

DIGITAL PRINTING

Digital Production Raising the Bar for Corrugated and Cartonboard Markets

Koenig & Bauer Durst, which was set up three years ago to address markets for folding carton and corrugated markets, has a growing portfolio of single-pass digital production presses that all use water-based inks.

All Koenig & Bauer Durst presses are designed with core technologies to provide automated, productive, food safe printing systems. They deliver shorter response times, more variants, shorter run lengths, individualisation and enable more and more small value orders. They also answer the increasing customer demand for brand security, sustainability and the ability to meet brand owners' requirements for multichannel communication including e-commerce.

Nine months ago, the first press jointly developed by the two companies - the VariJET 106 - was launched in a world premiere in



Radebeul, Germany. This modular single pass sheetfed digital printing press uses market-proven industrial expertise.

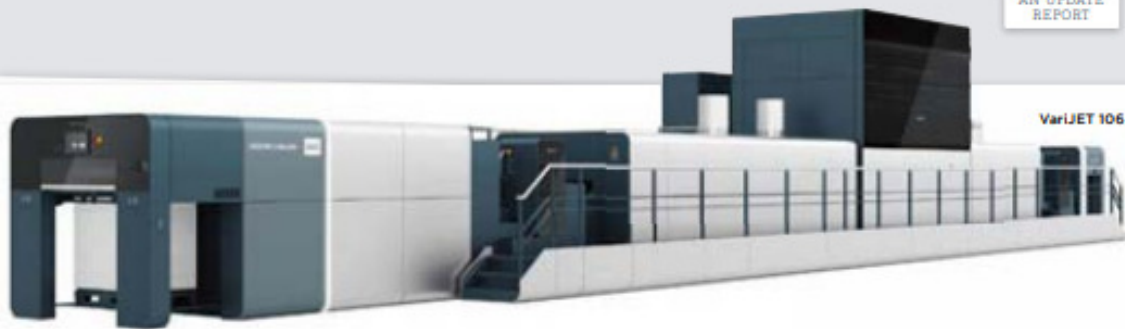
It targets groups such as pharmaceuticals, cosmetics, tobacco and food industries, as well as folding carton converters.



The B1 5,500sph press combines the best of both worlds - digital inkjet and classic offset printing. The VariJET 106 is based on water-based



VariJET 106



inkjet processes to provide the highest print quality. The innovative digital printing system is at the heart of the collaborative development between Koenig & Bauer and Durst. The VariJET 106 platform is based on Koenig & Bauer's standard high performance Rapida 106 platform and Durst printhead electronics, inkjet expertise and Durst workflow and RIP technology. This includes Durst Analytics, Smartshop and Workflow.

Designed for heavy production, 24/7 if required, this production press and can produce personalised/individualised cartons or alternate between ultra-short and medium runs. Koenig & Bauer's future roadmap includes a double coating unit, further embellishment options and applications such as augmented reality and intelligent variable data.

The main components in order of use are the feeder, primer unit, inkjet print engine (with a 'high-precision' vacuum transport belt), dryer, cooling unit, overprint varnishes and delivery (which incorporates another dryer).

Sheet transport, feeding, delivery, press control, and makeready use existing Rapida technology. Finishing options compatible with Rapida 106 can also be used.

Using 7 colour water-based food compliant inkjet technology (CMYK plus orange, green and violet), the VariJET 106 is suitable for food applications that meet the stringent requirements for food safe primary packaging utilising proprietary water-based ink technology.

The VariJET 106 can produce personalised and individualised print products or alternate between short and medium runs.

The VariJET 106 offers perfect register accuracy thanks to inline production, a highly competitive TCO, reduced resource consumption, storage costs and waste, plus absolute flexibility for test packaging and new campaigns.

Aimed at Corrugated Packaging

Koenig & Bauer Durst's portfolio also includes the Delta SPC 130 Series and the CorruJET 170 Series.

The newest product in the range is the Delta SPC 130 FlexLine Eco+

industrial production press for run lengths from one to millions of square metres. Launched in May this year, this entry-level, compact model will offer corrugated converters a new route into digital packaging or will enhance their current capabilities.

The Delta SPC 130 FlexLine Eco+ press is fully upgradeable to the market-proven Delta SPC FlexLine Automatic press. The new machine will be addressing converters with volumes of between four million and eight million square metres a year. It also includes a compact drying system.

Another announcement from Koenig & Bauer during its SPC Open House was the introduction of Dynamic Nozzle Management (DNM). Designed to further reduce the maintenance cycles of the Koenig & Bauer Durst's industry acclaimed, long-lasting printheads, the tool identifies nozzle clogging and can then be programmed to manage the level of ink being jetted from the head. DNM will become part of the standard package for the Delta SPC 130 portfolio,



Delta SPC 130
with cover off

packaging samples and spot colours. With around 50% of corrugated packaging in food and beverage, the ink set also

including the new Eco+ model. It can also be upgraded to existing customer machines.

Other important developments for the Delta SPC 130 range have included the introduction of orange and violet inks, plus digital priming capabilities. Enhanced image quality and special effects, as well as cost reduction, are among the benefits from the digital primer. Added effects that are possible include print embellishment on corrugated board with uncoated media.

This has positively impacted upon brand management for brand owners, particularly in producing colour saturations on

ensures that converters can invest knowing they will be ahead of the increasingly complex regulatory change curve.

Rondo Ganahl is one of the Koenig & Bauer's customers that is taking digital production to the next level thanks to digital volumes growing by 25 to 30% a year.

Later this year, Rondo Ganahl, based in Styria, Austria, will be opening a digital print production plant in a €25m investment. Taking centre stage in the dedicated digital production facility is the Delta SPC 130 that was transferred across to the new plant and is driving business growth.

The company, which is part of the Rondo Group that has eight plants across Europe, invested in the Delta SPC 130 three years ago to launch into digital production - and has never looked back. About 90% of the Rondo digital printing business is for the food industry. With lead times continuing to go down, Rondo says it must further develop the digital technology where the excellent print quality already matches litho production.

Final word from Karl Pucher, Managing Director, Rondo Ganahl St. Ruprecht, who said, "It has been an incredible success story. Digital printing was a big step for us three years ago with an unknown future, but we have never looked back."

www.koenig-bauer-durst.com



Lienz, Austria - home of the Delta SPC 130

