CDI CRYSTAL TOUCH 18.2

USER MANUAL

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ESKO

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Introduction

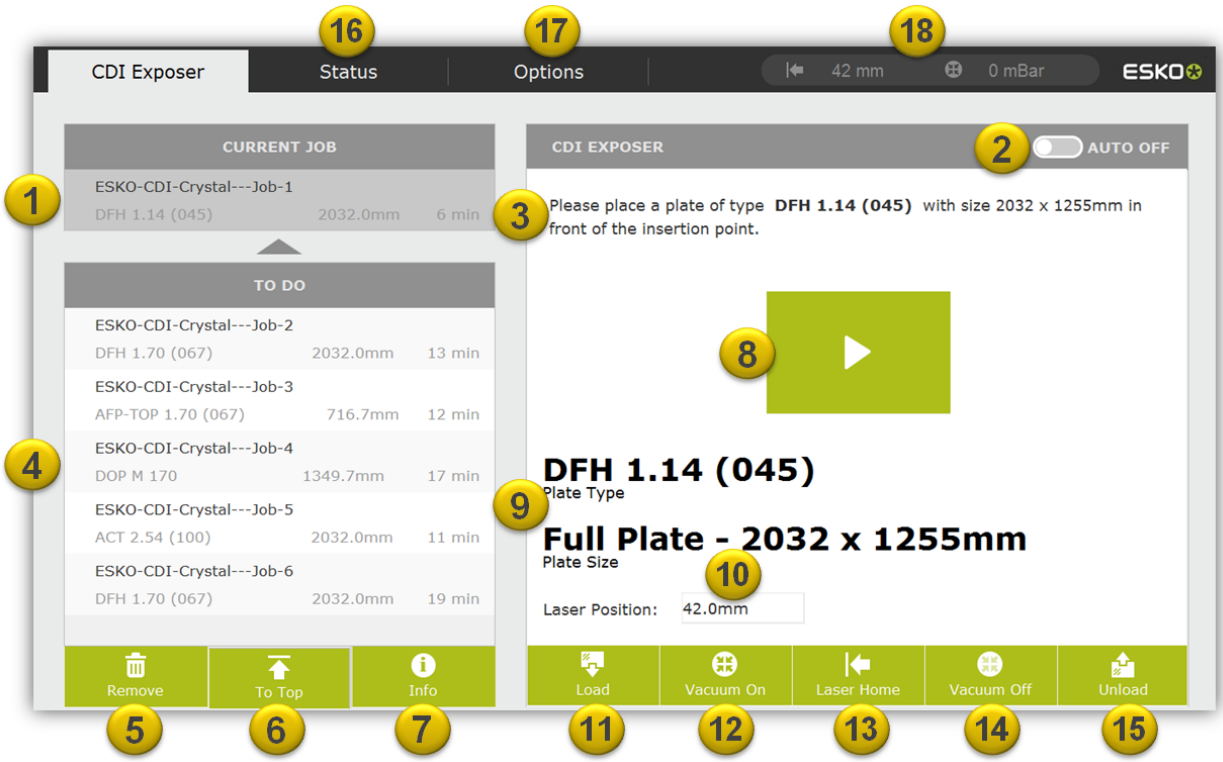
"CDI Crystal Touch" is a new user interface for touch-sensitive screens. The user interface is intentionally kept simple.

This software is used to start jobs. Furthermore, simple tasks such as focus search and the "Step-Test" for Pixel+ exposure can be performed.

The queuing of new jobs and the changing of plate parameters are performed from a PlatePrep or a Digital Flexo Suite or the Device Manager.

The user interface

The software starts in the "Expose" view. Here, one can find the exposure jobs and the operating elements used to start a job and to position the laser:



"Current Job" (1) is the current job. Instructions on which plate to install are shown in the *"CDI Exposer"* (3). The subsequent jobs are listed under "To Do" (4).

Switching from *"AUTO OFF"* to *"AUTO ON"* (2) automatically draws in the Flexo plate, exposes it and moves it back onto the loading table. The manual controls are hidden. The *"Laser Start"* position (36) must be set in the properties *"Preferences"* (28).

Once a job is selected by tapping it, it can be deleted (5) or moved up (6). A summary of the job can be opened by using the I-button (7).

Jobs are started by using the Start button (8). All information about the Flexo plate is displayed under 9. If required, the start position (10) can be modified.

The Home button (13) drives the laser to a previously specified position. This can be changed in Options (17). The vacuum is switched on and off with the *"Vacuum ON"* (12) and *"Vacuum Off"* (14) buttons.

