

# ***PRINTING WITH 'FOR DARKS' INK***

*THESE INKS ARE VERY THICK AND ARE MORE DIFFICULT TO PRINT WITH THAN 'FOR LIGHTS' INKS. HERE ARE SOME EXTRA PRINTING TIPS WHEN USING THESE INKS.*

'For Darks' inks contains up to four times more pigment than a standard ink, making the pigmentation and consistency much thicker, requiring a different printing method to ensure all the pigment passes through the screen and does not remain in the mesh after printing.

The thicker pigmentation of the ink ensures a solid coverage onto the fabric below and eliminates the need to place a white background or base layer under your colours.

The thicker consistency of the inks creates a common problem for beginners in that although the first print looks great, each print afterwards starts to get worse (lighter & patchier) as the ink starts blocking the design and drying in the screen – all easily fixed by adjusting the printing technique ever so slightly.

- Start by mixing your inks well, this will create a smoother consistency
- Print 'off contact' by elevating the screen 5-7mm.
- Keep the squeegee angle upright to print with the sharp edge of the blade
- Use slightly more pressure on the squeegee
- Keep the design area clear of ink after each print
- Increase the number of passes with the squeegee

## **OFF CONTACT**

This process is also called 'snap' or 'elevated' printing.

The process involves raising the height of your screen above the item you are printing. The raising of the screen ensures the mesh is not in contact with the item before or after printing and 'snaps' back after the squeegee has passed over the design.

When the screen is not raised you will actually pull a layer of ink back off the item when you lift your screen – this is why the item may appear patchy (as whilst your print was perfect, the wetness of the ink and heavy pigment load sticks to the strands of the mesh).

Raising the screen and 'snapping' back to a height above the item, the screen does not remain in contact with the item, so when it is lifted after printing the mesh is already away from the item and does not stick to the design (leaving all the ink on your item).

When using a Riso frame, we place our screen mesh on the top side of the frame (with shiny side touching the frame). If more lift is required we place wood strips (similar to a wooden ruler) between the frame and fabric, and use strong plastic spring clamps from the hardware store to hold the frame and trips to the table.

### ***KEEP THE SQUEEGEE UPRIGHT***

You will receive a sharper and more detailed image printing 2-3 times rather than 1 heavy print. The denser pigments in the ink can not all pass through the mesh in 1 print so by performing 2 prints you put down a set of 2 sharper layers that stack on top each other and to give a sharp solid print. You should hear the rippling noise of the blade passing over the mesh strands as you print.

1. Keep the angle of the squeegee upright – angle between 60-70 degrees

- Lowering the angle does not put more ink through the screen
- Angles too low will force ink through the screen and bleeding/ smudging will occur

2. Do not press too hard – less pressure is used with the squeegee when printing

- The blade on the squeegee will flex slightly, however should not bend or bounce whilst printing
- You don't need to push the squeegee through the screen – the ink will naturally be drawn through onto the material below – guide the squeegee onto the item below

### ***USE SLIGHTLY MORE PRESSURE***

As the screen must travel downwards to touch the item, you will find yourself naturally using more pressure to print, use caution not to press too hard and flood the screen with ink. This point is used in conjunction with both the previous point of squeegee angle and the next point of keeping the screen clean of ink after printing – it is adjusted to suite your printing technique, the elevated height of the frame and consistency of the ink you are using.

### ***KEEP THE DESIGN FREE OF INK***

The elevation of the screen, higher angle of the squeegee and increase in pressure on the squeegee blade should ensure that your design in the screen is clean after printing. Keeping the design area of the screen clean after printing is a sign of a good print. If the design area is not clear then not all the ink has passed onto your design and it's going to look patchy or faint. Ink left in the screen will also dry making subsequent prints worse – ultimately you'll have to stop and clean the screen down in water.

### ***LOOK AT YOUR SCREEN, NOT THE PRINT***

After printing you will naturally look at the print, however more importantly look at your screen after printing, as it's the health of the screen that is more important to your overall printing.

- A clean and healthy screen will continue to give you sharp quality prints.

You will notice problems with your screen before anything happens to the prints on your garments, so acting before things happen will save you troubles, miss prints and valuable time.

1. Part of the design with ink still in it

- Remove with a clearing print after your passes. If this does not clear the ink you may be required to perform your clearing print onto paper not onto the item after printing [the paper is more absorbent than the 'wet' fabric you have just printed].
- If ink continues to dry in the screen you must then either adjust the ink (by adding Fabric Ink Retarder) or the printing technique by flood coating the design. Retarder is recommended as the first option as flood coating involves pushing the ink back across the design area after printing to cover the area with wet ink. You are required to have more ink on the screen for this process and works best with thinner/ runny inks (not normally required for opaque Fabric Inks).

2. Excess ink building around the edges of the screen

- This is a normal part of printing, however you should return the ink to the container and stir to 'work the ink back in'. If you leave it too long it will start to dry and may then thicken your ink supply.

If ink continues to build regularly then you may be using too much ink or the pressure of the squeegee is too great as the ink is being forced off the squeegee to the sides.

### ***INCREASE THE NUMBER OF PASSES***

Most prints using high coverage inks will require two or three passes of the squeegee for complete coverage of ink onto the garment below.

Remember that 2-3 passes using a consistent and even pressure - not heavy - will produce a clear, solid image. One heavy pass will flood the screen with ink, blur the design and give you no greater coverage at all.

Items can only absorb a set amount of ink in one pass, so multiple passes with less ink will produce a clearer result, as you layer and blend the ink instead of forcing it onto the material.