RoHS

CRON

CRON HDI

High Definition Digital Flexo Imager

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CRON HDI Digital Flexo Imager

The Beauty of High Definition Flexo Printing

ABOUT US

A thousand years ago, in the early Song Dynasty, Bisheng invented man's first generation of the printing process, promoting man's heritage and development. Now, also in the same legendary place, CRON is taking on the challenge of the printing culture, its mission, embarking on the long journey of change and innovation in the printing industry.

CRON has been committed to the optimization and innovation of traditional printing since its establishment in 1992. CRON's mission is to bring sustained benefits to printing enterprises through creative design and excellent manufacturer processes.

Now, CRON employs a top-quality scientific research team with a high level of advanced technological experience in international applications and the ability for independent innovation. The team has obtained almost one hundred patents.

With more than 20 years innovation and development, CRON became the first company to draft the national standard for CTP. CRON is also the only certified CTP training center in China. As a leader in the global CTP field, CRON has the largest CTP production base in the world, with an annual capacity of more than 1000 units. To date, CRON has installed more than 8000 units across the globe and supplied products and services to almost one hundred countries and regions.

CRON's philosophy encourages the company to "take scientific and technological innovation as the driving force, make quality your survival and make progress every day from beginning to end. CRON improves its product system and forms the four core product lines, which are offset CTP system, HDI flexo CTP, offset printing plates, and EZC intelligent printing system, to meet the requests of industry 4.0.

From Germany to the USA and Malaysia, CRON has opened branch offices around the world and, at the same time, extended its R&D and production base, service, and spare parts bases. CRON has earned praise from worldwide users and brought new power to the promotion of the printing industry.

CRON will stay true to its mission, hold its belief, and move diligently ahead.

GLOBALIZATION OF CRON

Hangzhou CRON Machinery & Electronics Co., Ltd. - CTP and other related equipment
Jimu - eco-friendly CTP Plates | CRON intelligent technology - researching printing technology
CRON EUROPE | CRON AMERICA | CRON Graphics (Malaysia)
CRON Hong Kong | CRON Shenzhen | CRON Beijing

Excellent CRON HDI

CRON HDI - THE NEW FORCE IN FLEXO IMAGER

The new CRON HDI is derived from CRON's Offset CTP technology, which is a highly mature product used widely around the world. CRON has focused on the prepress industry for decades, and has gained a number of national awards and intellectual property patents. At present, CRON has more than 6,000 CTP units installed, operating daily in many enterprises around the world.
The CRON HDI encompasses the essence of CRON's CTP technology and has been specially developed and launched with the high-precision flexographic digital imaging market as its target.

Built-in dedusting system

State-of-the art linear magnetic drive scanning system

High speed, high accuracy, zero friction and maintenance-free operation guarantees reliable, stable laser output.

Linear magnetic drive scanning system

Built-in dedusting system

Built-in design, high-efficiency dedusting - a powerful tool to resolve the difficult problem of ablation dust removal.

Semi-conductor Multiple Fiber Array and Optical Imaging Technology

The laser system uses SMFO technology which helps to improve the resolution. Individual lasers can be changed or moved so that the cost of laser maintenance is greatly reduced.

Semi-conductor Multiple Fiber Array and Optical Imaging Technology

V-shape guide

V-shape guide

The unique V-shape guide rail guarantees smooth and stable movement of the scanning platform increasing image quality.

Highly refined external drum

Our class-leading external drum (surface flatness to within 5μm) lays a solid foundation for accurate laser focus and the sharpest possible dot reproduction.

Highly refined external drum

Constant temperature and dual-cooling system

Constant temperature and dual-cooling system

The system ensures that the laser's temperature stays at ±0.5℃. As a result laser life is extended.

Leak-proof drum vacuum channel system

Vacuum pressure is stable for all sizes of plates. There is no need for zones or air valves to make vacuum control easier.

Leak-proof drum vacuum channel system

Dynamic balancing system

Dynamic balancing system

The drum will automatically balance with any thickness and size of plate.