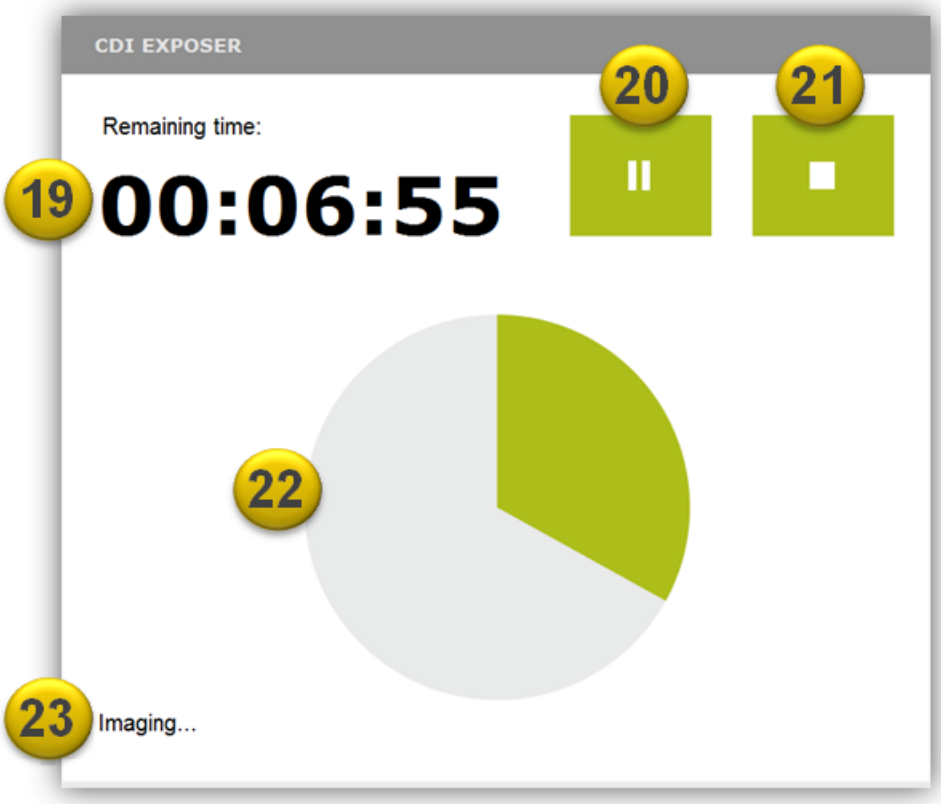
A plate is automatically loaded and unloaded with *"Load"* (11) and *"Unload"* (15).

The position and current vacuum (18) are displayed in the top status bar.

"Status" (16) will open a new window which shows the machine status.

In Options (17), the basic settings of the machine can be changed and focus search and the Step-Test for Pixel+ settings can be started. Furthermore, the Esko-Teamviewer can be started here, if required.

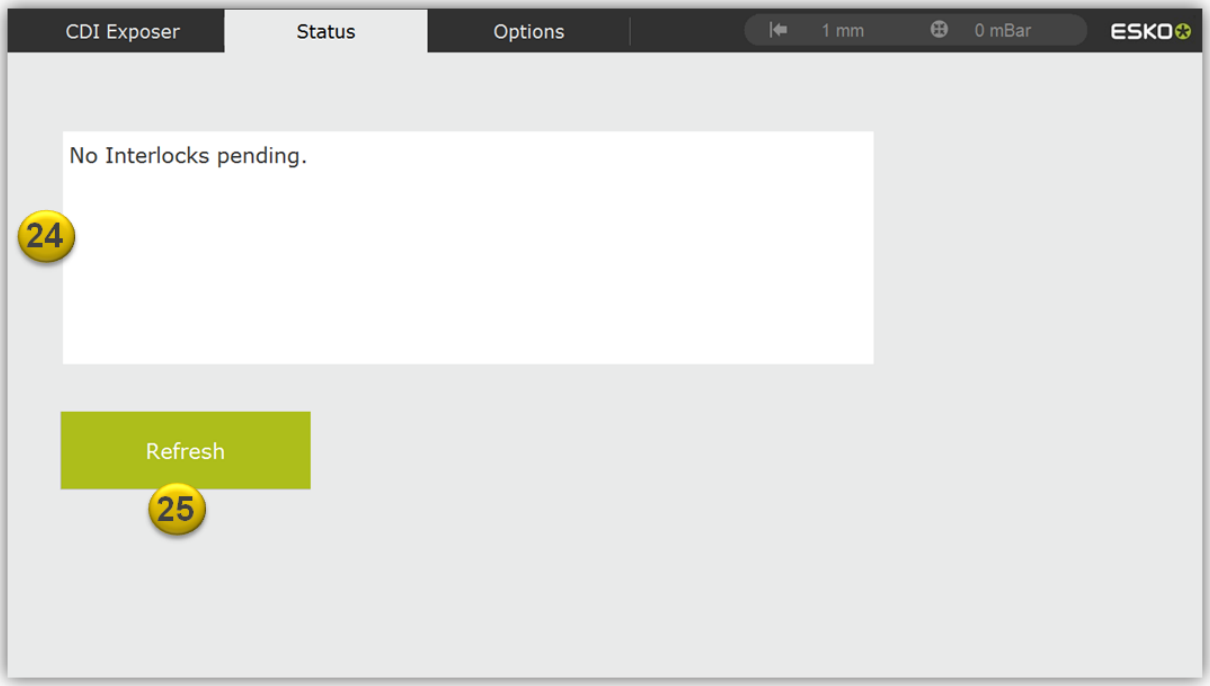
The "CDI Exposer" display will switch to a progress indicator after start-up (8):



