RoHS

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CRON

CRON HDI

High Definition Digital Flexo Imager

V 2018-9

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CRON HDI | **Digital Flexo Imager**

The Beauty of High Definition Flexo Printing

CRON HDI

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 burden and inheriting the printing culture, its mission, to embark on the long journey of change and innovation in the printing industry.

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

Now, CRON employs a top-quality scientific research team with a high level of advanced technological experience in international applications and 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 6000 units around the world and supplied products and services to almost one hundred countries and regions.

CRON insist the purpose of "take the scientific and technological innovation as the driving force, take the quality of survival, take progress everyday" from the beginning to the end. Improve product system, and form the four core products, which is offset CTP system, HDI flex CTP, Emerald environmental protection plate and EZC intelligent printing system which is face to industry 4.0 age.

From Germany to USA and to Malaysia, CRON has opened branch offices around the world and at the same time, built its R&D and production base, parts centers and service base. CRON has earned praise from users worldwide and brings new power to the promotion of the printing industry because of its ability to innovate, its high quality and its comprehensive after-sales service.

CRON will stay true to its mission, maintain it's belief, and move diligently ahead!

GLOBALIZATION OF CRON

CRON-EUROPE

CRON-ECRM

CRON Hong Kong

CRON ASIA

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-ECRM | 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.

Highly refined external drum

Constant temperature and dual-cooling system

V-shape guide

Linear magnetic drive scanning system

Built-in dedusting system

Dynamic balancing system

Leak-proof drum vacuum channel system

Semi-conductor Multiple Fiber Array and Optical Imaging Technology

State-of-the art linear magnetic drive scanning system
High speed, high accuracy, zero friction and maintenance-free operation guarantees reliable, stable laser output.

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.

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.

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.

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

High Resolution Flexo Imaging


CRON HDI

High resolution is the foundation of high quality plate making.

CRON HDI brings the latest technology to flexo, featuring a resolution-set from starting at 2400dpi up to 2540, 4000, 4800, 5080 and 9600dpi.

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.
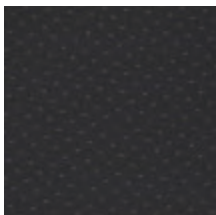
(1) Makes printed colors richer;
(2) Enhances the precision of security printing;
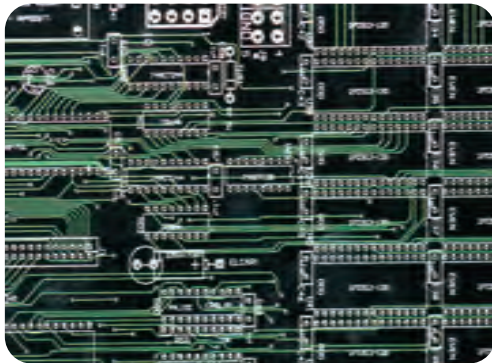(3) Solves the sawtooth noise problem of PCB circuit printing.
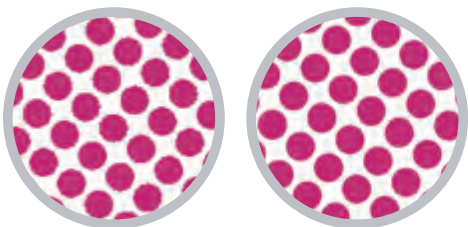
Dot reproduction: 4000dpi VS 9600dpi

0.01mm positive
line and negative line

1% dot

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.

A Complete Flexo Plate Making Solution

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

The packaging design and 3D preview software from Arden in the UK, coupled with the RIP and workflow software from Founder and Kodak Prinergy, leads to outstanding package design results. The digital flexo plates from, Toyobo, Flint, MacDermid, DuPont, Toray, Huaguang and others have excellent performance when imaged on CRON HDI. Popular brands like G&J and Heights offer different levels of plate-making machines compatible with most brands of plates.

