

1.1 What is a Mezzotint?

Mezzotinting is an alternative to halftoning as a way to simulate gray values with a fine pattern of pure black and white. A mezzotinted photo consists of small, irregular shapes, rather than a regular grid of dots. In light areas the mezzotint looks like small black shapes on a white background; dark areas have small white shapes on a black background. When viewed close up, the shapes look like chromosomes or worms. Mezzotints, like halftones, have screen values expressed in lines per inch; however in the Series 3 Filter, it is given in terms of "worms per inch".

Figure 1 comes from a gray-scale image, 400x100 pixels, 300 pixels per inch, containing a blend from black on the left to white. To show the mezzo "worms" in detail, the image was converted very coarsely, at only 35 worms/inch (using the Uniform Mezzo option).

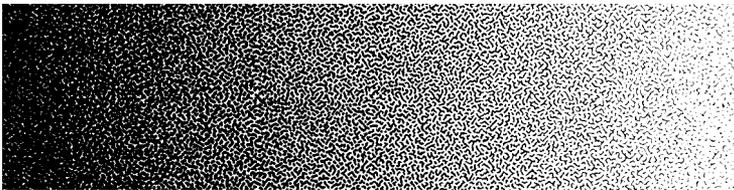


Figure 1

Mezzotinting is used more for special effects than for maximum photographic accuracy in reproduction. Frequently mezzotinting will be done at a worms/inch figure where the individual shapes can be perceived, giving a deliberately grainy or impressionistic effect, which can be somewhat mysterious looking. Mezzotinting is sometimes used in conjunction with deliberate blurring of the photo, and occasionally in conjunction with exaggerated sharpening. The Andromeda Screens Filter provides both blurring and sharpening capability.

Figure 2 contrasts halftoning and mezzotinting conversions. The image is 400 x 100 pixels, 200 pixels per inch. The top was halftoned at dots/inch=50, the bottom was mezzotinted at worms/inch=50, blend=50% screen, threshold=128.

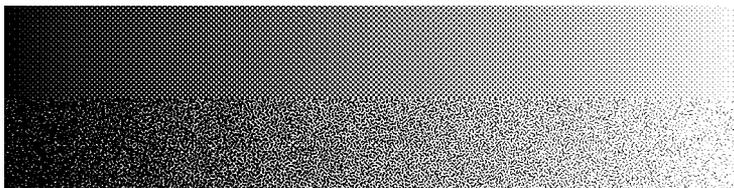


Figure 2