



HISTORY OF INCA

Setting the standard in UV inkjet flatbed printing with the Eagle and Columbia printers, Inca has an established track record of bringing ground-breaking technology to the market.

The Eagle, which launched in 2000, was the world's first commercial wide-format UV inkjet printer and this was followed shortly by the higher-speed Columbia and Spyder ranges; many of which are still producing work today. Moving forward a decade, Inca continues to develop ground-breaking technology for the digital printing market.

The Onset X Series, launched in 2015, is the pinnacle of digital printing producing a blistering 180 beds/hour whilst the SpyderX platform is delivering high-end machine performance and quality to the mid-range sector.

With approximately 25% of staff working in Research and Development, all supported by significant investment, Inca strives to maintain its position at the forefront of machine productivity, innovation, quality and reliability. Cambridge remains as Inca's HQ, which is home to its R&D labs, 20,000m² manufacturing facility, customer support hub, and a dedicated training centre.



THE SPYDERX PLATFORM

Designed and manufactured by Inca Digital, the robust 3.2m x 2.0m table, 6 colour+white SpyderX is available as either a flatbed, or a combination flatbed/roll to roll (R2R) model for handling rigid and flexible substrates.

This powerful and versatile printer is capable of producing a wide variety of products. Using Inca ink, the printer delivers high speed (230m² / hr) production with sharp, pinpoint accuracy whilst handling a wide range of media and applications.

QUALITY IS KEY!

Print-a-Shim

The SpyderX platform incorporates state-of-the-art, patented technology in which the vacuum table is optically mapped and adjusted to give optimum print quality across the full area of the bed. Whatever the application, whether it is photographic imagery, or nesting a fine text file across the printable area, the SpyderX is sure to offer supreme results.

UV System

The SpyderX operator controlled UV system allows even the most delicate and challenging materials to be printed. By using its proprietary UV lamp system to precisely control the dosage of the UV lamp, the SpyderX is capable of producing both matt and satin finishes on a wide range of media.

Registration Pins

The 3.2m table is equipped with 8 registration pins that enable the efficient and accurate positioning of media when printing double sided work up to 3.2m x 1.6m.



PRINT ANYTHING... ON EVERYTHING!

Print Mode	Flatbed Throughput			R2R Throughput	
	Beds /hr	m ² /hr	ft ² /hr	m ² /hr	ft ² /hr
Billboard	30	184	1981	230	2476
Production	26	150	1615	185	1991
Production Smooth	19	105	1130	125	1346
Quality	12	68	732	80	861
Quality Smooth	10	55	592	63	678
High Definition	5	28	301	32	344

Inca Ink

Inca Ink is a UV-curable ink available for the SpyderX, offering customers a wide colour gamut, supreme adhesion and excellent flexibility. Inca Ink adheres to the most difficult substrates including Dibond®, acrylic and plastics, while still offering excellent colour gamut – perfect for printing POP displays, durable graphics and banners.

R2R System

Increasing the functionality of the SpyderX, the robust and reliable R2R module can be added to any existing or new build flatbed printer to turn the platform into one of the industry's most versatile production-class printers. With a robust motion control system, and with a changeover time as short as walking around the machine, the system is able to handle rolls up to 3.2m wide and is fitted with high precision components to ensure accurate and wrinkle free media transport.

Multiple Layers

Thanks to its innovative design, the SpyderX is able to print up to eight layers. Each layer can be set independently using the most suitable print mode, ensuring that each layer within the job is printed efficiently at the required quality. The registration pins, and intuitive user interface, make multi-layer and double-sided printing a simple and seamless task.

Vacuum Zones

The vacuum table is divided into six zones which reduces masking time for the operator and ultimately increases the throughput of short-run, fast turn-around print. Vacuum zones are independently controlled and the auto zone functionality allows the selection to be easily managed by the operator. Vacuum strength can be adjusted according to the size and type of media allowing even the most challenging substrate to be fixed securely.



PRINT INTO THE FUTURE!

Inca Vision

Inca printers have a justified reputation for extraordinary reliability and unmatched production uptime. The combination of compatible hardware, software and inks on a well-maintained machine can mean that the printheads can potentially last the lifetime of the printer. We work hard to maintain this reputation which means we constantly measure the performance of both Inca printers in the field and engineers supporting our customers.

A major contributor to such performance is Inca Vision, a software-based customer support service unique to Inca Digital and developed to ensure that operators implement regular preventive and corrective maintenance. Inca Vision allows remote monitoring and diagnosis of printers in the field, conducting diagnostics to determine how well they are performing and – often even before customers have

a problem – decide whether there is a need for engineering support. Dashboards used by the Inca Digital Support Team provide a view of high-level data across machines throughout the world. A RAG (Red, Amber, Green) screen allows the support team to identify and prioritise printers needing urgent attention. The team also supports distributors and provides back-up technical data should serious machine issues arise in their regions.

Nozzle Mapping

Inca's patented nozzle-mapping feature minimizes print quality issues caused by deviated, unstable or blocked nozzles. To identify defective nozzles, the operator prints a test pattern and then identifies and inputs the defective nozzles into the user interface. The machine then prevents jetting from affected nozzles and compensates with adjacent functional nozzles. The procedure takes on average less than five minutes. This ensures continuous operation with no loss of either productivity or image quality.

Mechanical Substrate Height Detectors (MSHDs)

State of the art MSHDs help to protect the print heads from unwanted objects on the bed, such as masking tape or media folds. A pre-sweep before the print identifies any potential threat to the print heads and, if a barrier is within 0.25mm of the printheads, the MSHDs will detect this and stop the carriage before any impact is made.

Automated Cleaning Station

The automated cleaning station helps to maintain the printheads without manual operator intervention or purging, ensuring that customers do not have to compromise on throughput or quality. The automatic cleaning function is a seamless part of daily maintenance and ensures the printheads are always in the best possible condition. This dramatically reduces labour time and the loss of productivity associated with troublesome printhead cleaning procedures. A mist extraction system further reduces nozzle clogging.

Maintenance Scheduler

The in-built maintenance scheduler displays and plans the daily, weekly and monthly tasks to be completed by the operator. The completion of a task is logged against the username and this can be tracked by senior management or support engineers.



THE SPYDERX SALES NETWORK

The Inca SpyderX is available from Inca Digital's specialist reseller network.

Visit **www.incadigital.com** for details or contact for more information:

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