

INTRO TO RISO

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THE RISOGRAPH:

Risograph printing is a vibrant and economical method of producing anything from books to artist prints. It sits in a realm somewhere between screen print and photocopy, but at a fraction of the cost. The risograph bridges the gap between a standard photocopier (which is cheaper up to about 20 copies) and using a commercial printer (cheaper over about 5,000 copies).

HOW IT WORKS:

The risograph works by transferring artwork onto a stencil (or master, or screen). The stencil is wrapped around a drum filled with ink. The paper is then fed flat through the printer whilst the ink is pushed through the stencil, onto the paper, while the drum rotates at high speed. Stencils are made specifically for each drum, and can not be transferred to another. For multi-coloured prints, the artwork is printed in layers. We overprint the colours one by one, changing out the colour drums and creating a new stencil for each layer.

WHAT WE PRINT:

Our risograph thrives off printing anything on an A3 sheet of paper. Each stencil is an A3 size, therefore everything that is sent to the printer will be laid up on an A3 canvas. Finishing services can be organised for trimming, folding or binding to create the following objects (just to name a few!): Posters, flyers, business cards, compliment slips, letterheads, postcards, notebooks, folded greeting cards, envelopes, record sleeves, menus, art prints, clothing swing tags, paper bags, wedding invitations, programs, maps, catalogues, publications, comics and zines.

It is possible to print A2 posters, but only in low runs. This is achieved by folding the paper in half and feeding each sheet through manually. Let us know if you would like to print A2 and we can advise you on how best to design files for printing at this size.

INK:

Risograph ink is non toxic and soy based, which makes it a very environmentally friendly product. These inks can only be used on uncoated paper stock, because they sit on top of the paper rather than being fully absorbed. This can leave the printed material prone to marks and smudging (like a newspaper). We have eight spot colours in house.

All colours are unique to the risograph process and cannot be accurately replicated digitally or represented on the computer. This means we can't colour match exactly but there are ways to create other colours with overlay, halftones and faux CMYK printing to get very close matches, so we can offer help and advice around this.

BLACK (BLACK U)	100%	75%	50%	25%
GREEN (354 U)	100%	75%	50%	25%
BRIGHT RED (185 U)	100%	75%	50%	25%
RISOFEDERAL BLUE (288 U)	100%	75%	50%	25%
PURPLE (2685 U)	100%	75%	50%	25%
YELLOW (YELLOW U)	100%	75%	50%	25%
FLUORESCENT PINK (806 U)	100%	75%	50%	25%
GREY (411 U)	100%	75%	50%	25%

PAPER:

Risograph ink prints well on most uncoated paper, but not on coated or textured paper. We have a range of weights of Eco100, which is the recycled paper stocked in house. For larger runs we are happy to discuss ordering paper in bulk for you. {ideal paper weights}

Ideally the risograph likes to print on 70-260gsm paper stock, but we are happy to test on higher or lower paper weights, if you provide us with a sample. As the paper is fed flat through the machine, weights above or below that range can jam or become stuck to the ink drum.

You are welcome to provide your own paper, but we would like to test it first. When ordering please add 15% extra to the quantity required due to the likelihood of misprints.

Our suppliers include BJ Ball, Spicers Paper and B&F Papers. We carry uncoated stock sample books from all of these businesses.

PREPARING FILES:

- Files should be saved as a flattened grayscale PDF and at least 300dpi. No layers or transparencies.
- Each colour layer should be saved as a separate file (label each file with the name of the colour and the side (for double-sided works) eg. Job name_Pink_Side A.pdf, Job name_Black_Side B.pdf etc).
- Solid colours and text should be set to registration black (100% k). This is especially important for text otherwise it will become pixelated.
- Please leave a 10mm clear border on all A3 prints, as the Riso cannot print full bleed. This border can then be trimmed to create full bleed images.
- All files to be A3 (420x297mm) regardless of the size of the printed area.

All of the images, text or other file content must be set to the size you would like it to print, and then laid up on an A3 file size. If you would like to include crop marks on your printed area (eg. if you would like to print a full bleed A4 poster), export each layer as a flattened pdf first with crop, bleed and registration marks, then place each one on the centre of an A3 file. Lay-up templates are available from the downloads section of our website

If you wish to set up your own files then we need a pdf of every colour you would like to print for each artwork. Please specify the colour you would like it to be in the name of the file. For example, for a two colour artwork you will have three files, one for each colour and one proof. The colour layer files will be grayscale, and the proof will be in colour.

