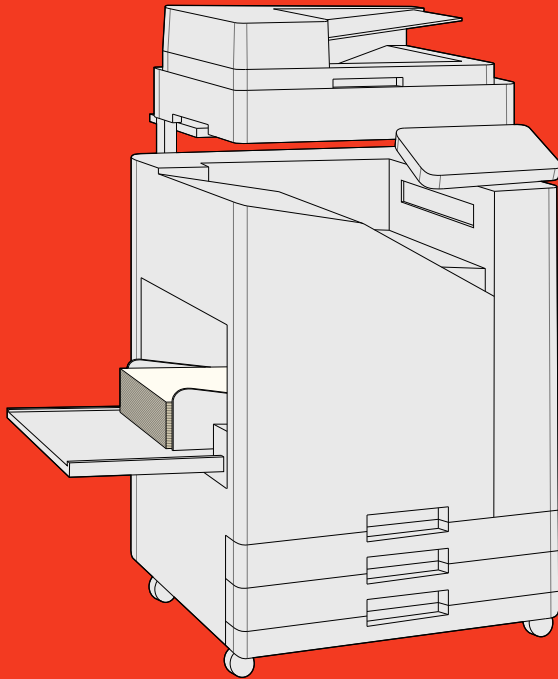


how to

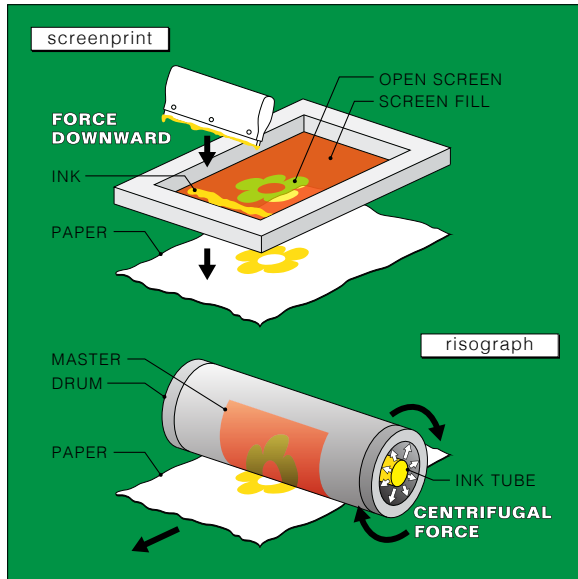


RISOGRAPH

risograph / riso / digital-duplicator / printer-duplicator

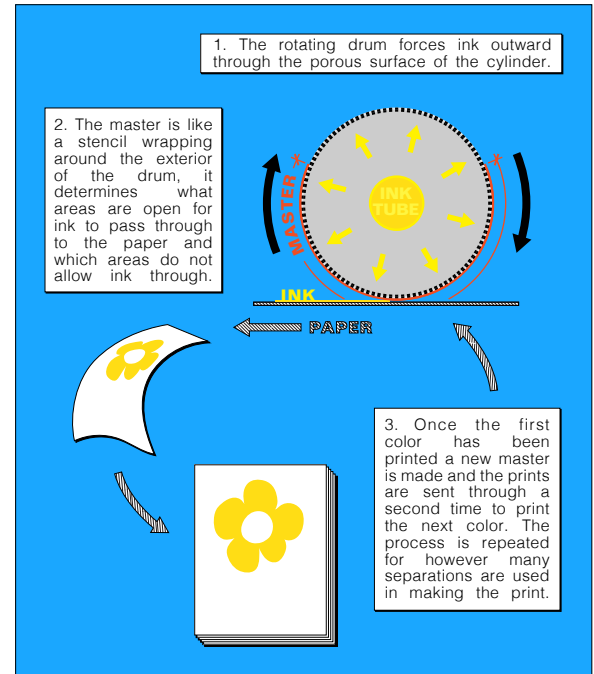
Risograph is a printing process eponymously named after the manufacturer, the printer-duplicator was first introduced in Japan in the 1980s. This method of printing is designed for rapid and high-volume reproduction while maintaining a consistent level of print quality akin to screenprinting techniques. A risograph print is made using soy-based ink that produces a significantly different quality of image compared to one printed using ink jet or laser printer technology. The riso sits in a nice and awkward way between the realm of rapid digital image production and slow fine-art printing.

