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Colour separating a design by hand

Colour separating a design is taking an original piece of artwork and breaking it down into a number of separate designs, from which screens/masters are made. The separations are printed over each other, in layers, to create the original design.

When do you need to separate colours?

Screen printing in colour requires a different screen for each colour, unless you can put two colours on the one squeegee, however PRINT GOCCO can print multiple colours on the one screen, using less screens.

There are a number of ways to achieve colour separations:

- ✓ By hand: using artwork pens to trace the design and draw on an overlay sheet
- ✓ By hand: taking a number of photocopies and blocking the unwanted portions
- ✓ With computer: scan image & colour separate using design program [see Information Sheet #13]

How many layers/ separations do you need?

- ★ PRINT GOCCO - different colours can be combined on single layers [using ink blocking] reducing the overall number.
- ★ Screen Printing - a separate screen for each colour is required as colours can not be combined on the same separation/ layer.

Tracing Method

This process is best performed using a light box or against a window, where light will shine through the design, highlighting the areas to be copied.

How it's done:



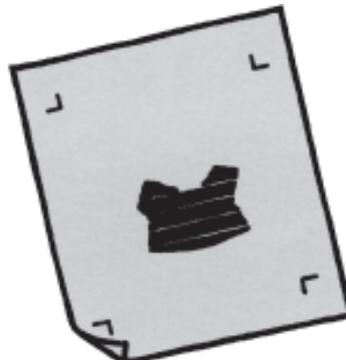
Place registration marks [a simple x or similar mark] into the 4 corners of your original design, using dark pen/ texta. These are vital to register all your different layers.

Place a sheet of thin paper over the original picture and mark your 4 registration marks onto the new sheet of paper. Draw the outlines of the areas to be coloured with a yellow pencil and then shade in the areas to be coloured with a RISO Carbon Artwork Pen [fill with 'texta' if it is to be photocopied]. Repeat the previous step for each new layer/ colour separation you require, so that each colour is on its own piece of paper and all sheets have the registration marks.

Below is an example of a simple two colour separation:



Separation #1



Separation #2

With your artwork separated

If using your design directly after tracing with RISO carbon pen - prepare artwork accordingly by removing the moisture from the design. It's best to photocopy your new designs and use the photocopies as artwork - this keeps your originals for later use/ additional changes [remember the blue filter for photocopies].

Blocking Method

By taking multiple copies of your original design, each separation is created by blocking out parts on each layer.

This process is more accurate than tracing the design as each design is identical, however blocking requires more thought and delicate separations as complex designs [5 colours or more] can get confusing - what needs to be removed from what layer, etc.

How it's done:

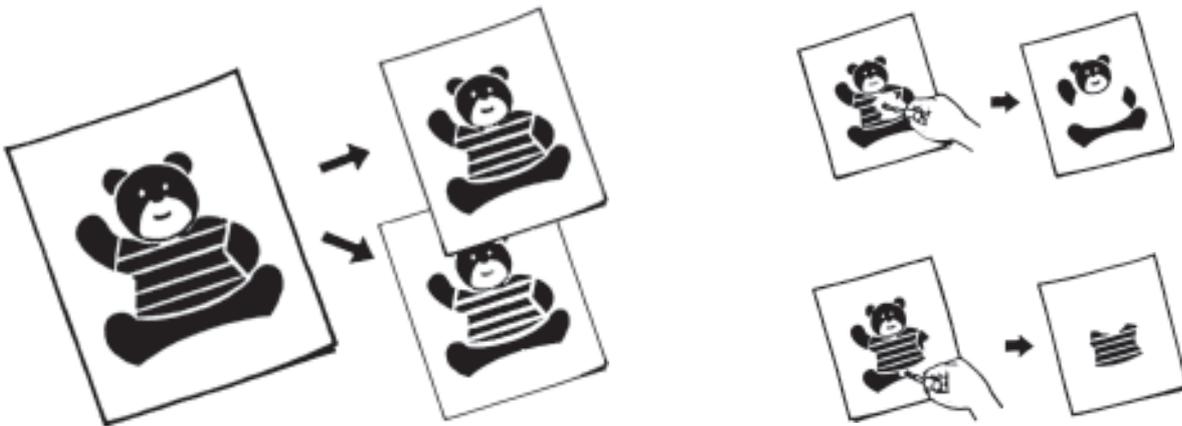
Place your original design onto the stage glass of the photocopier and make as many copies as you need layers [plus 1 or 2 spares].

- Each photocopy becomes it's own separation/ layer

Hint

Name Each layer [on the top or back] so you know what to remove from each separation.

You must now block out using correction fluid [or cut with a sharp knife] the areas on each separation that are not required. Repeat the process for each photocopy/ separation.



When you have finished all your separations, take a new photocopy of the design and use this as your artwork when imaging your screen [remember the blue filter for photocopies].

Registering your Layers

It is important to line up succeeding screens precisely, each and every time.

Most people develop their own simple form of registration depending upon the equipment they have available, however here's a few simple guides to help you get started:

☆ Place a copy of your original design over your item, in the correct printing position. This becomes your 'home' position and you will line up each of the screens over this design.

PRINT GOCCO: We do not recommend attempting this style of printing unless you have a PG-11, CD-Printer B6 or PG Arts for Paper system with advanced print registration features. Gone are the days of the old registering attempts by matching the registration marks exactly - not impossible but very time consuming.

Screen Printing: You can register designs by hand or using a screen printing jig.

☆ By hand - When a jig is not available Screen Master is fairly transparent enabling you to view through the screen and align the designs manually. By hand is a time consuming process as you must ensure the registration of each screen before printing.

☆ By Jig - Each screen is placed into an arm of the jig and then registered over your original design. The arms are locked in and registration is complete - a very fast and simple method.

Full details of Registering multiple colours in a jig is available on NEHOC Information Sheet #31 on the NEHOC Training CD or web site.