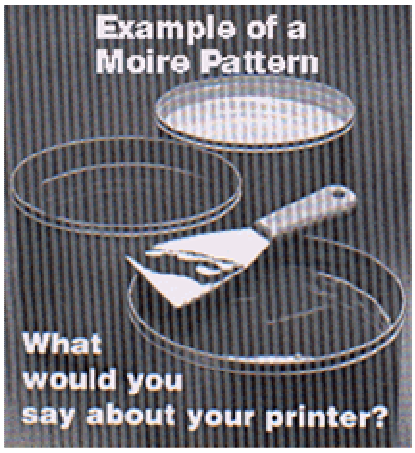
MOIRÉ IN SCANS:

Undesirable patterns created by scanning screened photos and art



Try to avoid scanning halftoned art. Halftoned art is anything that has already been screened and printed, like a photograph from a magazine or book. When screened artwork is scanned, it creates what is called a MOIRÉ, or pattern on the image. Usually moiré can be seen on the computer monitor, at one magnification or another. But even if it doesn't appear on the monitor, it will appear on the final film, and on your printed piece.

If you absolutely have no choice but to scan screened art, follow these steps:
Ignore your scanner's descreen function. It probably doesn't work. Scan the art at 749 pixels per inch, and then blur the image (with Gaussian blur) by very small increments (a 1 or 2 pixel radius). Reduce the image size to 667 ppi, and repeat the blur. Again reduce the image to 300ppi, but do not blur. At this point, you may apply an unsharp mask (Filter>Unsharp Mask) once or twice to sharpen the image, but use a low setting (25 - 3 - 4) to avoid contrast halos.

Moiré on the Press:

Undesirable patterns created by line screen angles in some hues

Certain mixes of process inks, mostly the warm colors, can to result in a moiré pattern on the press. The effect can be reduced, however, by using one of two methods:

1. Select warm colors that do not contain cyan, as cyan ink tends to be the cause of some moiré.

2. Reverse your Black and Yellow screen angles (Set Black to 90° and Yellow to 45°). By doing so, your magenta and yellow will be at complimentary angles, 30° apart, instead of their normal, and awkward, 15° apart. This method is popular with (and rumored to have been developed by) nude magazine publishers, who want to achieve a smoother skin tone on press. ***Beware of this method, though***: When you reverse the Black and Yellow screen angles, then moiré may crop up in other color areas. So use this method only when tans or browns are critical, and other colors are less important.