

Discontinuous tonal response and colorimetric response

When ColorFlow software models the color response of flexographic printing with flexo discontinuity, the resulting color response is called a discontinuous color response. ColorFlow software accurately represents the flexo discontinuity in both types of a color response: tonal response and colorimetric response.

The input tint value at which the discontinuity occurs, and the corresponding color response of a spot or process ink channel, is called the Mindot of the discontinuous color response. If a discontinuous color response has tonal and colorimetric components, they have the same Mindot **Tint In** value.

- Discontinuous tonal response
- Discontinuous colorimetric response

Discontinuous tonal response

Tonal response comprises the EDA of each ink channel whose response is measured. If a process or spot ink has a flexo discontinuity, its tonal response has a step change, at the Mindot **Tint In** value, from zero to the EDA value printed by the Mindot. As with continuous tonal color responses, the tonal response component of a discontinuous color response is used for tonal match curve generation, and is reflected in tonal response graphs of devices, device conditions, PCOs, and SCOs.

Discontinuous colorimetric response

Colorimetric response comprises the CIELAB color response of process ink ramps and overprinted combinations. It also includes the CIELAB color response of spot ink ramps.

If a process or spot ink has a flexo discontinuity, its colorimetric response has a step change at the Mindot **Tint In** value, from the substrate color to the color printed by the Mindot. As with continuous tonal color responses, the colorimetric response component of a discontinuous color response is used for gray balance curve, device profile, and DeviceLink generation.