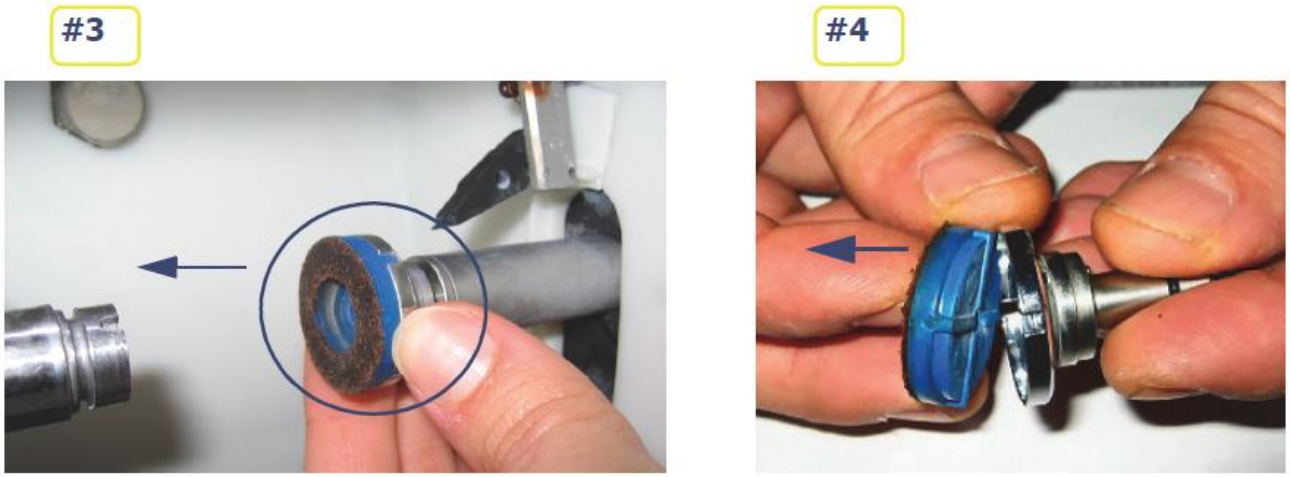


Illustration 5-1 : Replacing the flexible lens clamp adaptor pad

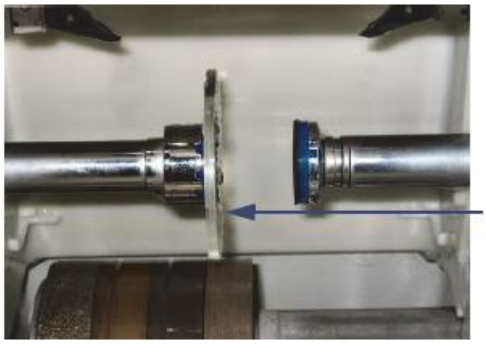
Illustration 5-2 : Replacing the mill bit

#4

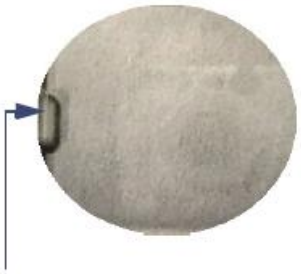
#5-11

#13

#14



#16



5.4.2. REPLACING THE MILL BIT

5.4.2.1. PRELIMINARY REMARKS

It may be necessary to change the mill bit.
A change of mill bit may be necessary for the following reasons:

> Broken bit
> Worn bit (chips around the holes on the internal side of the lens?) ;
> Excessive use of the bit.

The machine is guaranteed to operate correctly if Briot mill bits are mounted.

5.4.2.2. PROCEDURE

To change the mill bit, follow the procedure below:

#1	
#2	
#3	
#4	
#5	**Insert an Allen wrench or a screwdriver in the spacer hole to block the rotation of the spindle.**
#6	**Fit an 8 mm spanner on the chuck nut.**
#7	**Loosen the nut with one turn of the spanner, to free the bit.**
#8	**Use pliers to remove the bit from the chuck.**
#9	**Fit a new bit in the chuck. We advise you to apply a touch of grease to the end of the bit to ease its insertion into the chuck. Caution! Ensure that the bit is pushed home inside the chuck.**
#10	**Tighten the chuck nut lightly with the 8 mm spanner to immobilise the mill bit.**
#11	**When the bit is tightened, remove the Allen wrench or the screwdriver.**
#12	
#13	

#14	**Block the adjustment lens 10 00 205 in the centre and fit it on the lens holder shaft.**
#15	
#16	 **x3**
#17	**Remove the drilled lens from the edging station.**

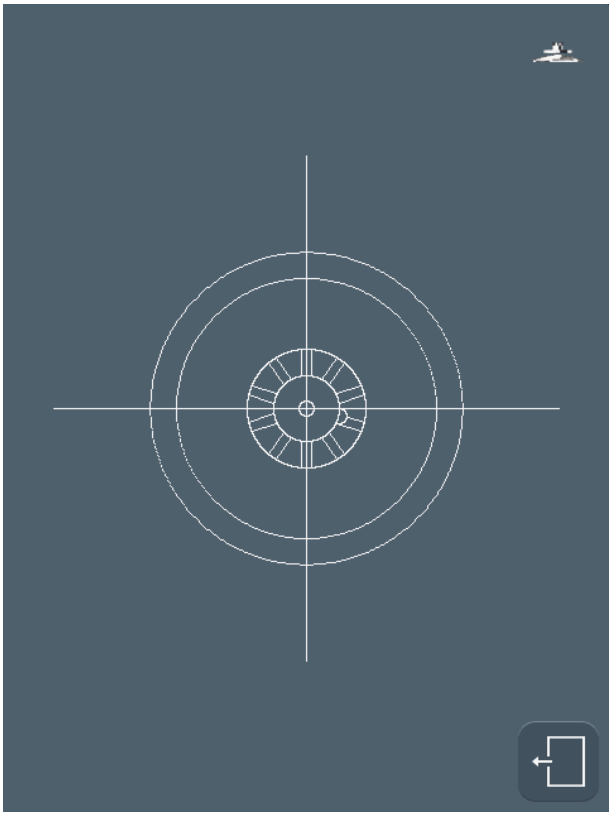
Flow chart 5-2: Replacing the mill bit

Note:

→ The drilling counters are automatically updated.
→ The new setting position is automatically saved.

5.4.2.3. HINTS

> During step 8, the bit may be difficult to remove from the chuck because of possible scale deposits. In this case apply a small quantity of a common scale remover, leave it for a few moments and then remove the bit.
> Use bits supplied by your Briot representative.
> Use the centering help available on screen #4 by pressing the "X" icon  .



Screen 5-3: Centering help screen

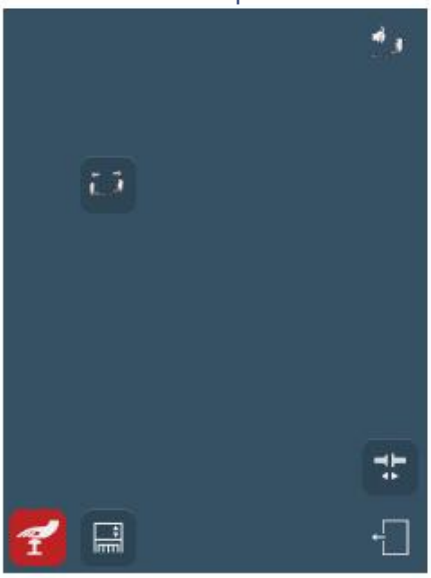
Illustration 5-1: Replacing the lens feeler tips

#4

Place the feelers in the replacement position.

#10

Place the feelers in the position to receive the tool.

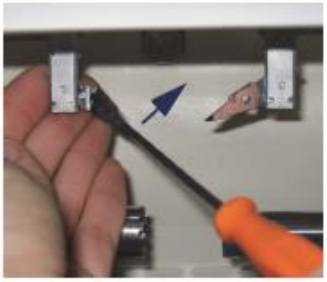


=> Confirm and switch automatically to the feeling adjustment screen.

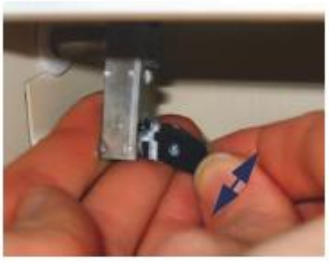
FRAGILE MOUNTING!

Removable lens feeler tips

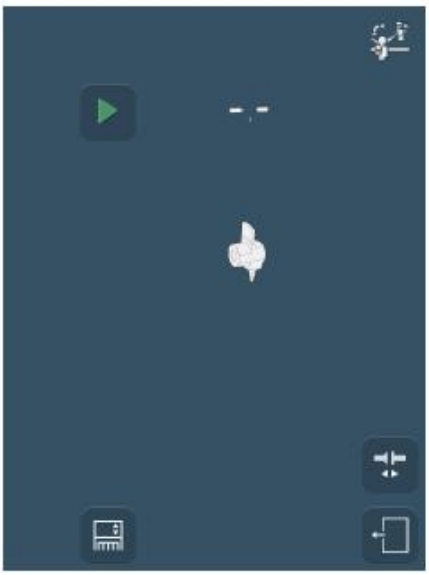
#5,6,7



#8



#13



5.4.3. REPLACING THE LENS FEELER TIPS

5.4.3.1. PRELIMINARY REMARKS

> Always contact your Briot representative before replacing the lens feeler tips.

5.4.3.2. PROCEDURE

To replace the feeler tips, follow the procedure below:

#1	
#2	
#3	
#4	
#5	**Hold the holder and immobilise the feeler arm.**
#6	**Insert a screwdriver or an Allen wrench in the hole of the removable feeler tip.**
#7	**Tilt the right feeler tip carefully to unclip it.**
#8	**Remove the worn feeler tip and replace it with a new one.**
#9	**Do the same for the second feeler tip.**
#10	
#11	**Remove the lens clamping and lens holder adaptors from the shafts.**
#12	**Fit the setting tool on the shafts.**
#13	
#14	**When the adjustment is finished, remove the tool.**
#15	 **x3**

Flow chart 5-3: Replacing the lens feeler tips

5.4.3.3. HINTS

- **Always replace the two removable feeler tips at the same time.**
- **When you are handling the feeler tips, do not apply pressure on the feeler arms** because that could alter the quality of the work produced by the machine. If you observe any malfunctioning after changing the feeler tips, contact your Briot representative.

#4

II
V

Specific procedure for dressing the polishing wheel

#6

Ensure that the dressing disc is correctly centered using the indentations intended to receive the adaptors.

Screen 5-4: Dressing a wheel

5.4.4. DRESSING A WHEEL

5.4.4.1. PRELIMINARY REMARKS

> Dressing the polishing wheel is not recommended.
> Too frequent dressing of the wheels reduces their working life.

5.4.4.2. PROCEDURE

Follow the steps below to dress a wheel:

#1	
#2	
#3	
#4	 **or**  **or**  **or**  **According to your selection**
#5	**Make sure large adaptors are fitted.**
#6	**Fit the dressing disc which corresponds to the wheel to be dressed. Make sure it is centered on the lens clamping and lens holder adaptors.**
#7	
#8	**When the adjustment is finished, open the lens clamping shaft while holding the disc and remove the disc.**
#9	 **x3**

Flow chart 5-4: Dressing a wheel

5.4.4.3. HINTS

> Dress the wheels when a message asks you to do so.

Illustration 5-3 : Cleaning and replacing the removable visor

#3

#4

#5

#6

#7

5.4.5. CLEANING / REPLACING THE REMOVABLE VISOR

5.4.5.1. PRELIMINARY REMARKS

> **Before undertaking any operation, ensure that the machine is switched off: On/Off switch OFF and mains plug disconnected.**

5.4.5.2. CLEANING THE VISOR

5.4.5.2.1. PROCEDURE

Follow the steps below to clean the visor:

#1	**Remove the machine top cover (see Handling the covers, chapter 1).**
#2	 **if the visor is closed**
#3	**Push the visor latching tab from the inside.**
#4	**Hold the visor holder and gently open the removable visor.**
#5	**Remove the removable visor from its holder.**
#6	**Take a clean soft cloth and clean the removable visor.**
#7	**Refit the removable visor by following the above steps in reverse order.**
#8	**Refit the machine upper cover.**

Flow chart 5-5: Cleaning the visor

5.4.5.3. REPLACING THE VISOR

5.4.5.3.1. PROCEDURE

To replace the visor, proceed as described above. Only Step 6 changes.

#6	**Insert a new removable visor in the holder.**

5.4.5.4. HINTS

> Regular cleaning of the visor increases the visibility of the interior of the edging chamber and the operations under way.
> Operating in closed circuit mode affects the cleanliness of the visor. We recommend more frequent cleaning of the visor.

Illustration 5-4 : Presentation of the tanks

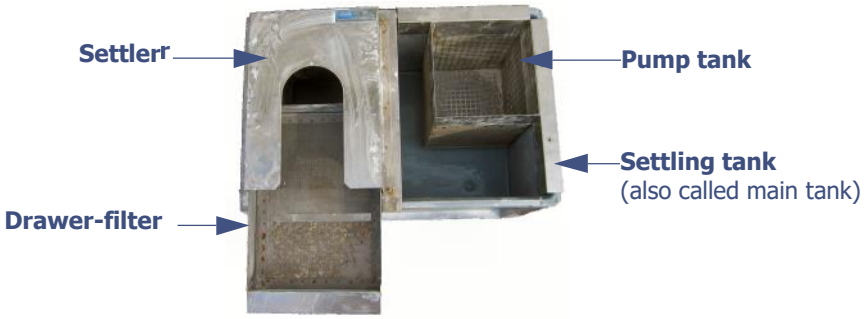
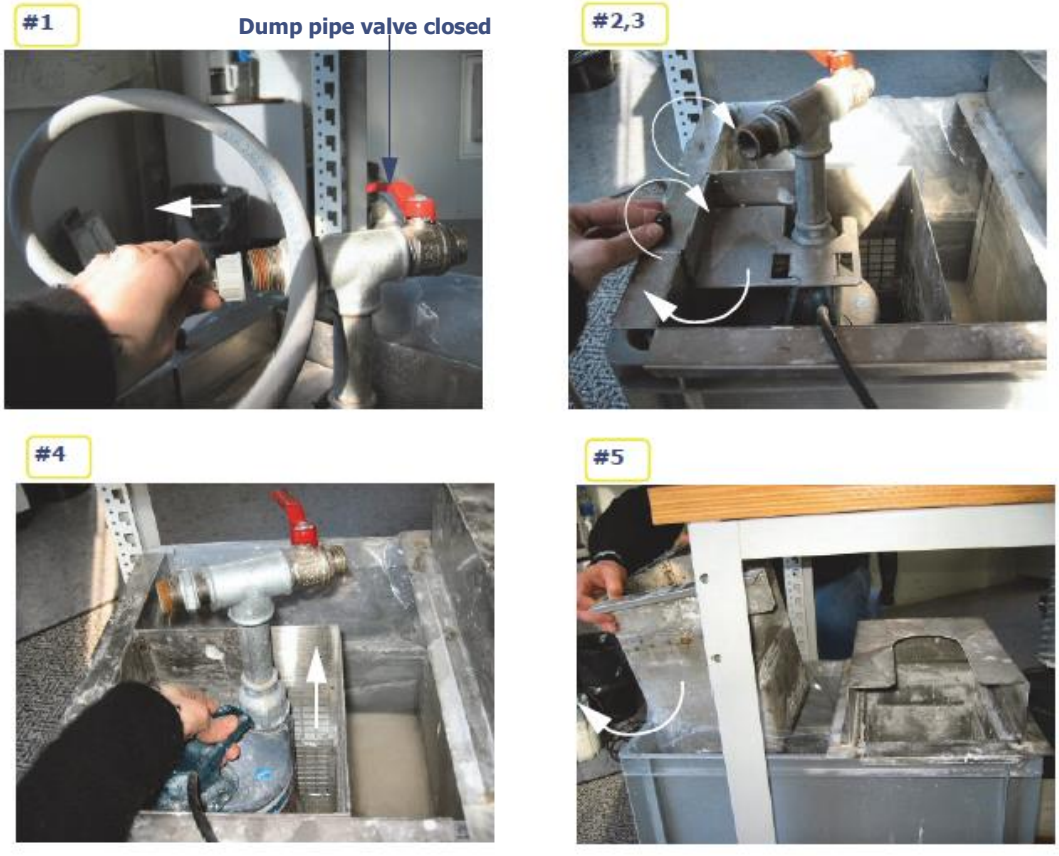


Illustration 5-5 : Cleaning the drawer-filter

Illustration 5-6 : Complete cleaning of the tanks and filters



5.4.6. CLEANING THE FILTERS AND WATER TANK

5.4.6.1. PRELIMINARY REMARKS

> **Before undertaking any operation, ensure that the machine is switched off: On/Off switch OFF and mains plug disconnected.**
> Cleaning frequency is left to the discretion of the user, depending on the number of lenses which have been edged. However, Briot recommends cleaning every 500 lenses (mineral and plastic).
> Gloves and eye shields must be worn. It is advisable to wear an overall.
> Ensure that the dump pipe valve is closed before starting the machine - the red handle must be perpendicular to the T.

