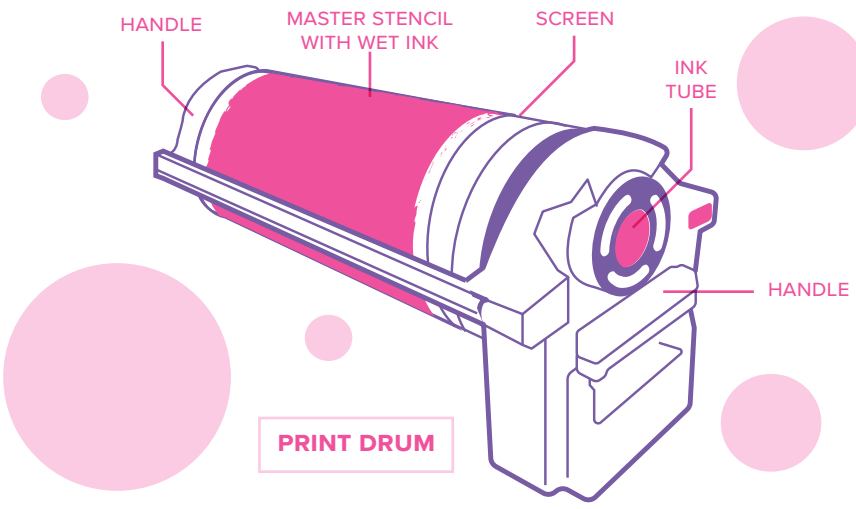
What's a Risograph?



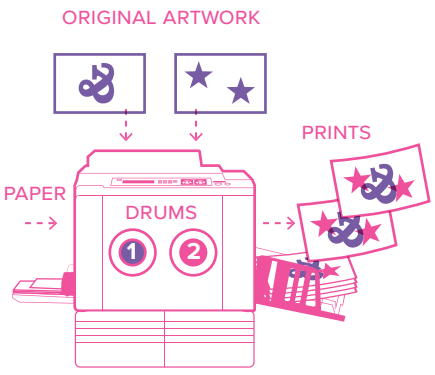
It's a digital duplicator stencil process.

It was designed in the 1980s as a cost-efficient way to print high quantities of limited-colour graphics, and it's now popular with artists + designers for its unique look. The machine looks like a printer/copier, but the way it puts ink on paper through a mesh + stencil is similar to more traditional mediums like screenprint.

It uses its own special inks.

That allows us to use some ink colours that are impossible in regular full colour CMYK printing.

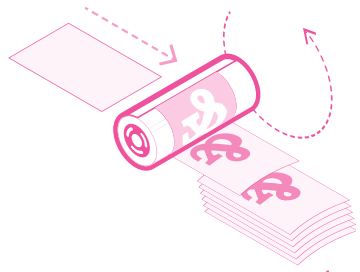
How Does It Work?



When you send or scan artwork to the Risograph, it burns your art onto a sheet of special stencil paper. That's called the "master." The machine then attaches that master stencil sheet to a specific ink colour drum, wrapping it around the drum cylinder.

The drums rotate and make a print impression on each sheet of paper that passes through. We can print either 1 or 2 ink colours at a time.

Ideal Riso Projects



- ✓ Lots of copies of the same print, or multiples of the same print on different types of paper
- ✓ Limited colour palettes
- ✓ Relatively light ink coverage
- ✓ Embracing some imperfection and inconsistency in the look of the prints – that's part of what makes Risograph interesting!

Risograph Paper

- ✓ Uncoated paper only
- ✓ Weight between 20# bond – 80# cover (75 – 216 GSM)
- ✓ We print on Letter (8.5x11") and Tabloid (11x17") sizes
- ✓ Studio paper: COMD studio has a variety of papers available for shared use and purchase. Personal paper must be approved by tech.
- ✖ No holes, rips, rough edges, or folds, or non-paper materials like staples, glitter, seeds, or plastic.

MULTIPLES ON A SHEET

For smaller prints: figure out how many fit on a Letter or Tabloid sheet, lay them out on one page with any trim marks you need, and cut them afterwards.

Imperfections

...are just part of the process!

