Proofing

Once we get artwork sorted out, we issue a PDF production proof that will show the front and back of the artwork as well as any features required such as Magnetic Stripes and Signature Panels. An order confirmation is issued with artwork proofs via Email, Courier or Express Post. The order confirmation outlines the total costs of the job. Once signed copies of the order confirmation and artwork proofs are received, production time begins.

Materials

We print on a wide range of Papers, Boards and Plastics in various weights and thicknesses.

Screen Printing

Screen printing is a method of printing where the artwork is transferred to a mesh screen, blocking ink that is squeegeed through the mesh onto the material. Screen Printing is good for applying large blocks of solid colour especially the sparkly metallic colours found on plastic cards.

White or transparent ink can be used for Signature Panels. These panels can be printed on with impact printers or signed with most ballpoint or felt tip pens. There is a standard position for Signature panels although custom placement is available.

Metallic Colours 

When printing on plastic, metallic colours, although they can be printed on an offset press, don't laminate and so they must be screen-printed. We have a range of metallic colours available, Gold, Silver, Pearl and with a wash of a particular colour over the top of silver, we can achieve a wide range of special metallic colours.

Special attention needs to be paid to complex designs when using metallic colours as a base colour. Inks are transparent and so once a colour is on top of a metallic, the colour will be dramatically affected. To combat this dramatic change, we may need to print white ink on top of the metallic to knock it out before the next colour goes down.

Digital Printing

Digital printing is a printing process that transfers the image to be printed electronically and does not require the use of film and plates.

This is not a traditional toner-based process, but actually an ink-applied CMYK system and so limitations apply to design. Metallic colours are not available and must be screen printed prior to CMYK printing. Solid colours and fine line art is not recommended. The machine is a 6-colour press and so we can offer CMYK and Spot Colour printing in one pass through the machine.

Magnetic Stripes

A magnetic stripe is the black or brown stripe that is found on Credit, EFTPOS and transit cards as well as various Club Membership, Loyalty and Security Access Cards. The stripe is made up of tiny magnetic particles in a resin. The particles are either applied directly to the card or made into a stripe on a plastic backing, which is then applied to the card.
The stripe is multi-track strip and stores information such as account numbers, room numbers, membership numbers etc. Encoders, readers and sorters are used to encode and read magnetic stripes. Magnetic stripes are available in a variety of densities depending on the level of security required.

Press Lamination

Once the sheet is printed, it is encased between a durable clear plastic sheet. This increases the lifespan of a card as it protects the printing. It also adds a gloss finish to the card and can affect the finished colour quite radically.

To make ready for lamination the finished printed sheets and overlays are collated and fixed together into what is commonly referred to as a sandwich. This is not a standard lamination technique, the process takes place in a large hydraulic press and it's a finite formula of temperature, pressure and time; each type of card has its own finely tuned formula.

Roll Lamination

Printed sheets can also be roll laminated which is a commercial size version of the laminating machines found in office supply stores. Roll Laminators are capable of handling larger sheet sizes and faster production rates. Certain materials can be thermal and inkjet printed on though generally it is not advised.

Die Cutting

Die cutting is the mechanical cutting of sheets to a desired shape and size.

Die cutting is a process where the desired shape is completely cut away from the sheet, leaving sharp and flat edges without burrs or bumps. An EFTPOS or Credit card is an example of die cutting. If you run your fingers along the edges of the card, you will notice that it's nice and flat and you won't feel any bumps or burrs (well you shouldn't anyway). As well as die cutting, used mainly with hard plastic, there is also another method of cutting known as Forme Cutting.

Forme cutting is limited to softer materials such as cardboard and laminated cardboard however softer plastics can also be forme cut.

Form cutting is different to die cutting in that the shape is still part of the sheet after cutting leaving the shape to be stripped away by hand. Forme cutting leaves little burrs or bumps around the edges of the cut shape and you can feel the bumps if you run your fingers around the edges of the shape.

Thermal Printing

This method is a process that uses heat to transfer ink from a foil ribbon. Ribbons are generally black but different colours can be sourced for special runs. White, blue, green, red, gold and silver can be used though stock of these colours is ordered generally as the job arises.

Encoding

Data printing also relates to encoded information, invisible to the human eye. Magnetic stripes in most cases hold just a number, which identifies you to the organisation that has provided the card. In some cases, details such as names, expiry dates, date of birth and address details are encoded onto a magnetic stripe.