5.4.6.2. PROCEDURES

Three situations are possible:

5.4.6.2.1. FOR DAILY CLEANING

#1	**Lift the water drain pipe and remove the drawer-filter.**
#2	**Clean the drawer-filter with a brush.**
#3	**Clean the drawer-filter.**
#4	**Refit the drawer-filter.**

Flow chart 5-6: Daily cleaning of the drawer-filter

5.4.6.2.2. COMPLETE CLEANING OF THE TANKS AND FILTERS

#1	**Empty the settling tank (see "Emptying the water tank")**
#2	**Ensure that the dump pipe valve is correctly closed.**
#3	**Unscrew the water supply pipe from the valve.**
#4	**Free the drain pipe from the drawer-filter and remove the drawer-filter.**
#5	**Remove the 2 fixing screws from the pump support plate.**
#6	**Remove the pump support plate.**
#7	**Remove the pump from the pump tank.**
#8	**Brush the lateral filters of the pump tank.**

→ The procedure continues on the next page.

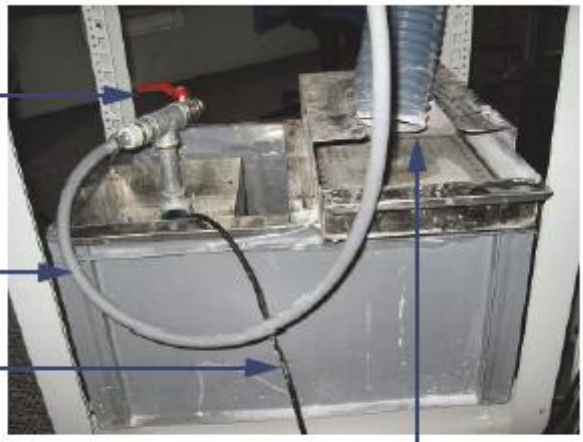
→ Complete cleaning of the tanks and filters (cont.)

#8

#9

#13

#14



#9	**Remove the settler carefully.**
#10	**Clean the settler with a plastic spatula and a brush above the drainage system (bucket, waste bin, drain, etc.).**
#11	**Clean the settler.**
#12	**Remove the used plastic bag from the settling tank and dispose of it.**
#13	**Clean the settling tank if necessary.**
#14	**Place a new plastic bag in the settling tank.**
#15	**Reassemble the tanks, pump and pipes.**
#16	**Fill the water tank to within 6 or 7 cm of the upper edge of the plastic bag.**
#17	**Run a dummy edging cycle to prime the unit.**

Flow chart 5-7: Complete cleaning of the settling tank

5.4.6.3. HINTS

> If the pump is not activated when you restart the machine after cleaning, open the discharge valve to the minimum to allow the escape of any air which has remained in the pipes. Close the valve before restarting the process.

> Always check the water-tightness of the unit before restarting the machine.
  - Check the connections of the drain, water supply and pump pipes.
  - Ensure that the discharge valve is closed.
  - If you have worked on the solenoid valves, check the fixings.

Illustration 5-7 : Emptying the settling tank

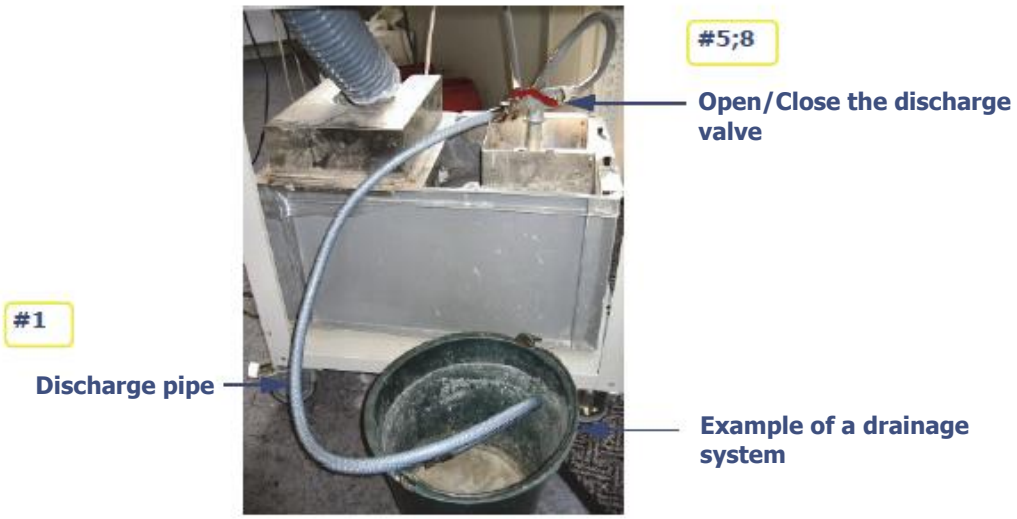


Illustration 5-8 : Water connections

5.4.7. EMPTYING THE WATER TANK

5.4.7.1. PRELIMINARY REMARKS

> Use a standard discharge pipe with a 20x27 connection.

5.4.7.2. PROCEDURE

To empty the settling tank, follow the procedure below:

#1	**Fit a discharge pipe on the same side as the valve and connect it to the drainage system (bucket, sink, drain etc.).**
#2	
#3	
#4	
#5	
#6	**Open the discharge valve.**
#7	**Close the discharge valve when the settling tank is empty.**
#8	
#9	 **X 3**
#10	**Disconnect the discharge pipe and put it away.**

Flow chart 5-8: Emptying the settling tank

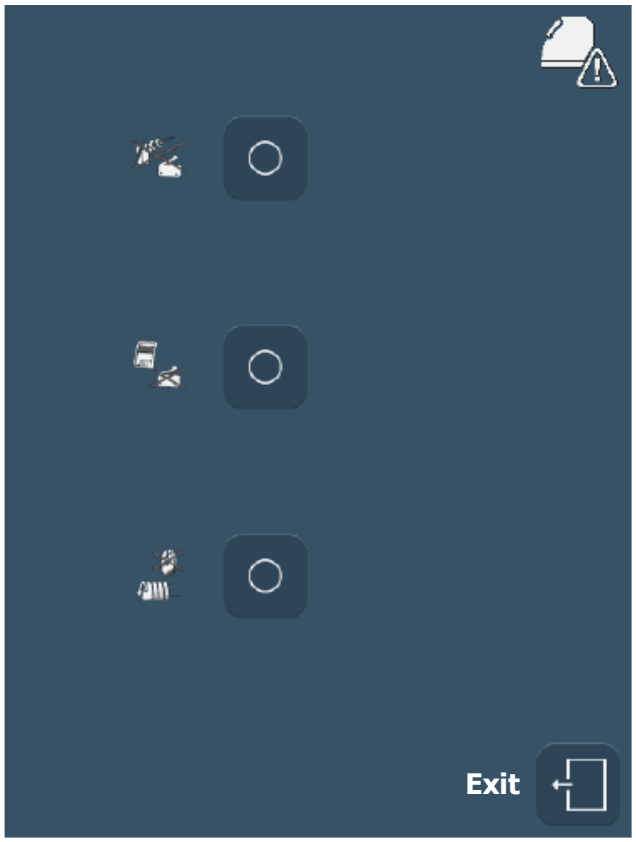
5.4.7.3. HINTS

> If the pump is not activated when you restart the machine after cleaning, open the discharge valve to the minimum to allow the escape of any air which has remained in the pipes. Close the valve before restarting the process.

> Always check the water-tightness of the unit before restarting the machine.

- Check the connections of the drain, water supply and pump pipes.
- Ensure that the discharge valve is closed.
- Check that all parts are correctly attached, especially the solenoid valves.

Screen 5-5: Operation in degraded mode



5.4.8. OPERATION IN DEGRADED MODE

5.4.8.1. PRINCIPLE

> An element or function of the visor or of the safety-bevel-grooving-drilling system (SBGD) or the wheel unit photoelectric cell for rotation is out of order but the general operation of the edger must not be altered.

> Depending on which element or function is out of order, a hotline technician may ask you to configure the machine in "degraded" mode. This operating mode allows you to de-activate an out of order element or function and continue to use the machine until the visit of a Briot technician.

> When a function is de-activated, the  icon appears on the user screen and shows that machine is operating in degraded mode.

5.4.8.2. PROCEDURE

#1	
#2	
#3	
#4	**Select the appropriate mode:** •  **When a component of the CBRP is defective.** •  **When the closing micro-switch is defective.** •  **When the edging wheel speed sensor is defective.**
#5	 **X 3**

Flow chart 5-9: Selecting a degraded operating mode

5.5. PREVENTIVE MAINTENANCE

5.5.1. HINTS

> You will optimise the working life of your edger by using only Briot spare parts.
> Change the blocks regularly - every 100 lenses.

5.5.2. REPLACEMENT TABLE FOR STANDARD PARTS

The following table summarises the replacement frequency for standard parts, calculated according to the number of lenses edged.

TABLE 1: REPLACEMENT OF STANDARD PARTS

Part	L.T.O part number	Number of lenses edged
Removable lens feeler tip	11 38 190	Every 3000 lenses
Safety-bevel wheel	16 06 207	Every 5,000 lenses, per wheel side
Grooving wheel	16 06 303	Every 5000 lenses
Mill bit (0.8mm)	SVS 180158	1 hr of total drilling
Mill bit (1mm)	SVS 180138	1 hr of total drilling
Emptying the settling tank (if closed circuit operation) Cleaning of tanks and filters	-	Every 500 lenses
Visor	11 97 047	If necessary
Filter seal 20x27	21 62 153	If necessary

If the machine is equipped with universal "BRIOT" adapters:

Part	L.T.O part number	Number of lenses edged
Briot magnetic block - Large Size (25 mm diameter)	11 63 178	Every 100 lenses
Briot magnetic block - Small Size (19 mm diameter)	11 53 027	Every 100 lenses
Briot magnetic block - 16 across flats	11 53 038	Every 100 lenses
Flexible lens clamp adaptor pad - Large size (25 mm diameter)	11 38 162	Every 1000 lenses
Lens clamp adaptor pad - Small size (19 mm diameter)	11 38 161	Every 1000 lenses
Flexible lens clamp adaptor pad- 16 across flats	11 38 195	Every 1000 lenses
Lens clamp adaptor pad sub-assembly - Small size (19 mm diameter)	S1 14 004	If necessary
Lens clamp adapter pad sub-assembly 16 across flats	S1 14 009	If necessary

Briot unit support - Small size (19 diameter)	11 90 793	If necessary
Briot unit support 16 across flats	11 90 798	If necessary

If the machine is equipped with universal "WECO" adapters:

Part	L.T.O part number	Number of lenses edged
Weco magnetic block - Large Size (25 mm diameter)	11 53 031	Every 100 lenses
Weco magnetic block - 20 across flats	11 53 037	Every 100 lenses
Weco magnetic block - 17 across flats chamfered	11 53 036	Every 100 lenses
Flexible lens clamp adaptor pad - Large size (25 mm diameter)	11 38 162	Every 1000 lenses
Lens clamp adaptor pad - Small size (19 mm diameter)	11 38 161	Every 1000 lenses
Lens clamp adaptor pad sub-assembly - Small size (19 mm diameter)	S1 14 004	If necessary
Weco magnetic block support - Small size (19 mm diameter)	S1 14 011	If necessary
Universal Weco magnetic block support 17 across flats	S1 14 012	If necessary

Wheel unit “all materials”

Part	L.T.O part number	Number of lenses edged
Finishing / chamfering wheel	11 77 427	Every 10000 lenses
Polishing wheel (rimless) 12 mm	11 77 428	Every 6000 lenses
Organic roughing wheel	11 47 127	Every 50000 lenses
Mineral roughing wheel	11 47 129	Every 10000 lenses

Wheel unit “all materials”

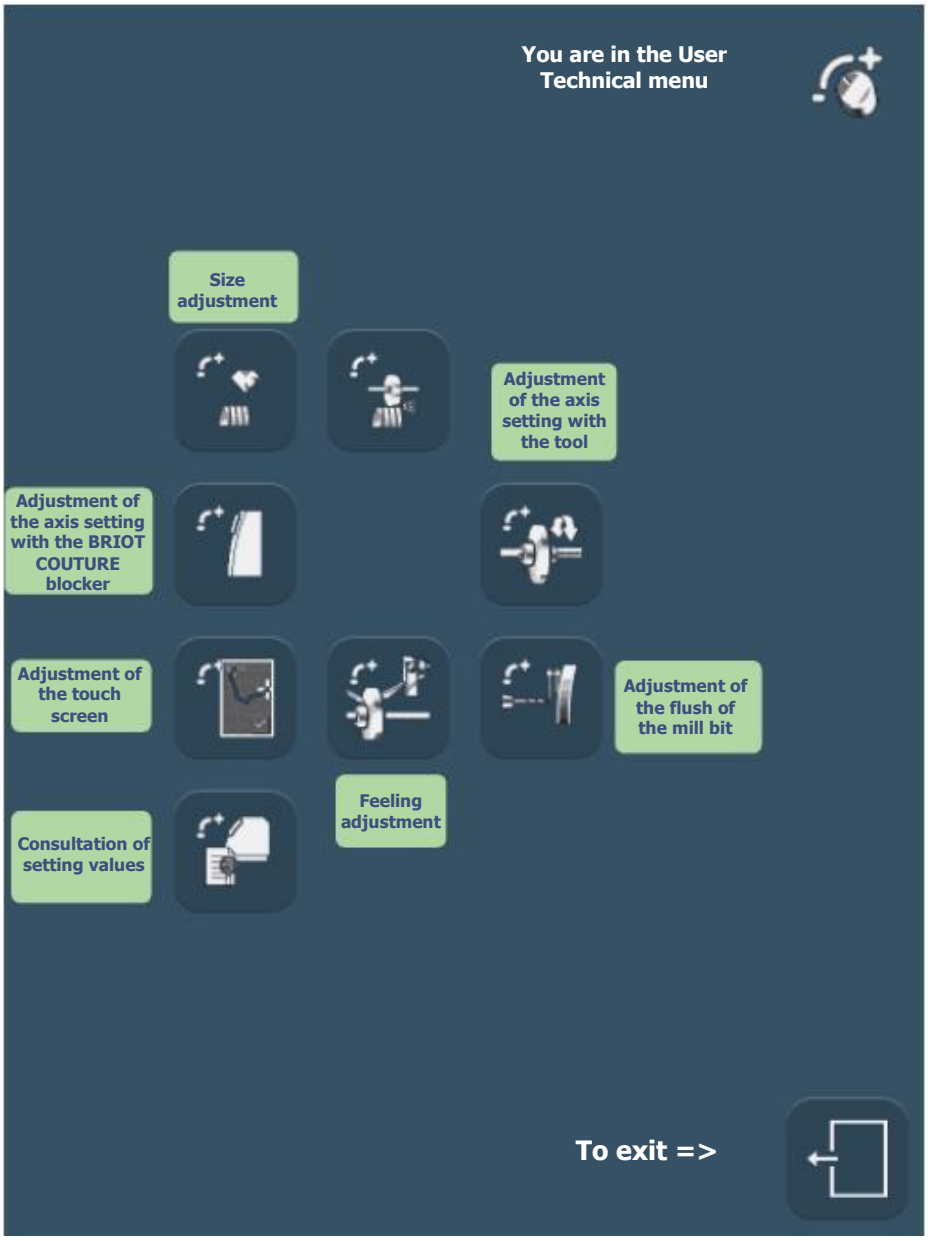
Part	L.T.O part number	Number of lenses edged
Finishing / chamfering wheel	11 77 438	Every 10000 lenses
Polishing wheel (rimless) 18mm	11 77 420	Every 6000 lenses
Organic roughing wheel	11 47 125	Every 50000 lenses

