Offset Lithography

Definition
Offset lithography is the most common printing technique. Ink is transferred from a plate to a rubber blanket, then on to the printing substrate, paper. In order to achieve the desired result, the printer is able to adjust the ink density of the print. Printing pressure has to be correct for the paper. The full range of Arjowiggins Creative Papers is compatible with traditional sheet-fed offset printing (except Curious Touch which requires UV offset). Some papers such as Curious Collection Cosmic or Curious Collection Skin may require fully oxidising inks, as specified in the respective printing guides.

Dos
- Do specify Rives Sensation papers for projects requiring impeccable print rendering. Available in Matt and Gloss finishes, this paper has been specially developed for high resolution offset printing on fine papers, including textured finishes.
- Do think of metallic inks to print on dark colours. CMYK process inks are translucent, which is not the case of metallic inks. White ink for offset does exist but requires several passes to cover a dark colour, with the risk of misregistration.
- Do take advantage of spot colours (Pantone) if you need to reproduce a precise colour, for a logo or solid area for example. Spot colours enable you to create specific colours unavailable through the CMYK process, including fluorescent and metallic colours.
- Do prefer UV, H-UV or LED UV offset for quicker drying times and sharper images. Sheet fed Offset UV requires an adapted press and is more costly than traditional offset - but for large print runs the extra cost can be balanced by the shorter conversion time.
- Do go through the print guide associated to your chosen paper stock. You will find useful recommendations about ink coverage, printing inks and screen ruling in particular.

Don’ts
- Don’t limit yourself to smooth white papers: Pop’Set colours, Curious Collection Metallics and Rives textured papers can also create striking printed materials with offset printing, even with 1 or 2 colour printing!
- Don’t cut corners on paper quality. Good sheet formation makes uncoated papers absorb ink more evenly, thus reproducing a more uniform solid colour and limiting unpleasant mottling effects. Two-sidedness can also cause the same colour to look different on both sides.
- Don’t choose paper weights above 400g without checking with your printer first. Many offset presses cannot process heavier Creative boards that are much thicker than equivalent weights of coated boards.
- Don’t skip the print set-up on sensitive jobs. Pass the job on press as colour adjustments can be finalised during the run. Come with a checklist of areas to verify on press, such as solids, skin tones, dark areas, registration, colour matches and gradations. Keep in mind, the proof is never identical to the final job, as the process for making the proof differs from the offset process (paper, ink and press).
- Don’t be afraid of printing solids. Drying time may be longer, so you can ask your printer for interleaving in order to avoid ink transfers whilst guillotining or processing.