Automatic detection of thick plate

According to the actual thickness of the plate, automatic focusing ensures that the image dot quality is not affected by different plate thickness.

AUTO

Automatic detection of thick plate

High Resolution Flexo Imaging

As the bright new force in digital flexo plate making, CRON brings its core strengths, its innovation, its product quality and has solved the problem of high resolution flexo printing, bringing rich levels of color to printing and superb performance both in highlight and shadow areas. Results compare favorably to offset and gravure printing.

CRON HDI helps flexo printers to enhance their printing quality, improve customer satisfaction and at the same time improve their competitive advantage.

CRON HDI

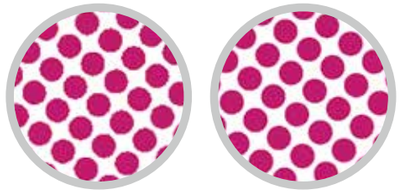
High speed plate imaging is the basis of high efficiency

In the application field of packaging plate imaging, the speed of CRON HDI can be more than 8m²/h, which fully meets the needs of packaging market users.

High resolution is the foundation of high quality plate making.

CRON HDI brings the latest technology to flexo, featuring a resolution-set at 4800/5080dpi and maximum over 10000dpi. The high resolutions achieved have solved the common problems associated with lower resolutions(for instance jagged edges and curves), and significantly improved the printing quality of fine lines. It can also create smooth gradations, with no hard or sudden changes in tonal values and superb performance in highlight areas.

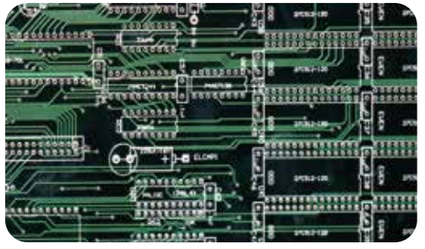
(1) Makes printed colors richer
(2) Enhances the precision of security printing
(3) Solves the sawtooth noise problem of PCB ciruit printing



Dot reproduction: 4000dpi VS 9600dpi

0.01mm positive
line and negative line

1% dot



A Complete Flexo Plate Making Solution

CRON is dedicated to providing a high cost-performance complete flexo plate-making solution, with higher efficiency, lower investment and easier maintenance.

The packaging design and 3D preview software from Arden in the UK, Coupled with workflow and Rip solutions from Kodak and Xitron, bring outstanding package design results. The digital flexo plates from Toyobo, Flint, MacDermid, Dupont, Toray, Huaguang, and others achieve excellent performance when they are imaged on CRON HDI. Popular brands like G&J, Heights, and DuPont offers different levels of plate processing.

A reliable, easy and excellent solution is the guarantee for the best plate-making quality.

High-resolution plate imaging is the foundation of perfect printing.

CRON HDI in cooperation with professional workflow software can take full advantage of CRON HDI flexo capabilities and achieve a small, fine dot.

Working with strategic partners, CRON offers powerful workflow software such as Founder Eagle flexo, Kodak Prinergy EVO, XITRON etc. Professional software meets high quality production requirements and offers high-resolution, specialized screening technology for flexo. Working with CRON HDI it is possible to obtain the highest quality, high-resolution flexo printing.

1	2	3	4	5
Packaging Design & 3D Preview	Professional screenings technology & flexo RIP	Digital Flexo Imaging	Flexo Plate	Plate-making assistant machines
				
ARDEN SOFTWARE impact FOUNDER	FOUNDER Eagle RIP Flexo Kodak Prinergy Workflow	CRON HDI HDI-2000 Series HDI-1200 Series HDI-1600 Series HDI-920 Series HDI-600 Series HDI-400 Series	All brands of digital photopoly-mer plates and letterpress plates	GLUNZ & JENSEN

