

# WELCOME TO HELIO PRESS

Risograph printers were invented in the 1980s in Japan and are often described as a mix of screen printing, offset printing and photocopying. The risograph receives your image digitally and makes a stencil by burning tiny pixel holes into a master. The master is then wrapped around an ink drum, and ink is pushed from the drum through the master on to the paper. This all happens one colour at a time, so the paper goes through the risograph once for each colour in your design.

At Helio Press we use a Risograph RP3700 named Myrtle. We specialise in riso printing zines, posters and art prints as well as diving into new experiments.

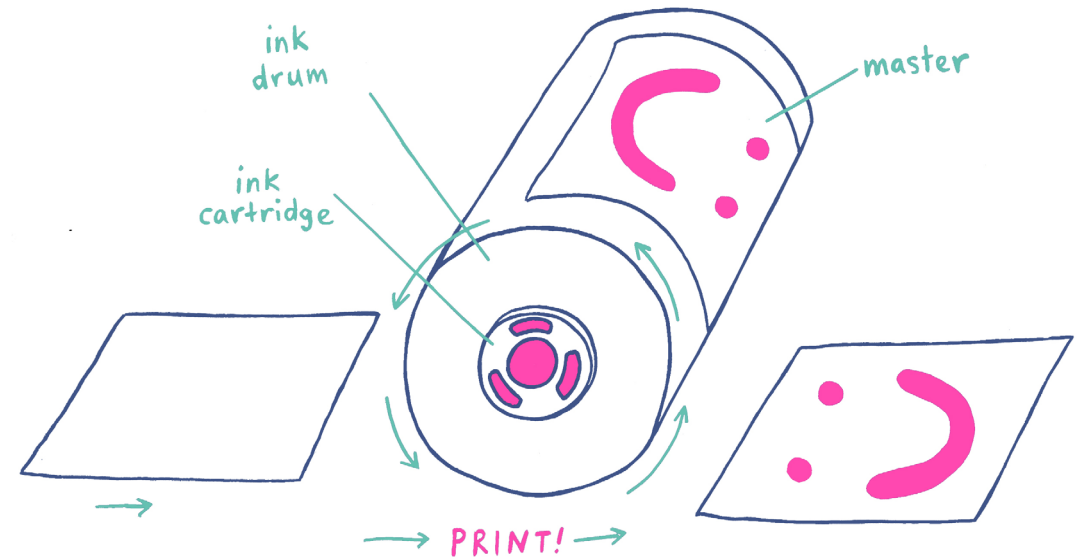
## What can you use risograph for?

Risograph printing is best used for artwork created with riso in mind and for medium print runs (50 to 5000 copies).

You can use risograph printing for art prints, zines, business cards, flyers, posters, record covers, cassette covers, stickers, post cards, packaging, swing tags, menus, certificates, letterheads – the possibilities are endless!

## Ink colours

Risograph printers use soy based inks which are not totally opaque, so layering up ink colour can create some interesting combinations! Same goes for paper colour - fluoro pink ink on blue paper will look a little more purple. We have riso printed colour charts of most of our colours available in the online shop.



<b>BLACK</b>	<b>FLURO PINK</b>	<b>RED</b>	<b>BLUE</b>	<b>ORANGE</b>	<b>GREEN</b>	<b>BROWN</b>	<b>FEDERAL BLUE</b>	<b>LIGHT GREY</b>	<b>PURPLE</b>	<b>SEAFOAM GREEN</b>	<b>YELLOW</b>	<b>BURGUNDY</b>
Black U	806 U	Warm Red U	3005 U	021 U	354 U	7526 U	288 U	424 U	2685 U	570 U	Yellow U	235 U
0, 0, 0	255, 72, 176	251, 66, 56	0, 120, 191	255, 108, 47	0, 169, 92	146, 95, 82	61, 85, 136	136, 137, 138	118, 91, 167	98, 194, 177	255, 232, 0	145, 78, 114
#000000	#FF48B0	#FB4238	#0078BF	#FF6C2F	#00A95C	#925F52	#235BA8	#88898A	#765BA7	#62C2B1	#FFE800	#914E72

# DESIGN TIPS

## Borders and printable area

On our printer we can use up to A3 sized paper with 5mm border, so the maximum printable area is 410 x 287mm. When using A4 paper, the maximum printable area is 287 x 200mm.

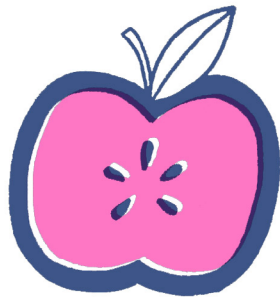
When using full bleed allow 3–5mm of bleed area on each side of your design, keeping the printable area in mind. Any crop marks required will need to be inside the printable area too.