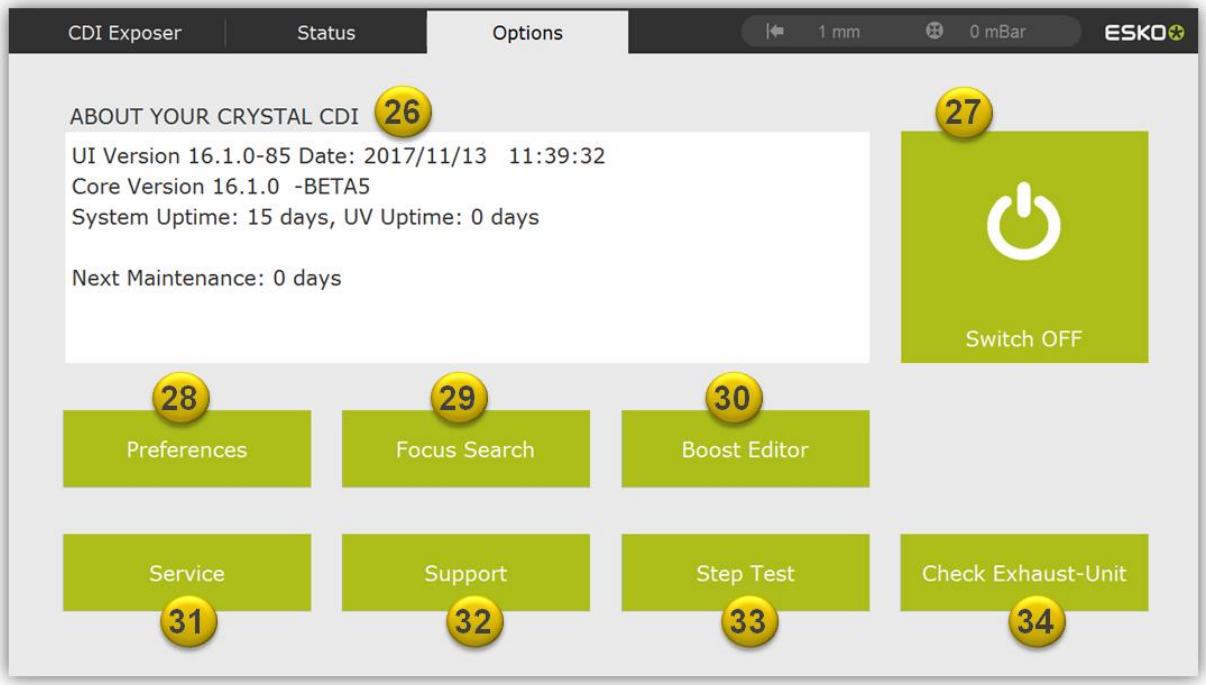
The remaining time (19) is displayed, along with a graphical representation of the progress (22). The exposure can be paused with 20 or stopped with 21. The executed action (23) is displayed at the bottom left, e.g. load - expose or unload.

Machine status display

The machine status is shown under *"Status"*. In the event of an error, this display will blink in red. Once the error (24) has been corrected, it must be reset by using *"Refresh"* (25).



Options



In Options, *"About your ..."* (26) shows information such as software version and upcoming maintenance times.

Before shutting down the CDI, the software should be closed and the operating system shut down (27).

"Preferences" (28) opens a new window in which the language, the *"Home"* position and the units can be set.

"Focus Search" (29) starts the function of the same name. Using the *"Boost Editor"* (30), Pixel+ parameters can be set for various plate types and plate families. The *"Service"* window (31) is password-protected as its use is reserved for Esko Service personnel.

