

FINISHING OPTIONS *that* **WOW**



Add punch to your print with time-tested techniques

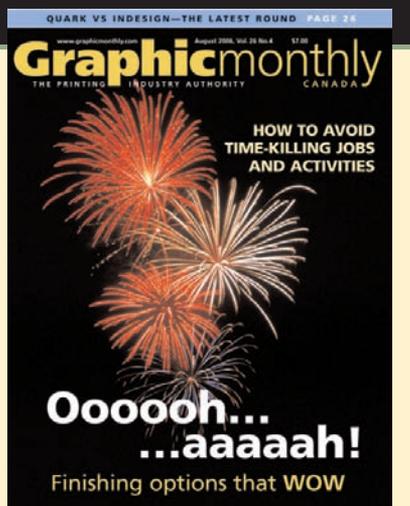
Amid the buzz and whirring of machines on Coatings Canada's shop floor, territory manager D'Arcy Pigott takes me aside to show me a small surplus of supplies he uses for the lavish finishing technique that has created some of the most eye-catching printed pieces in the country. He opens a drawer to reveal what looks like a collection of school craft supplies—several tubs containing different coloured glitter. Coatings Canada is the only shop in Canada creating raised UV glitter finishes on printed pieces.

By Kate Calder

cover feature

OUR COVER

This issue's explosive cover was finished at Coatings Canada. Our art director created a separate photoshop file to represent the glitter. From that file, a piece of film was output, which Coatings Canada then used to create a silk screen. A small *Graphic Monthly* team was on-hand at the beginning of the press run to oversee the amount of glitter. We decided on a 3:1 ratio of glitter to UV coating, which brings the fireworks to life without overwhelming the artwork. The raised UV coating with glitter was applied in a single pass to the printed covers and then shipped for binding.



It takes me a while to get my head around the process. It isn't until Pigott shows me the measuring cup and mimics himself dumping it on the silk screen that I understand. There is no computerized measuring system, no dedicated application tube, no sophisticated intrusion device. Someone actually pours silver or gold glitter into a measuring cup, mixes it with UV

coating and then manually pours it onto the flatbed silk screen. It's that low-tech, that analogue. And the results are breathtaking.

The shop's samples include a delicate spider web that appears to glimmer with morning dew, and a peacock feather with life-like iridescence. Recently the shop produced promotional posters for individual packets of iced tea mix. The poster used

glitter to illustrate the shimmering crystals being poured into a bottle of water. On our cover, exploding fireworks erupt into a night sky. "It puts the magic back in printing," says Pigott.

Though the process is straightforward now, it took two years of research and development for Coatings Canada to perfect it. Everything from the exact combination of UV coating and glitter to the use of calendar screen mesh to the material and angle of the squeegee on the press had to be just right to achieve perfect results. The process requires that the customer is on the premises at the beginning of the run because the amount of glitter added to the UV coating starts off on a one-to-one ratio and is altered manually until the sparkle is just right. Pigott explains that using the screen process enables the shop to put down a thicker UV coating, which encapsulates the glitter. Also, the operators can lock a screen into place so it can't move, ensuring dead-on registration. The silk screen finishing process adds time to a production schedule, and each job is so design-specific that it's impossible to estimate an average rate of speed for the process. But the overall appeal is worth the time and effort.

cover feature



Top, raised UV with glitter makes a spider web glimmer. Bottom, raised UV coating gives a linear illustration depth and sheen.

Source: Coatings Canada

Did the glittery fireworks on the cover catch your eye? Did you pick up the magazine and run your hands over the raised UV? This tactile reaction to and interaction with a printed piece is a good example of the benefits that simple finishing techniques can bring to ink on paper. Raised UV glitter is a shining example, but embossing, foil stamping, die cutting and laminating all give an added punch to printed pieces. Is finishing top of mind in your services repertoire and are you offering or suggesting finishing techniques to your customers?

Realizing the benefits

"Printers can make their product stand out from all the others by using finishing techniques. An example: the packaging industry uses foil more readily on labels and boxes, and it does have a definite impact. People pick it up, they look at it. Of course, once it's in their hands it's easier to make the sale," says Rod Clark of Presscraft Litho Finishing, in Toronto. The shop's services include hot foil stamping, die cutting, embossing, and auto gluing.

