

# DIGITAL VS. OFFSET PRINTING

## *What's the difference?*

**DIGITAL PRINTING** is what you would think of as a color printer. Digital printing is a quick and cost effective printing solution, especially when it comes to producing small quantities or when you want a full-color product. Digital printers reproduce in full-color, composed of four distinct printer ink colors – Cyan, Magenta, Yellow and Key (Black). It is commonly referred to as CMYK. When combined, process colors can produce a wide range of colors.

However, there are limitations to digital printing. Colors can vary between runs. This can be due to a number of outside factors, including the temperature in the room, how much the printer has been running that day, how long the toner cartridges have been in the printer, paper type, etc. Additionally, colors as they appear on a computer screen do not always reproduce accurately in print. Computer monitors have a larger color gamut than printing, which is why a computer can display a million more colors than what can be achieved with printing.

**OFFSET PRINTING** is beneficial for large quantities and when color matching is critical. In general, offset printing is regarded as being of higher quality than digital, due to its greater detail and color fidelity. However, the quality of digital printers has improved over the years, with some digitally printed jobs rivaling the quality of offset jobs.

There is much more set-up involved in offset printing, so it is not usually cost-effective for small runs. When running large quantities, these set-up costs are often absorbed by the diminished price per piece.

Offset printing can print using custom inks, such as metallic and Pantone Matching System (PMS) spot colors, which allows for more control when color match is critical. When spot colors are printed on a digital machine, the colors must be converted into CMYK, which does not always generate a good reproduction of spot colors.

