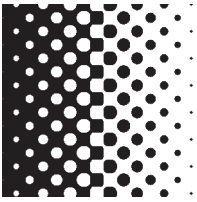


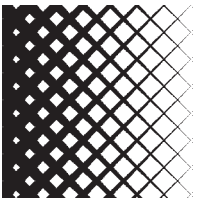
Halftone attributes



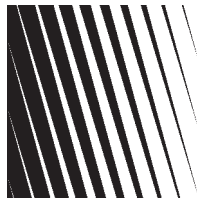
Round, 10 lpi, 45°



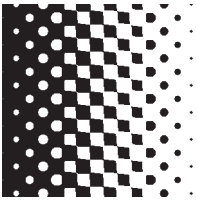
Line, 10 lpi, 45°



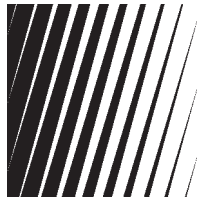
Cross, 10 lpi, 45°



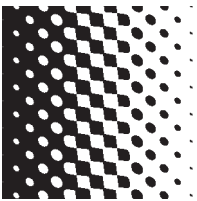
Line, 10 lpi, 75°



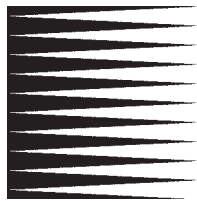
Diamond, 10 lpi, 45°



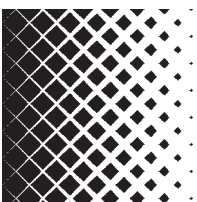
Line, 10 lpi, 105°



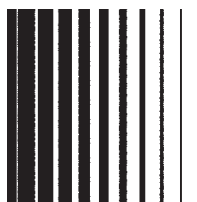
Ellipse, 10 lpi, 45°



Line, 10 lpi, 0°



Square, 10 lpi, 45°



Line, 10 lpi, 90°

A halftone dot has three attributes: shape, frequency and angle.

Dots shapes commonly include round, elliptical, line, diamond, square and cross. The round dot is best suited for most applications although some printers prefer elliptical or square. The term line screen is used to refer to all screens, whether or not the dot shape is line.

The **frequency** of a halftone screen is determined by the print medium, printer specifications and overall quality of the job. Newspapers usually print 85 lpi (lines per inch); offset work varies from 128 to 150 lpi; magazines and specialized applications vary from 150 to 200 lpi. Some waterless technologies use 300 to 600 lpi, although it is difficult to correctly separate images at this extreme frequency.

The **angle** of a halftone screen should be chosen to best work with the other colors in a job. One color jobs or jobs where no colors touch or overprint are printed with a 45° angle. A second color is usually printed at a 75°; a third color at 105°. For more complicated jobs, consult with your printer or separation house.

There are a variety of new technologies available from Allied-Hell, Agfa and Scitex that use frequency modulated screening. These systems modulate the size and angle of the halftone dots. This can result in better detail in the images, a reduction of moiré patterns, a significant reduction in banding and better overall quality at lower imagesetter resolution.