Technical Information

Appendix B: A Closer Look

To understand Diamond Screening, it helps to look at it at a microscopic level. The photographs shown here reproduce the same minute portion of an image. The only factor that changes is the screening method.

The top image was output using I.S. Technology.TM I.S. Technology is a screening method that uses evenly spaced rows and columns of cyan, magenta, yellow, and black halftone dots to reproduce a color image. Each color uses a different screen angle, but all of the colors have the same screen ruling (175 lines per inch). This image was output at a resolution of 2845 dots per inch.

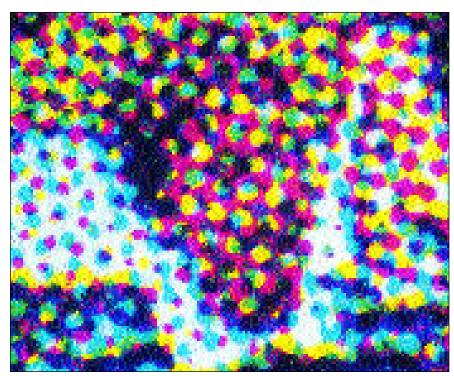
The bottom image was output using Diamond Screening. In the Diamond Screening example, randomly placed cyan, magenta, yellow, and black laser spots replace the orderly halftone dots shown above. The Diamond Screening example was output at a resolution of 1219 dots per inch. No comparable screen ruling or screen angle value can be given because the concepts of screen angle and screen ruling do not apply for Diamond Screening.

For more information on this innovative new technology, please refer to the Linotype-Hell technical information article entitled Diamond Screening. For information on the Linotype-Hell technical information series call 1-800-842-9721.

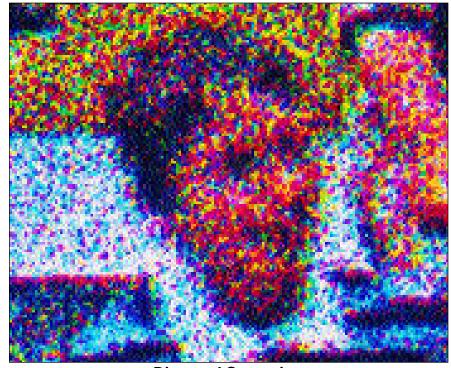
Production notes: The photos shown here were shot from images that appear in a Linotype-Hell brochure called "The Finest Selection of Screening Technologies". Including the reproduction enlargement, the magnification of these images is 50x. This page is not reproduced using Diamond Screening.

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Conventional Halftone Dot Structure



Diamond Screening