5.6. ADJUSTMENTS

5.6.1. PRESENTATION OF THE SETTINGS MENUS ACCESS SCREEN

5.6.1.1. SCREEN DESCRIPTION

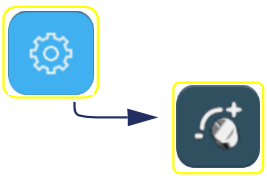
The settings menu access screen is shown below:



Screen 5-6: Setting menu access screen

5.6.1.2. ACCESS / EXIT

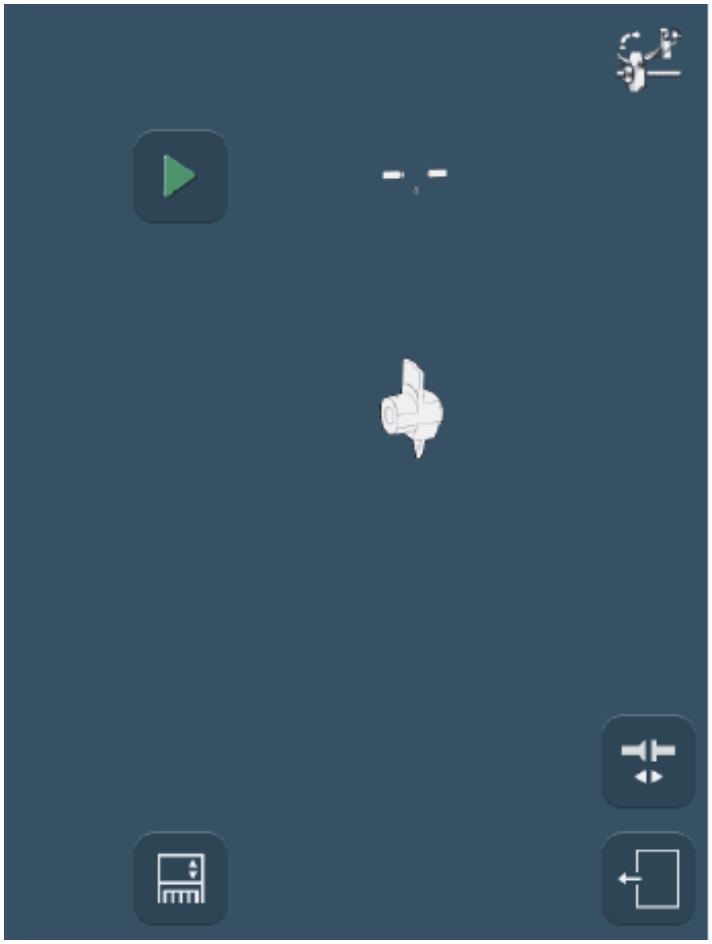
5.6.1.2.1. TO ACCESS THE SCREEN



The machine restarts.

5.6.1.2.2. TO EXIT THE SCREEN

Screen 5-7: Feeling adjustment



5.6.2. ADJUSTING THE FEELING

5.6.2.1. WHEN?

> If a message asks you to do so.
> If you observe that the feeler tips are beginning to be worn.
> After replacing the feeler tips - the machine then switches automatically to this screen.

5.6.2.2. PROCEDURE

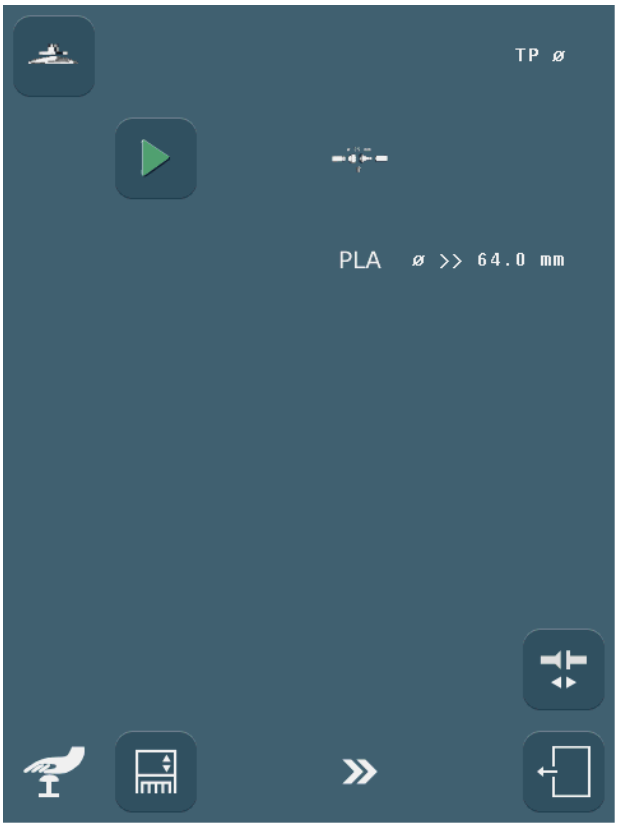
Follow the steps below to adjust the feeling:

#1	
#2	
#3	
#4	**Remove the lens clamping and lens holder adaptors from the shafts.**
#5	**Fit the setting tool on the shafts.**
#6	
#7	**When the adjustment is finished, remove the tool.**
#8	**Refit the lens holder and lens clamping adaptors.**
#9	 **X3**

Flow chart 5-10: Feeling adjustment

5.6.2.3. HINTS

> Always check that the setting tool **14 04 301** is correctly fitted on the shaft. You must neither force the fitting nor feel any play.
> The feeling setting can be incorrect if the tool is badly positioned. This factor also affects the quality of the work produced by the machine.



Screen 5-8: Adjusting the sizes - Screen 1

5.6.3. ADJUSTING THE SIZES

5.6.3.1. WHEN?

> Perform this adjustment regularly. The wear of the wheels has a direct influence on the lens sizes, which increases over time. This will help you to avoid retouch.
> Center the adjustment lens **10 00 205**exactly in the center so as to be able to use it from start to finish of size adjustment.
> When you measure the lens size with a digital caliper, keep the lens in the same plane as the caliper. Take two consecutive measurements 90° apart and record the average value with the number keypad.
> Perform the size adjustment procedure from beginning to end so as to record all the parameters.

5.6.3.2. PROCEDURE

Follow the steps below to adjust sizes:

#1	
#2	
#3	
#4	**Make sure the 25 mm adaptors are fitted.**
#5	**Block a lens 10 00 205 in the center and fit it on the lens holder shaft .**
#6	 > Lens edged to 57.5 mm diameter - Rimless finishing

#7	**At the end of the edging process, open the lens holder shaft and remove the lens.**
#8	**Measure the size of the lens with a caliper.**
#9	
#10	**Enter the value using the number key pad.**
#11	
#12	 Continue with the normal procedure **OR**  Repeat the edging process > Lens edged to 55mm diameter - Rimless finishing
#13	**Fit the lens on the lens holder shaft again.**
#14	 > Lens edged to 50 mm diameter - Bevel finishing

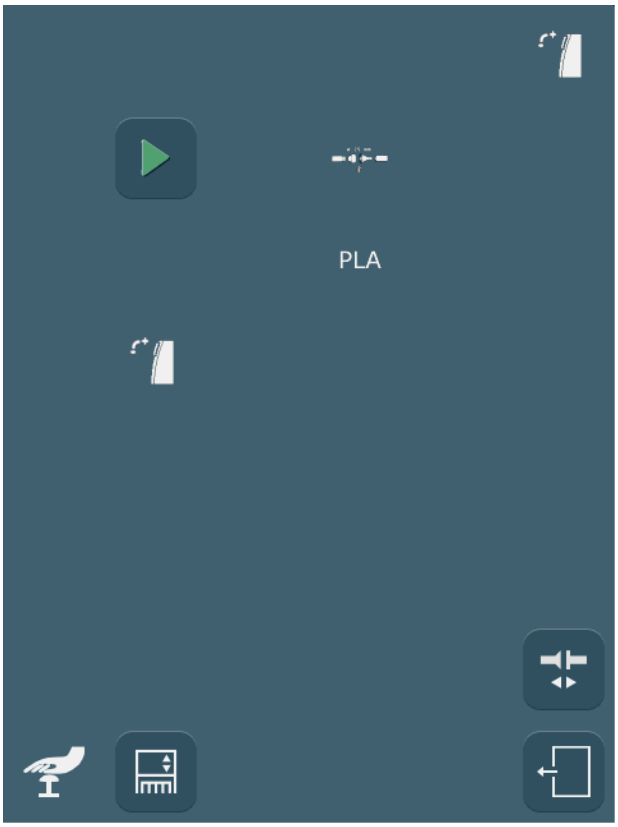
#15	**At the end of the edging process, open the lens holder shaft and remove the lens.**
#16	**Measure the size of the lens with a caliper.**
#17	
#18	**Enter the value using the number key pad.**
#19	
#20	**Check the position of the apex of the bevel with a linen-counter. The apex must be in the centre of the edge of the lens.**
#21	
#22	**If the apex of the bevel is off-centered, enter the value of the shift using the number key pad.** • **Apex too close to the rear face → enter a negative value** • **Apex too close to the front face → enter a positive value**
#23	
#24	 **OR**  Continue with the normal procedure Repeat the edging process > Lens edged to 47.5mm diameter - Rimless finishing
#25	**Fit the lens on the lens holder shaft again.**
#26	 > Lens edged to 42.5 mm diameter - Rimless finishing and polishing

#27	**At the end of the edging process, open the lens holder shaft and remove the lens.**
#28	**Measure the size of the lens with a caliper.**
#29	
#30	**Enter the value using the number key pad.**
#31	
#32	**At the end of the edging process, open the lens holder shaft and remove the lens.**
#33	**Measure the size of the lens with a caliper.**
#34	
#35	 Continue with the normal procedure **OR**  Repeat the edging process > Lens edged to 40 mm diameter - Rimless finishing
#36	
#37	**Fit the lens on the lens holder shaft again.**
#38	 > Lens edged to 35 mm diameter - Bevel finishing and polishing
#39	**At the end of the edging process, open the lens holder shaft and remove the lens.**
#40	**Measure the size of the lens with a caliper.**

#41	
#42	**Enter the value using the number key pad.**
#43	
#44	**Check the position of the apex of the bevel with a linen-counter. The apex must be in the centre of the edge of the lens.**
#45	**If the apex of the bevel is off-centered, enter the value of the shift using the number key pad.** • **Apex too close to the rear face → enter a negative value** • **Apex too close to the front face → enter a positive value**
#46	
#47	
#48	**Check the setting values ; the new values are displayed in red.**
#49	

Flow chart 5-11: Size adjustment

Screen 5-9: Adjustment of the axis setting with the BRIOT COUTURE blocker



5.6.4. ADJUST THE AXIS SETTING WITH THE BRIOT COUTURE BLOCKER

5.6.4.1. PRELIMINARY REMARKS

> To avoid producing an incorrect axis setting, the large adaptors are required for this adjustment.
> When blocking the lens **14 04 274**, put the lens down on its unmarked face (black markings towards the top of the BRIOT COUTURE blocker).

5.6.4.2. PROCEDURE

To adjust the axis setting with the BRIOT COUTURE blocker, proceed as follows:

#1	
#2	 *After initializing the machine*
#3	
#4	**On the BRIOT COUTURE blocker, load any job and enter null decentering values.**
#5	**Insert the pre-marked lens 14 04 274 in the BRIOT COUTURE blocker. The rounded corner with the marking should be on the top right.**
#6	**Centre the adjustment lens in**  **or**  **mode.**
#7	**Fit a large block on the blocking head and block the lens.**  **If the message "Lens too small, do you want to continue ?" is displayed, reply "Yes".**
#8	**Make sure it is centered on the lens clamping and lens holder adaptors.**
#9	**Fit the blocked lens on the lens holder shaft.**
#10	
#11	**At the end of the adjustment process, open the shafts and remove the lens.**
#12	**Ensure that there is no water in the hole drilled in the lens.**

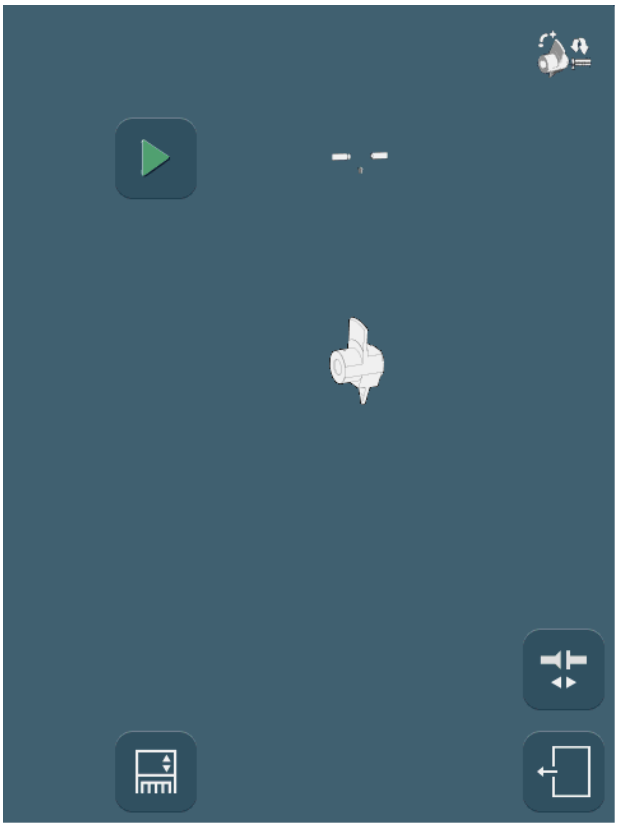
#13	**Remove the block from the lens.**
#14	**Place the lens on the bearing surface of the BRIOT COUTURE blocker.** **The rounded corner should be on the top right.**
#15	**Start the PROS optical recognition system.**
#16	**Switch to the left shape of the lens and check that the drilling hole has been detected (the drilling point is visible from the left shape).**
#17	*From the edger* 
#18	*The axis adjustment is finished!*  **X3**

Flow chart 5-12: Adjustment of the axis setting with the BRIOT COUTURE blocker

5.6.4.3. HINTS

> Always ensure that the pattern holder is clean and unscratched before placing the lens on it.

Screen 5-10: Adjustment of the axis setting with the tool



5.6.5. ADJUSTMENT OF THE AXIS SETTING WITH THE TOOL

5.6.5.1. WHEN?

> The BRIOT COUTURE is not connected to a BRIOT COUTURE blocker

AND

> you have the adjustment tool 14 04 300 (supplied on request by Briot)

AND

> a hotline technician asks you to undertake this type of adjustment.

