



*Availability

...**Studio versions**: have the new full functionality including the two full automatics and the scalable dialogue.

...**Ai-, ...DCPro-, ...HDR versions**: Offer the complete descreening dialogue with preview, manual selection and automatic screen-detection. The fully automatic functions are not included.

...**SEPlus versions**: offer the scalable descreening dialogue, without preview but with manual screen input and also contains the two automatic descreening options.

...**SE versions**: contain the new descreening, the descreening dialogue without preview, but with manual screen input. The two fully automated functions are not available.

6.3 De-screening an image*

From Version 6.4.2r4 onwards, *SilverFast** uses a completely new descreening in order to remove any screen dots from printed images.



Image taken from a magazine, enlarged 300%

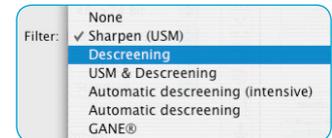
Left: normal Scan without descreening. The moiré on the print is clearly visible...

Right: Scan with descreening. The moiré is completely removed.

Adjusting the Frame of the Image*

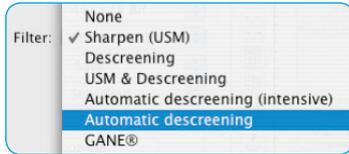
To activate *SilverFast*'s descreening, select one* of the menu points* from the filter menu, located within the frame palette:

- Automatic descreening
- Automatic descreening (intensive)
- Descreening
- USM & Descreening



The newly developed descreening in *SilverFast* is able to detect the actual screen of the image automatically.

“Automatic descreening” and “Automatic descreening (intensive)” are fully automated and are available without any further dialogues. In case “Descreening” or USM & Descreening” is selected, a sub-menu will appear, within which more individual parameters may be set.



Automatic Descreening

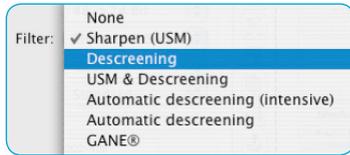
This function launches a fully automated descreening of the image. No more dialogues or menus are necessary. The “Automatic descreening” is recommended for medium and fine screens. The result is only visible after the final scan and is not displayed in *SilverFast*’s preview window.



Please note that the image to be descreened consist of enough image elements and not only textures and graphics.

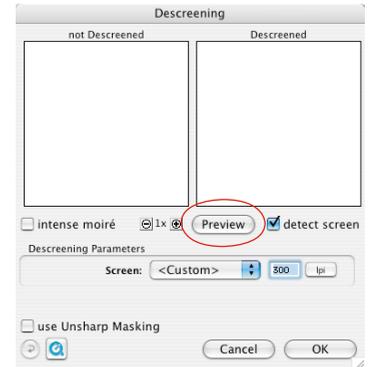
Automatic Descreening (intensive)

The “Automatic descreening (intensive)” function operates like the “Automatic descreening” function, but in addition uses a specialized calculation algorithm. This selection is recommended for cruder screens and low screen width. The intensive descreening needs more system resources and is more time intensive. The result will only be visible in the final scan and not in *SilverFast*’s large preview window.



Descreening

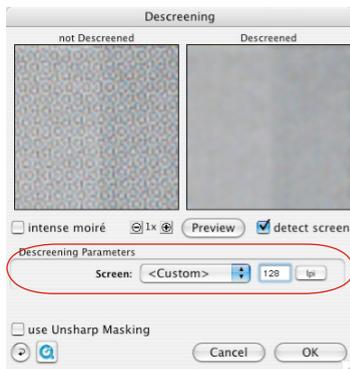
This dialogue allows an automatic and manually adjustable descreening. In order to judge the quality of the descreening, a "before-after" view is available. Here, a freely sizable 100% view of the image is shown.



