

DIGITAL CUTTING AND CREASING

Highcon has introduced a Digital Cutting and Creasing system for the carton sector. It eliminates the time and expense of conventional die making, reduces costs, delivers speed to market and offers significant design flexibility.

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Based in Yavne, Israel, Highcon is a young company with a clear focus and understanding of the carton sector. The company was founded in November 2009 by Aviv Ratzman and Michael Zimmer, both highly experienced professionals in the digital print market, working initially with Indigo N.V. and latterly HP.

The result of their extensive development effort is the Highcon Euclid that uses precision laser optics and polymer technologies to transform cutting and creasing from an analogue to a digital workflow, dramatically streamlining the finishing process. "Over the past two decades we have witnessed key areas of the supply chain becoming digital, but packaging finishing has remained analogue," said Aviv Ratzman, Highcon's

CEO. "Converters and their customers have been unable to benefit from the speed and flexibility that digital solutions could provide to finishing. But this is about to change."

Highcon is a private company with key investors including Landa Ventures, the investment company owned by the Indigo N.V. founder Benny Landa, Israbieg, the largest die supplier in Israel and other print industry players. Speaking of Highcon's game-changing concept, Benny Landa said, "I believe that Highcon will do for the folding carton market what Indigo did for print."

The Highcon digital converting solution dramatically increases speed to market, eliminates costly production steps, reduces the carbon footprint of packaging production and reduces die storage and management. Moreover, the implementation of this new technology will drive numerous new packaging opportunities for converters, packaging printers and brand owners.

Chris Baker, Highcon VP Sales and Business Development, said: "We have been developing our product with input and advice from a number of top converters around the world to ensure we meet the market needs."



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In Operation

Euclid will be formally launched and demonstrated on Highcon's stand at Drupa 2012 (Hall 4 Stand B28). It has been designed to accept information from most standard layout/prepress systems and takes only minutes to send the data from the prepress station to the Euclid. The Highcon direct-to-pack process relies on precision laser optics and proprietary polymer technologies to transform cutting and creasing from an analogue to a digital workflow, dramatically streamlining the finishing process. The system translates the two separate layers of cutting and creasing in the software into two separate actions. First the DART is created, accurately drawing polymer crease lines on to a foil. Next, the multiple lasers along with new and innovative precision optics cut the sheets. The Euclid has three lasers — which usually have a life of several years without need for replacement or adjustment

Feeder pile height is 1.1m. The cut cartons are nicked for stabilisation and is capable to handling sheets from 350 x 400mm (13³/₄ x 15³/₄") to 760 x 1066mm (30

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x 42"). Machine speed is up to 1,500 sheets per hour, depending on substrate thickness and application complexity (linear cut length).

Min sheet size	350 x 400mm (portrait)
Max sheet size	760 x 1066mm (portrait)
Net cutting area	740 x 1050mm

The Highcon digital finishing solution eliminates the costly production set up for runs of <20,000 — with no waiting time associated with the construction of a new die. Converters will be able to change package designs, run promotions and no longer be constrained by time and costs. Designers can use such a system to quickly produce new samples — changing window shape and/or location. Decorative cut outs that were never very practical before can also be quickly accomplished. This new capability can enhance seasonal, event and promotional marketing programmes. The ability to remain agile, responsive and most importantly, relevant to consumers, will become the key driver that moves the industry to quickly embrace such digital opportunities.

As is the nature of disruptive innovations, legacy metrics (eg: speed, format, cost, etc.) are usually not appropriate to evaluate benefits. Early adopters typically look for new metrics and capabilities that were not possible before. Successful early adopters leverage these new capabilities to create new desirable consumer experiences to grow revenue.

