

Mitigating flexo discontinuity using hybrid screening technologies

Halftone screen ruling affects the nature of the flexo discontinuity. Generally speaking, increasing the ruling increases the highlight gain for all plate technologies, which increases the magnitude of the flexo discontinuity. A screen ruling increase also increases the minimum printable dot for LAMS plates and as a result, increases the magnitude of the flexo discontinuity.

Flexo discontinuity can be mitigated by using hybrid screening technologies, such as Kodak Maxtone CX, FX or SX screening. Hybrid screening systems use conventional (AM) halftone dots through most of the tonal range, but change to stochastic (FM) screening in the highlight region. Using FM screening in the highlights produces a continuous color transition from an input tint gradient that extends down to 0%, at the expense of increased grain and in some cases, a visually noticeable transition from FM to AM screening.

If your flexographic device uses a [hybrid screening system](#) that delivers a smooth, continuous color response from the substrate color through the highlights of all inks, then the flexo discontinuity is eliminated. The flexo device behaviors in ColorFlow are similar to other device types.