Step Preview:

Turn on machine.

Initialize system.

Check/change the blade.

Set the recipe in device data.

Choose manual operation and then cutting semi-Auto.

Align the channel.

Choose the first line to be cut.

Check the parameters.

Start the cut.

Change channel.

Repeat
1 | **LOG IN!!!**

Check the blade!!!

Check the rotametter on the back side of the machine - it should be above 1.8 lit/min.

Check that the exhaust is working

2 | Turn on the machine by turning the key clockwise in two steps. The first step to “on” position and then to “start” position. The green light will turn on and this indicates that the machine is on.

3 | Welcome screen

Press to initialize the system

The square in the upper left corner of the button will turn blue.
4

The info bar will say “Initialization completed”
Check the installed blade (if you want to change the blade call Youry @ 0523836163)
Press “Device Data”

5

Device data
Find your recipe (folder and recipe name) choose it and press ENTER to approve.
Or go back to main menu by pressing EXIT.
More info about each field in appendix B.

Yellow background indicates non saved fields. To update the changed fields press “Enter”. When the recipe is updated press “Exit” until you return to the welcome screen.

Place your sample on a mounting ring then open the cover and place it on the chuck—make sure not to harm the chuck! It is extremely delicate!
Press C/T Vacuum button to activate the vacuum. The square in the upper left corner of the button will turn blue. Make sure that the vacuum level is over 85 kPa. Otherwise an error may interfere your process. Press “Manual Operation” to enter the manual operation menu.

9

Press “Cutting semi auto” button to cut your sample manually.
10. Check these values and press manual alignment (F4)

11. Toggle between high and low magnification (F10), change the light conditions by pressing
Adjust the focus by pressing and holding the Focus button (F8), to define first alignment point on the left side of the substrate and press align (F5)

12. The chuck will rapidly move to the right side of the substrate. The info bar says “select a target for theta adjustment, and press F5 button”.
Find the second alignment point on the right side of the substrate and define it by pressing align (F5)
13 The microscope will move to the first point across the line you defined. You can correct the alignment if necessary. The info bar will say “theta adjustment is completed”. **DO NOT PRESS ENTER OR EXIT!!!**

Note that you made the alignment at the right Channel!

14 Before starting the job you need to define the first line to be cut (and it is highly recommended to check the indexes) press the “direct” button. It will become violet.

15 Press measure
16 Measure to define first cut line. Toggle between high and low magnification. You can reset the coordinates using “Clear to 0” button.  
Note that “Clear to 0” works only for either high or low magnification, but not both!

17 Check cut lines by indexes using the IDX buttons. Press and then . To move by indexes press  
When you checked the cut lines by indexes and you are centered on the first cut line go back to the cutting screen by pressing “Exit”  
Approve the first cut line by pressing “Enter”
18 Start cut – check all the **parameters** again, choose the cut direction (rear/front) and press Start. If you made a mistake and you want to stop the work press the “Z-EM” button, it will elevate the blade and you can restart the job after corrections. If you want to check the cut lines you can pause the job by pressing “Pause” and resume by pressing “Start”.

19 Check the water pressure. Both rotameters should show approximately 1.5 L/min.

20 When the first channel dicing is done, you can continue to the next channel using the index button by pressing . Make sure that the Channel says “CH2”. **step 10** and execute the manual alignment (it is exactly 90 deg to CH1 – but the procedure is necessary in order to define the first cut line).
<table>
<thead>
<tr>
<th></th>
<th>When you finished cutting all the channels, go back to main menu by pressing “EXIT” several times. In order to release the wafer from the chuck press the C/T vacuum button the square will become gray and the chuck will move to its initial position. You can now open the cover and carefully pick up the mounding ring and release your sample. Close the cover and turn off the machine by turning the key to “OFF” position.</th>
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<td><strong>When finished Log off and DON’T FORGET to dry the chamber</strong></td>
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