Optimized flexo screening

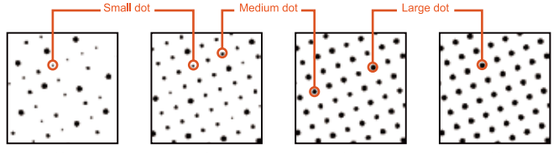
Normal dot shape 85%

FlexoRound dot shape 85%

Ganging software

FlexoRound Balance technology

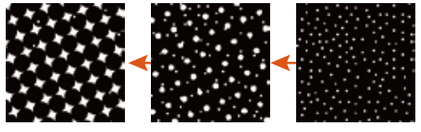
Achieve perfect gradients in highlight



Miracle Cell technology

Increase solid ink density

Miracle cell type sets to gradient, density of extract tiny dots is variable



Different miracle cell density setting

HDI-400 Series Technical Specifications

HDI-400
automatic tail clamping

CRON HDI-400 specially designed for high quality narrow web & label printing.

Configured with the advanced CRON laser optical system, CRON HDI-400 reliably provides accurate high definition label prints.

The new CRON HDI-400 is now the first choice for label printers due to its easy operation, image performance, and stability.

Model	HDI-400S	HDI-400H
Max. size	430x588mm（17×23 in）	
Min. size	100x100mm（4×4 in）	
Plate type	Polyester letterpress, Thermal offset plate,Digital flexo plate,Ablative film	
Plate thickness	0.11mm ~ 3.94mm	
Automatic detection of thick plate	Optional	
Plate loading	Manual mounting, Auto loading	
Resolution	2000/4000dpi（Upgradable8000dpi） 2400/4800dpi（Upgradable9600dpi） 2540/5080dpi（Upgradable10160dpi）	2000/4000/8000dpi 2400/4800/9600dpi 2540/5080dpi（Upgradable10160dpi）
	Note: To upgrade to 10160 dpi, customer's job file needs to be tested and reviewed.	
Plate making speed	2400dpi 1.67m²/h 4800dpi 1.67m²/h 9600dpi 0.98m²/h	2400dpi 3.05m²/h 4800dpi 2.64m²/h 9600dpi 1.33m²/h
	Note: The above mentioned plate making speed is calculated based on 2.5j/cm² of plate exposure energy; plate making speed might vary according to plate exposure energy, resolution, plate size and plate thickness.	
Offset plate making speed	About 30 sheets per hour (320×408mm) 2400dpi	About 48 sheets per hour(320×408mm) 2400dpi
Net weight	472 kg	
Power supply	Single-phase 220V ± 5% 50/60Hz	
Rated power	4.3KW	
Dimensions	(L x W x H) 1154 × 900 × 950 mm	
Environment	18~28℃; RH: 40%~60%	

Remarks: CRON reserves the rights to modify or change the design and technical parameters without notifying in advance

HDI-600 Series Technical Specifications

The amazing CRON HDI Flexo 600 is a space-saving and affordable Flexo plate imager designed for small format and narrow web applications such as labels, stickers and tags. Its small footprint and ease of use make this the perfect unit for all small packaging and labelling work, with astonishing cost-savings and a minimum plate size of just 100 x 100mm.

The HDI Flexo 600 is a highly flexible solution for superior quality plate production. The semi-automatic plate loading, and a head and tail clamp make it possible to image on a wide range of plate materials including thermal film, digital polyester-back flexo and letterpress plates, thermal offset plates and dry offset metal-back plates. This design also eliminates the need for operators to secure the plates with tape.

