

# FLEXO VS DIGITAL

## LABEL PRINTING

An explanation of the key differences between two common methods of printing labels

### WHAT IS FLEXO?

Flexo (flexographic) requires the use of polymer plates that carries a raised image. The raised portion of the plate accepts the ink. When the plate is pressed against the material the ink transfers from the plate to the material. Each colour requires a separate plate, which when printed in sequence creates the final image.

### WHAT IS DIGITAL?

There are many different types of digital print technologies; we have HP Indigo digital offset presses. Our presses use a Photo Imaging Plate (PIP) that can be re-imaged with different information on every revolution of the printing cylinder. The ink is only attracted to the charged areas on the PIP. The PIP transfers the attracted ink to a rubber blanket, which then transfers (offsets) the ink to the material.

Fast and efficient, flexo is ideally suited for medium to high volume print runs.



#### QUANTITY

Digital is ideally suited for short runs (there's no minimum order quantity), multiple varieties, concept mock-ups and test marketing.

Printing plates are required for each label. Flexo is typically suited to labels that don't frequently change.



#### FLEXIBILITY & SPEED TO MARKET

No printing plates are required; this reduces preparation costs and makes it easier to change and update label designs as frequently as required.

Flexo provides consistently world-class quality labels. We utilise in-line and off-line print quality inspection technology to ensure consistency and repeatability of labels printed.



#### QUALITY

Our HP Indigo presses ensure we offer world-class quality digital labels. We can achieve an almost identical finish to flexo with accurate brand colour matching that covers up to 97% of the Pantone range.

Flexo by its nature prints static jobs, where every label is the same. However a limited amount of variability can be achieved by stacking variations of the same label up on the plate to repeat throughout the print run. An example is using 9 different recipes for the same product label.



#### VARIABLE DATA & PERSONALISATION

With digital you can create personalised label campaigns; perfect for limited editions, event marketing, and individual targeting. There are two main forms:

1. Incorporating variable components within a label design e.g. images, numbers, text and barcodes.
2. Specialised software that creates thousands, even millions, of individual designs where no two labels are alike.

Hally Labels flexo presses use predominantly UV (Ultra Violet) curable inks. They require considerably less energy for curing compared with traditional water-based and solvent inks. We minimise flexo ink waste by re-using and recycling into other colours.



#### ENVIRONMENTAL SUSTAINABILITY

Digital printing has a minimal environmental impact. There are no printing plates required and there is minimal set-up, which means waste is virtually eliminated.

Once all the colours of the label have been printed, the same machine will apply coatings or laminations, die-cut the labels and add any embellishments required e.g. cold and hot foiling, embossing, silk screens and high builds.



#### FINISHING & EMBELLISHMENTS

Once the label material has been printed it is then transferred to our specialist finishing machines to be coated or laminated, die-cut and embellished. Our full range of embellishments are available.

Flexo uses a combination of spot and process colours using UV inks. Spot PMS (Pantone Matching System) colours are typically used for logos, brand colours and colour-coded product variants. Process colours are typically used to create images. We can print up to 11 colours in one pass.



#### COLOURS

Metallic, food-safe and light-fast inks are also used and we can print water-based inks on specialised flexo presses.

Digital uses process printing to create colours and images, typically via Cyan, Magenta, Yellow and Black. Our presses can add Orange, Green and Violet to widen the colour gamut normally achievable through traditional CMYK print, covering up to 97% of the Pantone range. White can also be printed and we have the option to use 'spot colour' inks for accurate brand colour matching. The ink used in Digital Offset is semi-opaque, which allows for bright and vibrant colours and excellent colour reproduction.

All types of materials are available; thermal papers and films, gloss papers, clear and white films, metallic paper and film, cards, tags, self-adhesive board and much more.



#### MATERIALS

The majority of label materials can be digitally printed including gloss paper, uncoated and textured papers, clear and white films, metallic paper and film, and thermal paper.

Flexo has a turnaround time of 10 to 15 working days. We often make to hold or stock flexo printed labels, offering just in time delivery with 24 hours to Despatch. This is part of a forecasting and stock management service that is suited to larger volume labels that don't frequently change.



#### TURNAROUND TIMES

Our turnaround times are faster via digital, at around 5 working days. We usually make digital labels to order, where we make the exact quantity you want and deliver it all straight away.

Our GMG proofing machines are calibrated and profiled to our flexo presses, ensuring that all process images in a job can be matched to a very high degree of accuracy on press. Spot colours are matched to PMS.



#### PROOFING

We've also calibrated and profiled our GMG proofing machines to our digital presses, providing accurate colour matching for the entire label design. We also offer a 'v-proof' service where we print your design on the material you choose, straight off the digital press.