What factors play
a role in moiré?

Screen ruling, screen angle, and the interplay of colors

Moiré may occur when two repeating patterns are overlaid. Since halftones are composed of repeating patterns of dots, moiré may occur when two or more colors are laid on top of each other. The screen ruling, screen angle, and the interplay of the colors all contribute to the visibility of moiré.

To the right are examples of three different screen angle and ruling selections. All of these examples were output at a 2540 dot per inch resolution to a RIP 30 raster image processor and Linotronic* 330 imagesetter. To the side of each example is a black and white representation of the rosette pattern.

The top example uses a type of halftoning called RT Screening* RT Screening can only approximate traditional color separation screen angle and ruling values. As a result, moiré patterns may occur. To minimize moiré, recommended angles and rulings have been developed for RT Screening. This is shown in the middle example. The bottom example showcases HQS Screening* which allows more accurate production of traditional screen angle and ruling values.

RT Screening and HQS Screening were developed by Linotype-Hell. RT Screening has been licensed to Adobe Systems for use in the PostScript** page description language. HQS Screening is now available only from Linotype-Hell.

For more information on this subject, ask your Linotype-Hell representative for the technical information piece on Moiré.

A - Replace with supplied B&W artwork

Use existing film

B - Replace with supplied B&W artwork

Use existing film

C - Replace with supplied B&W artwork

Use existing film

Illustration courtesy of Network Graphics, Hauppauge, NY

Linotype-Hell