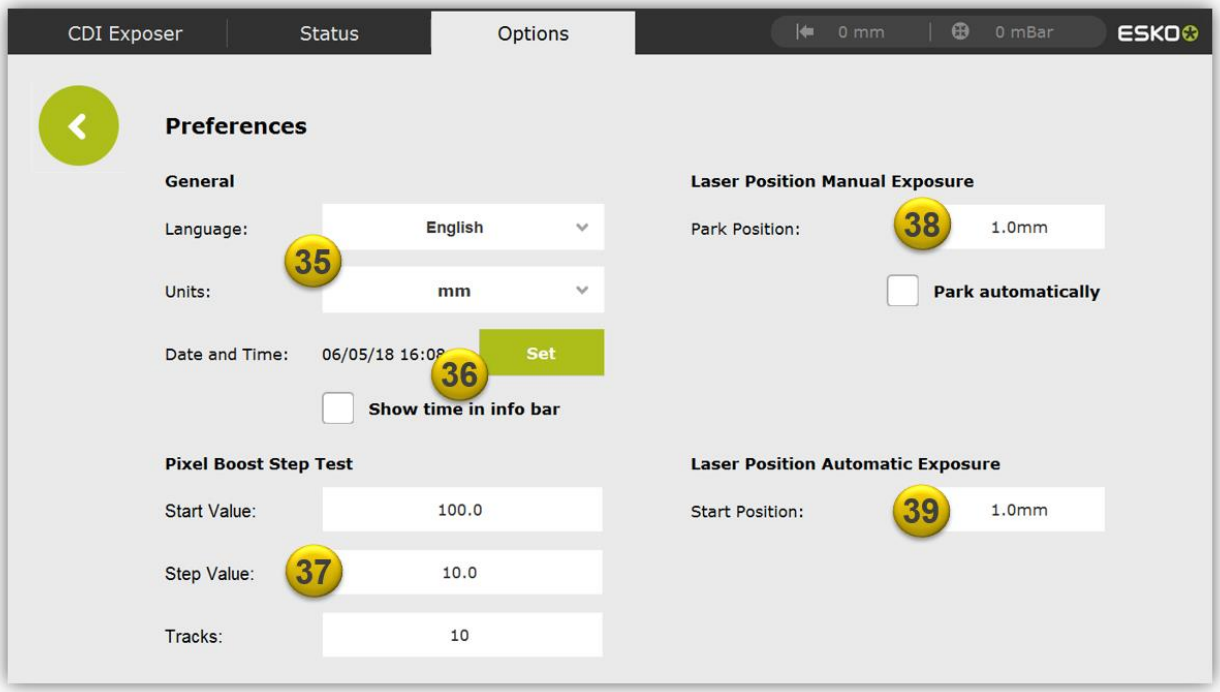
In the event of issues, the Esko service will request the Teamviewer credentials. These can be found by using the "Support" button (26). The CDI must have Internet access to do so.

The *"Step Test"* (33) will generate a test job from the topmost job in order to be able to determine the Pixel+ parameters. The topmost job must have been sent with Pixel+. The plate is measured using a densitometer and the desired Pixel Boost value is entered with the *"Boost Editor"* (30).

The exhaust system can be tested with the *"Check Exhaust-Unit"* button (34).

Changing basic settings

The basic settings of the UV exposer are adjusted in the *"Preferences"* window (28).



You can select the display language using "Language" (35). This is only available after the machine has been restarted.

You can switch between "mm" and "inch" using the "Unit" point (35).

Under "Date and Time", you can adjust the date and time of the operating system using "Set" (36). If you want the time to be constantly displayed, you should activate the "Show time in info bar" option (36).

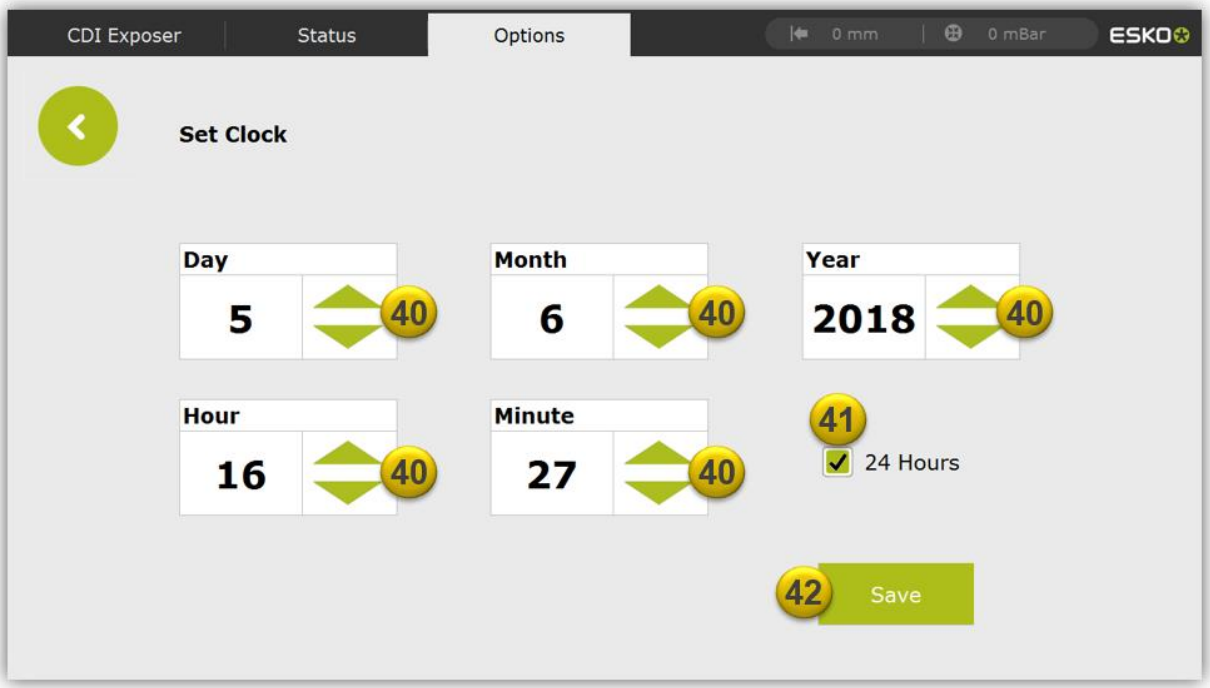
"Step Test" (37) is used to adjust the values for the Pixel Boost Step-Test.