Clark says that although he hasn't seen a lot of change in finishing capabilities, the variety and benefits they offer people seem to go unpromoted among a lot of printers.

"The hard part is getting right in front of the client to identify with them the benefits they would have if they did this type of finishing. Some of them just don't have time, or they turn a blind eye," says Clark.

Daniel Boram, partner of Vancouver-based Abacus Foil & Embossing also sees the need to reach out to printers with ideas and information. He is in the process of putting together a brochure illustrating the different techniques of foil embossing that

FOIL STAMPING

“You’d be surprised, but just a little bit of foil can really enhance a piece. It looks clean and sharp and isn’t hard to do.”

— John Fasulo
PRESTON’S PRINTERS
TORONTO

Indeed the process behind foil stamping, also known as flat stamping, hot stamping, gold stamping, blocking, and leafing, is straightforward and hasn't really changed all that much over the last ten years, while the rest of the printing industry has gone through revolutionary changes. The die that stamps the image is mounted on a platen and heated to a carefully controlled temperature, according to the type of foil and stock being imprinted. When the die presses against the foil, the heat releases the colouring layer from the foil and binds it to the substrate.



Gold foil embossing and stamping gives two-dimensional appeal to Rupert Resources' logo on its presentation folders, letterhead and business cards.

Source: Abacus Foil & Embossing

With the right design and materials, adding a colour of foil can be less expensive than adding another colour of ink. In fact you can stamp multiple colours of foil in a single pass. Foil over foil also adds colour options with an additional pass through the foil process. The effects are virtually limitless; foil isn't just metallics, it's also available in different colours, finishes and effects, from marble, snake skin, imitation leather, pearls, woodgrains, holograms, pigments, metallics and subtle tints. Also, foil can be laminated, die cut, overprinted, and creased and folded.

HELPFUL hints

Best choices for foil stamping are smooth coated stocks. Cast coated paper will create a sheet that reflects light like a mirror and gives foil brilliance.

- Supply the stamper with a sample sheet and specify the name and weight of the stock you'll be using to be sure that the proper foil is ordered.
- If foil is to be stamped over ink, alert your printer so proper inks are used. It's often better to apply the foil first, then the coating or lamination.
- Pieces with large, solid areas of foil as well as fine detail will generally require two passes.
- Different foils have different characteristics in terms of durability, scratch resistance, fade resistance, chemical resistance, brittleness, opacity, adherence and colour.
- Not all foil can run through a laser printer. Dry textured parchment and recycled stock have low adherence properties and can cause the foil to release, crack, peel or dull under the heat extremes of a laser printer. Ask for a test sheet to run through the printer.

- Translucent pigment, pastel tint and pearl foils will be altered dramatically by the colour of the underlying stock.
- Let the finishing shop know if the same job uses two slightly different stocks, or if the stock came in two separate batches. A change in thickness while the job is being foil stamped will affect the pressure and can flatten dies.
- Inks and varnishes that contain high percentages of wax, Teflon or silicon are resistant to foil's adhesive. Stamping over UV or catalytic coatings, lacquers and certain film laminations can also be difficult.
- Wax free inks are necessary if you are foil stamping over a printed surface. Rubber-based inks are also difficult to foil stamp over.

cover feature

EMBOSSING

Most people describe embossed pieces as elegant and subtle. The raised image creates shadows giving the image definition, depth and providing the whole printed piece with an extra dimension. The raised surface of an embossed image is created by stretching the paper fibres under pressure and heat. It involves an etched metal die and matching counterdie. Textured stock, such as laid or linen will flatten in the embossed areas, giving them even more contrast.

EMBOSSING TECHNIQUES

Different embossing techniques create different effects. Creating an indented image is called debossing. Embossing on paper without a printed image is known as blind embossing. Glazing can also be used with blind embossing images on textured papers. A burnished effect is created with increased heat and pressure, which looks especially good on medium to dark stock. It's possible to create a beveled or rounded edge or a sculpted look with many levels of etching. Gloss emboss combines a clear foil with blind embossing. Tint leaf combination combines the effect of blind embossing with pastel tinting of the image. Textured emboss gives a tactile quality to embossing or foil stamping. Typical textures are pebble or woodgrain.

