

Print Contrast

The Equation:
$$\% \text{ Print Contrast} = \frac{D_s - D_t}{D_s} \times 100$$

Where: D_s = Density of solid

D_t = Density of tint (typically 75%)

Print Contrast indicates the degree to which shadow detail is maintained or kept open.

Why measure Print Contrast?

Print Contrast is a good indication of print quality because shadow detail carries important information in many images. Print Contrast values correlate well to the subjective evaluations of print quality such as "flat" (low Print Contrast values) versus "jumps off the page" (high Print Contrast values).

Compared to mid-tone Dot Gain values, which change with ink film thickness and therefore Density, high Print Contrast values require both high density and sharp printing to maintain shadow detail. It is often used as a guide for maintaining proper ink/water balance. Today's densitometers lead the operator through the necessary sequence of measurements.

Solid

Tint

cyan 36 PC

What should my Print Contrast values be?

Table 4 shows some typical Print Contrast values for three common printing conditions.

	BLACK	CYAN	MAGENTA	YELLOW
SHEET-FED, OFFSET	40	36	36	30
WEB-OFFSET, Magazine	36	31	31	28
NON-HEATSET WEB, Newspaper	24	22	22	18

Table 4: Print Contrast values are Status-T, measured at a 75% film tint.