

# Printing Jargon 2

## What is Trapping?

What is Trapping? To the customer, or a new graphic designer, when they first hear of trapping its definition can be a mystery. Also how, why and when should it be performed? Most times “trapping” is done by a prepress person or a graphic artist without the customer’s involvement. However, if not done correctly, it can be a disaster. In this brochure I will discuss “What trapping is”, words that relate to it, and ways to manually trap. Finally, if you cannot trap, ask your local print house if they have programs available so that it is done correctly. (Click on blue links to see animated examples).

### Trapping Explained

Trapping is the creation process of an overlap between abutting inks to compensate for imprecise registration in the printing process.



However, to slightly overlap colours to eliminate potential gaps (due to mis-registration), generates a third colour. Trapping is used when two colours are completely different from each other and will not blend in overlapping, but only touch. Example: magenta touching cyan ink. Whether it is a spread or choke, the lighter colour is the one that compensates the trap. Trap size may be ¼ point or larger, it depends on the type of press.

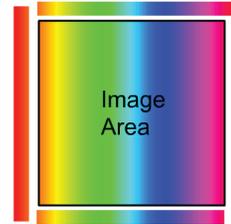
[See Movie](#)

### When to Trap

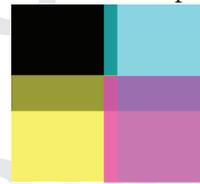
As mentioned earlier, trapping is required for specific instances. For instance, if two pantone colours touch each other a slight overlap needs to occur. Trapping is not needed in the case of a CMYK (see bleed) or Rich Black Photograph, but mis-registration can still occur. That is why the

addition of a 100% black line around a picture or the addition of bleed to an image that goes off the page’s printable area is important.

**Bleed** - images and/or page data that extends beyond the trim marks on a page. When the data extends beyond the page on all four sides this is known as a “full bleed”. The excess bleed is trimmed away to make it appear that the page data extends across the full page. If bleed has not been used when the page is cut on the trim marks, a small white gap on the edge might be seen. A ¼” to an ⅛” bleed is generally used. [Full Bleed](#)



**Rich Black (Quadtone)** - This is an example of using the four process colours (cyan, magenta, yellow and black) to create a black and white image. The tones of the image are considered richer and the picture may appear to contain more depth. However, during this process the black may have to be spread beyond the bounds of the other three colours to compensate for mis-registration. If black and another colour are used, that is called a duotone, or black and two other colours make a tritone. [Rich Black](#)



### An Example of Trapping

Suppose you had a CMYK Photograph on a presentation folder along with a Blue Pantone Background. You’ve decided to use this blue Pantone because the prepress person has informed you that the press will not keep the colour consistent from folder to folder, when you use a CMYK equivalent for the blue. This blue is the corporate colour; so branding and consistency are important. The question is, should the blue be trapped with the photograph? The answer is Yes, but how?

First, let’s explore some ways to trap, then we can decide if this should be accomplished manually or by a prepress computer program



such a TrapPro.

**Knockout** - A printing technique that represents overlapped objects without a mixing of inks. The ink for the element below does not print or “knocks out” in an area where the objects overlap. It’s the opposite of an Overprint. If the registration on a press is not precise a small white gap can appear around one side of the “knocked out” letters or object. A Knockout could also refer to white letters on a coloured background. [Knockout](#)



This is what will happen if we do not use a trapping technique.

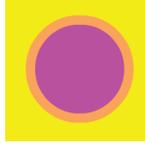
**Overprint** - A printing technique that lays down one ink on top of another ink. The overprint inks can combine to make a new colour. This is the opposite of Knockout. An overprint is not always a good choice because unexpected colours may appear. For example, use of special pantone colours. [Overprint](#)



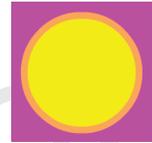
In the earlier folder example, in order to trap we cannot let the Pantone Blue mix with the CMYK or we will have a muddy mess. We need the CMYK Photo to just slightly touch the Pantone Blue, but not entirely Overprint.

Here are two ways to manually do this with a simple object or in the case with the folder example.

**Choke** - to allow the darker image colour to spread under the light image colour, thus "Choking" into the light colour. The lighter may be the background and the darker the foreground. *Choke*



**Spread** - to allow the lighter image colour to spread into the darker image colour. The lighter may be the foreground colour and the dark the background. *Spread*



### The Manual Solution

Create a Blue Pantone line (1/4 point or larger) between the photo and the blue and setting this line to overprint we are in fact creating a type of Choke.



Or if we had a logo that we wanted to blend into a photograph we could add a stroke around the pantoned coloured logo and create a Spread.

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### The Computer Solution and Proof

However, with a complex design, manually added chokes and spreads will degrade its overall look. In this case, if you know your design requires trapping, but you're unsure how to do it, speak to the prepress technician. Find out if they can assist with their software. Then after they or you have made the adjustments, ask for a separation and composite proof to view to insure there will be no unexpected surprises.



For more information about trapping visit:

[www.adobe.com](http://www.adobe.com)

Additional reading:

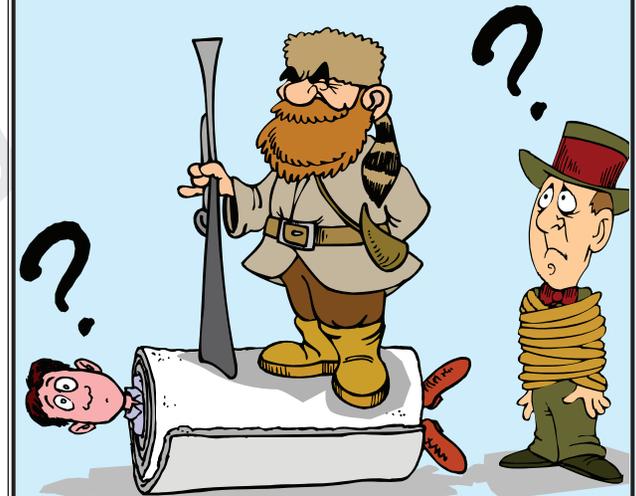
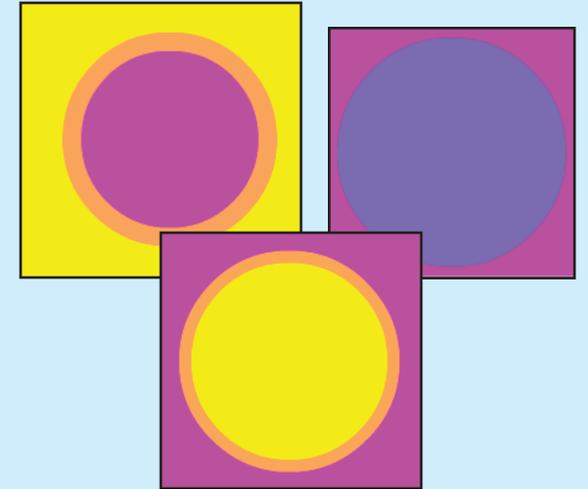
[http://en.wikipedia.org/wiki/Trap\\_\(printing\)](http://en.wikipedia.org/wiki/Trap_(printing))

For further informational brochures on various printing terms and jargon visit:

[www.theinkrag.com](http://www.theinkrag.com)

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### What is trapping?



Trapping and its Explanation  
When to, How to  
&  
Trapping Solutions

Produced by The Ink Rag