HDI-600 automatic tail clamping

Model	HDI-600S	HDI-600H+
Max. size	670x588mm（26×23 in）	
Min. size	100x130mm（4×5 in）	
Plate type	Polyester letterpress, Thermal offset plate,Digital flexo plate,Ablative film	
Plate thickness	0.11mm ~ 3.94mm	
Automatic detection of thick plate	Standard	
Plate loading	Manual mounting, Auto loading	
Resolution	2000/4000dpi（Upgradable8000dpi） 2400/4800dpi（Upgradable9600dpi） 2540/5080dpi（Upgradable10160dpi）	2000/4000/8000dpi 2400/4800/9600dpi 2540/5080dpi（Upgradable10160dpi）
	Note: To upgrade to 10160 dpi, customer's job file needs to be tested and reviewed.	
Plate making speed	2400dpi 3.05m²/h 4800dpi 2.64m²/h 9600dpi 1.33m²/h	2400dpi 5.47m²/h 4800dpi 4.02m²/h 9600dpi 2.01m²/h
	Note: The above mentioned plate making speed is calculated based on 2.5j/cm² of plate exposure energy; plate making speed might vary according to plate exposure energy, resolution, plate size and plate thickness.	
Offset plate making speed	About 19 sheets per hour (510×400mm) 2400dpi	About 28 sheets per hour (510×400mm) 2400dpi
Net weight	780 kg	
Power supply	Single-phase 220V ± 5% 50/60Hz	
Rated power	5.1KW	
Dimensions	(L x W x H) 1175 × 1400 × 1050 mm	
Environment	18~28℃; RH: 40%~60%	

Remarks: CRON reserves the rights to modify or change the design and technical parameters without notifying in advance

HDI-920 Series Technical Specifications

The CRON HDI Flexo 920 is a highly flexible CTP for narrow and medium formats such as label printing, paper cups and cartons. The HDI Flexo 920 offers superior quality, high productivity and cost efficiency on a very compact footprint, making it a smart choice for all packaging converters.

The HDI Flexo 920 features a slide-back lid for easy, semi-automated loading of thermal film, digital polyester-back flexo and letterpress plates, and a head and tail clamp to facilitate reliable imaging onto thermal offset plates and dry offset metal-back plates. With an open 1-bit TIFF interface compatible with almost all third-party software solutions, the HDI Flexo 920 is an excellent low-cost solution for high-quality plate production.

Model	HDI-920S	HDI-920H+
Max. size	920x675mm（36×26 in）	
Min. size	100x130mm（4×5 in）	
Plate type	Digital flexo plate, Polyester letterpress,Ablative film,Thermal offset plate,Metal base letter press plate* Note: * Metal base letter press plate， base<0.2mm	
Plate thickness	0.11mm ~ 3.94mm	
Automatic detection of thick plate	Standard	
Plate loading	Manual mounting, Auto loading	
Resolution	2000/4000dpi（Upgradeable8000dpi） 2400/4800dpi（Upgradeable9600dpi） 2540/5080dpi（Upgradeable10160dpi） Note: To upgrade to 10160 dpi, customer's job file needs to be tested and reviewed.	2000/4000/8000dpi 2400/4800/9600dpi 2540/5080dpi（Upgradeable10160dpi）
Plate making speed	2400dpi 2.99m²/h 4800dpi 3.05m²/h 9600dpi 1.53m²/h Note: The above mentioned plate making speed is calculated based on 2.5j/cm² of plate exposure energy; plate making speed might vary according to plate exposure energy, resolution, plate size and plate thickness.	2400dpi 6.30m²/h 4800dpi 4.63m²/h 9600dpi 2.31m²/h
Offset plate making speed	About 27 sheets per hour(510×400mm) 2400dpi	About 40 sheets per hour(510×400mm) 2400dpi
Net weight	880 kg	
Power supply	Single-phase 220V ± 5% 50/60Hz	
Rated power	5.6KW	
Dimensions	(L x W x H) 1650 × 1300 × 1100 mm	
Environment	18~28℃; RH: 40%~60%	

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HDI-1200 & HDI-1600 Series Technical Specifications

The CRON HDI Flexo Imager 1200 and 1600 set an astonishing new price point for large format Flexo imagers, whilst delivering the same high-quality imaging as all CRON devices. Its unique yet simple design allows minimum handling of the plate material, minimizing waste without any compromise in quality. The HDI 1200 and 1600 cover an extensive range of wide-format applications such as flexible packaging, corrugated and folding carton printing, supporting the common large plate size of 1524 x 1067mm (HDI 1600), nevertheless maintaining a conveniently compact footprint.

