

# *Quality Policy Statement*

Lexus SoftMac™ is ISO 9001:2000 Company

*We, at “Lexus SoftMac”,  
make our Quality so special, So Valuable to our Customers,  
so Important to their Success,  
that our Products become their only Real Value Choice.*

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CEO

Date: 01.02.05

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# WELCOME





Get ready for a whole new experience.

Lexus Roundist Faceting a completely fresh, new look and it's easier than ever to use.



This booklet explains how to get your Lexus Roundist Faceting set up and where to turn for help, so you can enjoy the most intuitive Analysis System yet for Real gem quality Diamonds.

Let's get started!


## SPECIFICATIONS

 Weight	: 28 Kgs.
 Dimension	: 400(L) x 380(W) x 500(H)mm
 Supply	: 440 VAC , 50 HZ , 3 Phase
 Load	: 1 kVA

## STANDARD ACCESSORIES

 Dia Set (2+1)	- 10 Set
 Dia Spanner	- 1No.

## EXTRA ACCESSORIES

 Wheel Spanner
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# BENEFITS

- Completely Automatic polishing of Facets of equal sizes.
  - Maximum accuracy in Facet division. Thanks to zero backlash system.
  - Polishing of Facets and roundness of a very high standard.
  - Easily selectable program.
  - Digital display of the status, keeps the operator well informed.
  - Ergonomically designed controls, avoids operator's fatigue.
  - Great saving by eliminating skilled manpower requirement.
  - Single operator can handle up to 5 machines.
  - Modular construction, for quicker trouble shooting and easy maintenance.
  - Faster return on your investment.
- Plus all the advantages of LEXUS TECHNICAL SUPPORT.

## REVOLUTIONARY DESIGN WITH STATE OF THE ART TECHNOLOGY.

- Finishes the girdle of round brilliant in CON -> continuous Mode like a Roundist Machine, while it is being held between pots.
- Can Polish 32 / 64 / 80 /100 /128 /160/200/256 facets on girdle of Sawable sawn goods.
- Fully Automatic control sequence with Auto-Stop Function and Job Over Indication.

**Automatic Polishing of facets of equal sizes, plus the advantages of a normal Roundist machine. Ideal facet quality for Sawn goods.**

## INSTALLATION AND WIRING



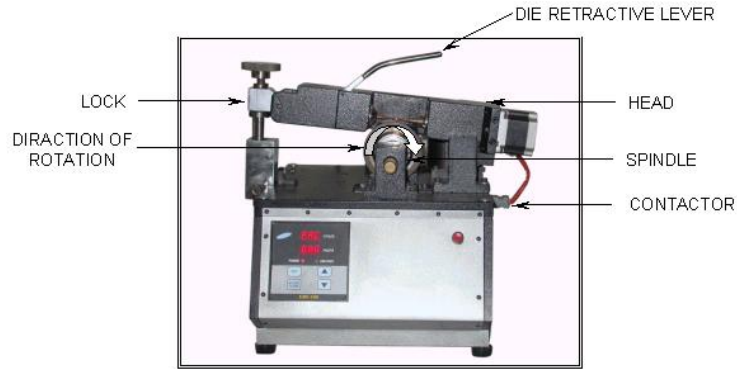
Main Switch

Connect 3 Phase, 480 Volts 3 wires system for spindle Motor. Please provide a MCB Switch before the 3 Phase Mains supply. This will trip this MCB in event of any problematic / short circuit condition.

Connect provided Single Phase cable as shown in the figure. Switch on the Mains switch. The spindle will rotate. If head is up, in parked position, lower the head.

The wheel should rotate in clockwise direction when viewed from front. If direction is not correct, Disconnect the 3 Phase supply and switch off the power supply and swap two of the phases of the 3 Phase supply at the terminal connector restart the machine.