The automatic return to the *"Park"* position at the end of an exposure is activated by using the "Park automatically" function (38). The position can be adjusted in the "Park Position" field (38).

A start position is required for automatic start-up. This is adjusted in the "Start Position" field (39). It should be adjusted so that the imaging starts approx. 5mm after the plate edge.

Adjusting the date and time

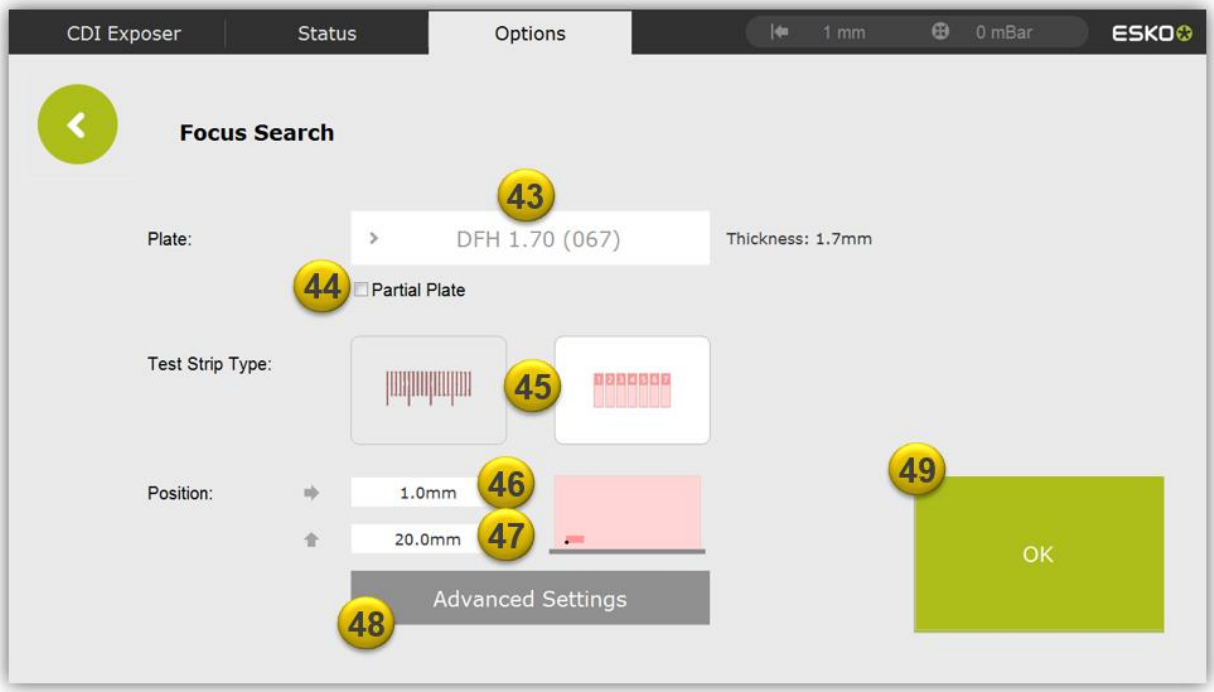
In the *"Preferences"* window (28) you can adjust the date and time of the operating system using "Set" (36).



The values can be changed using the arrow keys (40). The "24 Hours" option (41) is activated for 24-hour format. The settings are saved using "Save" (42).

Focus Search

The *"Focus Search"* button (29) opens a new window, in which the parameters and plate type of the focus search are selected:



The plate type is shown behind *"Plate:"* (43). Pushing *"Plate"* (43) will show the available plate types, from which one is then selected.

For partial plates, the *"Partial Plate"* option (44) must be activated, as these require that the RPMs be limited and the vacuum of the drum won't be monitored.

The type of focus search is selected with *"Test Stripe Type"* (45). The left selection uses the regular focus search, in which lines are exposed. The thinnest line represents the focus. The right-hand selection will expose seven test strips with Pixel Boost. The field with the lowest density has the best focus.