INTRO



Risograph involves a process similar to that of screenprinting. The key components are a porous surface, a stencil that blocks out portions of the porous surface, ink, force, and paper. In riso printing the porous surface is the cylinder/drum, the stencil is called a master, the ink is soy-based, the force is centrifugal from the rotating motion of the drum, and the paper must be uncoated.

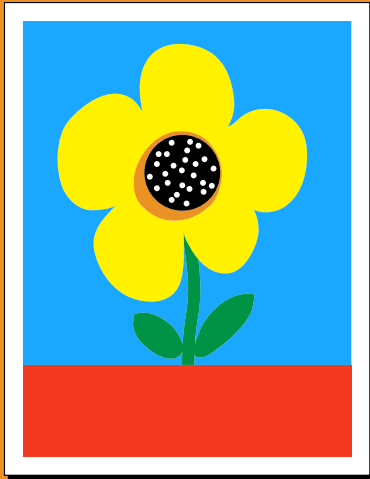
INTRO



Rotating at high speed, the drum pushes the ink through the screen and onto the paper as it passes through the machine.

INTRO

original

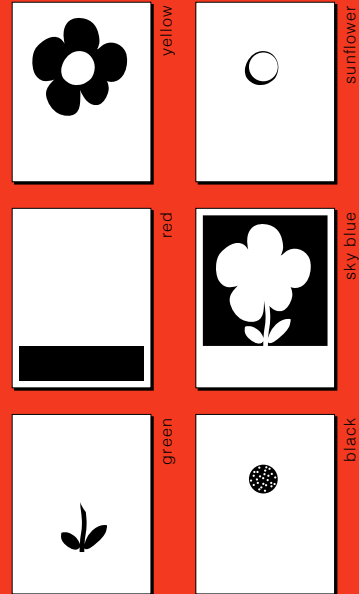


original full-color image requires 6 separation layers (see next page)

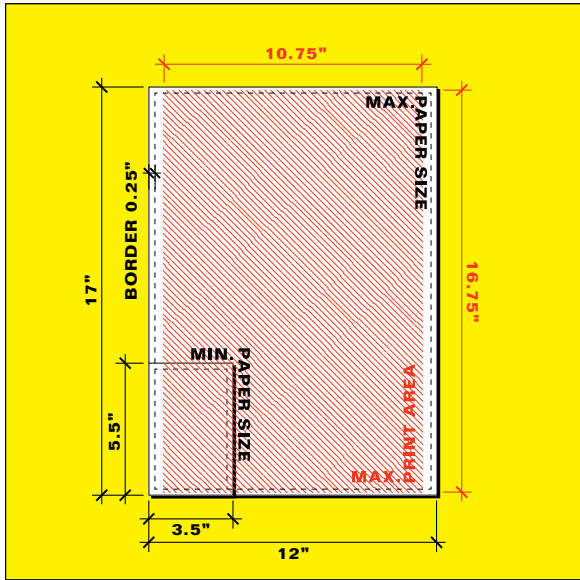
The riso prints a single color at a time, each color needs to be separated into a new layer for printing. You may either separate your files yourself or we can separate them for you.

INTRO

separations



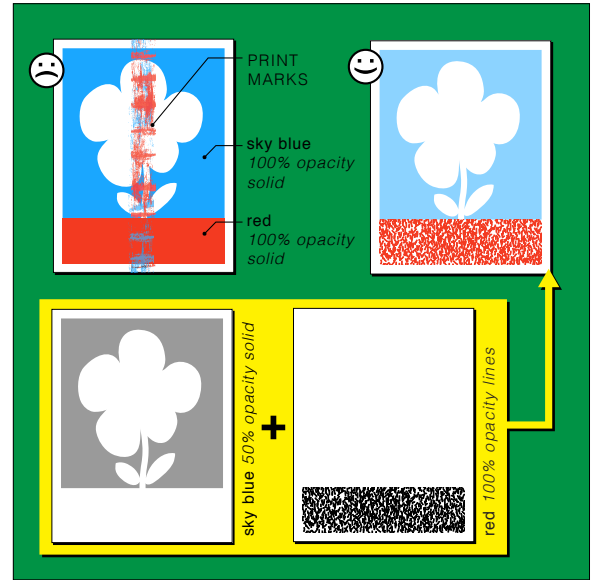
PRINT AREA



Printable Paper Sizes: 3.5" x 5.5" to 12" x 17"
 Printable Area Approx.: 10.75" x 16.75"

Please note that there is a 1/4 inch border on prints.

