

About step limit

You can set a relative step limit to affect whether a trap will be generated between adjacent colors (objects) depending on the relative difference in their amounts of colorants (inks). If the relative difference in amounts of colorants between two objects is less than the step limit, then no traps are generated. The step limit is controlled from the **Trap** section of refine process templates.

For each ink, the relative ink dot percentage between two adjacent colors is calculated as the difference between the two, divided by the lower one. In the first example in the table below, Color1 at 60 percent and Color2 at 40 percent lead to a relative ink dot percentage of $(60 - 40) / 40 = 0.5$ or 50 percent.

A high value indicates a significant change between the two colors and thus a possible need for a trap. The trapper compares the relative ink dot percentage of the inks to the **Step Limit (%)** value, and considers creating a trap if the value for at least two separations is larger than the **Step Limit (%)** value and the step is in the opposite direction (that is, from Color1 to Color2, the dot percentage increases for one ink and decreases for another). Using the relative value here allows a higher sensitivity for traps between light colors and a lower sensitivity for traps between dark colors.

For the example in the table below, the trapper creates a trap because two separations increase in opposite directions equal to or greater than the **Step Limit** value of 25 percent.

Separation	Color1	Color2	Relative Ink Dot Percentage	Step Limit (25%) Satisfied?
Cyan	60%	40%	$(60-40)/40 = 0.5$ or 50%	Yes, 50% > 25%
Magenta	25%	31%	$(31-25)/25=0.24$ or 24%	No, 24% < 25%
Yellow	30%	40%	$(40-30)/30 = 0.33$ or 33%	Yes, 33% > 25%
Key	10%	14%		Ignored, doesn't meet 5% minimum difference