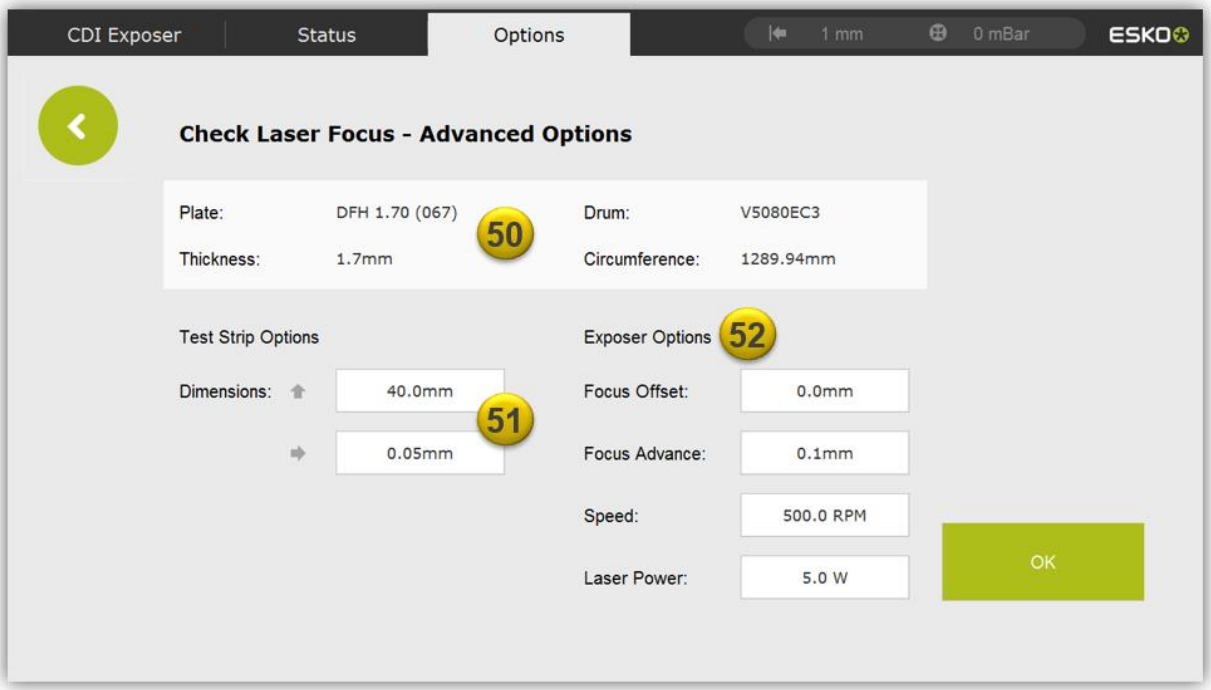
"Position:" is where the start position of the laser (46) and the circumferential position of the plate (47) are shown. The values can be changed by tapping these fields.

"Advanced Settings" (48) will open another window, offering even more parameters for the focus search which can be adjusted.

"OK" (49) creates a new *"Focus search"* job at the top of the job list.

Advanced settings

If *"Advanced Settings"* (48) has been tapped, a new window with various focus search parameters will be shown:



The currently selected plate and drum are shown at the top (50).

With regular focus search, the lines found under *"Dimensions"* (51) can be used to adjust the height and the distance between the lines.

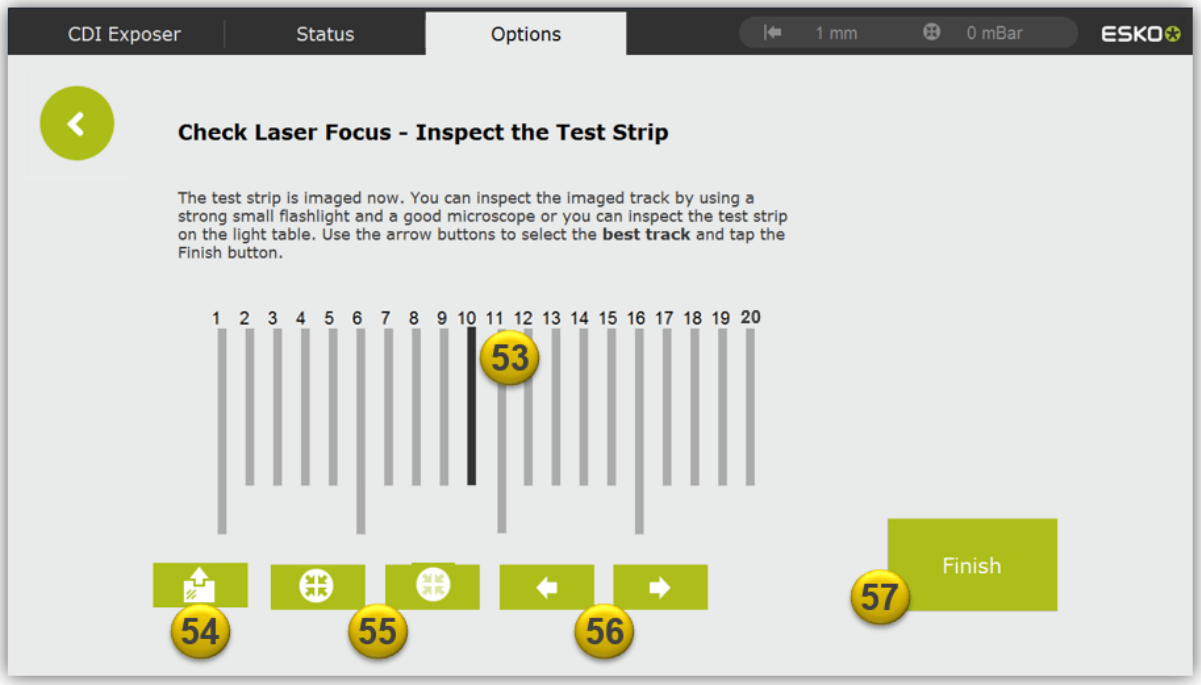
The start value of the focus search can be adjusted in the *"Exposer Options"* (52) under *"Focus Offset:"*. For each exposed line the focus will be changed. The focus distance between each line can be modified under *"Focus Advance:"*.