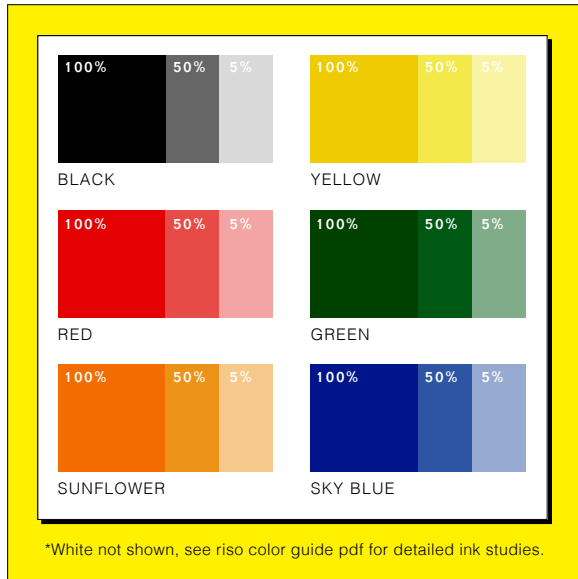
PRINT AREA



Large areas of block color won't print out evenly and may also cause print marks.

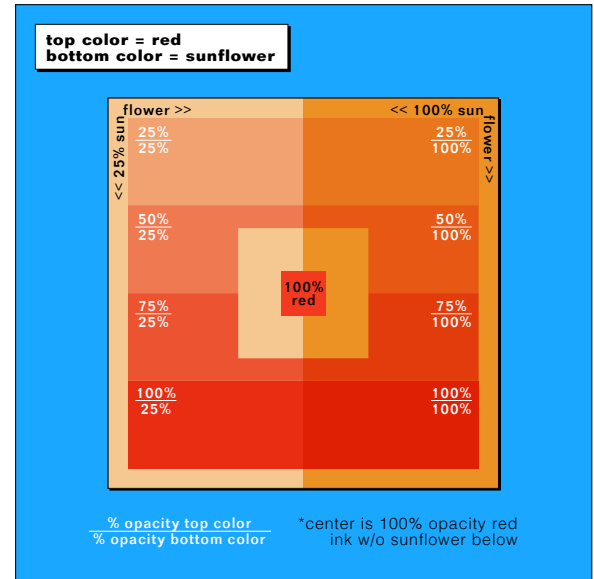
When possible avoid large areas of solid color (see example above) if you must print large areas of solid color they should be at max 50% opacity.

INKS



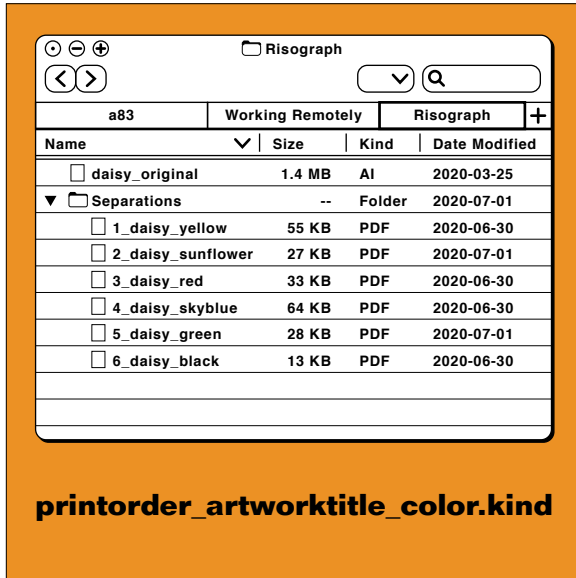
We currently stock 7 colors of ink: Black (image above), Red, Sunflower (Cadmium Yellow), Yellow (Process Yellow), Green (Yellowish), Sky Blue (Ultramarine), and White.

INKS



Colors can be blended to make new colors by layering and altering opacity e.g. Red over Sunflower as shown above.

