BSS Designer® - Study lessons

Lesson 5

Let's create an example of the monophonic image for offset printing with two latent images.
For the given example we will prepare three images:

The image "A" - the basic image in color format Grayscale;

Screened image

The images "B" and "C" will determine geometrical distortions in the structure of a raster

Additional image "B"   Additional image "C"

1. Start the program BSS Designer®.

2. Specify a location of the screened image. Leave the resolution unchanged.

3. Specify a location of the image "B". Choose the position "Stretch". Blurring - 1.

4. Specify a location of the image "C". Choose the position "Stretch". Blurring - 1.

5. Pass to the menu "Parameters".

6. Set the value of ruling 133 LPI.

7. Set the value of the resolution 2400 DPI.

8. Set the angle of screening 45 degrees (at this value it will be possible not only to turn a verifying film through 90 degrees for display of the second latent image, but also just to turn it to the other side).

9. Dot gain compensation - 3.00.

10. In the menu "Dot Shape Modification" choose a mode "One Value". A raster - "Round" (for transfer of two latent images other kinds of rasters are not suitable).

11. In the menu "Deformation of Structure" choose a mode "Base on the formula".

12. Set the formula for dX = B+C, for dY = B-C, the multiplication factor 6.00. (the mark "+" or "-" in the mathematical formula before a variable of the additional image sets a direction of displacement, for the second image the direction should be perpendicular in relation to the first additional image and to an angle of screening. The value of multiplication factor is connected to the relation DPI/LPI, and for the angle of screening 45 degrees it is calculated by the formula DPI/LPI/3)

13. Do not use an option "Blur Autoselect".

14. Pass to the menu "Generate".

15. Generate a map of a raster.

16. Generate the structure of a raster.

17. Specify the name and a location of the generated files.

18. Generate the screened image.

19. Set 50 % filling of a verifying grid.
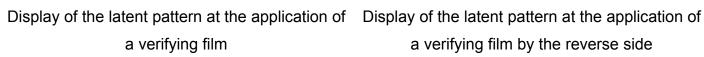
20. Set the angle of a verifying grid of 45 degrees.

21. Choose a mode "No Deformation".

22. Specify a location and the name for a file of a verifying film.

23. Generate a verifying film.

24. Save the parameters of the project in order to use them afterwards.

25 Open the generated files or import them into any graphic editor.

26. Generate a print-file for offset printing. Print the image using orange inks.

Printed image

27. Produce a verifying film on a separate photopositive.

28. Check up the display of the latent images on the printed sample at the application of a verifying film by the obverse and reverse side.

Display of the latent pattern at the application of a verifying film

Display of the latent pattern at the application of a verifying film by the reverse side

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29. If you have become confused in the menu of program BSS Designer[®], load a file of the project lesson_5.mtj and verify your installations.

• The values DPI and of dot gain compensation defined in the example may not suit your conditions of printing.

The list of applied files:

A.tif   - the basic screened image

B.tif   - the additional image "B"

C.tif   - the additional image "C"

Out.tif   - the generated raster of the basic image

Net.tif   - a file of a verifying film

Lesson5.mtj   - a file of the project with the saved installations

Lesson5.html - a file of the present description