WHAT YOU NEED TO KNOW

IT'S ALL IN THE STOCK

■ Bulky paper stocks are ideal for embossing. Text and cover papers with high cotton fibre content create the

most effective embossing. Cotton fibres are longer, stronger and more supple than wood fibres. Premium coated stocks in the 6 to 12 point range emboss well, but coated papers of lighter stock cannot be stretched as much and can crack.



Multi-level embossing in thick white stock creates a subtle and elegant feel for this Manpower logo.

Source: Abacus Foil & Embossing

will include information on paper types and creative options and be will distributed in Vancouver as a marketing tool.

"There are some old techniques that are really sharp and have been around for years but aren't used and could win a contract over the competition if they came with that idea," says Boram.

Preston's Printers in Toronto is a 21-year-old finishing shop that owner John Fasulo says uses old-fashioned skill and knowledge as a big part of its process.

"A lot of people put emphasis on the stock. They spend X amount of dollars on a paper, but really they can get a basic

stock and add a little bit of foil, or a little bit of embossing and enhance the product so much more," says Fasulo. He says he sees a lack of knowledge about finishing processes holding printers back. "They don't know much about it, so they're afraid to sell it. If somebody comes to us with a foil job, we try to make it as easy as possible because the last thing we need is an upset printer," he says.

Working together

House of Foil in Oakville specializes in holographic foil stamping, a technique that is invaluable in security printing and that

DIE CUTTING

Not as glamorous or easy to upsell, as say foil stamping or spot coating, die cutting is the silent, yet ubiquitous sibling in the family of finishing techniques. Presentation folders and folded cartons and packages simply must be die cut.

“Look around on your desk, I guarantee something is die cut.”

— Daniel Boram
ABACUS
VANCOUVER

...A CD holder, an advertising window in a calendar, the matting in a picture frame. Just how that die cut was produced depends on the shop, the client's budget and the complexity of the job. Die cutting is still a traditional, skilled trade, but automated, laser-cutting systems are



Die cutting works hand-in-hand with a great design to create a landscape format folder with depth and allure.

Source: Abacus Foil & Embossing

slowly increasing their presence on shop floors. Preparing dies with lasers as opposed to manually is fast and intricate, but not always necessary for inexpensive, simple cuts. There is a definite mix of traditional and more modern die cutting equipment being used in shops across the country. But seemingly old-fashioned equipment still has its place depending on the job at hand.

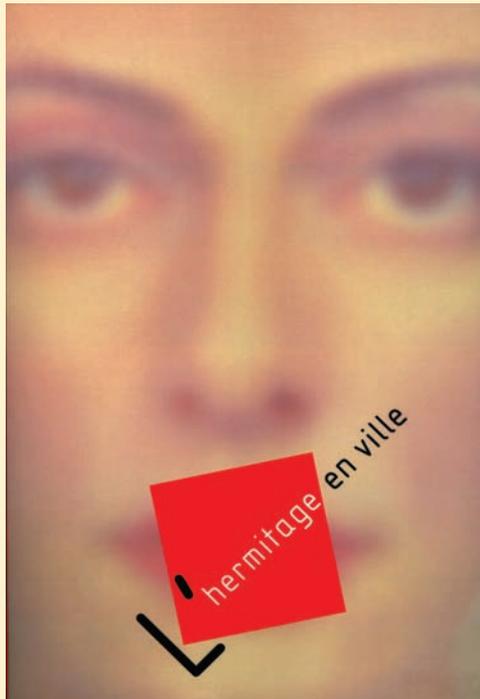
Boram estimates that about half of the die cutting in the industry is done on newer equipment with laser-cut dies.