Barcodes 

A barcode is defined as a series of vertical bars of varying widths, in which each of the digits, zero through nine, are represented by a different pattern of bars that can be read by a laser scanner. The bars are commonly found on consumer products and are used especially for inventory control. Barcodes however are increasingly being used to store information that is held by a computer at head office and is brought up on screen at the counter by scanning it with normal product scanners.

Product barcodes are the barcodes you find, for example, on a grocery item which is scanned at the check out to tell the supermarket what item it is you are buying and how much to sell it to you for. Product barcode numbers are administered by GS1 Australia who can be found at http://www.gs1au.org/contact/_contact_us.asp. GS1 Australia issue barcode numbers to product manufacturers and suppliers so that they can have them scanned and sold in retail stores either in Australia or Worldwide. Some of the larger retailers, especially supermarkets, are fairly strict with barcoding requirements. In most cases they insist on having barcodes otherwise they won't carry the product.

Inventory barcodes are used to identify an individual item within the same line of products. In other words each barcode is different on each item. Generally, these barcodes are used for distribution; enabling suppliers to track where their products are and which supermarket/store they have been sent to. They usually use a serial number. These numbers might be made up of a combination of numbers, usually using an identifier such as a production date and a sequential number. For example, a serial number of 0209200615001 would mean the 2nd of September 2006 and the product number is 15001. Depending on the product, we can print barcodes with Thermal, Inkjet or Laser Printers. Thermal and inkjet printing is mainly used for plastic and paper cards. Laser printing is used for printing on letterheads and DL's.

Laser Printing

The primary principle at work in a laser printer is static electricity, the same energy that makes clothes in the dryer stick together or a lightning bolt travel from a thundercloud to the ground. Static electricity is simply an electrical charge built up on an insulated object, such as a balloon or your body. Since oppositely charged atoms are attracted to each other, objects with opposite static electricity fields cling together.

Ink-Jet Printing

Ink jet printing is a high-speed, non-contact method of printing variable information onto different surfaces including plastic, paper, laminated paper and some varnished materials. It uses a single stream of continuously circulating solvent-based ink that is sprayed onto the surface as it travels underneath the print head.

Predominately, we use Ink jet printing to print PINS, Barcodes and Serial Numbers onto Phone Cards however we can also inkjet onto envelopes, letterheads, post cards, gift vouchers and swing tags.

We use high-speed camera verification equipment to ensure all of the data applied to each card is accurate and legible. The camera will read each PIN as it travels along the conveyor and report any print errors. Once a card has been reported with a print error, the machine keeps a record and re-prints the data at the end of that batch of cards.

Cards reported as having print errors are documented and shredded at the end of each batch of cards by the Production Manager. This ensures that no rejected cards are dispatched with the finished order.

Scratch panels are applied after the camera has verified the PIN. Once the scratchy has been laid over the PIN, the card is manually inspected to ensure the PIN is entirely covered. If any data is exposed, the card is rejected and replaced at the end of the batch of cards.

Cards that have been passed are then manually inspected. The Production Manager then signs off this final check. These checks form part of our internal quality inspection process and give us the ability to provide an audit trail of each job that we do.

Card Attaching

Depending on the size and nature of the job, we can attach cards to most items by machine or manually by hand.

Attaching by machine is done using warm glue that is sprayed onto the surface of the carrier as it travels along the conveyor belt. Computer sensors are used to pinpoint the position of where the glue must be applied and also where the card is to be attached. As well as multiple staff viewing the attached cards as they come off the conveyor, we use camera verification to identify accurate positioning and whether the correct card has been attached to the correct carrier. Camera verification matches the card to the carrier by taking a still-frame photograph of the members name and/or a sequential barcode.

Attaching manually by hand is usually done on smaller jobs such as when we perform mail outs of membership cards and letters on a fortnightly or monthly basis. Usually these jobs are in the vicinity of 100 to 1,000 cards each in which case it is more economical to attach by hand than by machine due to the cost in set up.

Mailing

We provide mailing services for membership, advertising, promotional or newsletter mail outs. We keep stock of Cards, Letterheads, Envelopes and Brochures in house ready for ongoing mail outs.

We use certified software to pre-sort your database to reduce postage costs and help speed up delivery of mail.

Address details are Laser or inkjet printed onto letterheads together with Australia Post DPID (Delivery Point Identification) barcodes. Cards are matched and attached to the letterheads, folded down and inserted with brochures into envelopes by machine on the initial runs and then our staff perform weekly, fortnightly or monthly runs where packs are sent to new members.