"Speed" changes the speed of the exposure. It must be noted that for partial plates, this speed value must not exceed the permissible partial plate speed. Excessive RPMs will cause errors.

The output power of the laser is adjusted under *"Laser Power"*. Normally, these values won't have to be adjusted.

Evaluation of the regular focus search

In the regular focus search, lines with different foci are being exposed. Once exposure has concluded, a new window will open showing the best focus:



The thinnest line on the plate is not always the one being selected (53).

ATTENTION: Some microscopes show a mirrored image!

The plate can be taken off the drum for evaluation (51). The vacuum is switched on and off by using the Vacuum buttons (55).

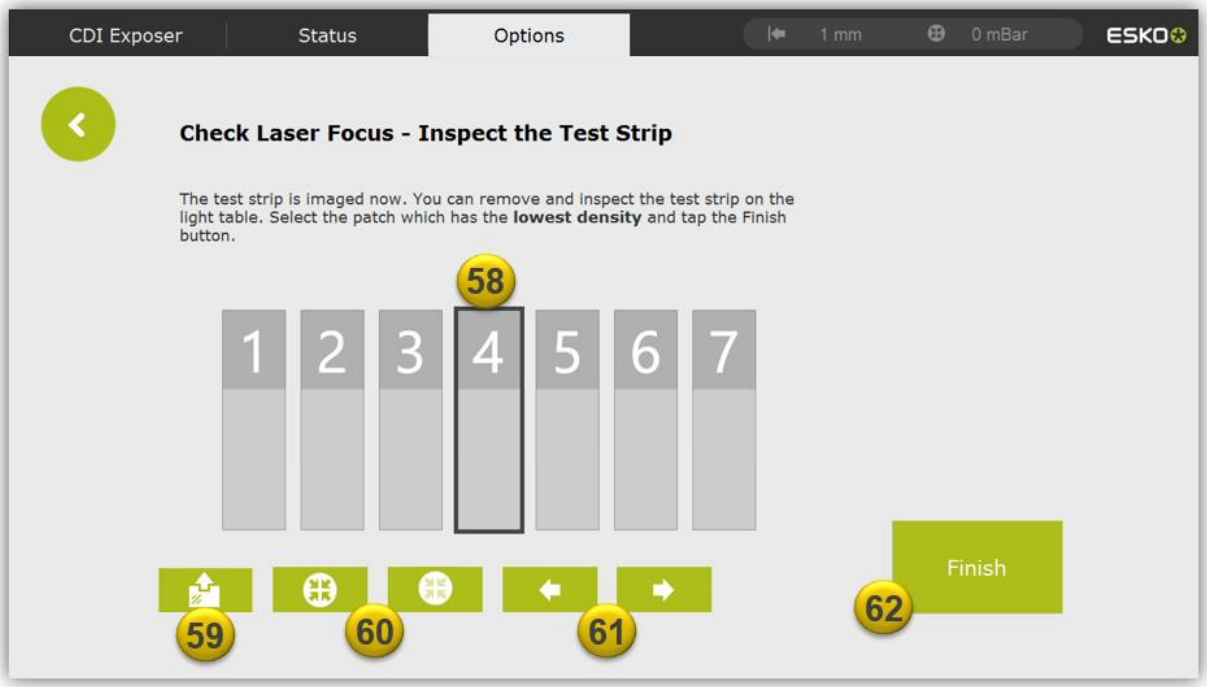
The black line below the numbers (53) indicates the current selection. It can be changed by using the left-right buttons (56), in order to select the thinnest line.

