

A VISIT TO CARTOR

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Recently, fellow *Bulletin* contributor Richard West and I were given the opportunity of visiting Cartor Security Printing. Their premises are situated in the heart of the French countryside just south-west of Paris in a small French town of around 3700 inhabitants called La Loupe, which translates into English as ‘the magnifying glass’. Equally appropriate is that they are located in Avenue Rowland Hill and are within the Gutenberg industrial zone. The train journey from Paris took around 80 minutes and we were met at the local station by Peter Evans, Cartor’s International Sales Manager, who was to be our host for the day.

Cartor (the name is derived from *Carte d’Or* – a symbol of excellence and quality) was formed in 1974 at L’Aigle in Normandy, where it remained until early 1999, and has been specialising in the printing of high-quality postage stamps ever since. Its reputation has been based around the continual development and investment in new printing processes and it endeavours to react rapidly to the needs and wishes of postal administrations around the world – now also including Royal Mail, of course.

In 1995, Cartor was taken over by Gilles le Baud who provided the sound financial and legal structure that enabled them to support future growth prior to the next stage of the company’s development. This occurred in June 2004 when it became a key element of the newly-formed International Security Printers group (ISP), having been bought outright by Walsall.

ISP came about following a long-standing idea of Adrian Aspinall, Chairman of WSP, to unite some of the biggest and best names in stamp production, including Walsall Security Printers and Courvoisier Security Printers. ISP acts as an umbrella and marketing name and has facilitated the combining of resources, improvements to collective buying power and the sharing of expertise and technologies, enabling the group to provide an unrivalled range of products and services. A massive 99% of Cartor’s production is now postage stamps; up from probably around 50% just five years ago, such is their desire to be known throughout the print and postal industries as specialist stamp printers and not just general security printers.

Within the group, it is Walsall that undertakes the high volume reel-fed printing; Cartor does the small to medium-sized litho sheet-fed runs, while Courvoisier (now sited in building two within the French plant) produces shorter-run gravure reel-fed stamps on its Moser machine. This press was once sited in Switzerland, it then moved across to Walsall when they purchased the company and is now at Cartor. It can print and perforates in-line and cut into sheets in one operation and looks as if it will carry on forever; such is the quality appearance of this old workhorse. It is perhaps feasible that if a short-run Royal Mail stamp issue was required in gravure it would suit this press and so might be used at some point in the future, maybe adding the Courvoisier brand to our British stamp albums for the first time.

At this point I enquired as to what the break-point was between using lithography, rather than gravure and assuming that the client had not specified the process to be adopted in the contract. It appears that production of up to ten million special stamps is currently suited to lithography, due to its low set-up costs (disposable plates can be produced in-house by Cartor at minimal cost); while gravure is best suited for higher volumes (where the initial setup for the sub-contracted engraving of a set of cylinders costs many thousands of pounds).

It was not long before Royal Mail stamp production staff had visited Cartor and subsequently authorised them to produce stamps for the United Kingdom, the first such item apparently being the Pacific Explorer Exhibition Smiler's sheet issued early in 2005. Orders (or 'warrants', as they are known) are placed by Royal Mail with Walsall, who then decide what part of the group is best placed to fulfil the printing based on type of stamp, print volume, printing capacity at each plant and the urgency of the order.

During our visit, the Ashes cricket miniature sheet was being perforated and was just days away from being placed on sale across the UK. This was one of Royal Mail's 'fast-track' issues that clearly suited production methods at Cartor. The precision perforators used allow a movement tolerance up or down of a mere half of one perforation hole and were manufactured by James Burn International. They have an automatic feed that moves the sheets forward, manoeuvres them into alignment and then the stamps are perforated with a conventional die tool.

Once perforating was complete, the primary sheets would have been put through a 'massicot' – named after the inventor of the machine and having no connection with the mineral form of lead monoxide – that would cut the sheets into single miniature sheets. For reasons obvious to anyone possessing even the smallest understanding of French history, they do not use the term guillotine when talking about cutting paper.

Four of the six new self-adhesive Smilers (the kind that can be personalised, as no generic sheet has so far been created) were in various stages of completion. These sheets were printed on a six-unit Heidelberg press (thus enabling Hexachrome printing, when required), which has an additional unit on the end that simulates perforations by kiss-cutting the depth of the paper in the same pass to within a fraction of a millimetre.

A later pass of the sheets through a single-unit Heidelberg once the stamps were dry saw the application of the phosphor ink. Phosphor will sink into the coloured inks if applied as part of the initial pass through the printing units, reducing the output of the phosphor and potentially impacting on readability by the sorting equipment used at the Mail Centres. Quality control phosphor-reading equipment provided by Royal Mail enables Cartor to constantly monitor batches for variation in signals.

In the examining, packing and despatch area, a very large order for self-adhesive miniature sheets placed by a Far Eastern country was in progress on the day of our visit. The printed stock was being checked for any errors by the skilled and highly focused team of all female examiners, prior to being counted on an automatic machine, then packed, labelled and despatched to distant shores.

The examination area is also home to a collator that is used for prestige stamp book assembly of covers, panes and interleaves. The printed components are produced in two columns of five books, which are then cut into single columns, sewn with thread (or stitched, i.e. stapled), bound with tape over the spine area and cut-down into single finished books. It should be noted that conventional booklets of water-activated or self-adhesive stamps are also produced at Cartor, albeit not for Royal Mail due to the large volumes that they require. The stamps are printed, perforated or kiss-cut, merged with the printed covers (in the case of water-activated stamps), cut into singles, folded and finally rouletted along the spine to assist with opening. Coils are one of the few stamp products not produced at Cartor.

Next on the tour came the paper store, which contains the base stock used to print the stamps be it Tullis Russell Coaters' water-activated paper, or Avery's self-adhesive stock, both types of which need to be acclimatised for a few days prior to use to assist with optimal running through the presses.

Our tour was now complete leaving only the general offices, waste destruction area and 'repro' rooms unexamined, for they are strictly out of bounds to all visitors due to the nature of what might be on view and the risk of breaching the confidentiality and trust that its clients place in Cartor.

Gilles le Baud (Vice President, Special Projects) and Ian Brigham (Vice President, Cartor) showed us an album containing many of the innovative stamps that they are particularly proud of. These included stamps that had actual pieces of the Rock of Gibraltar incorporated and another with real wood from HMS Victory. There were stamps with micro-printing that can only be seen with a very strong magnifying glass, 'scrambled indicia' stamps where an image or words are invisible to the naked eye until viewed through a decoder and stamps and miniature sheets in all manner of sizes and shapes. Rose, coffee and perfume scented stamps were there too, as were embossed, metallic foil, thermographic and holographic stamps. Many of these specialised finishing operations are done on four Heidelberg platen presses that have been especially adapted to undertake this work.

There appears to be no end to how a once-humble postage stamp can be enhanced these days – either for security or decorative reasons – and Cartor is at the forefront of developing still further these printing features. It is all about 'designing for the process' and only incorporating these features on stamps where they will take an issue from the mundane to the extra-ordinary.

All too soon our visit was over and we were on our way back to Paris, via the attractive medieval town of Chartres, reflecting on all that we had seen. It is clear that the enviable reputation enjoyed by Cartor around the world is fully justified and I take this opportunity of thanking Peter Evans and his colleagues for spending so much of their time with us and for answering the many questions that we posed, both during and after the visit.

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