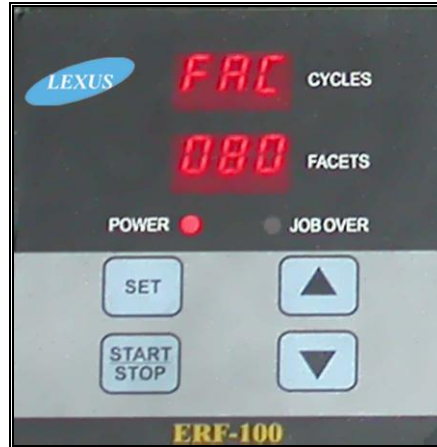
## FIXING DIE POTS AND ADJUSTING THE DIAMOND



1. Bring it to park position. Away from the Spindle
2. Fix the die pots in pot spindle. Die pot with hole at right and pin without hole at left, while retracting the left sliding spindle depressing the retracting lever. The die pot size should be around 60 % of diamond diameter.
3. Hold the diamond between these die pot and pin with culet at the right.
4. Lower the head arm and latch it in lock. This will switch on the wheel spindle.
5. Program the number of facet or put the spindle in continuous mode (See how to do the programming) and press "START" This will switch on the machine with a reciprocating movement of the wheel.
6. Lower the head till the diamond is still close of the wheel.
7. The diamond pot spindle will start rotating. Lower the arm till makes smooth contact with the wheel.

You can reset the number of counts which has been lapsed in this process of setting the diamond to touch the wheel. by pressing the Up arrow . You don't have to switch off the machine by pressing Start / Stop Switch to reset this count. This function can be called as reset the count without stopping the process mode. So just press Up arrow after you have correctly set the diamond to touch the wheel.

# PROGRAMMING SEQUENCE



## How to set the Number of cycles / Process?

- Power on the system and check for the corresponding LED to glow.
- Press 'SET' key once in order to enter the required number of cycles. The first row of display indicates 'CYC' and the other display no. of cycles which blinks intermittently. Using ▲ or ▼ keys enter the required value. The maximum cycle value that can be entered is '999' through the bottom display.
- Number of cycles will decrement every time the facet will reach from its 32..31...0 facet. So for Facet mode select the number of cycles from 1-5 depending upon your need.
- For continuous mode the number of cycles will decrement every time one stroke is taken. So in continuous mode number of cycles needed should be more i.e 10 to 100 ( Depending upon your own choice)

## How to set or Program number of Facets?

On pressing 'SET' key again, first display indicates 'FAC' and other displays Facet value which blinks intermittently. Using ▲ or ▼ keys enter the required value. On every press of ▲ or ▼ keys, the value increments/ decrements in steps of 32, 64, 80, 100, 128, 160, 200, 256 and 'Con'. At this stage, if ▲ or ▼ keys are pressed, the Facet value starts from 256 or 32 respectively.

## How to select continuous polishing mode (Conventional Roundist Mode)?

- Select the Cycles setting mode. Display indicates 'Cyc' and using the ▲ or ▼ keys to set the required cycles anywhere between 1-999. The number of strokes will be counted by the system. So depending upon this cycles set the Machine will work for that many cycles. Say you have selected 10 Cycles then the Machine will start with 10...9..8...7...0. Select the Facets setting mode. Display indicates 'FAC' and using the ▼ key go to the last 'Con' display. Press 'START/ STOP' key to select the continuous mode. If Start push button is pressed to start the polishing, controller works in continuous mode. Top display indicates the set cycles and bottom display indicates the left-out cycles.

## How to reset the cycle count?

- To restart with a fresh cycle, press 'START/ STOP' key or External Start/ Stop Key to start.
- Whenever the optical switch is interrupted
  1. Depending on the selected facets, stepper moves as per the *Facets Vs Stepper pulses Table*.
  2. Facet count is decremented from 032 to 031.
  3. Controller will check whether facet count is zero so that cycle count can be decremented to indicate the remaining cycles.
- When the cycle count reaches zero (Job is completed)
  1. Stepper motor stops
  2. Spindle AC motor stops
  3. Synchronous AC motor stops
  4. 'Job' on top display and 'Ovr' on the bottom display is indicated to mark the job completion. Buzzer beeps Continuously for 3 seconds.