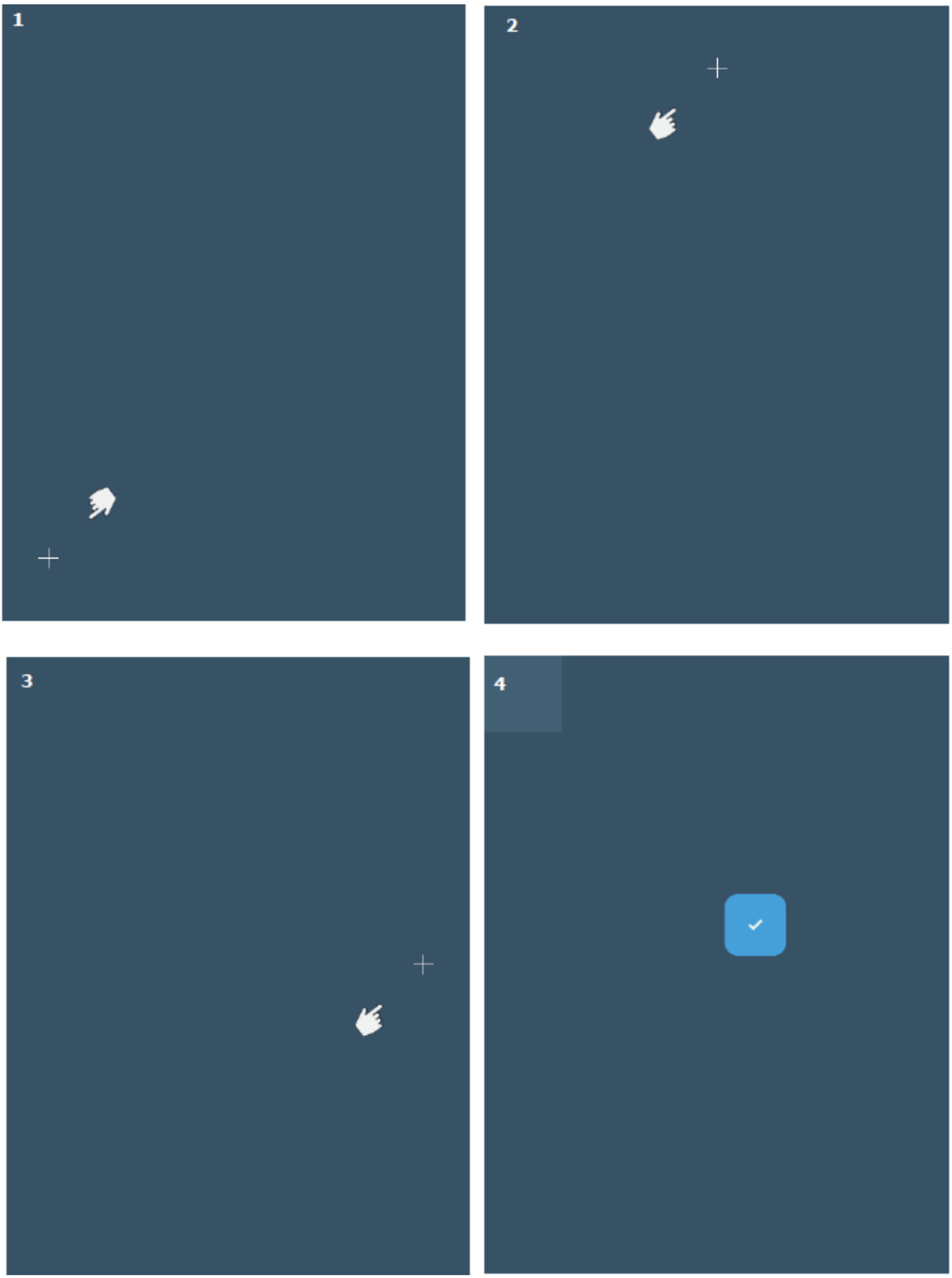
5.6.5.2. PROCEDURE

To adjust the axis setting with the tool, proceed as follows:

#1	
#2	
#3	
#4	**Remove the lens clamping and lens holder adaptors from the shafts.**
#5	**Fit the setting tool on the shafts. Use the pin and push from each side of the tool. No adaptor is necessary.**
#6	
#7	**At the end of the adjustment process, open the shafts and remove the tool.**
#8	**Remove the lens clamping and lens holder adaptors from the shafts.**
#9	

Flow chart 5-13: Adjustment of the axis setting with the tool

Screen 5-11: Adjustment of the touch screen



5.6.6. ADJUSTING THE TOUCH SCREEN

5.6.6.1. WHEN?

The machine switches automatically to this screen when the touch screen has not been detected.
When you observe a difference between the displayed icon and the touch area of the screen.

5.6.6.2. PROCEDURE

Follow the steps below to adjust the touch screen:

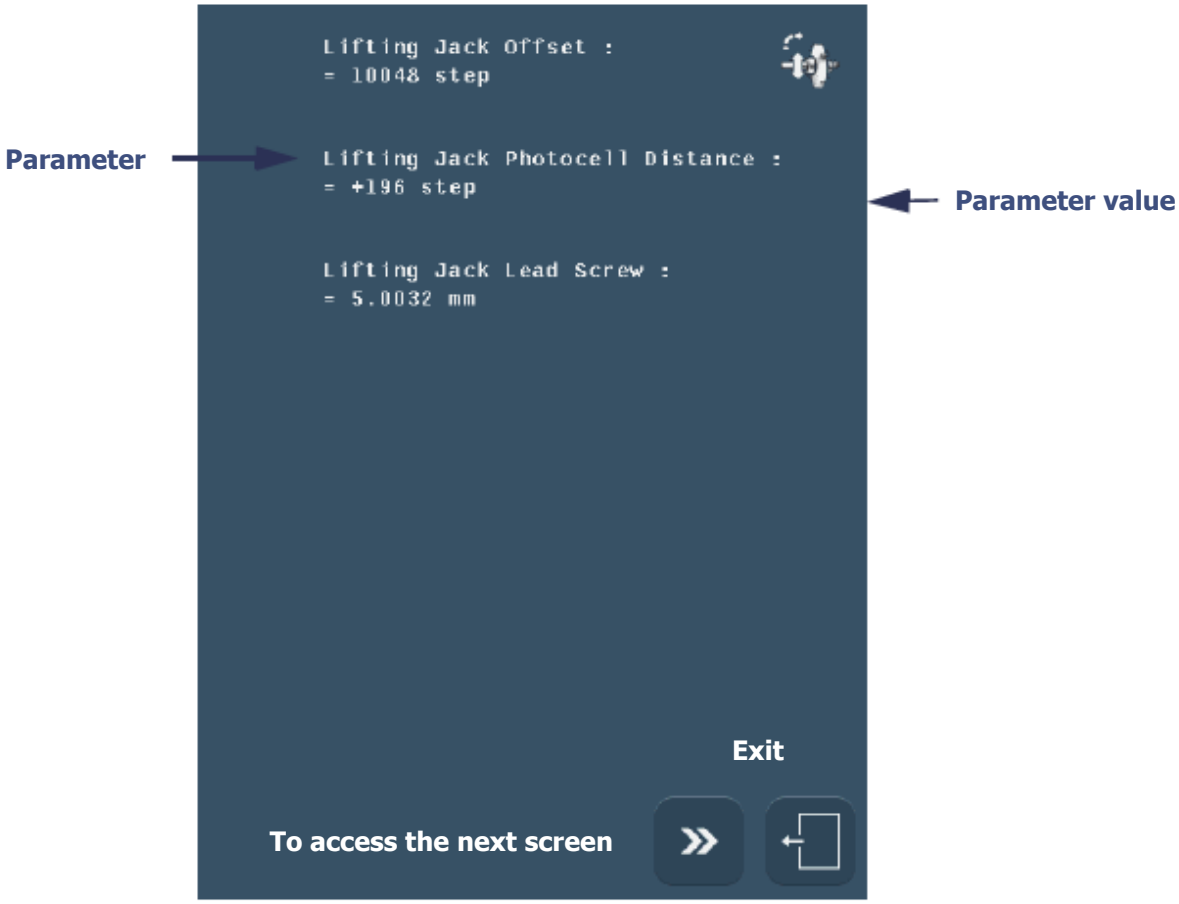
#1	
#2	
#3	
#4	**Press carefully on the red crosses which are displayed successively.**
#5	 **X3**

Flow chart 5-14: Adjustment of the touch screen

5.6.6.3. HINTS

> Make sure that you press carefully on the crosses being adjusted. Otherwise you may affect the touch screen settings.
> If you think you have not pressed on a cross correctly, wait a few moments. The adjustment becomes accessible again after 5 seconds.

Screen 5-12: Example of a setting values display screen



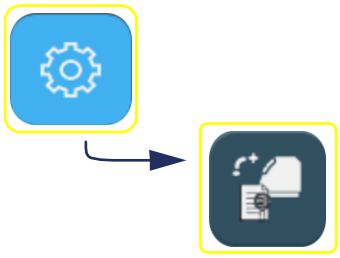
5.6.7. CONSULTING THE SETTING VALUES

5.6.7.1. PRESENTATION

> A hotline technician may ask you for some setting values, in order to diagnose a possible problem for example.
> The setting values cannot be modified from these screens.

5.6.7.2. ACCESS/EXIT/NAVIGATION

5.6.7.2.1. TO ACCESS THE SCREENS



5.6.7.2.2. TO EXIT THE SCREENS

x 2

5.6.7.2.3. TO NAVIGATE FROM ONE SCREEN TO ANOTHER

> To access the next screen, 

> To access the previous screen, 

5.6.7.3. PRESENTATION OF THE SETTING VALUE CONSULTATION SCREENS

⇒ Refer to the next screen, which is typical of the 12 user screens.

5.7. CONSULTING THE STATISTICS

5.7.1. PRESENTATION OF THE STATISTICS MENU

5.7.1.1. SCREEN DESCRIPTION

The statistics menus access screen is shown below:

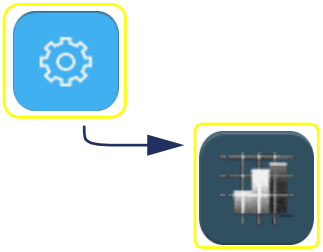
Screen 5-13: Statistics access screen

* Since the last wheel dressing

Note: The Statistics menu type is shown by the icon which is displayed on the top right of the current screen.

5.7.1.2. ACCESS/EXIT

5.7.1.2.1. TO ACCESS THE SCREEN



5.7.1.2.2. TO EXIT THE SCREEN

5.7.2. CONSULTATION PRINCIPLES

The statistics relate to two types of information:

- Displayed messages, or incident log;
- The machine's general operation.

The screens associated with each type of information have different operating principles, as described below:

5.7.2.1. INCIDENT LOG

5.7.2.1.1. CONTENT

The incident log may be consulted according to four themes:

→ Consultation of the general list of incidents which have occurred (incidents, warnings and information)
→ Consultation of the list of fault messages displayed
→ Consultation of the list of warning messages displayed
→ Consultation of the list of information messages displayed.

5.7.2.1.2. ACCESS/EXIT

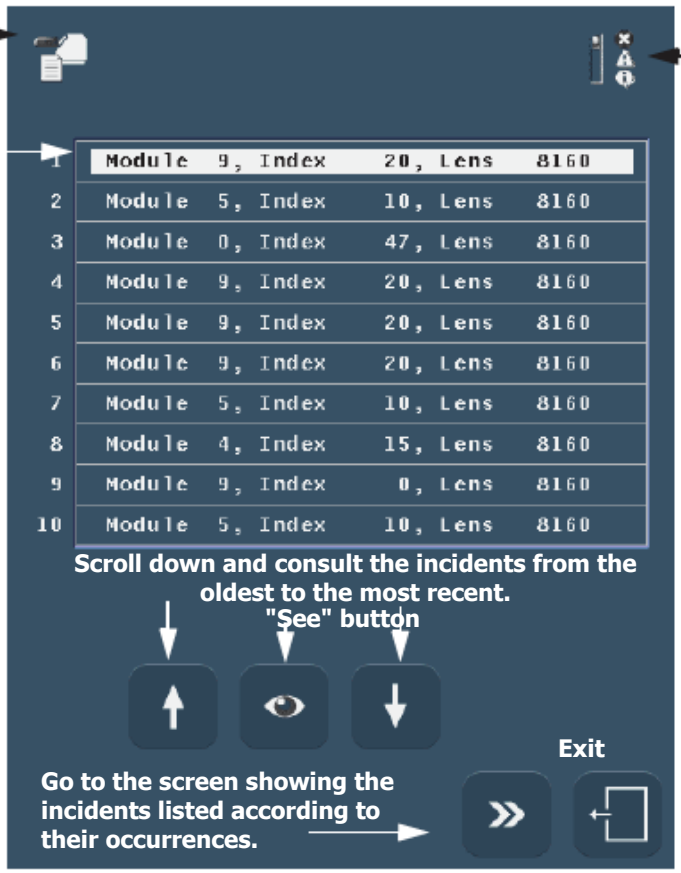
⇒ You may access the desired statistics using the buttons shown above in the paragraph "Presentation of statistics menu".

⇒ Exit each menu by pressing the  button.

5.7.2.1.3. OPERATION

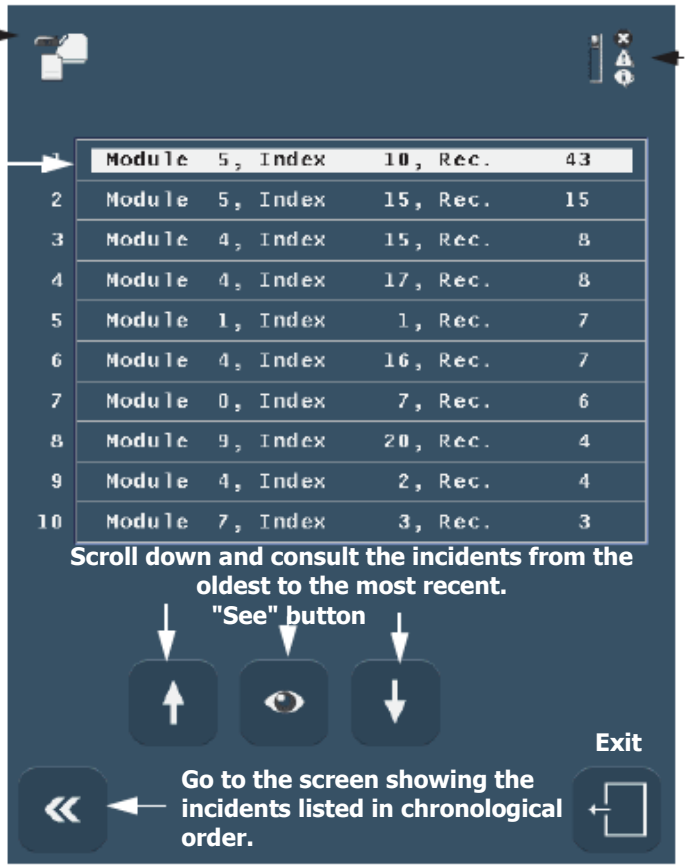
Each button of the Statistics menu related to the incident log allows two possibilities:

→ Consultation of the last incidents listed according to their order of appearance:



Screen 5-14: Consultation of the incidents listed according to their order of appearance:

→ Consultation of the 10 most recent incidents listed according to their occurrences.



