Ink Density Setup

Many magazines accepting four-color process advertisements require that ink density be no higher than 300%. This means that the total percentages of Cyan, Magenta, Yellow and Black cannot total over 300%. This specification prevents ink set-off or show-through and is an important aspect of a magazine's quality control.

You can easily monitor your ink density while improving the reproduction of your color images by utilizing Adobe Photoshop's color settings.

**Photoshop CS**
In Color Settings under the Photoshop menu heading, select Custom CMYK, U.S. Web Coated (SWOP) v2, set Dot Gain to 20%, Separation Type to UCR, Black Ink Limit to 100%, and Total Ink Limit to 300%. Click OK.

**Photoshop CS2, CS3 & CS4**
Under the Edit menu heading, select Color Settings, select Custom CMYK, U.S. Web Coated (SWOP) v2, set Dot Gain to 20%, Separation Type to UCR, Black Ink Limit to 100%, and Total Ink Limit to 300%. Click OK.

From this point, any images you move from RGB or Lab color to CMYK will have these attributes applied to them. If you open CMYK images that have different color settings saved in them, you may have to change the color mode to Lab and back to CMYK and resave the image. The color settings are only applied when an image is moved into CMYK color space from another mode.

To determine the density in your image, place the Eyedropper Tool over the shadow or darkest areas of your image. The ink percentages or total ink will be shown in the info palette. If the numbers total higher than 300%, the image should be adjusted using the steps above. Again, if your image is already CMYK, you'll have to move the image to another color mode, such as Lab, and then back to CMYK in order for the CMYK settings to take effect.

The Total Ink should be under 300%.