Stamp Production: Screen and Digital Printing

For Royal Mail's *Stamps and Collecting* Website

Two recent printing methods available to the stamp printer are screen and digital printing. The latter has the opportunity to revolutionise stamps, both in speed of production and features incorporated.

The final two kinds of printing to be covered in this series are relative newcomers to the arsenal of processes that are available to the modern-day stamp printer.

[Silk]-Screen: This printing method, also known as serigraphy, was first used on stamps during the 1990s, having originally been invented to print on textiles and metals. It works by ink being forced via a giant squeegee through a fine screen (once made of silk, hence its original name) onto the paper surface of the stamp sheet below. A protective coating on the screen allows colour to pass through in some places (the image area), but not others (the non-image area).

It is invariably used when heavy ink coverage is required and was seen as an alternative to printing by lithography, although it has yet to be used extensively in the specialised field of stamp printing.

Screen printing was first applied to a British stamp using a thermochromic (heat sensitive) ink on the Nobel Prizes 2nd class value of 2001.

Digital: It probably will not be too long before digital printing has a greater impact on the world of stamp production following Australia Post's fast-track printing of the Sydney 2000 Olympic Games sheetlets. Within 24-hours of an Australian athlete winning a gold medal, stamps had been designed, approved, printed at six locations, distributed and placed on sale at major post offices nationwide.

This incredible accomplishment ensured rapid availability of initial stocks in a short print run only, with the bulk supplies being lithographically printed and available three days later at every Post Office. Digital printers at the time could not cope with the total volume of stamps required for such a major event, whereas today's digital printers are getting faster all the time and an output of some 6,600 A4 sheets per hour is currently achievable.

The digital process also presents an opportunity to make each stamp that is printed quite literally unique, perhaps individually numbered, tariff coded or bearing covert (hidden) security features.

Digital printing has been used by Britain on Smilers® photo labels, but not on actual stamps as yet.

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