Screen 5-15: Consultation of the incidents listed according to their occurrences:

5.7.2.2. GENERAL OPERATING MODE SCREEN

5.7.2.2.1. CONTENT

The statistics related to the general operation of the machine allow you to consult:

→ Statistics relating to the operation of the machine itself
→ Statistics based on the last wheel dressing
→ Statistics based on the lens material
→ Statistics based on the bevel and rimless finishings
→ Statistics based on polishing
→ Statistics based on safety-bevel
→ Statistics based on groove finishing
→ Statistics based on the drilling finishing
→ Statistics based on retouches
→ Statistics based on user maintenance
→ Statistics based on facets

5.7.2.2.2. ACCESS/EXIT

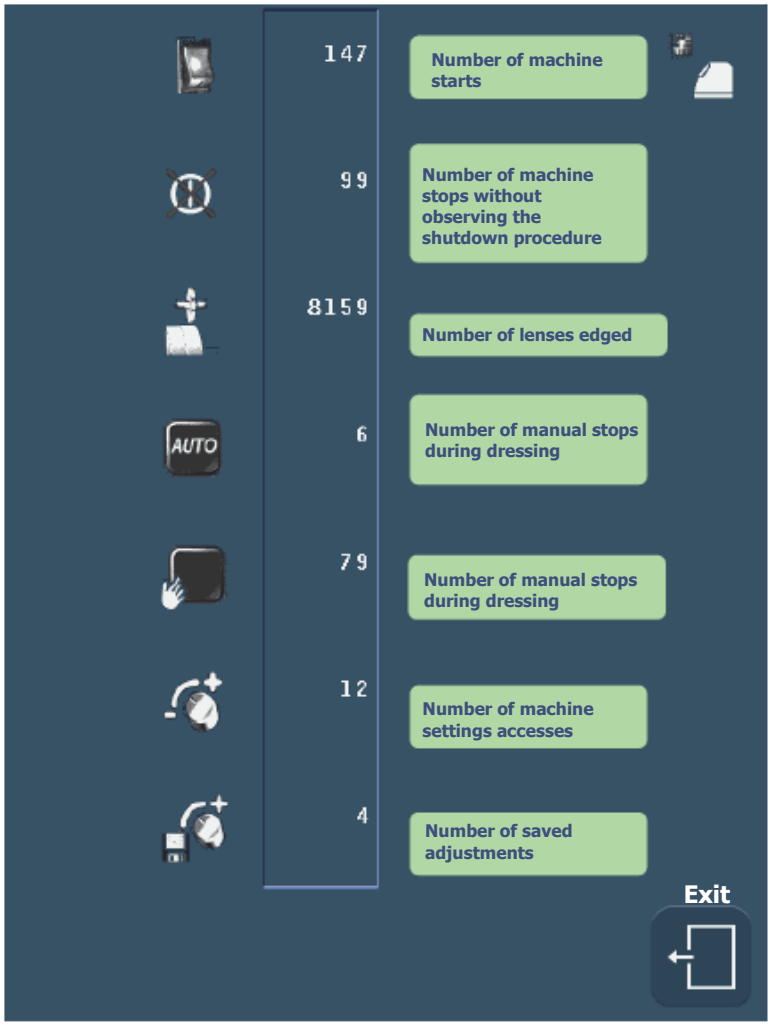
⇒ You may access the desired statistics using the buttons shown above in the paragraph "Presentation of statistics menu".

⇒ Exit each menu by pressing the  button.

5.7.2.2.3. DESCRIPTION

5.7.2.2.3.1 Edger general statistics display screen

The display screen for the edger general statistics is shown below:

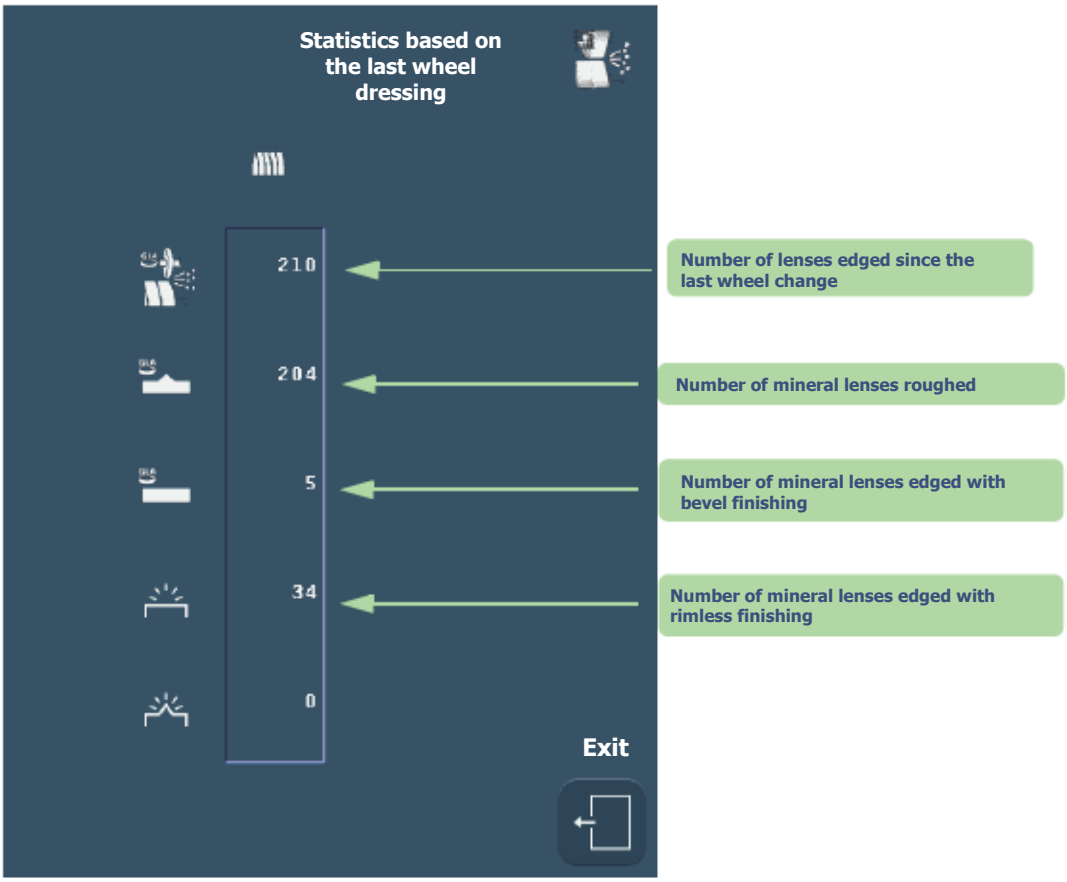


You are in the Edger Statistics menu

Screen 5-16: Consulting the edger general statistics screen

5.7.2.2.3.2 Display screen for statistics based on the last wheel dressing

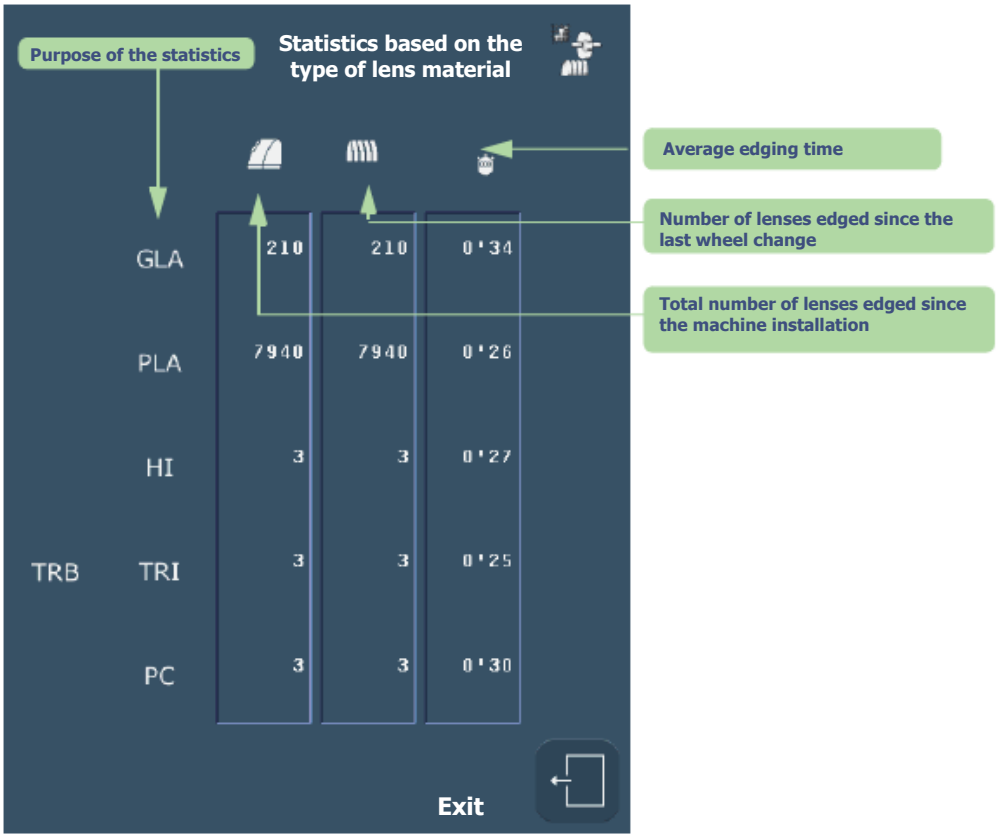
The display screen for statistics based on the last wheel dressing is shown below:



Screen 5-17: Consulting statistics based on the last wheel dressing

5.7.2.2.3.3 Display screen for statistics based on the type of lens material

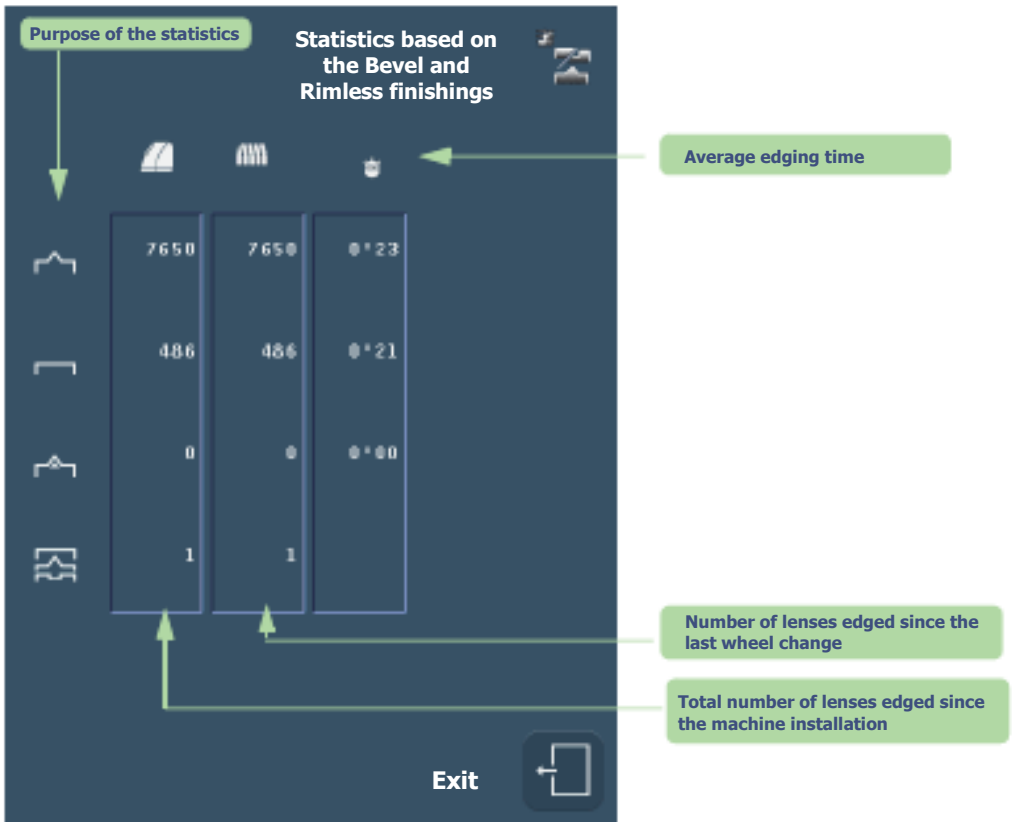
The display screen for statistics based on the type of lens material is shown below:



Screen 5-18: Display screen for statistics based on the type of lens material

5.7.2.2.3.4 Consulting statistics based on the bevel and rimless finishings

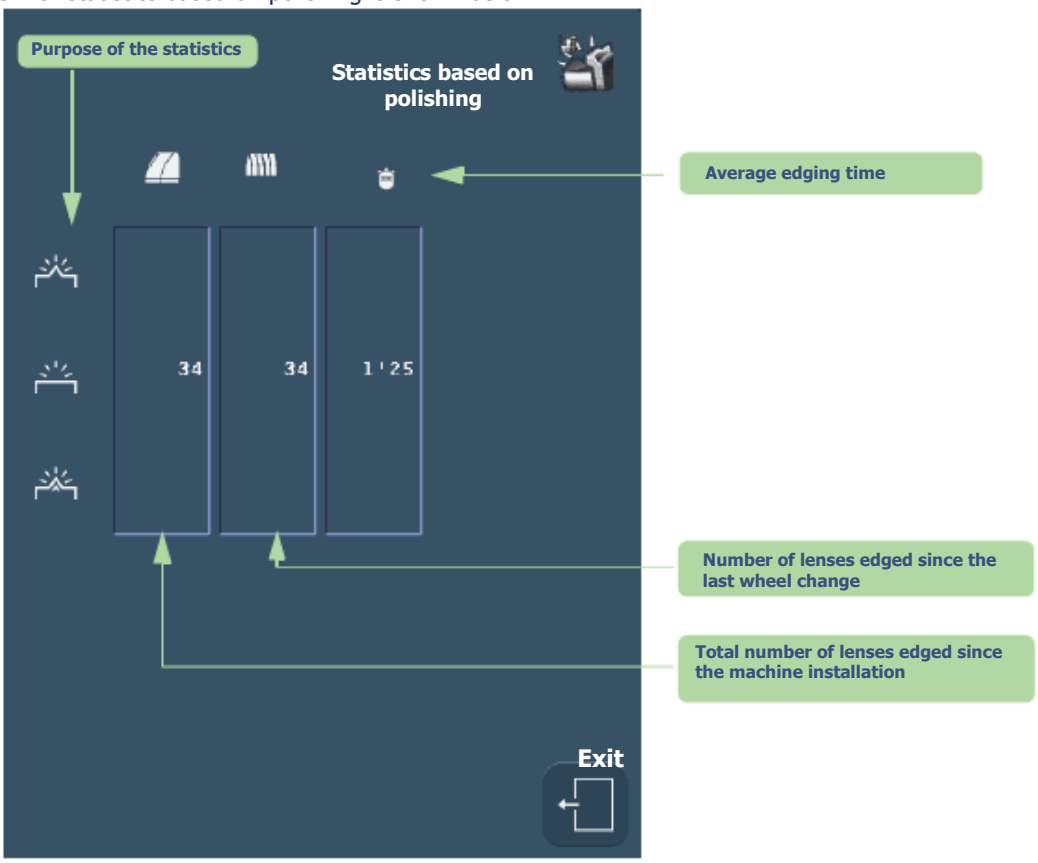
The display screen for statistics based on finishing is shown below:



Screen 5-19: Consulting statistics based on finishing

5.7.2.2.3.5 Display screen for statistics based on polishing

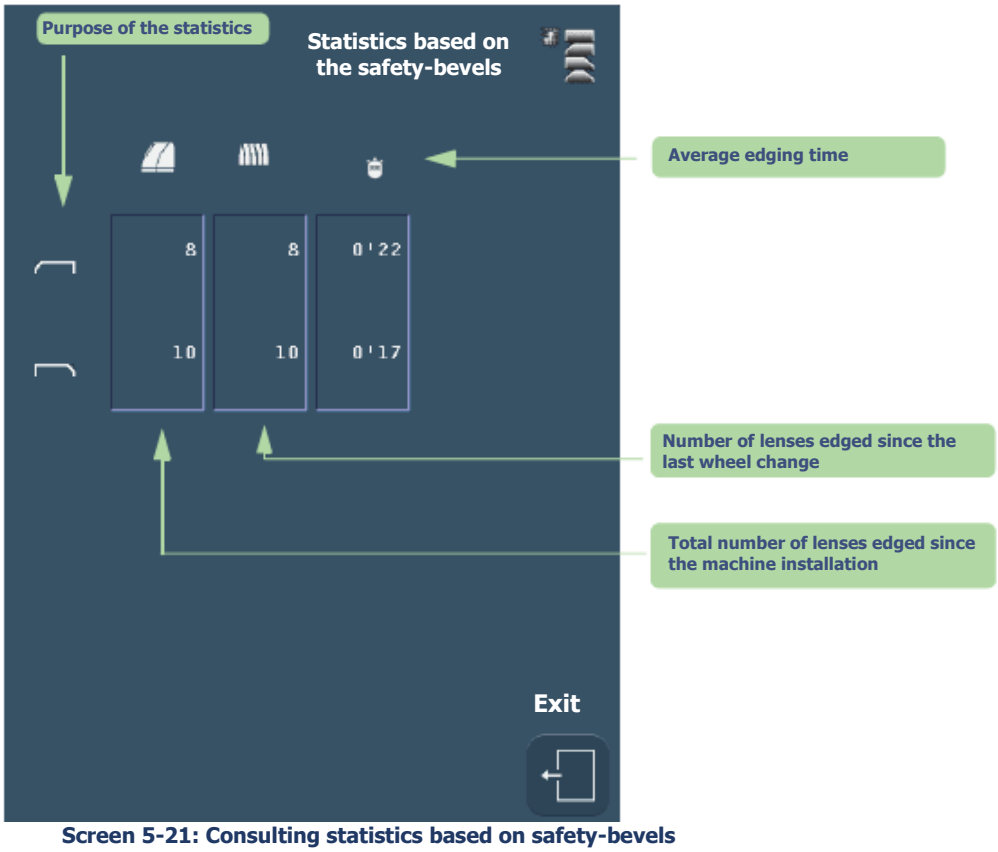
The display screen for statistics based on polishing is shown below:



Screen 5-20: Consulting statistics based on polishing

5.7.2.2.3.6 Display screen for statistics based on the safety-bevels

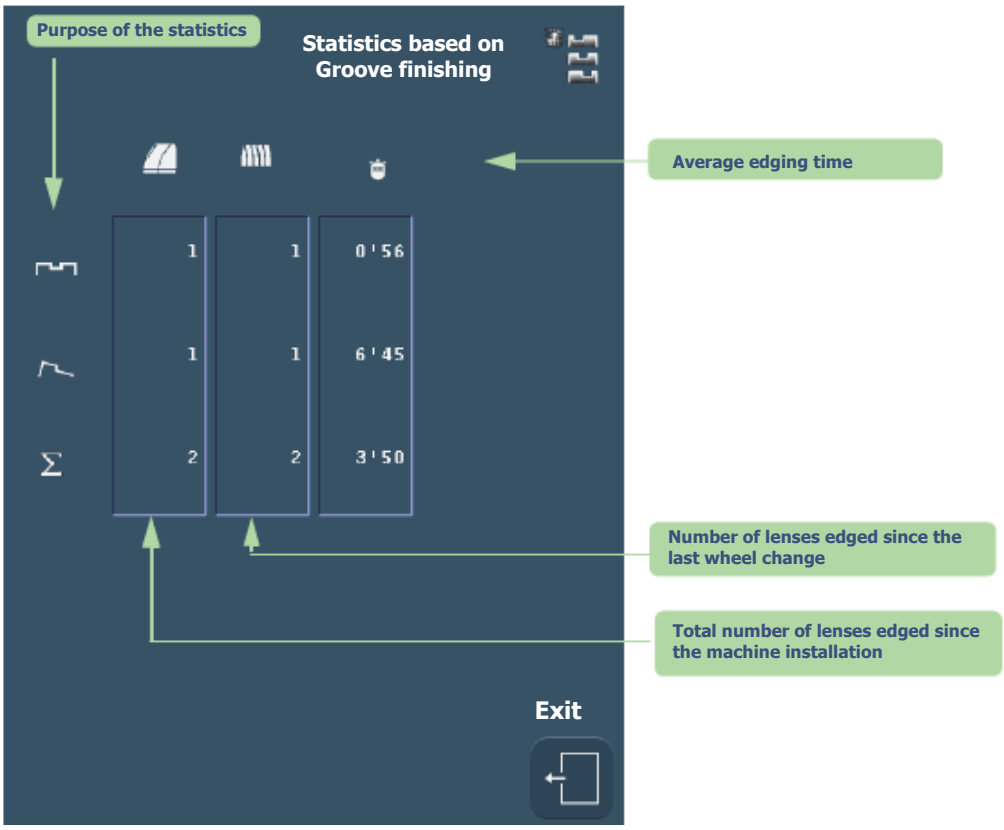
The display screen for statistics based on safety-bevel is shown below:



Screen 5-21: Consulting statistics based on safety-bevels

5.7.2.2.3.7 Display screen for statistics based on groove finishing

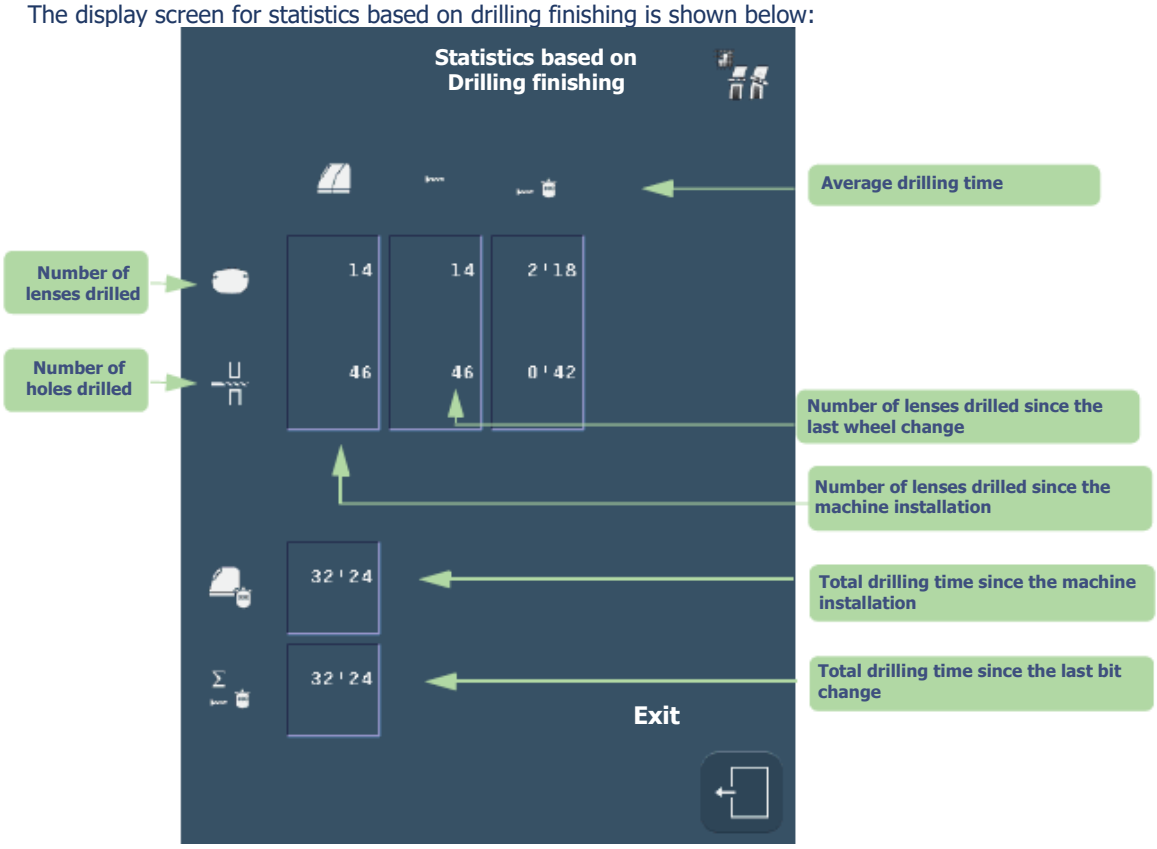
The display screen for statistics based on groove finishing is shown below:



Screen 5-22: Consulting statistics based on groove finishing

5.7.2.2.3.8 Screen for consulting statistics based on the drilling finishing

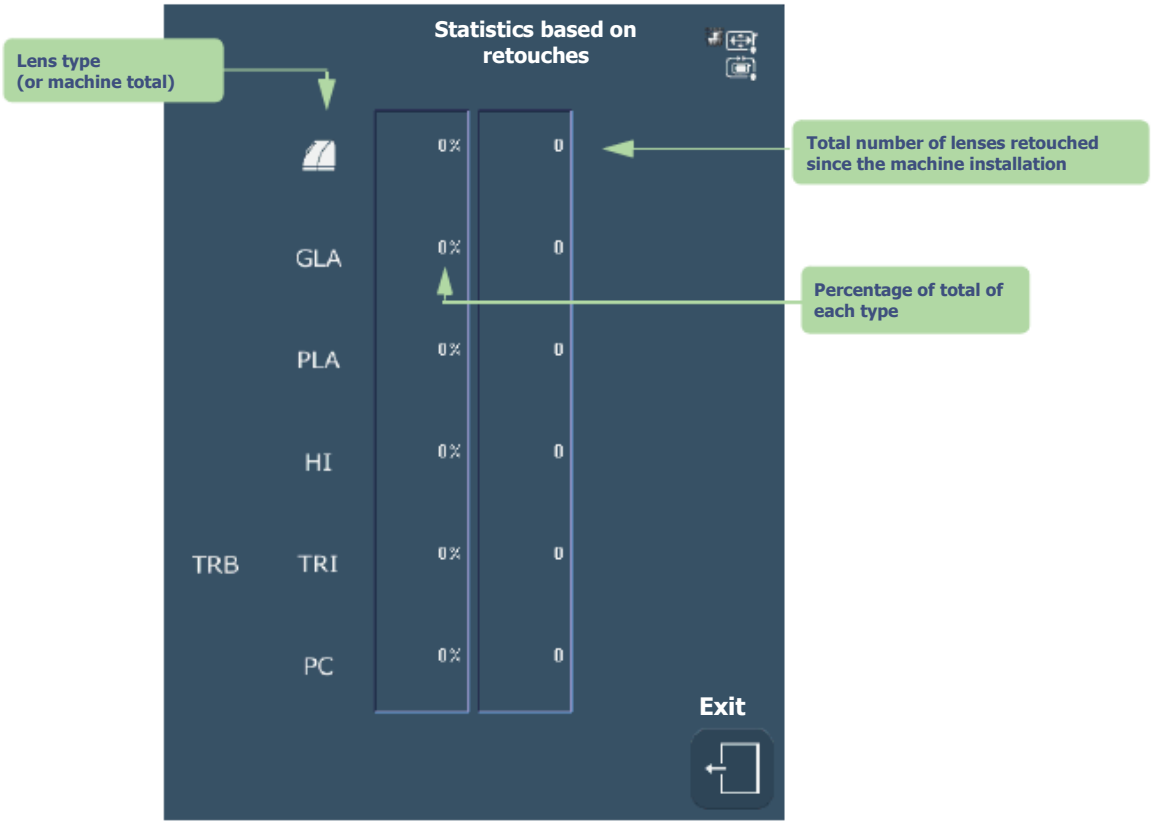
The display screen for statistics based on drilling finishing is shown below:



Screen 5-23: Consulting statistics based on drilling finishing

5.7.2.2.3.9 Display screen for statistics based on the number of retouches

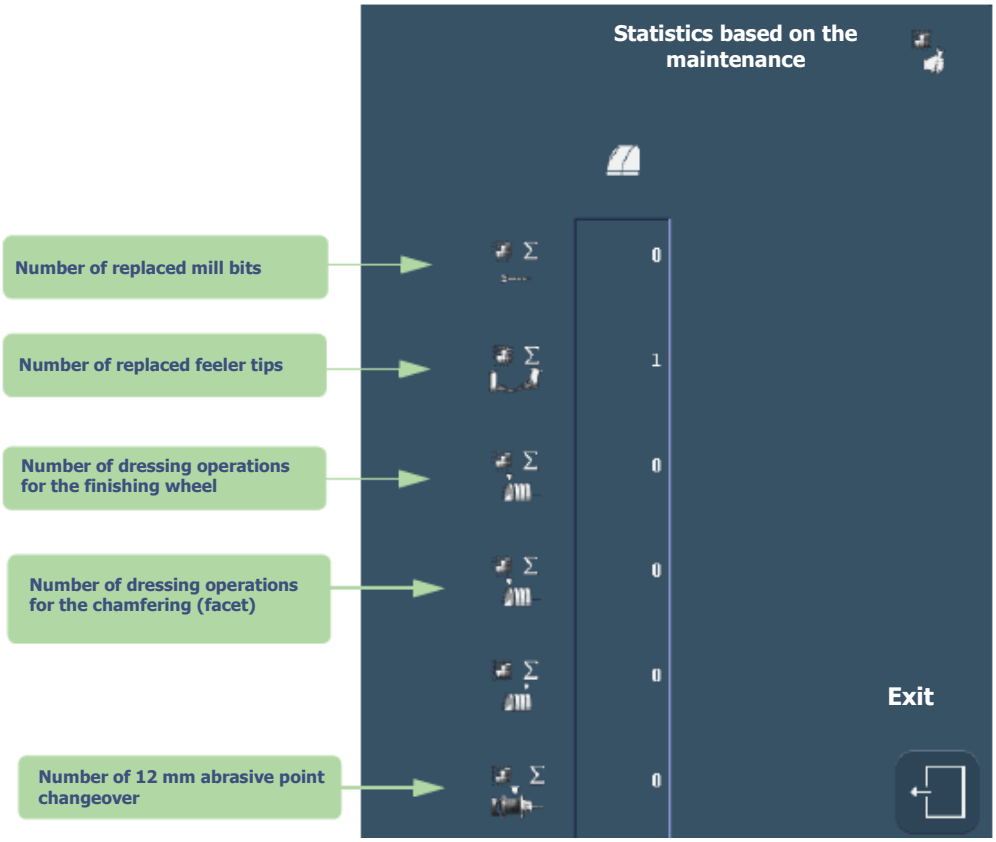
The display screen for statistics based on the number of retouches is shown below:



Screen 5-24: Consulting statistics based on retouch

5.7.2.2.3.10 Display screen for statistics based on user maintenance

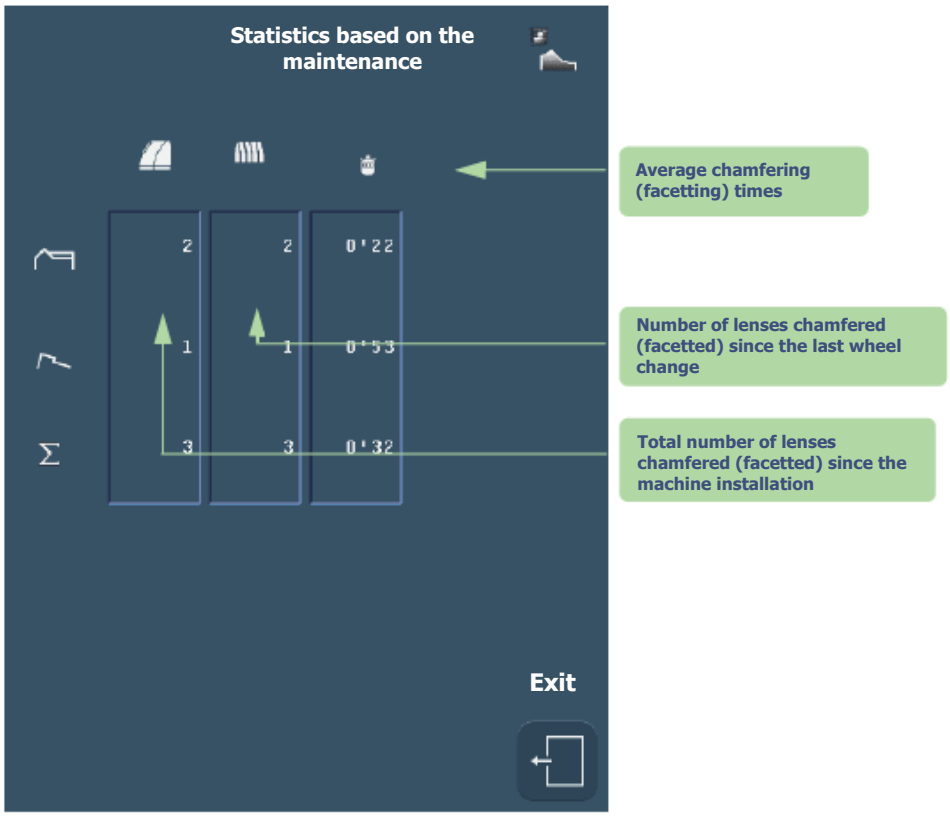
The display screen for statistics based on user maintenance is shown below:



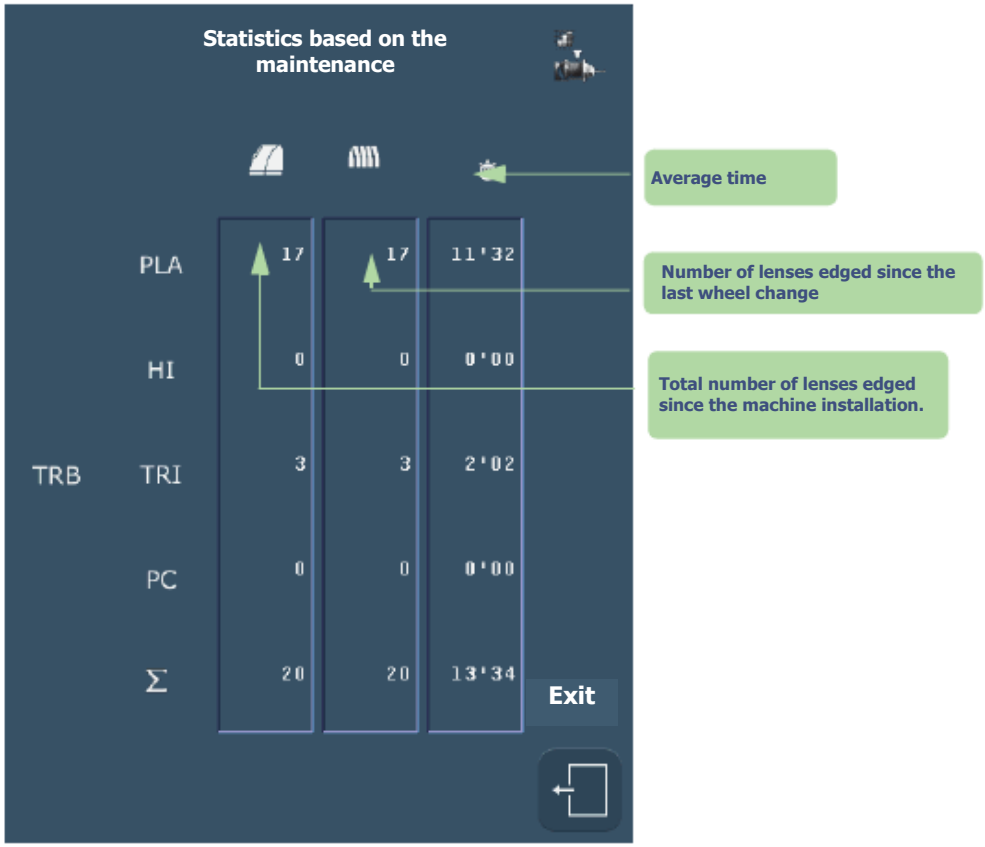
Screen 5-25: Consulting statistics based on user maintenance

5.7.2.2.3.11 Display screen for statistics based on facets

Display screen for statistics based on facets:



Screen 5-26: Consulting statistics based on facet finishing



Screen 5-27: Consultation of statistics based on Smart Design

5.8. MESSAGES

5.8.1. TYPES OF MESSAGES

There are three types of messages:
- Information messages
- Warning messages
- Fault messages

5.8.2. LIST OF MESSAGES.

The table below shows all the messages, the conditions for their display and the action to undertake.

#	Message title	Condition(s) for display	Action(s)
0x0	Grooving & drilling not allowed on mineral lens.	Mineral lens material can neither be grooved or drilled.	Adapt your job to Mineral lens material: bevel or rimless finishing or Use another lens material for the current job.
0x1	Edging parameters incomplete.	You have started edging before selecting all the parameters.	Check that all parameters have been selected. No "To be defined" button must be visible!
0x2	No job selected.	You have started edging without first loading a shape.	Load a shape, select the parameters and then start the edging process.
0x4	Edging in progress.	Job A is in progress and you have called up job B.	Wait until the end of the job in progress before loading another job.
0x5	Unknown job number	The job number you are trying to load does not exist on the server.	Check the job number and load another number.
0x7	Do you want to re-edge the same lens ?	You have just edged a lens and then re-started a cycle on the same job number and the same side.	YES: If you wish to edge the same lens again or if you wish to edge several lenses with the same parameters. NO: Fit a new lens and proceed as you wish.
0x8	Please wait... during machine shut down.	You have pressed for more than 6 seconds on the machine standby button.	Wait until the machine has stopped before switching off.
0x9	You can safely turn off your machine.	You have asked for the machine to stop. The close-down procedure has been followed. The machine can now be switched off.	Switch off the machine (On/Off button pressed-in and unlit).

#	Message title	Condition(s) for display	Action(s)
0xA	Incompatible edger configuration. Trivex lens not allowed.	The job you have loaded calls for Trivex® lens material. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Trivex® lens material. Load the job again.
0xB	Incompatible edger configuration. HI lens not allowed.	The job you have loaded calls for High Index (HI) lens material. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select High Index (HI) lens material. Load the job again.
0xC	Incompatible edger configuration. Mineral lens not allowed.	The job you have loaded calls for Mineral lens material. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Mineral lens material. Load the job again.
0xD	Incompatible edger configuration. Organic lens not allowed.	The job you have loaded calls for CR39 lens material. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select CR39 lens material. Load the job again.
0xE	Incompatible edger configuration. Polycarbonate lens not allowed.	The job you have loaded calls for Polycarbonate lens material. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Polycarbonate lens material. Load the job again.
0xF	Incompatible edger configuration. Bevel finishing not allowed.	The job you have loaded calls for Bevel finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Bevel finishing. Load the job again.

#	Message title	Condition(s) for display	Action(s)
0x10	Incompatible edger configuration. Rimless finishing not allowed.	The job you have loaded calls for Rimless finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Rimless finishing. Load the job again.
0x11	Incompatible edger configuration. Groove finishing not allowed.	The job you have loaded calls for Groove finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Groove finishing. Load the job again.
0x12	Incompatible edger configuration. Drilling finishing not allowed.	The job you have loaded calls for Drilling finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Drilling finishing. Load the job again.
0x13	Incompatible edger configuration. Groove/drilling finishing not allowed.	The job you have loaded calls for Grooving/Drilling finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Grooving/Drilling finishing. Load the job again.
0x14	Incompatible edger configuration. Auto bevel sub-finishing not allowed.	The job you have loaded calls for automatic Bevel sub-finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select automatic bevel sub-finishing. Load the job again.
0x15	Incompatible edger configuration. Basic bevel sub-finishing not allowed.	The job you have loaded calls for basic Bevel sub-finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select basic Bevel sub-finishing. Load the job again.

#	Message title	Condition(s) for display	Action(s)
0x16	Incompatible edger configuration. Bevel distance (in mm) sub-finishing not allowed.	The job you have loaded calls for Bevel distance (in mm) sub-finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Bevel distance (in mm) sub-finishing. Load the job again.
0x17	Incompatible edger configuration. Bevel distance (in %) sub-finishing not allowed.	The job you have loaded calls for Percent bevel sub-finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Percent bevel sub-finishing. Load the job again.
0x18	Incompatible edger configuration. Manual bevel sub-finishing not allowed.	The job you have loaded calls for Manual bevel sub-finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Manual bevel sub-finishing. Load the job again.
0x19	Incompatible edger configuration. Automatic groove sub-finishing not allowed.	The job you have loaded calls for automatic Groove sub-finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Automatic Groove sub-finishing. Load the job again.
0x1A	Incompatible edger configuration. Basic groove sub-finishing not allowed.	The job you have loaded calls for Groove Curve sub-finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Groove curve sub-finishing. Load the job again.
0x1B	Incompatible edger configuration. Groove distance (in mm) sub-finishing not allowed.	The job you have loaded calls for Groove distance (in mm) sub-finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Groove distance (in mm) sub-finishing. Load the job again.

#	Message title	Condition(s) for display	Action(s)
0x1C	Incompatible edger configuration. Groove distance (in %) sub-finishing not allowed.	The job you have loaded calls for Percent groove sub-finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Percent Groove sub-finishing. Load the job again.
0x1D	Incompatible edger configuration. Manual groove sub-finishing not allowed.	The job you have loaded calls for Manual groove sub-finishing. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select manual Groove sub-finishing. Load the job again.
0x1E	Incompatible edger configuration. Drilling perpendicular to rear face not allowed.	The job you have loaded calls for Drilling normal to rear face. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Drilling normal to rear face sub-finishing. Load the job again.
0x1F	Incompatible edger configuration. Drilling perpendicular to front face not allowed.	The job you have loaded calls for Drilling normal to front face. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Drilling normal to rear face sub-finishing. Load the job again.
0x20	Incompatible edger configuration. Drilling parallel to clamp shaft not allowed.	The job you have loaded calls for Drilling parallel to clamp shaft. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select Drilling parallel to clamp shaft. Load the job again.
0x21	Incompatible edger configuration. Front safety-bevel not allowed.	The job you have loaded calls for front safety-bevel. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select safety-bevel parameter on the front face of the lens. Load the job again.

#	Message title	Condition(s) for display	Action(s)
0x22	Incompatible edger configuration. Rear safety-bevel not allowed.	The job you have loaded calls for rear safety-bevel. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select safety-bevel parameter on the rear face of the lens. Load the job again.
0x23	Incompatible edger configuration. Rear safety-bevel not allowed.	The job you have loaded calls for front and rear safety-bevels. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select front and rear safety-bevel parameter. Load the job again.
0x24	Incompatible edger configuration. Lens without safety-bevel not allowed.	The job you have loaded has the No safety-bevel parameter. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select the No safety-bevel parameter. Load the job again.
0x25	Incompatible edger configuration. Safety-bevel to be defined not allowed.	The job you have loaded has the parameter Safety-bevel to be defined. In the personalization menus, you have excluded this parameter. Therefore the edger cannot accept this job.	Confirm the message. If you wish to load this job nonetheless, change the personalization of the pull-down menus. Select the Safety-bevel to be defined parameter. Load the job again.
0x26	Retouch impossible on drilled or grooved lens.	You wish to undertake a retouch on a lens which has been drilled or grooved. This operation is impossible on a lens with these finishes.	Carry out the lens size adjustment procedure. Fit a new lens and enter a negative oversize value.
0x2B	Wrong job received.	Problems of communication with the server have been detected.	Load another job number.

#	Message title	Condition(s) for display	Action(s)
0x30	Do you want to save the new personalization?	At least one of the menu personalization parameters has changed. The machine requests confirmation of this modification.	Confirm: the new personalization is registered. No confirmation: the new personalization is not registered. The previous personalization is retained. Cancel: you return to the personalization screen for the menu-button concerned. Select again the elements that you wish to be displayed.
0x34	Groove too near front.	The distance between the front face of the lens and the external edge of the groove is less than 0.2 mm.	Confirm the message. Select Manual groove sub-finishing. Display the position of the groove on the control screen. Reposition the groove.
0x35	Groove too far back.	The distance between the rear face of the lens and the internal edge of the groove is less than 0.2 mm.	Confirm the message. Select Manual groove sub-finishing. Display the position of the groove on the control screen. Reposition the groove.
0x100	Requested job does not exist.	You have called up a job number but the corresponding job is not on the server.	Load another number.
0x101	No response from server within time limit.	You have tried to load a job but the edger has not received a signal from the server.	Check that: - The server is switched on. - The OMA cord is correctly connected to both terminals. Then load the job again.
0x102	No server connected.	The OMA cord is disconnected. OR The server is switched off.	Check that: - The server is switched on. - The OMA cord is correctly connected to both terminals. Then load the job again.
0x103	Corrupt OMA frame.	The OMA frame sent by the server displays a fault which prevents reception.	Contact a Briot technician.

#	Message title	Condition(s) for display	Action(s)
0x104	Invalid OMA frame.	The OMA frame sent by the server displays parameters which the edger does not recognise.	Contact a Briot technician.
0x300	Touch screen not detected.	When the edger is initialized, the touch screen is not detected.	Contact a Briot technician.
0x404	Safety-bevelling or grooving not possible	Safety-bevel and/or groove cannot be made.	Confirm the message. Select new parameters.
0x405	Holes removed (at least one was unfeasible). Do you want to continue?	The drilling plan includes at least one hole positioned too close to the block or too far from the edge of the lens.	YES: the lens is edged but not drilled. Then you can produce the holes with a drill. NO: the lens is not edged. Remove the lens from the edging station.
0x406	External safety-bevel will not be made. Do you want to continue?	External safety-bevel cannot be made. The lens is too thin and/or the shape is too small.	YES: the lens is edged without an external safety-bevel. NO: the lens is not edged. Remove the lens from the edging station.
0x407	Internal safety-bevel will not be made. Do you want to continue?	Internal safety-bevel cannot be made. The lens is too thin and/or the shape is too small.	YES: the lens is edged without an external safety-bevel. NO: the lens is not edged. Remove the lens from the edging station.
0x408	The groove cannot be made. Do you want to continue?	The groove cannot be made. The lens is too thin and/or the shape is too small.	YES: the lens is edged without a groove. NO: the lens is not edged. Remove the lens from the edging station.
0x409	The safety-bevels will not be made. Do you want to continue?	The safety-bevels cannot be made. The lens is too thin and/or the shape is too small.	YES: the lens is edged without the safety-bevels. NO: the lens is not edged. Remove the lens from the edging station.
0x40A	External safety-bevel and groove cannot be made. Do you want to continue?	External safety-bevel and groove cannot be made. The lens is too thin and/or the shape is too small.	YES: the lens is edged without an external safety-bevel or a groove. NO: the lens is not edged. Remove the lens from the edging station.
0x40B	Internal safety-bevel and groove cannot be made. Do you want to continue?	Internal safety-bevel and groove cannot be made. The lens is too thin and/or the shape is too small.	YES: the lens is edged without an internal safety-bevel or a groove. NO: the lens is not edged. Remove the lens from the edging station.

#	Message title	Condition(s) for display	Action(s)
0x40C	Safety-bevels and groove cannot be made. Do you want to continue?	Safety-bevels and groove cannot be made. The lens is too thin and/or the shape is too small.	YES: the lens is edged without the safety-bevels or the groove. NO: the lens is not edged. Remove the lens from the edging station.
0x40D	Lens too thick: edging impossible.	The lens thickness at the measured point is greater than 11 mm. The lens cannot be edged.	Confirm the message. Remove the lens from the edging station.
0x40E	Edging stopped: visor open.	You have opened the visor during the edging cycle.	Check the lens and remove it from the edging station. Confirm the message.
0x40F	Problem detected. Machine re-initialisation.	A problem has been detected during the cycle. The machine must restart before continuing.	Confirm the message.
0x410	Lens too small. Do you want to continue?	Lens too small or too off-centered in comparison with the shape.	YES: the lens is felt again 0.5 mm closer to the interior. It can be re-felt 3 successive times, 0.5 mm closer to the interior each time. NO: Remove the lens from the edging station.
0x411	Small adaptors fitted?	The 19 mm diameter adaptors are required for the procedure you have selected.	Confirm the message. Fit the small adaptors.
0x412	Small adaptors fitted?	The 17 mm diameter adaptors over flats are required for the procedure you have selected.	Confirm the message. Fit the small flat adaptors.
0x413	Edging impossible,radius too small	The shape is smaller than the smallest adaptor.	Confirm the message. Remove the lens from the edging station.
0x414	A feeler fault has been detected during feeling.	An irregularity has been detected during lens feeling.	Confirm the message. Restart the cycle and observe the lens feeling process: - If one of the tips is unclipped, refit it. - If not, proceed with the lens feeling adjustment.
0x415	Bevel out of lens.	The bevel is outside the lens in at least one point.	Confirm the message. Display the fault on the control screen and proceed as required.

