InDesign Color Techniques

Adobe InDesign offers a strong set of tools for color creation and control, as Chapters 8 and 29 show in detail. This special eight-page color section shows some of these tools in action, using InDesign’s actual capabilities. Most images in this section are color photographs scanned in at 24-bit RGB files at 600 dpi and converted to MCYK TIFF images in Adobe Photoshop. I also adjusted brightness, sharpness, and color balance as needed.

Color Models

Color is made up of light, but the printing model and computer-monitor models act very differently. Color printing is based on how light reflects off paper through inks — the standard inks in printing are cyan, magenta, yellow, and black (CMYK), although there are specialty inks such as Pantone, Toyo, and Trumatch. The ink absorbs all colors but the one you see; for example, your eyes can see cyan because the ink has absorbed all the other colors that light would normally pick up. That’s why mixing several inks produces a dark brown or gray — most of the light is absorbed by the multiple inks. By contrast, computer monitors use a model based on how the three colors of light — red, green, and blue (RGB) — combine. All three combine to make white, while having none gives you black. Because the physics of the two models is different, what you see on-screen — or what your scanner or digital camera sees when capturing an image — won’t necessarily match what is printed.
Colors on the Web

Although the Hypertext Markup Language (HTML) supports thousands of colors, you can count only on 216 colors to display properly on popular Macintosh and Windows Web browsers. That’s because most browsers play it safe and assume that people have just the basic video support on their computers: 8-bit color depth, which permits 256 colors. Of those 256, Windows reserves 40 for its interface, leaving 216 for the browser to use. Understanding this, InDesign comes with a Web swatch library that has only the Web-safe colors.

The examples below show how print-oriented colors are typically shifted when viewed in a Web browser.

Copying Colors from an Image

Even if you have an excellent sense of color, matching colors by eye can be difficult. Because you may want to use a color from an image in your document — as a text color or for lines or strokes — an accurate color matching tool is a necessity. Fortunately, InDesign has the Eyedropper tool to sample a color and add it to an object or to text.

The color-selection process is simple: Select the Eyedropper tool, then click on any colored object in your document. If another object is currently selected (via the Selection tool), that object will take on the clicked color. You can also Option+Shift+click or Alt+Shift+click an unselected object to apply the color to its background fill.
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![Fabric Samples (Color)](Image1)

The InDesign swatch library at right shows all Web-safe colors; compare that to the very partial (about 2 percent) listing of print-oriented colors shown in the swatches on the preceding page.

The examples below show how print-oriented colors are typically shifted when viewed in a Web browser.

![Fabric Samples (Color)](Image2)

Photograph in print

Photograph on the Web

Solid color in print

Solid color on the Web

Gradient in print

Gradient on the Web

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To add the color to your Swatches pane, select New Color Swatch from the Swatches pane’s palette menu, then provide a name and choose Spot or Process from the Color Type menu, and click OK to save it.

After clicking a color with the Eyedropper tool, the Eyedropper tool changes to the Stroke Marker tool, which lets you change the color of text’s stroke (outline) by highlighting the text with the Stroke Marker tool (click and drag over the text whose stroke you want to color). The Stroke Marker tool is shown at left.
Applying Color Tints

Adding color to an image, whether at full strength or as a lighter tint, can greatly change its character. The examples here show how you can apply color to an object to give your grayscale images a new look. To do more-complex colorizing, use an image editor like Adobe Photoshop or Corel Photo-Paint.

The original grayscale image is at upper left; the others all have a tint applied.

To change an image’s foreground color (normally black), select the image with the Direct Selection tool and apply a color or tint swatch.

Note that you cannot change the background color (the white part) by applying a fill to the graphics frame — not even if your image has a transparent background.

Working with Gradients

Gradients (also called blends) add a sense of motion or depth to a background or image. An image editor or illustration program such as Photoshop, Photo-Paint, Illustrator, or CorelDraw gives you very fine control over gradients, letting you control their shape and pattern. InDesign approaches the ability of such programs, and in some cases surpasses them.

Example gradients (at left), using various settings for the stop and start colors, as well as for the gradient midpoint and, for linear gradients, the angle. Below are examples of more-complex gradients. (Chapter 28 explains how to apply these settings.)
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- Two-color linear gradient
  - Even distribution, 0° angle
  - 45% start, 0° angle
  - 70% midpoint, –40° angle

- Two-color radial gradient
  - Even distribution
  - Manual offset, 60% midpoint
  - 45% start
  - 20% midpoint
  - 70% midpoint

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The Effects of Color Profiles

Like most professional design tools, InDesign uses color profiles to help ensure that your output will match as closely as possible the original image’s colors (the capabilities and limits of your output device ultimately determine how close you can get). By applying color profiles and using InDesign’s Rendering Intent color settings, you can change the output character of your images.

Compare the original image against the modified insets. The original uses the Generic CMYK color profile and is set with a Rendering Intent of Perceptual (Images), the default for photograph-like images. In the top row, the insets all use the Generic CMYK profile but different Rendering Intent settings: from left to right, Saturation (Graphics), Relative Colorimetric, and Absolute Colorimetric.

The remainder of the inset images use the Rendering Intent setting of Perceptual (Images), but different profiles. In the second row, I applied the three Kodak SWOP Proofer CMYK profiles: from left to right, Coated, Uncoated, and Newspaper.

Finally, I applied the Color LW 12/600 PS profile (for an Apple color laser printer) in the third row and the 3M Color Matchprint Euro profile to the inset image in the final row.

Working with Traps

If you don’t have your InDesign documents output to negatives or directly to plate and have them printed on a standard web offset press (SWOP), you don’t need to worry about trapping. But if you do such professional output, trapping is an issue you should be aware of. InDesign lets you control trapping in some situations, based on what kind of output device you are using. These controls are global — affecting everything in the document — so if you want to set specific trapping settings for graphics, for example, you’ll need to do so as part of creating the illustration in a program like Illustrator or CorelDraw. The one local control InDesign does offer is whether strokes and fills overprint or trap.

At right: The various trapping methods you can use in InDesign. Except for overprinting, each method is applied to every object in your document.

Cycling Champs

InDesign lets you control on an object-by-object basis whether fills and strokes overprint or trap. In the images at left, I applied different settings. The text in the top image has the fill overprint and the stroke trap; the text in the middle image has the stroke overprint and the fill trap; the text in the bottom image has both traps (the default).
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Working with Clipping Paths

InDesign can import clipping paths — invisible outlines — in images created in such programs as Photoshop. It can also create clipping paths from images placed in InDesign. However they are generated, the clipping paths become InDesign frame boundaries. Using clipping paths, you can create close-fitting text wraps or create masks in images through which other objects can appear.

At top left is a picture imported with the clipping path ignored, while at top right is the same image with the path enabled. That let me put a gradient in the frame behind it to create a new background.

The set of bottom images is similar, except that in this case I created a clipping path that excluded the soccer ball so I could colorize it in InDesign by having a colored frame behind it.

InDesign can also create its own clipping paths by ignoring image areas that have less than a certain hue (see Chapter 25). This is less exact than in a program like Photoshop where you can specify the actual path, but it does work for simpler images.