



### **Highcon PULSE**

# Digital cutting and creasing in a B2/29 in. format

The Highcon™ Pulse digital cutting and creasing solution brings the digital post-print revolution to print service providers and converters with a seamless integration into existing B2 / 29 in. sheet size workflows. Highcon's digital cutting and creasing technology enables an in-house controlled digital system that delivers improved responsiveness, design flexibility and entry into a wide range of applications in numerous markets.

In today's competitive market, service is the keyword to business growth and long term success. By introducing digital capabilities to the finishing process, the Highcon Pulse opens up a whole new world of service.

The Highcon Pulse delivers all the capabilities and potential of digital cutting and creasing in a machine with a footprint that is a great fit for businesses of any size.

#### **Benefits**



Business growth through innovation



Wide range of new, high value applications offering differentiation and competitive edge



Improved responsiveness, short turnaround time and last minute corrections



Profitable solution for in-house finishing of short runs at affordable price.

#### **Features**

- > Supported substrate size from 320 X 457mm (12.5X18") to 530 X 750mm (21X30") sheets
- > Small footprint
- > Up to 2,000 sheets/hour
- ➤ Highcon Axis Web-to-Pack Package (optional)
- > Highcon Integrated Digital Stripping (optional)
- > Variable Data Cutting (optional)
- > Advanced Registration (optional)

## Highcon digital finishing

Launched for the first time at drupa 2012, Highcon introduced the world's first digital cutting and creasing machine. Since then Highcon machines have been installed all over the world and are producing a vast range of applications for hundreds of different brands. The Highcon Pulse integrates all the valuable lessons learned worldwide with the right format and size for a large portion of the printing world. With business growth in mind, its key focus is on helping printers and packaging converters rise to the challenge of today's highly competitive business environment by growing their business with new applications that both attract new customers and retain a larger part of existing customers' spend.

#### How does it work?

The processes of cutting and creasing are separated into two stages.



#### **Stage 1: Crease**

First, creasing is based on Highcon's patented DART (Digital Adhesive Rule Technology) replacing the traditional rules and channels. In the Highcon DART process digital rules are written onto a DART Foil on the machine. Setup for the DART is a mere 15 minutes. Once the DART has been written, production can start with the press of a button and sheets pass between the DART foil and an advanced DART Counter. The combination of digital rules written to match the specific job and substrate, the DART counter's physical characteristics and computer driven process results in crease lines with the same physical attributes as traditional ones.



#### Stage 2: Cut

The creased sheets then move in one pass to be cut, perforated or etched with precision CO2 lasers and innovative optics. Intricate cutouts and decorative cuts are simple and fast. Being a digital process, last-minute changes or edits are simple and can be done on the machine in seconds.

Job data for repeat orders are simply stored as files, eliminating the need to physically warehouse die-cut tools.



#### **Variable Data Cutting**

(optional module)

The Pulse comes with built-in, easy to use, variable data cutting and etching software. By bringing the benefits of variable data to finishing, the Highcon Pulse turns a technical process into an opportunity for differentiation. Variable data cutting can transform simple products into premium ones by adding customization, personalization and security applications.

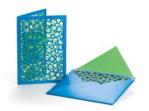


#### **Highcon Axis**

(optional module)

The Highcon Axis 2D to 3D platform is a software solution that brings the benefits of a web-to-print system to all the players in the complex paper or cartonboard production supply chain. While web-to-print solutions handle only straightforward 2D products, like brochures or business cards, the Highcon Axis handles all the intricacies of 3-dimensional folding applications.

This solution, developed in collaboration with XMPie and Esko specifically for packaging and other complex applications, can streamline ordering from your existing customers, as well as providing an online storefront for your business.



### Highcon Integrated Digital Stripping

(optional module)

This waste stripping mechanism is a built-in unit inside the Highcon Pulse that automatically removes the waste from the smallest internal cutouts produced on the sheets by the lasers. The optimized cutting algorithms, together with a new substrate handling system ensure completely clean cuts that are essential for intricate cutouts. All the small particles drop into an easily removable chamber. This module removes the need to buy, setup or store a separate stripping tool and further advances the productivity of the machine.

#### **Highcon Pulse Specification**

	parameter	metric	in
Substrate & performance	Max format	530 X 750 mm. portrait	21 X 30"
	Min format	297 X 420 mm. portrait	11.7 X 16.5"
	Cartonboard & labels cutting Cartonboard & labels creasing	120-600 μ 200-600 μ	5-24 pt. 8-24 pt.
	Max throughput (s/h)*	2000	
Feeding and Delivery	Height of feeding pile, inc pallet	1.1 m.	3.6 ft.
	Delivery tray capacity	Up to 20 cm.	7.9"
Technical data	Net cutting area	515 X 750 mm.	20.2 X 29.5"
	Gripper margin	12 mm.	0.47 "
Machine dimensions & weight	L×W×H	6.4 x 2.0 x 2.2 m.	21 x 6.5 x 7.2 ft.
	Net weight (tons)	~4.5 tons	

<sup>\*</sup>Depends on layout imposition and substrate

### **Highcon Product Portfolio Comparison\***

	Highcon BEAM  Digital cutting and creasing for mainstream production	Highcon EUCLID III  Application versatility made possible by digital cutting and creasing	Highcon PULSE  Digital cutting and creasing in a B2/29 in. format
Format	760 X 1060 mm. portrait / 30X42 in	760 X 1060 mm. portrait / 30X42 in	530 x 750 mm. portrait / 21x30 in
Maximum throughput*	5,000 s/h	1,500 s/h	2,000 s/h
Substrate	Cartonboard and label 120-900 µ (5-36 pt.) Microflute (up to E) up to 2mm (78 pt.)	Cartonboard and label 200-600 µ (8-24 pt.) Microflute N + F + G up to 1.2mm (47 pt.)	Cartonboard and labels 120-600 μ (5-24 pt.)
Machine length	8.6 m / 28 ft.	8.6 m / 28 ft.	6.4 m / 21 ft.
Variable Data Cutting	Included	Included	Optional add-on
Advanced Registration	Included	Included	Optional add-on
CAD Light Editor	Included	Included	Optional add-on
Highcon Axis (basic pack)	Optional add-on	Optional add-on	Optional add-on
Highcon Integrated Digital Stripping	Optional add-on	Optional add-on	Optional add-on
3D Modeling Package	Optional add-on	Optional add-on	N/A

<sup>\*</sup>see product brochure for full specification



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