#	Message title	Condition(s) for display	Action(s)
0x416	Retouch impossible.	You have activated the retouch control and the lens detected does not match the parameters of the lens you wish to retouch.	Confirm the message. Remove the lens fitted on the shafts. Fit the lens that you actually want to retouch.
0x41A	Lens too thin to be grooved, do you want to continue?	A thickness of less than 1 mm has been detected in at least one point of the lens.	YES: The lens is edged with rimless finishing. NO: The cycle is stopped. Remove the lens from the edging station.
0x41B	Lens too small.	Feeling carried out 3 successive times, 0.5 mm closer to the interior each time. Lens too small or too off-centered in comparison with the shape.	Confirm the message. Remove the lens from the edging station.
0x41C	Bit diameter > hole diameter. Do you want to drill?	The diameter of at least one hole is smaller than the diameter of the mill bit. But the minimum drilling diameter is equal to the bit diameter.	YES: The hole(s) will be drilled with a minimum diameter equal to that of the bit. NO: the lens is not edged. Remove the lens from the edging station.
0x506	Please remove lens to free mill bit before acknowledging this message.	A fault has occurred when the mill bit was not in its housing. The lens could be damaged.	Make sure that the machine is switched off. Free the lens from the mill bit carefully. Restart the machine.
0x508	Replacing the mill bit is recommended. Do you want to do it now?	At start-up, the machine records total drilling time greater than 1 hr. Replacing the mill bit is recommended.	YES: Replace the mill bit (see "Replacing the mill bit"). NO: You accept the risk of using a worn mill bit. The risk of chipping the lens is increased. The message is displayed at each machine startup.

#	Message title	Condition(s) for display	Action(s)
0x509	Mineral wheel dressing recommended. Do you want to do it now?	1000 mineral lenses have been edged. Dressing the mineral roughing wheel is recommended.	YES: Dress the mineral roughing wheel (see "Dressing a wheel") NO: You accept the risk of using a dirty wheel. The risk of lens size error is increased, and so is the edging time. The message is displayed at each machine startup.
0x50A	Finishing wheel dressing recommended. Do you want to do it now?	800 mineral lenses have been edged with bevel finishing. Dressing the mineral roughing wheel is recommended.	YES: Dress the mineral roughing wheel (see "Dressing a wheel") NO: You accept the risk of using a dirty wheel. The risk of lens size error is increased, and so is the edging time. The message is displayed at each machine startup.
0x902	Dressing impossible Wrong disc thickness.	The thickness of the fitted disc does not match the theoretically required thickness.	Confirm the message. Use an appropriate dressing disc.
0x903	Dressing impossible Disc diameter too small.	The volume of material to be machined is less than the minimum volume required.	Confirm the message. Use an appropriate dressing disc.
0x50C	Low voltage source	The voltage detected is less than 20% of the normal voltage.	Please contact your electricity supplier.
0x909	Adjustment impossible: Lens too small.	The diameter of the felt lens is less than 11 mm.	Confirm the message. Fit another lens 10 00 205 blocked at the centre.

6. TESTS

briot Couture

6.1. PRESENTATION OF TEST MENUS

6.1.1. PRESENTATION OF THE TEST ACCESS SCREEN

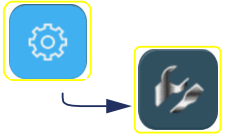
6.1.1.1. SCREEN DESCRIPTION

The test access screen is shown below:

Screen 6-1: Test access screen

*Note: *SBGD = Safety-Bevel Grooving Drilling system*

6.1.1.2. ACCESS / EXIT



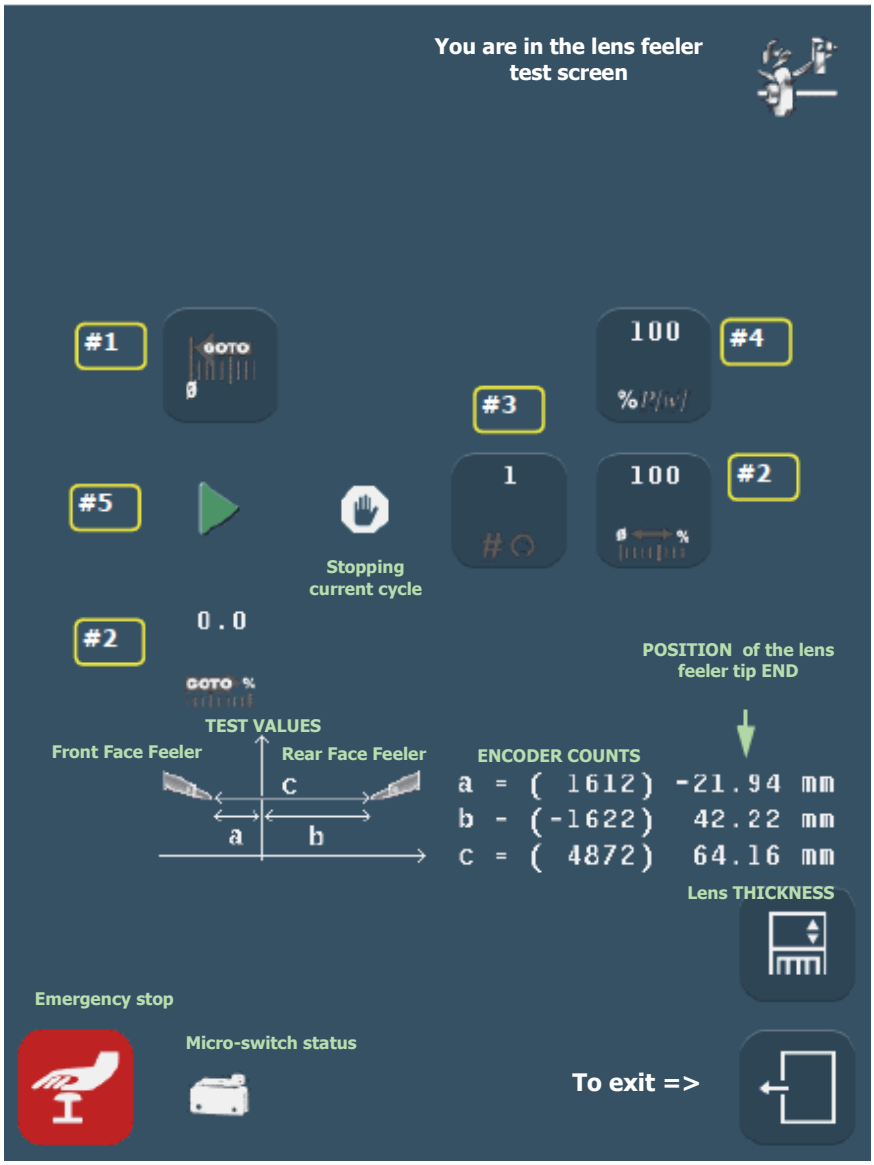
6.1.1.2.1. TO ACCESS THE SCREEN

6.1.1.2.2. TO EXIT THE SCREEN

x 2

6.1.2. TYPICAL TEST SCREEN

The following screen (lens feeling test) is typical of most tests ("Operating principle"):



6.2. OPERATING PRINCIPLE

6.2.1. OPERATING PRINCIPLE OF A TYPICAL SCREEN

6.2.1.1. TESTS INVOLVED

The following test screens operate on the same principle:

- Lens feeling
- Lifting jack movement
- Wheel unit translation movement
- Lens rotation
- SBGD exit/return
- Visor Opening/closing
- Wheel rotation
- Opening/closing of lens clamp shaft

6.2.1.2. PROCEDURE

The operating principle is as follows:

#1		**Initialise the movement [mandatory].**
#2		**Enter a percentage of "one-way" movement.**
OR		
#2		**Enter a percentage of "round-trip" movement.**
#3		**Enter the number of cycles to be completed.**
#4		**Enter a power percentage.**
#5		**Start the test.**

Flow chart 6-1: Operating principle of a typical test screen

6.2.1.3. TEST SEQUENCE

> Tests must be undertaken in a logical sequence.
> The tests which appear grayed cannot be carried out so long as the previous accessible test has not been started.

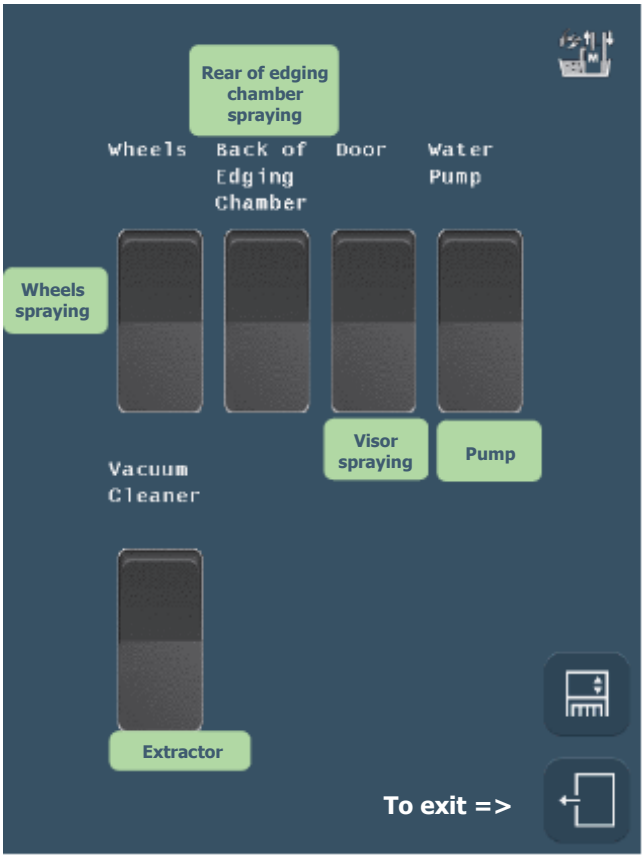
Example: The lens rotation test cannot be undertaken if the lens feelers, lifting jack movement and wheel unit translation movement tests have not already been carried out.

6.2.2. OPERATION OF THE OTHER SCREENS

6.2.2.1. SCREEN WITH SWITCH

6.2.2.1.1. PRESENTATION

The following screen corresponds to the solenoid valve, pump and extractor tests:



Screen 6-2: Test screen with switch

6.2.2.1.2. PROCEDURE

⇒ To start the test, press the switch of the element you wish to test.
⇒ Observe the test.
⇒ To stop the test, press the switch again.

6.2.2.2. SCREEN WITH MICRO-SWITCHES AND PHOTOCELLS

6.2.2.2.1. PRESENTATION

The following screen corresponds to the test screen for all micro-switches and photocells:

Screen 6-3: Test of micro-switches and photocells

6.2.2.2.2. PROCEDURE

⇒ Manually operate the micro-switch or photocell of the element you wish to test.

⇒ Observe the status of the micro-switch or photocell on the screen.

7. TECHNICAL SPECIFICATIONS

briot Couture

7.1. CHARACTERISTICS

> Automatic initialization
> Feeling front & rear lens faces in 3 dimensions
> Equipment:

BRIOT COUTURE (all materials)

Mineral roughing wheel

Roughing wheel for all plastics (CR39, high index, polycarbonate, Tribrid, Trivex™)

Chamfering - bevel - rimless finishing wheel

Rimless polishing wheel.

BRIOT COUTURE (all plastics)

Roughing wheel for all plastics (CR39, high index, polycarbonate, Tribrid, Trivex™)

Chamfering - bevel - rimless finishing wheel

Bevel/rimless polishing wheel.

> Automatic clamping pressure
> Automatic edging pressure adjusted according to material to be edged
> Lens grooving
> Drilling wide choice of holes:

Through holes

Non-through holes

Couterbored hole

Notches

Elongated holes.

Rectangular

Round

> Drilling at variable angles:

Parallel to the lens clamping shaft and lens holder shaft

Normal to front face

Normal to rear face

Normal to base

> Smart Design function
> Safety-beveling of front and/or rear faces of the lens
> Connection for pump if operating in closed water circuit
> Edging diameter

Lens diameter <= 80 mm

If machine equipped with BRIOT adapters:

Rimless (without safety-bevel) = 17 mm

Bevel (without safety-bevel) = 18.6 mm

Grooving (without safety-bevel) = 17 mm + twice the groove depth (If depth = 0.6 mm then D =18.20 mm)

Safety-bevel = 21 mm

Machine equipped with WECO adapters:

Rimless (without safety-bevel) = 17.75 mm

Bevel (without safety-bevel) = 19.5 mm

Grooving (without safety-bevel) = 17.3 mm + twice the groove depth (If depth = 0.6 mm then D =18.50 mm)

If finish with bevel, safety-bevel >= 22.9 mm

If finish with bevel, safety-bevel >= 21.3 mm

BRIOT COUTURE (all materials):

Chamfering >= 19.95mm + (2 x height of chamfer)

BRIOT COUTURE (all plastics):

Chamfering >= 20.95mm + (2 x height of chamfer)

- Automatic cleaning of shafts and edging station
- Edging statistics
- Personalized machine configuration
- Network connection
- Option to extract air and emitted dust.

7.2. TECHNICAL SPECIFICATIONS

7.2.1. BRIOT COUTURE

Θ GENERAL

> Designed for internal use
> Dimensions

Width = **510 mm**

Depth = **615 mm**

Height = **570 mm**

> Weight = **69 kg**
> **Pump** section outlet; Power available (for the pump) = **450 W**
> Maximum water pressure = **2 to 7 bars (pH 7 - 7.5)**
> Controls/mains insulation stepped up
> Noise level = **66 dB**
> Degree of pollution = **2**
> Installation category = **II**
> Ambient temperature = **13° C to 35° C**
> Relative humidity = **10% to 80%**
> Maximum elevation = **2000 m**
> **IP 20**
> Meets CE directives

Θ 230 V - 50 Hz OR 60 Hz EDGER

> Input voltage = **230 V +/-10%**
> Power consumption = **8 A**
> Electric power = **1800 W**
> Fuses

F3 = **3.15 AT** Littelfuse 2183-15
F4 and F5 = **3.15 AT** Littelfuse 2183-15
F6 = **8 AT** Littelfuse 218008

Θ 120 V - 60 Hz EDGER

> Input voltage = **120 V +/-10%**
> Power consumption = **15 A**
> Electric power = **1800 W**
> Fuses

F3 = **5 AT** Ferraz 250 V 5ST 5x20
F4 and F5 = **5 AT** Ferraz 250 V 5ST 5x20
F6 = **8 AT** Littelfuse 218008

> ETL marking for 120 V - 60 Hz version:

⇒ UL 61010 - 1

⇒ CAN/CSA C22.2 No. 61010 - 1

THE MANUFACTURER CANNOT BE HELD RESPONSIBLE FOR DAMAGE CAUSED BY ANY USE OF THE MACHINE WHICH DOES NOT COMPLY WITH THE INSTRUCTIONS IN THIS MANUAL OR DISPLAYED ON THE MACHINE ITSELF.

VISIONIX

INNOVATION TO UNLOCK YOUR POTENTIAL

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