

## Processes

### 4 Colour Heidelberg DI Press

We have invested in a Heidelberg DI Press, which is on the cutting edge of printing technology, the Heidelberg Quickmaster DI is a "direct-to-plate" system which enables digital imaging to be done directly from computer to printing plate.

#### Digital Printing What is digital printing?

A revolutionary method of printing direct from disk or hard copy, direct to paper without the need for conventional films or plates. At speeds of up to 125 ppm black or 45 ppm of full colour, digital printing is ideal for short run, variable text documents such as mail shots, business cards, price lists, manuals, handbooks, posters, catalogues, directories, leaflets etc. Laser sharp images for the price of a photocopy. Digital printing gives the flexibility to print in quantities that would not be cost effective with conventional lithographic printing. Advantages of Digital

- Shorter turnaround.
- Every print is the same. More accurate counts, less waste and fewer variations, due to not having to balance ink and water during press run.
- Cheaper low volume printing. While the unit cost of each piece may be higher than with offset printing, when setup costs are included digital printing provides lower per unit costs for very small print runs.
- Variable Data Printing is a form of customizable digital printing. Using information from a database or external file, text and graphics can be changed on each piece without stopping or slowing down the press. For example, personalized letters can be printed with a different name and address on each letter. Variable data printing is used primarily for direct marketing, customer relationship development and advertising.

**Lithographic Printing What is lithographic printing?**  
 Offset lithography is the most common high volume printing technology. In offset printing, the print image is burned onto a plate and is then transferred from the plate to a rubber blanket, and then to the printing surface. The lithographic process is based on the repulsion of oil and water. The image to be printed gets ink from ink rollers, while the non printing area attracts a film of water, keeping the non printing areas ink-free. Advantages of Offset

- High image quality.
- Works on a wide range of printing surfaces including paper, wood, cloth, metal, leather, rough paper and plastic.
- The unit cost goes down as the quantity goes up.
- Quality and cost-effectiveness in high volume jobs. While today's digital presses are close to the cost/benefit ratio of offset for high quality work, they are not yet able to compete with the volume an offset press can produce.