## Colour registration

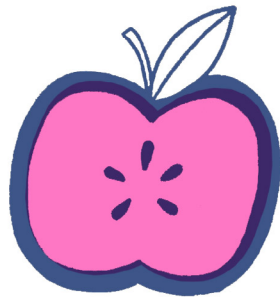
Risograph was not initially designed to print more than one colour, so misregistration is inevitable! Please allow for 1-3mm misregistration between colours in your artwork.

## Trapping

Where necessary, overlap colours by 0.5mm so there are less instances of white area showing through when misregistration does occur.



without trapping



with trapping

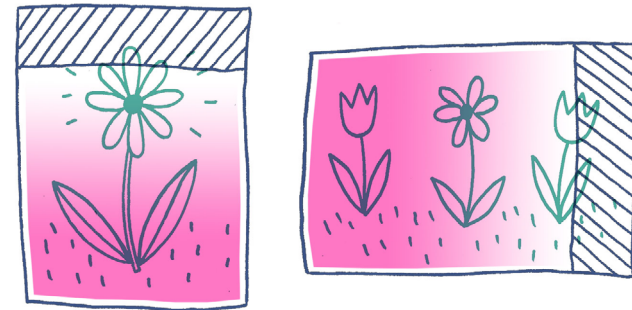
## Double-sided prints

It is tricky to align double sided prints perfectly so keep this in mind. Go easy on ink coverage for double sided printing, as dense ink can transfer onto the other side of the paper.

## Ink coverage

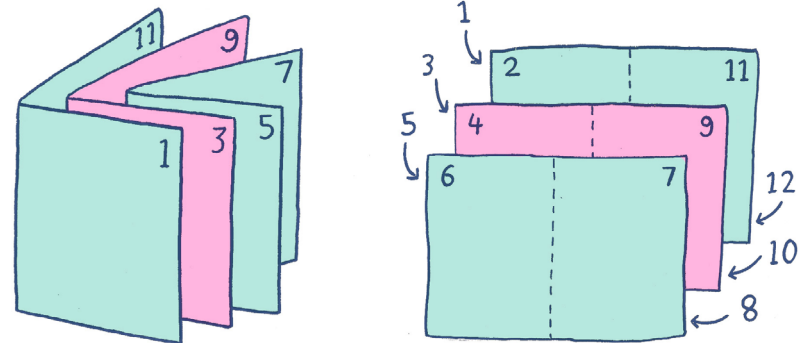
Roller marks can occur on prints with more than one colour, but can be removed with an eraser. Same goes for finger prints or small smudges. The heavier the use of ink on your print, the greater chance of ink smudges. Heavy ink coverage causes paper jams – please keep large dense areas of ink to less than 60% of your artwork for each colour, or use a lower density of ink for large areas of colour.

The riso's paper feed rollers grab paper on the top 5cm of the sheet when pulling paper into the printer, so please use light ink coverage in this area where possible.



## Page imposition

Imposition refers to the process of arranging a book's pages prior to printing so that once the printed sheets are folded, bound, and trimmed, the pages will appear in the correct order. If you're printing a zine or book with us, please supply your files using this method.



## Printing photographs

It is possible to print photography with risograph using one to four ink colours. We can simulate a CMYK print using blue, fluro pink, yellow and black riso inks. We also can vibrant duotone images (such as pink and green) or create striking monotone images with one ink colour.

This method can also be used for artworks such as paintings and illustrations that have been created as a full colour artwork and are then photographed or scanned.

You can make the colour separations yourself or we are happy to export the separations using colour profiles specifically made for risograph. Get in touch with us early in the process to see what's possible for your project.



*Cynthia*, Jessie Adams (2019)  
Yellow, fluro pink and black ink  
on envirocare paper

Postcard by Thuy Vy (2019)  
Fluro pink and green ink  
on colorplan mist paper



## Paper options

Our riso can print on 80 - 250gsm uncoated paper.

Our house stock is Envirocare – a nice lightly speckled just-off-white 100% recycled paper available in 100, 150 and 250gsm, A4 and A3. We have many rotating paper options in the studio and can order in paper to suit your project if needed.

## File set up

- 5mm border (within the page area)
- 3–5mm bleed if required (within the printable area)
- Resolution: 300–600dpi
- Sized as final print size (A4 or A3)
- Greyscale PDF for each layer and a colour jpeg preview of the final print
- Files labelled with artwork name, your name, ink colours (and page numbers for zines)



[Saturn\\_Ashley\\_Seafoam.pdf](#) [Saturn\\_Ashley\\_Pink.pdf](#) [Saturn\\_Ashley\\_Preview.jpg](#)

We are currently only taking risograph printing work on a project basis. If our books are open to general print work we will indicate this on the [print page](#) of our website. Enquiries are welcome but please don't be discouraged if we can't print with you this time.

We can highly recommend these excellent Australian risograph studios – [Glom Press](#) in Melbourne, [Pinch Press](#) in Sydney and [Neighbourhood Press](#) in Fremantle.

Feel free to contact us if you have any questions ~ [hi@helio-press.com](mailto:hi@helio-press.com)