

Fact Sheet Number 2^A

SCREENING

Photos must be “screened” if they are to be successfully printed with various shades or tones. This involves converting the image to a series of “dots”. The size and number of the “dots” determines the coarseness of the printing and screening is a concept which Printgraphic’s clients should be familiar with.

Screens are measured as a number of lines per inch or centimetre, eg: 133 lines per inch. This means the number of dots that could be drawn along a straight line one inch long.

The two main kinds of screening are **amplitude-modulated (AM)** screening and **frequency-modulated (FM)** screening.

In amplitude-modulated screening, the dots are positioned in uniform rows and the size of each dot increases to create a heavier colour.

Frequency-modulated screening uses the same size dots but, by using what appears as a random placing of dots, more dots are placed in the same area to create a heavier colour.



150 Lines per inch (AM)



133 Lines per inch (AM)



175 Lines per inch (AM)

2^B

Fact Sheet **Number 2^B**

SCREENING continued



200 Lines per inch (AM)



K-Fine screening (Black 256 LPI, Cyan 191 LPI, Magenta 191 LPI, Yellow 171LPI)
(AM)



FM screening (often referred to as the brand names such as "Crystal Raster", "Diamond" or "Stochastic")
20 micron dot