If you do not supply a proof then we will not be able to tell what the intended outcome of the artwork is to be, which means we will not be able to pick up on any mistakes or print issues. We know the colours don't match exactly, but we need to have an idea of the desired result!

We aim to print the lightest colour, or colour with least ink coverage first to avoid printer marks and smudging. If you have a desired order for colour printing, let us know and we can discuss it further.

OPACITIES, INK COVERAGE AND OVERLAYS:

All artwork is sent to the printer in grayscale. Text and solid areas of colour should be set to registration {insert screenshot of colour picker drawn over like screentone.tv} to avoid it looking pixelated. The riso will pick up different tones of black and translate these to different tones of colour, so ensure you have your grayscale files at the colour opacity intended.

The riso can't print 100% ink density across the entire surface area. Too much ink coverage will result in the paper sticking to the colour drum. This will have to be amended which means that a new stencil will have to be created at extra cost. Heavy ink coverage will also result in tyre tracks, pickup feed marks and needle marks across

small areas of the paper. These can be rubbed off clear paper areas with an eraser, but may interfere with the artwork. Large areas of 90-100% colour can look patchy due to inconsistent ink dispersion. {diagrams about ink coverage around paper feed area}

Ink can transfer to the back of a print due to heavy ink coverage. When the paper exits the machine they stack on top of each other which can cause the transfer. This is something to be aware of especially if you are printing double sided.

Tips:

- Large areas of solid colour should be a 75-80% tint.
- Avoid heavy coverage around the edges and at the paper feed end.
- Instead of printing a solid colour background, think about using a coloured paper instead.
- Limit the amount of colours used per print, as this increases the amount of times the paper will pass through the machine.

TEXT/TYPE SIZE, LINE THICKNESS, KNOCKOUT TEXT:

GRADIENTS:

Text always works best when set to registration black and in vector format (created in indesign or illustrator, as opposed to photoshop). We recommend the minimum text size to be 7pt as the machine will struggle with anything smaller. We also recommend that the text line weight be no smaller than 0.25pt.

For knockout text we recommend it to not be smaller than 8pt, and for it to be of a heavier line width. This is because it is not being seen by the machine as text, but rather as an image and it will use pixels to determine the text's edges. Please note if the area surrounding the knockout text is solid colour, the ink may flood the text area. It is best to keep these areas to 80% opacity.

The risograph is incapable of printing a full 0-100% colour gradient. It tends to suddenly drop off from 10-0%, and if the gradient is covering a large area then 90-100% can appear patchy. For smaller areas it is fine to set your gradient from 100-10%, but for larger areas we would recommend a range of 90-10%.

IMPERFECTIONS:

Risograph printing comes with its unique quirks and imperfections, so it is important to be accepting of these before deciding to print with us. Due to these imperfections this method of printing is not right for every job.

The best outcomes are usually designed with risograph printing in mind from the start, though finished artwork can be reworked to suit this printing process if you have a great understanding of the possible result.

The finished print will not look exactly like what you see on your screen when you set it up, and each print will be slightly different with small imperfections in registration and ink coverage.

Ink Transfer:

When the paper is printed on to then comes back out of the machine, these are stacked in the collection tray. If the ink is too dense it will transfer to the back of the print that lands on top of it. This mainly only poses a problem with double-sided printing.

Needle Marks:

The 'needle' is a small spike that helps peel the print off the drum as it rotates. If the ink is dense and also situated right down the centre, the needle will drag through it and leave a mark.

Registration:

Misregistration can easily occur due to the unpredictable nature of the machine. To ensure registration is as tight as possible, please use trapping. Otherwise just embrace it as one of the many quirks of the risograph.

Tire Marks:

The paper pick up and paper feed rollers can leave track marks through the centre of the print, due to running over the ink. To avoid this you would have to have almost no ink down the centre of the print. These marks can be easily removed with an eraser.

Heavy Ink Coverage:

If the ink is heavy over a large portion of the print, this can smudge, transfer to other prints, cause the paper to stick in the machine, and often never fully dries.

Double-sided:

Two sided printing can take longer as it will take time to register the ink layers on both sides. It is usually best to avoid heavy ink coverage on both sides of the paper, as the paper will pass through the machine twice as many times as single-sided printing.

PRICING:

Standard New Zealand GST (15%) applies to all prices quoted, unless purchased from overseas to be delivered to an overseas address.

