A taste of luxury

The capability to offer a label or packaging with a little bit of panache could clinch the deal for a brand who's looking for a more elegant or luxurious look and its in the finish where the real wow can be found. By *Michal Lodej*

tunning work is of course, the aim of the game when producing packaging or labels that has to leap off the shelf at customers passing by. Finishing is the obvious part of the print process whereby special effects can be added to a job to give it those qualities.

Yet these qualities can be time consuming to apply and go against the grain of the industry-wide push for productivity. It's an issue most finishing equipment manufacturers know too well.

"Productivity today isn't about high running speeds, but short setup times and quick job changeovers," said Kama sales director Bernd Sauter. "To succeed in the lucrative packaging market, you need to offer high-quality embellishments that create a unique look and feel."

Ving of Embellishman

The company's latest generation of the ProCut 76 excels in die cutting, creasing, and embossing as well as high-quality embellishment, all with fast setup times and outstanding results. The versatile finishing solution is designed for quick changeovers between jobs, but also between applications, such as switching from hot foil embellishment to die cutting. "This can be done in just 5 - 10 minutes, enabling cost-effective finishing of short runs," Mr Sauter added. "We've expanded our modular concept for our die cutting and finishing solutions. Options like the easy-to-operate hot foil stamping module, the AutoRegister AR3 with skew adjust, and the tool-free stripping and blanking unit can be retrofitted."

A premium package

Hot foil finishing is the process of choice for premium packaging, such as folding cartons for cosmetics, luxury goods, chocolates, and lifestyle products. "It offers unmatched accuracy, brilliance, and fine detail, including micro and nano embossing," said Mr Sauter. "You can also create haptic effects with sharp contours or embossing."

The ProCut 76's heating system with a removable plate consumes reduces the heat-up times for hot foil stamping to just 5-10 minutes with cool-down time is just as short, allowing for fast job changeovers.

Systems like the Kama ProCut 58 Foil demonstrates how compact machinery can deliver professional embellishment capabilities with register accuracy of 0.1mm. This precision ensures the execution of techniques such as hot foil stamping, blind embossing, and microstructured effects that transform ordinary prints into premium products.

The efficiency of digital finishing has improved dramatically, with setup times for this unit reduced to just five minutes between applications. This rapid changeover capability allows print shops to profitably produce short runs of high-value items including luxury product tags, greeting cards, business cards, and promotional materials.

The integration of multiple finishing processes—die cutting, creasing, perforating, embossing, and hot foil stamping—into a single compact system maximizes both space efficiency and production versatility. With footprints under 5sqm, these machines can fit into most businesses.

Cartes'Jet D-Screen unit enables the creation of multiple complex embellishment options

Rising to the challenge

When finishing and embellishing a digitally printed job, the levels of challenge may vary, but the end results are the same: everyone must focus on delivering a perfect product where register accuracy, print quality and label durability must be unwaveringly guaranteed.

Wherever possible it is a great advantage to be able to override all those variables inherent in the tools required to execute a job, such as screen-printing screens, hot stamping and die-cutting plates, as well as the variability of inks and foils. These benefits can amplified if these variables pass along a path where automation of machinery requires less and less human interaction.

For this particular purpose, Cartes has created the 'digital screen' effect with its own technology, Jet D-Screen. The Jet D-Screen digital unit enables the creation of multi-layer effects, spot varnishing, complex tactile embossing and braille printing, as well as highly detailed foil transfer and metallic 3D gold. Labels can be customised and ennobled in a single pass, with no set-up costs, instant start-up and no material wastage.

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Cartes' research and development department, using its many years of expertise in traditional screen printing, has developed this technology using a proprietary system that enables coating thicknesses previously impossible to achieve with inkjet technologies.

The work of the operator has been simplified to the utmost, allowing the selection of printing by means of predefined settings and the choice of substrate materials to be used, thus making the production of the JDS unit immediate and waste-free. The materials to be printed with the JDS system do not require painting or special primer treatments, which usually distort their texture. According to the company, the mould curing device, consisting of a hybrid LED/UV drying system, allows any type of material to be processed, even the most heat-sensitive ones.

Quick as a flash

In recent years, the market's interest in finishing solutions that meet the digital print concept has grown significantly. Laser technology is undoubtedly an option that complements this concept.

In the view that automation is the key to helping customers produce labels and packaging in the most efficient way, Cartes offers a laser die-cutting system that allows an immediate die-cutting solution with automated job changes.

Thanks to radio frequency laser power control and 'cuton-the-fly' software, the unit is able to process die-cutting, microperforation, engraving, progressive numbering in a single cycle. All these jobs are digitally set up to achieve very high value products in real time.

According to the company, the Cartes laser is the only one which can process dark materials without leaving an unsightly white edge. The unit uses a semi-sealed source with unlimited life, resulting in constant power and cutting quality over time.

The AG-4220, manufactured by Blumer, brings efficient processing capabilities to the large format label market. This counter-pressure die-cutting machine handles impressive formats measuring up to 239 x 420mm while accommodating multiple substrate types and materials with thicknesses down to 50 micrometers.

The machine integrates a comprehensive automated workflow that seamlessly handles buffering, cutting, die-cutting with counter-pressure, separation, and banding functions. Its versatile design makes it appropriate for both medium production runs and smaller batch requirements.

Using counter-pressure technology, the AG-4220 addresses the challenges of processing various materials within its specified dimensional range. Blumer has engineered this equipment to deliver the precision and reliability needed for demanding large format label production applications.

Metal on-demand

Actega has formed a partnership with Fujifilm Integrated Inkjet Solutions. The collaboration means that Actega's EcoLeaf units can now be equipped with a Fujifilm 46kUV inkjet printbar to print a higher resolution trigger image consistently and reliably. By moving from traditional foiling techniques to EcoLeaf metallisation, printers and converters eliminate the need for PET carrier film and foil reels.

Greg Balch, senior vice president and chief operating officer of Fujifilm Integrated Inkjet Solutions explained: "Our collaboration adds yet another dimension of quality and productivity to this already innovative, industrial-scale technology. We have every confidence that EcoLeaf has the potential to transform the way the label industry views metalisation. The ability to avoid wasted foil is fantastic news for brands looking to meet strict and necessary environmental targets and also don't want to lose their competitive edge."

Finishing and embellishments within packaging and labels is still a highly skilled area but is in no way immune to some of worker shortages being felt in the industry today. Perhaps with the equipment available today, printers will be able to master these challenges, optimise workflows and explore high-margin niches.