It's common for Risograph prints to have variations in alignment and texture, and not all of your copies will look identical.

TIPS + TRICKS

- Design artwork where the lineup between ink colours doesn't need to be extremely precise, or looks cool if it's a little "off."
- Print 10–20% more copies than you need for good final ones.
- It's sometimes impossible to avoid ink marks and stains, especially with multiple passes through the machine. But, after drying, marks can often be cleaned up with an eraser.

Planning Risograph Artwork

YOU'LL NEED...

- ✓ **Black + white or grayscale art** (either a PDF or a physical page to scan) for **EACH** ink colour in your artwork. You're designing a stencil for each ink.
- ✓ The page should match the paper size. We print on:
  LETTER: 8.5 x 11 inches, or
  TABLOID: 11 x 17 inches

1 INK PRINTS

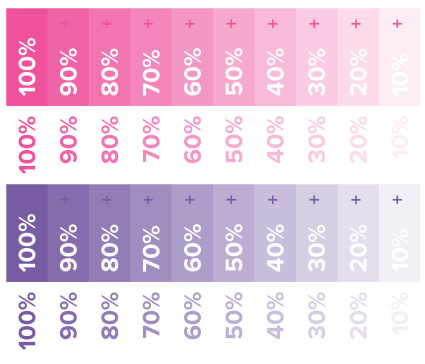
- One ink colour is easy: you just need a black and white or grayscale version of your page.

2+ INK PRINTS

- Prints with more than one ink colour need a **separation**. That means you're splitting it into the parts that should print with each ink.

3+ INK PRINTS

- Prints with more than 2 ink colours need more than one pass through the Risograph, and at least a day to dry in between passes.



VALUE + DENSITY

The values in your grayscale file (light to dark) become the range of ink density for each colour's master stencil.

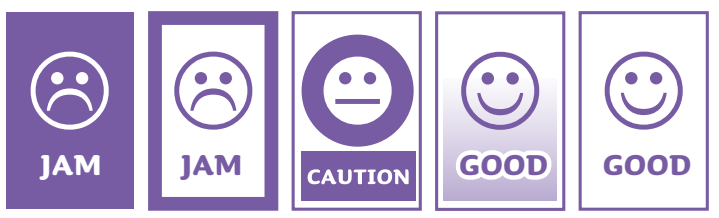
100% = black
1–99% = shades of gray
< 10% may not be visible
0% = white (paper colour, no ink)

Since it's a stencil, lighter shades will always have a texture or a dot pattern.

LAYERING

The inks aren't opaque, so the look of the colours is affected by overlapping areas, as well as the paper colour.





Ink coverage on the page: try to keep it light!

DON'T OVERLOAD THE PAPER OR EDGES WITH HEAVY INK

Heavy ink, especially large areas of 100% black in your original, can make a mess and even jam in the machine.

For large areas of ink coverage, keep the values light, or break up dark areas with a range of midtones + highlights. When possible, use paper colour instead of ink for background colours.

Using shades of gray instead of 100% black in your original artwork can result in cleaner, faster drying prints, but text and lines will have the clearest and most solid looking edges at 100%

MARGINS: Risograph can't print edge-to-edge on the paper. Allow at least a 0.25" (6mm) white border on all 4 sides. Printing a 100% black border will jam.

WET INK + DRYING TIME

- **Prints that are double-sided or have more than 2 ink colours will need to go through the machine multiple times, and need time to dry in between.**
- COMD Studio rule: prints must dry **1 day or overnight** before another pass through the machine. Prints with a lot of heavy ink may need 2 or 3 days to reach their maximum dryness.
- Be careful not to touch the wet ink on new prints. Gloves are available.
- Even after it's had time to dry, Riso ink isn't 100% permanent, and can still smudge + transfer when touched. (It's kind of like touching a pencil drawing, or newspaper ink.) It's also not archival, and the colours can fade in sunlight.

More Information + Links

Contact the Communication Design Studio Technician
Email Kathleen at comdtech@ecuad.ca, or visit office c3214 during tech hours

START HERE! JOIN OUR RISO MOODLE
courses.ecuad.ca/course/view.php?id=11282

PREPARING RISOGRAPH ARTWORK
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