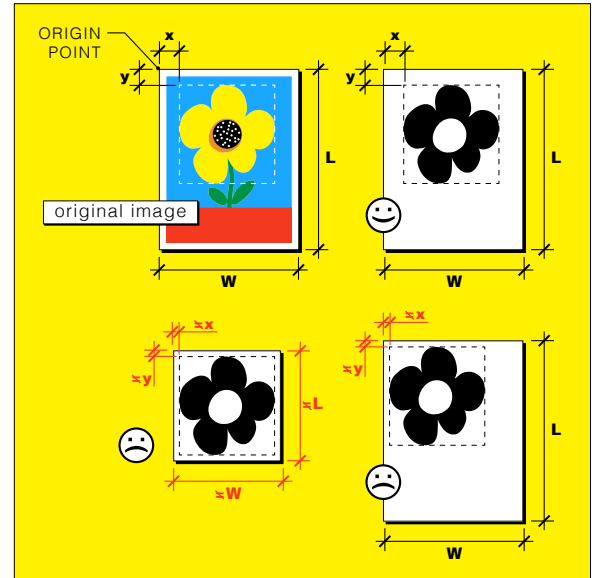
FILE SET-UP



To prepare your artwork for printing, first you need to save each color layer as a separate grayscale file (PDF).

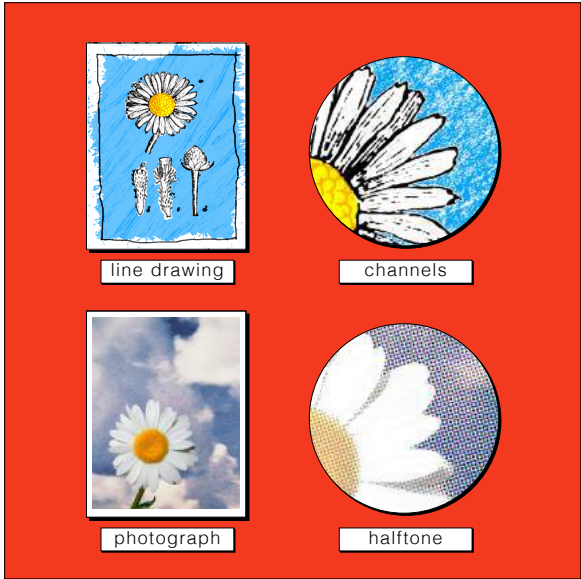
It is good practice to print in order from lightest color to darkest (w/ the exception of white which can be printed underneath a color to make it more vibrant, or over top to mute a color).

FILE SET-UP



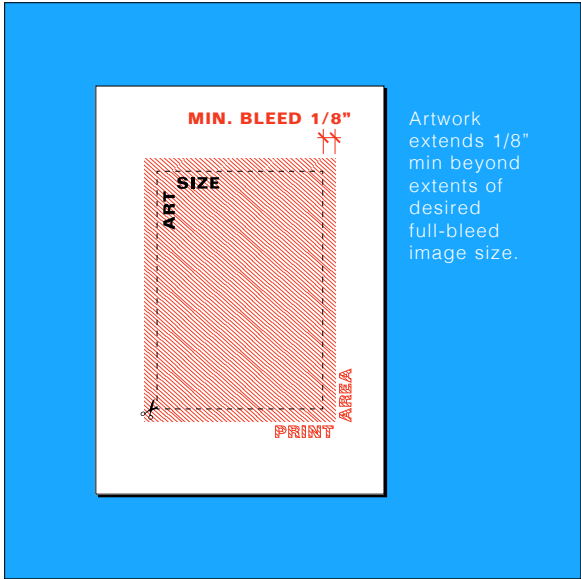
Make sure your media size and relative position on the page is the consistent for all of the grayscale separation files.

FILE SET-UP



Separations will differ for different kinds of images (e.g. line drawing vs. photo) and the choice of technique depends on the desired effect. Some techniques include the use of halftone, channel selection etc. When possible keep art as vectors (outlined) when exporting. All solid shapes, type and images should be set to Registration Black (from 5% to 100% opacity).

FILE SET-UP



If your project is full-bleed, include at least an 1/8 inch bleed area.

FILE SET-UP

15x actual size

The point size of a font refers to the em height (the distance from the top of ascender to bottom of descender)

actual size

5 pt	Aa Hh Gg 83 ⁸³	0.1 pt	_____	0.2 pt	_____
8 pt	Aa Hh Gg 83 ⁸³	0.3 pt	_____	0.4 pt	_____
10 pt	Aa Hh Gg 83 ⁸³	0.5 pt	_____	0.6 pt	_____
12 pt	Aa Hh Gg 83 ⁸³	0.7 pt	_____	0.8 pt	_____
		0.9 pt	_____	1.0 pt	_____

Fonts cannot be smaller than 5 pt and lines 1 pt minimum.