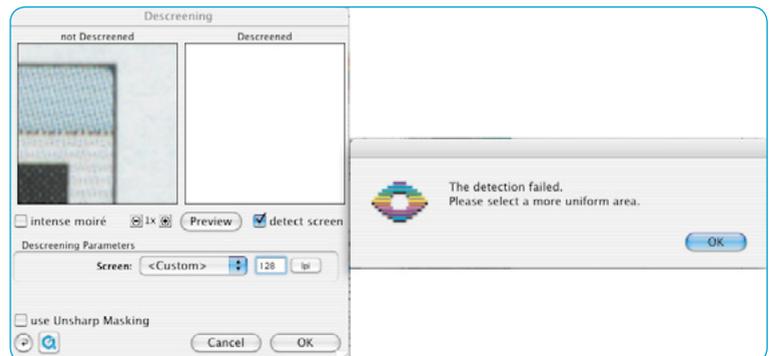
In order to generate a preview, simply click the "Preview" button within the opened dialogue. The mouse pointer changes to a square, with which a homogenous part with medium brightness of the image should be chosen and clicked. The scan starts immediately.

The previously activated input field "detect screen" ensures that the correct screen is calculated automatically.

The result of the descreening is displayed after the end of the final scan in the "After" window. Simultaneously, the detected screen is displayed in numerical values in the "Descreening Parameters" window.

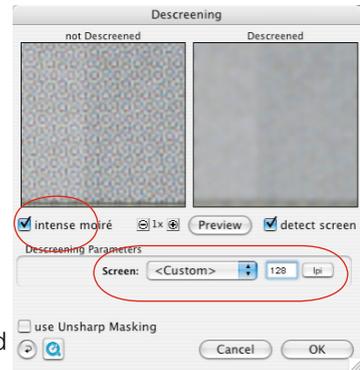


In case an inadequate part of the image was chosen, an error message will be displayed. In this case, please choose a different, more homogenous part of the image.



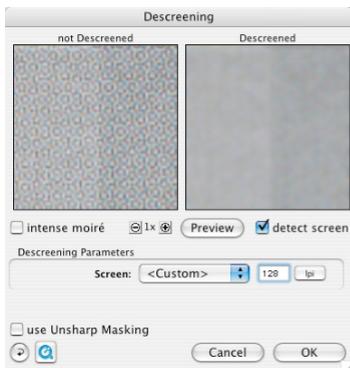
If the result is satisfactory, the dialogue may be closed by clicking the “OK” button, which closes the window.

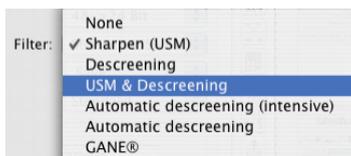
If any artifacts can be found in the “After” window, a different screen may be entered. Alternatively, the field “intense moiré” may be activated. This makes sense while descreening a rough raster with small screen widths. The “After” image is generated immediately after altering any numerical values. The intense descreening needs notably more system resources and is hence more time intensive.



Due to the low monitor resolution of the large preview window, the effect of the descreening cannot be simulated by *SilverFast*. Only once the final scan has been launched, will the parameters for descreening be calculated into the scan.

It is, however, still possible to get an idea of the quality of the final scan prior to performing it; the dialogue-window of the *Studio* and *Plus* versions may be scaled! Simply drag it open by click-dragging the lower right edge of the window. By pressing the “Shift” key and a click on the Update button, the preview will be recalculated and a much larger part of the image is displayed.





USM & Descreening (Descreening with Unsharp Masking)

If you simply descreen printed artwork it, often looks very soft and appears quite unclear in the image processing program. In order to avoid this, you can add “unsharp masking” to the descreening process.

For this, the descreening in the filter menu may be launched under “USM & Descreening”.

Alternatively, in case the descreening dialogue is already opened, the USM may be activated by checking the “use Unsharp Masking” box.

For this purpose, mark the check box “use unsharp masking” with a check mark. All parameters in the elongated dialogue window can be used, just as in normal unsharp masking. You can also choose here between the standard mode or expert mode.

Finally, enter the desired output screen in the field for “screen” in the “frame” palette.