Quotes are calculated with the number of colours/stencils used, the ink passes through the machine (quantity of prints x number of colours), and then the quantity of paper used. The initial set-up is where most of the production time is spent so therefore the cost is weighted at the start. Once the artwork is set up, it is only a matter of cents per print.

Because of this weighting, the most economical jobs are ones that use few colours/stencils but output high quantities, and the more expensive jobs involve many colour stencils or jobs of a low print quantity.

QUOTES:

Our Risograph is an A3 printer, so all work is to be set up to be printed on A3 paper from an A3 file size. If your work is smaller than A3, you may lay up multiple copies per A3 stencil if space allows. Use our downloadable layout templates to ensure the best results.

As each job varies dramatically, we have no set price list. If you provide us with the following details, we can get back to you with accurate estimates:

- Number of colours - Side A and Side B (eg. Side A 2 colours, Side B blank)
- Copies: (eg. 100)
- Paper: (eg. 100gsm Eco100)

PRINT PROOFING:

Due to the risograph process, getting proof prints aren't common because most of the job cost is in the initial setup of the stencils. If you would like a proof, please keep in mind the additional cost and turnaround time added to the job.

For specific colour matches, large runs and very important jobs, we would recommend this process so you can see the expected results and make changes if necessary.

FILE SET-UP:

M/K Press offers a file set up service. This will ensure your files are in the best format for print. Please get in contact as we are happy to advise!

Please note: If you don't take up an in house file setup option, you take full responsibility of the printing outcome. We will take basic steps to check your file before printing and let you know if it is unsuitable, but the files are your responsibility to fix. If after printing, the artwork isn't successful, we will notify you and ask that you send us an amended file which will be an additional reprint cost.

With any option, we do not proofread content and we ask that you do not submit anything you know to be unlawful or harmful to the rights of others.

AMENDMENTS TO FILES:

Once printing has started, there will be a \$10 fee for amendments or new stencils that have to be made which will be added to the final invoice. Please make sure you have fully read this guide and our terms and conditions before sending work to us for printing.

We will check through your file before starting the printing process, but often problems can't be found until it is printed such as the text not being set to registration black. These issues are your responsibility to check over and correct.

We will not be held liable for artwork set up if you choose to do it yourself. Please also note we do not proofread content.

TURNAROUND TIMES:

Printing can often take more time than expected due to drying time, print checks and adjusting alignment. Technical issues and paper jamming can also happen from time to time, but once each stencil is up and running, copies are fast to duplicate. The more layers per artwork, the longer it will take as each layer needs to dry before being passed back through the machine, and the registration process is also time-consuming to ensure achieving the best possible result.

Roughly, you can account for 24hrs per layer, per side. So for example, a 1 colour print could take only 24hrs, but a 3 colour, double-sided zine would take a minimum of 6 days.

Also, we are not open for printing every day! So please keep that in mind for when you are approaching a deadline. It is best to enquire at least 2 weeks in advance. If you require any specialty paper to be ordered in bulk, this can also add up to 5 working days.

TERMS AND CONDITIONS:

- Please check the details of these terms and conditions carefully to make sure that all the information is correct, as well as the total cost due, quoted in the email.
 - Your order must be confirmed and payment received* before we proceed to create artwork or print.
 - Confirming this order means you have accepted these terms and conditions.
 - Please reply with ORDER CONFIRMED or any order amendments if there are any changes required.
 - Cash, bank transfer or PayPal (service charges applicable) details available on request. Please let us know what your chosen payment option is.
 - If a job is later cancelled by you, any costs incurred to us (such as paper ordered in) will be charged for.
 - We accept no responsibility for missed deadlines if artwork is incorrectly submitted or needs to be amended.
 - You are responsible for making sure that the artwork that you send to print is accurate and appropriate for publication and printing.
 - Do not submit anything you know to be unlawful or harms the rights of others. We will check the design and file setup to ensure your order is printable, although we do not monitor the content.
 - If a proof is not provided (jpeg or pdf) then we will still print the work but cannot guarantee its accuracy.
 - We are unable to accept responsibility for work that is not collected within six weeks of completion.
 - We will use the courier service requested upon booking of a job and we will ensure it is appropriate.
- In the unlikely event of delay or loss in the post or by a courier, we will not be held liable under any circumstances for consequential loss resulting from third party actions but we will always do our utmost to resolve any transit issues.
- *Work over \$500 in value requires a 50% deposit before printing can commence.
- *All print work is to be paid for before it leaves the studio unless otherwise agreed.

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