

The modular game

New converting options abounded at Labelexpo Europe. Modularity is the name of the game in finishing with speeds and levels of automation increasing. *Neel Madsen* looks at what the manufacturers introduced.

A large Digicon 3 converting line with two Big Foot hot foil and embossing stamping modules and a new flatbed screen-printing unit took pride of place on the AB Graphic stand. The company reported an excellent show as it sold all 19 machines on show and also took 50 new orders. Sales director Tony Bell said, 'Our new screen-printing unit, with speeds double those of our previous model, gathered crowds throughout the show and we received orders for retrofits, as well as modules on new machines.' He continued, 'There was considerable interest in the Digicon Series 3 with FAST Track die, FleyeLink Workflow manager, new quick-change mandrels on the AutoSet glueless turret, and a new roll closure printer linked to the camera to identify any defects.'

Printum showed its new Concept_17 multi-web converting line, which featured a four-colour UV inkjet print module from mprint for hybrid production. The machine on stand had been built to spec for a customer and featured a flexo station for printing white before the digital engine and another for varnish after, as well as semi-rotary die-cutting from Kocher+Beck.



Digicon 3 line on the ABG stand with new flatbed screen-printing unit and two Bigfoot modules

Daco Solutions showed a DP250 digital platform running inline with a DM350 die-cut to register module and the new SVT350 turret rewinder module, which came fresh with a patent granted for its double-sided tape system, just days before the show. The rewinder runs at speeds up to 175m/min in a web width of 350mm and maximum unwind diameter of 700mm. The four-spindle machine print features BST electronic web guide and a Toshiba Tec thermal transfer printer for adding print data to

the roll closure labels. The new double-sided tape solution means hot melt glue issues can be avoided.

The SVT350 was converting variable barcode labels printed by the inkjet module from Inkjet Solutions, which was programmed to print lead-in and lead-out unnumbered barcodes to avoid waste.

Gem changers

HP brought its digital embellishment technology to market, first seen as a technology demo at drupa last year and now named GEM. This was running inline with an HP Indigo WS6800 digital press. Developed with JetFX, it is a fully digital one-pass printing press for embellishing with foil, screen, tactile, varnish and other special effects, using one workflow and one design file, without the need for tooling. The machine utilises dedicated GEM Coat and GEM Clear, sold by HP Indigo. Orders were taken at the show and shipping is expected to begin in spring 2018.

Gallus introduced a new Digital Embellishment Unit (DEU), which has been developed to offer matt, gloss and tactile spot effects in a single pass using a UV inkjet print process. Shown as a prototype, it can be integrated into the Labelfire 340 as an additional finishing module, and is based on Steinemann's dmax technology with the digital coating expertise of Schmid Rhyner, while Gallus said it contributed the 'translation of customer requirements in label printing, the combination printing know-how and the integration for its presses.'

Kurz new inline version of its Digital Metal foiling machine was running on its stand with the mlabel Gen3 UV inkjet press from mprint. The DM-Liner UV Ink Built-in finishing station added a metallised variable design to the labels.

MGI and Konica Minolta introduced a new roll-to-roll digital combination press with four-colour printing and embellishment inline. The MGI JETvarnish 3D Web Color+ uses KM's toner technology combined with inkjet spot or high-build varnish (up to 232 microns) and foiling plus variable data and semi-rotary die-cutting, slitting and rewinding.

The embellishment line offers flexo primer as needed and can print on paper and filmic substrates as well as light cartonboard. Production speed with four-colour printing is up to 20m/min in 1200 x 1200dpi 8 bits resolution (equivalent to 3600dpi) on a 330mm web width. If using only the finishing part the speed rises to max 42m/min without and the width to 420mm.

Scandi connection

Grafotronic introduced the new GigaFast die-cutting unit, which can reach speeds of up to 160m/min in semi-rotary mode. 'We have been working on this new concept for a long time and we are of course very excited about finally showing it to our customers. This is a big breakthrough in the semi-rotary die cutting technology,' said the company's vice president of production and operation, Tomasz Skrobik. The patented GigaFast is offered as a module on the DCL2 finishing line, which was running live at the show. It can also be retrofitted and Grafotronic promises that customers will be up running within eight working hours.

'Our customers will be able to finish digital printed labels at 160m/min. We will combine this with our solutions for non-stop production with automatic turrets, closed chambers for high speed printing and Wifi-Slitting Automatic knife positioning,' commented Mattias Malmqvist, vice president sales. The first orders are scheduled for delivery during the first quarter of 2018.



The TCC 3300 die-cutter is a new option for the EFI Jetrion press

The company sold all five models on its stand. The largest converting line, which was configured with integrated laser cutting, went to Germark in Barcelona. President Iban Cid said, 'We decided to buy the Grafotronic line with laser cutting as it offers more flexibility to our customers.'

GM showed a full complement of converting options. Its new bigger and faster DC350 was introduced configured with jumbo roll unwinder with integrate lift, semi-rotary flexo station for varnishing and automatic slitting. This can run inline with all major digital presses and includes more options such as the new SmartLam Multilayer lamination station for peel&reveal labels.

Also new was the DC330MINiflex, a compact, modular machine with automatic slitting station and semi-automatic turret rewinder, which can run at up to 65m/min in semi-rotary mode if GM's new Productivity Pack is applied. Sauter Druck in Germany was one customer signing up to take one home. A new version of GM's DC330FB was also running to demonstrate the latest model foil-tower, flatbed screen-printing and new software.

→ Werosys demonstrated its fully modular Compact Hybrid converting line, which incorporated a UV inkjet print module from Amica Systems.



GM's DC330FB line drew in the visitors

As with all the company's machines, all manual controls have been eliminated in favour of a touchscreen interface. The company is developing a remote service which means all machines can receive updates and be serviced without the need for technicians to attend.

CTO Bjarke Nielsen explained the company's use-to-use concept, saying, 'We offer a cost-effective proposition. It should be as easy to print labels as it is to print out a document on your home desktop printer. And we want the same type of interface as on your mobile phone with no buttons to press on the machine itself, just clean lines and ready to use, in register, within one label.' He said the concept is proving very popular. ←

Collaborations

EFI demonstrated a new cutting option for the Jetrion 4950LXe LED inkjet press. The TCC 3300 from US manufacturer Rotary Technologies is a compact analogue die-cutter that can convert printed labels at 100m/min and blank labels at 200m/min using rotary die-cutting, which has been specifically developed for digital print finishing. It can run inline with the Jetrion press or standalone.

Another advantage of this system is the ability to die-cut PE substrates, which can't be processed using the laser cutting technology that up until now has been the standard on the Jetrion press. Ken Hanulec, EFI vice president marketing, inkjet solutions, said, 'Adding the TCC to our offering knocks down another barrier for customers to get into inkjet. It fits nicely into our portfolio and I've been pleasantly surprised with the reactions at the show.'

Screen and Prati announced a new collaboration that will see the development of an interface between the Truepress Jet L350 UV series of label presses and the DigiFast One digital converting line.

Aimed at maximising end-to-end productivity, the interface delivers a near-line connection, allowing label printers the flexibility to run integrated inline or standalone off-line jobs. 'Our said aim is to maximise productivity and accuracy whilst minimising downtime,' stated Chiara Prati, sales and marketing director. 'As a leading player in the label press market, Screen is a natural partner for us, particularly as inkjet rises in popularity.' •