FILE SET-UP

original + separations

TO: info@a83.site

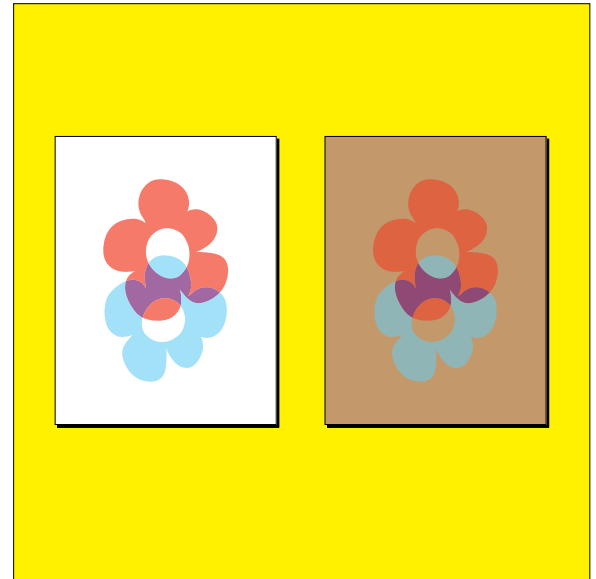
a 83

Please send us your work in as a PDF, JPEG, AI, PSD, or IND file. PDF or JPEG must be high-res at 300-600 dpi.

Be sure to send us a full color JPEG or PDF as a reference.

GLOSSARY: OVERPRINTING

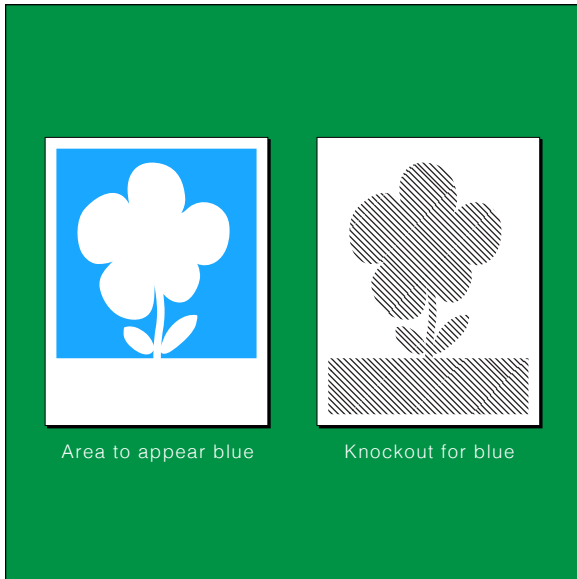
info@a83.site



Overprinting is when two or more inks overlap to create a new color. Riso inks are transparent and are affected by both the paper and the ink that it's printed on.

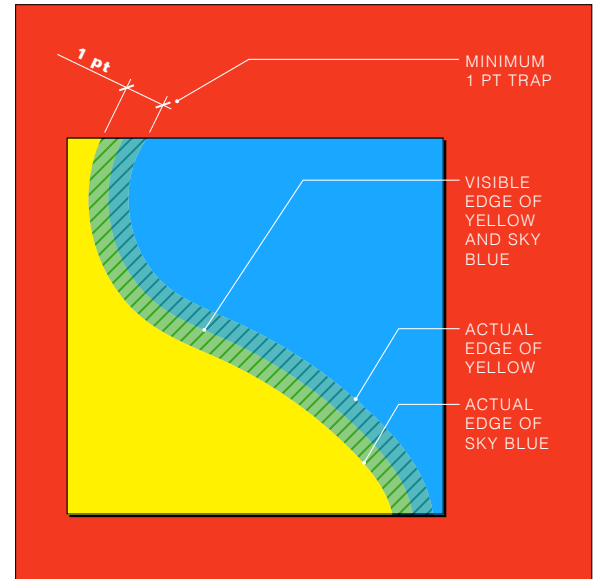
e.g. 50% blue + 50% red on white paper will appear as a different hue if printed on brown paper.

GLOSSARY: KNOCKOUTS



Knockouts are areas that are intentionally omitted to avoid overprinting.

GLOSSARY: TRAPPING



Trapping helps to ensure proper registration by adding a slight overlap between adjacent colors. It's used to compensate for registration issues that are inherent to the machine. It ensures that there are no unwanted gaps between separations. Min 1 pt (2 px) recommended.

HOW TO
no.1
July 2020

