

## Title:

Printing On The Dark Side: Four-Color Or Simulated Process?

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342

## Summary:

Printing a full color image on a dark shirt is one of the hardest jobs a screen printer faces. Regular four-color process uses transparent inks: Cyan (sky blue), Magenta (hot pink), Yellow and Black) which print in various percentages, blending together to form a wide range of colors. While this process works beautifully on a white shirt, the results can be disappointing on dark shirts, requiring a white underbase and multiple passes of colors ending up with a thick ink layer...

## Keywords:

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## Article Body:

Printing a full color image on a dark shirt is one of the hardest jobs a screen printer faces. Regular four-color process uses transparent inks: Cyan (sky blue), Magenta (hot pink), Yellow and Black) which print in various percentages, blending together to form a wide range of colors. While this process works beautifully on a white shirt, the results can be disappointing on dark shirts, requiring a white underbase and multiple passes of colors ending up with a thick ink layer and muddy color. While good four-color process can be done on a dark shirt, to do so takes a great deal of experimentation, time, and tweaking during the print run. But there is another way to achieve similar results much more easily.

Simulated process uses opaque inks and in more than just four colors, often between six and eight (usually White, Red, Yellow, Green, Dark Blue, Light Blue, Gray, and Purple). Simulated process colors are usually printed wet-on-wet, with few flashes (a drying process while the shirt is still on the press). For example, to create a flesh tone simulated process would use a mixture of tan, opaque yellow and possibly white. Since the colors are opaque, the dark background becomes a non-issue (or at least much less of one). And if individual, particular colors are needed (for example a exact shade of red for a business logo) they can be mixed to specification and individually printed.

So why would you want to use four-color process at all? When done correctly and

successfully, it is the most accurate version of full color reproduction. And for shops with smaller presses with fewer heads available, the multiple colors required for simulated process may not be possible at all. Also for subtle, nuanced art with slight changes in tone, such as pastels, the bright, solid colors of simulated process do not work well.

While screen printing images on dark shirts may be difficult, the results can be amazing and are worth the time and effort involved regardless of which type of printing you use.