WHAT YOU NEED TO KNOW

■ Forgoing the die and laser cutting the actual stock itself is a relatively new development in die cutting that can create an extremely intricate cut-out, but is a slower and more expensive process. Boram says he recently sent a cutting job out to be laser cut because a detailed dog design on the front of a greeting card was so fine and intricate that creating a die would have been more time-consuming and expensive in the long run, than paying the extra expense of laser cutting.

COATING AND LAMINATING

Coatings and laminates not only enhance the appearance of a printed sheet, they protect the inked surface against wear and tear from display and handling. Lamination bonds plastic film to the printed piece using an adhesive, whereas UV coating is applied to the surface and then cured by exposure to an ultra-violet light source. The curing process is a chemical reaction, which produces a tough, high-gloss surface. Both processes have strengths for different applications. For example, lamination provides the maximum wear resistance for paperback book covers and hardcase book jackets and improves their appearance on the shelf. It also provides UV resistance, preserves colour longer, increases rigidity and can change the finish of a print to gloss, matte or varnish. UV coating is often the choice for catalogues, which need a protective layer, but don't have the shelf life or the design budgets that books do. Annual reports, advertising brochures, POP materials, posters, greeting cards and calendars all use spot UV coating and matte or gloss film lamination or a combination of these to enhance the design of the end product.



On this large presentation folder, a matte varnish was applied over top of the gloss laminate to emphasize the shiny red square in the design and create a striking image.

Source: R&M Laminating

Trends in laminates and coatings include delustred film, a soft and silky matte film used on everything from book covers to presentations folders and annual reports; spot coating; specialty films that are glueable, stampable and printable; textured films; and print on lamination, which is made easier by specialty inks that are formulated to dry on that type of plastic.

- Keep offset spray to a minimum
- Use low-wax, non-bleeding inks
- Avoid using rhodamine red, reflex blue and purple
- A minimum paper-weight of 60 lbs. and maximum board thickness of 24 points are required for most coatings and laminations
- Ask you finisher for test sheets



“Presses and chemistry in the pressroom itself have dramatically changed over the last five or six years and printers often aren't aware of how that impacts the finishing...The printer often says, 'Well, if I'd known that wax in the ink makes it hard to accomplish something, I would have used a wax-free ink.'”

—Rob Varnel
R & M LAMINATING
VANCOUVER

not many shops offer. Owner Bill Preston says that although his business and other finishing shops are often invisible from the end user's perspective, it's up to the printer and the finisher to have open lines of communication to perfect the finished product.

In fact, almost every finishing professional we spoke to emphasized the importance of working together with printers. “My whole job is to educate people and teach people what we need so that they get that right and it saves them money, time and re-work,” says Rob Varnel, president of R&M Laminating in Vancouver. Varnel has been laminating for more than 10 years and just recently added off-line UV coating to his repertoire in his Vancouver shop and plans to also offer it in the company's Calgary location next year. He says improving the layout of a sheet to optimize paper usage and choosing the right inks to work with different laminates and coatings are typical issues that printers need guidance with.

Varnel also articulated a common plea to printers among finishers: “They shouldn't go anywhere else but us first. Go to the last step first and there will be no problems. We've proven it time and time again that if they come to us first and they take our advice all the way through, the job goes a lot smoother.”

Time is a major factor in determining how smooth a job goes. Talk to any finisher and they will tell you that being at the last stage of the process means the printer needs everything done yesterday.

“Everything that comes into the shop is extremely hot. Basically we're trying to work as quick as we can because of demand. It has become worse over the last few years. I think a lot of it has to do with computers. People expect to push a button and the product will appear. But there is a process you have to go through,” says Fasulo of Preston's Printers. He adds that many printers are almost shocked when they hear that 10,000 folders will take three to five days to produce. “They figure we can run 10,000 an hour. Well we can't. We're running 1,000 an hour to die cut it, then we have to strip it, then trim it. Then, we have to go to the gluer and that will run 3,000 an hour. It takes time. It's not like an offset press, where they're running at high speeds,” says Fasulo.

Says Clark of Presscraft, “I'm a firm believer in this industry and I believe that you have to have the types of products that are produced through die cutting and embossing. You need the embellishment and the prettiness. You know, it always looks so much better when it has something else on it.” ■