The HDI Flexo 1200 and 1600 come with a built-in plate loading platform, while semi-automated plate loading further simplifies machine operation. The easy operation avoids plate damage, while the drum automatically sets balance block positioning for optimum drum stability.

Neither air valves nor plastic sheet is needed to seal vacuum holes when using CRON patented leak-proof drum vacuum system.

HDI-1600 automatically load and unload platform

Model	HDI-1200H/HDI-1600H	HDI-1200H+/HDI-1600H+
Max. size	1000x1200mm（39×47 in）1200	1524x1200mm（60×47 in）1600
Min. size	200x200mm（8×8 in）	
Plate type	Digital flexo, Polyester letterpress, Ablative film	
Plate thickness	0.11mm ~ 3.94mm	
Automatic detection of thick plate	Standard	
Plate loading	Manual mounting, Auto loading	
Resolution	2000/4000dpi（Upgradeable8000dpi） 2400/4800dpi（Upgradeable9600dpi） 2540/5080dpi	2000/4000/8000dpi 2400/4800/9600dpi 2540/5080dpi
	Note: To upgrade to 10160 dpi, customer's job file needs to be tested and reviewed.	
Plate making speed	2400dpi 6.37m²/h 4800dpi 6.19m²/h 9600dpi 3.98m²/h	2400dpi 8.50m²/h 4800dpi 8.30m²/h 9600dpi 5.30m²/h
	Note: The above mentioned plate making speed is calculated based on 2.5j/cm² of plate exposure energy; plate making speed might vary according to plate exposure energy, resolution, plate size and plate thickness.	
Net weight	1480 kg	
Power supply	Single-phase 220V ± 5% 50/60Hz	
Rated power	6KW	
Dimensions	(L x W x H) 2315 × 1150 × 1175 mm	
Environment	18~28℃; RH: 40%~60%	

Remarks: CRON reserves the rights to modify or change the design and technical parameters without notifying in advance

HDI-2000 Series Technical Specifications

CRON HDI-2000 series is the very first choice for high-volume flexo trade shops and corrugated converters.

As the very first full-size flexo imager made in China, the CRON HDI-2000 is compatible with all 50 x 80 size flexo plates, hence perfectly achieves maximum plate utilization.

Configured with CRON's dual clamping systems(both head-and tail-clamp), the HDI-2000 greatly assists trade shops in efficiency improvement. The HDI-2000 takes plates up to a thickness of 6.35mm which can be loaded from the loading table situated on top of the machine. The loading and unloading cycle is fully automatic and reduces the amount of manual labour to a minimum.

HDI-2000 automatically load and unload platform

Model	HDI-2000H	HDI-2000H+
Max. size	2032x1270mm（80×50 in）	
Min. size	350x200mm（14×8 in）	
Plate type	Digital flexo, Polyester letterpress, Ablative film	
Plate thickness	0.11 mm ~ 6.35 mm	
Automatic detection of thick plate	Standard	
Plate loading	Manual mounting, Auto loading	
Resolution	2000/4000/8000dpi 2400/4800/9600dpi 2540/5080dpi Note: To upgrade to 10160 dpi, customer's job file needs to be tested and reviewed.	
Plate making speed	2400dpi 6.60m²/h 4800dpi 6.40m²/h 9600dpi 3.20m²/h	2400dpi 8.86m²/h 4800dpi 8.61m²/h 9600dpi 4.31m²/h
	Note: The above mentioned plate making speed is calculated based on 2.5j/cm² of plate exposure energy; plate making speed might vary according to plate exposure energy, resolution, plate size and plate thickness.	
Net weight	2800kg	
Power supply	Single-phase 220V ± 5% 50/60Hz	
Rated power	8.8KW	
Dimensions	(L x W x H) 2820 × 1400 × 1125 mm	
External air pump	size：(L x W x H)1110×680×770mm weight：190kg	
Environment	18~28℃; RH: 40%~60%	

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