Line number 10 is the current focus!

"Finish" (57) ends the selection process and the focus is saved.

Evaluating the Pixel-Boost focus search

The Pixel-Boost focus search exposes seven test fields:



To identify the focus, the plate is taken off the drum (59). The vacuum is switched on and off by using the buttons (60). The fields are measures using a densitometer.

The field with the lowest density is selected on the display (61) using the left-right buttons (58) and the new focus is saved using *"Finish"* (62).

Field number 4 is the current focus!

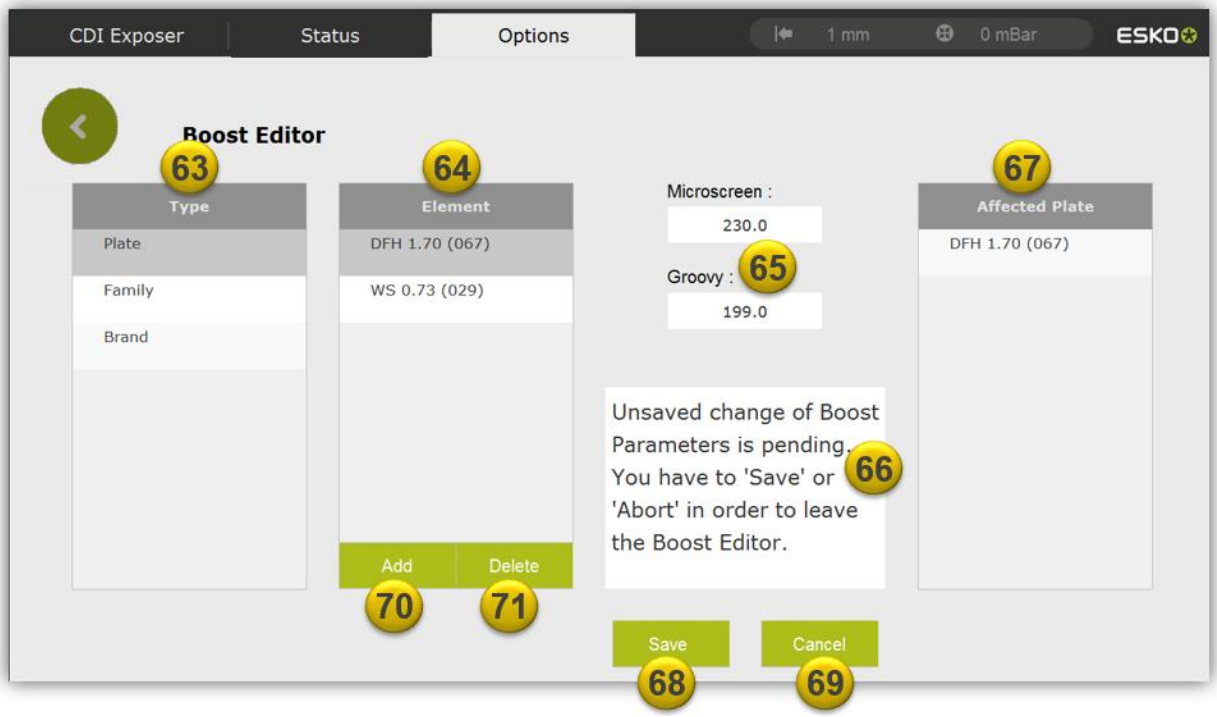
Adjusting the Pixel-Boost parameters

The *"Pixel-Boost"* parameters must be set and tested for each plate.

First, the desired test job is lined up in the CDI Exposer. This job must be sent with the *"Pixel+"* option activated.

The job is converted into a *"Step-Test"* with the *"Step-Test"* (33) function found under *"Options"*. The same image is repeatedly produced but with different "Pixel-Boost" values.

Later on, it will be determined which *"Pixel Boost"* value delivers the desired results. This value can now be entered in the *"Pixel Boost Editor"* (30).



The Pixel Boost values can be assigned to a certain plate type *"Plate"*, a plate family *"Family"* or to the plate manufacturer *"Brand"*. This must be selected in the *"Type"* field (63) before changing or adding values.

The desired plate, family or manufacturer is selected under *"Element"* (64) in order to change the *"Microscreen"* or *"Groovy"* Pixel Boost values (65).

A corresponding help text (66) is displayed for every action. The plates affected by this change are displayed under "Affected Plate" (67).

All changes are saved with *"Save"* (68), all changes are rejected with *"Cancel"* (69). The Boost Editor is closed in both cases.

Plates, families or manufacturers are added with the "Add" button (70). The default values are entered, which can then be changed. A previously selected entry can be deleted with the *"Delete"* button (71).

Only active plates with Pixel+ are displayed on adding!

The back button is only available when nothing has been changed.

All changes in *"Boost Editor"* are applied on the next exposure job.