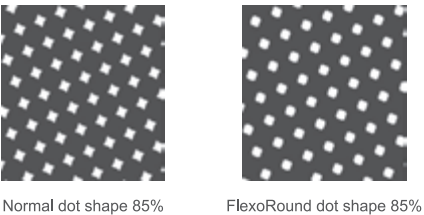A perfect and reliable solution is the guarantee for making the best quality plates.

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 Packaging Design & 3D Preview
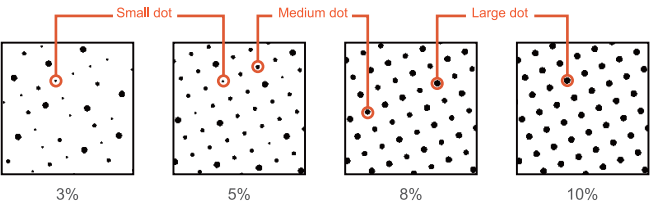
ARDEN SOFTWARE
impact
FOUNDER

2 Professional screenings technology & flexo RIP

FOUNDER
Eagle RIP Flexo

Kodak
Prinergy Workflow

3 Digital Flexo Imaging

CRON HDI

HDI-2000 Series
HDI-1600 Series
HDI-920 Series
HDI-600 Series
HDI-400 Series

4 Flexo Plate

All brands of digital photopolymer plates and letterpress plates

5 Plate-making assistant machines

GLUNZ & JENSEN
PLATE PROCESSORS

HEIGHTS

Optimized flexo screening

Normal dot shape 85%   FlexoRound dot shape 85%

Ganging software

FlexoRound Balance technology — Achieve perfect gradients in highlight

Small dot   Medium dot   Large dot

3%   5%   8%   10%

Miracle Cell technology — Increase solid ink density

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

80%   90%   100%

Different miracle cell density setting

100%   100%   100%
Miracle cell density: 6   Miracle cell density: 10   Miracle cell density: 15
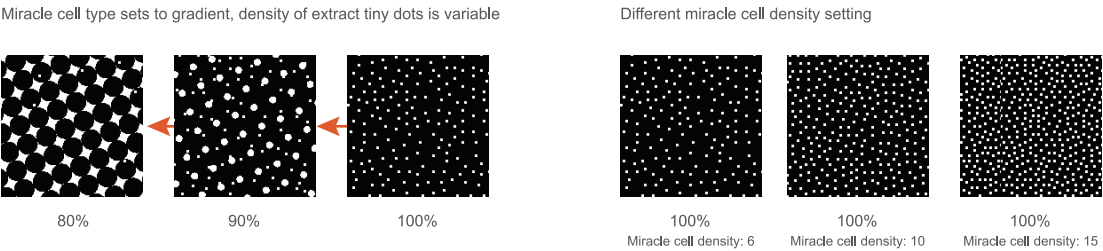
HDI-400 Series Technical Specifications

CRON HDI

HDI-400
automatic tail clamping

CRON HDI-400 specially designed for high definition label printing.

Configured with the advanced CRON SMFO laser optical system, CRON HDI-400 steadily outputting accurate image ensures high definition label prints.

Brand new CRON HDI-400 is the very first choice for label printers due to its easy operation, fine image and stability.

Model	HDI-400S	HDI-400S+	HDI-400H
Max. size	430 × 560 mm (17 × 22 inch)		
Min. size	100 × 100 mm (3.9 × 3.9 inch)		
Plate loading	Manual mounting, Auto loading		
Resolution	4000 dpi or 4800/5080 dpi	4000/8000 dpi or 4800/5080/9600 dpi	
# S series speed	1.0~1.8 m²/h (3.7~2.0J/cm²) 4800/5080 dpi		
# S+ series speed	1.0~1.8 m²/h (3.7~2.0J/cm²) 4800/5080 dpi	1.0 m²/h (3.7~2.0J/cm²) 9600 dpi *	
# H series speed	2.0~4.5 m²/h (3.7~2.0J/cm²) 4800/5080 dpi	2.0~2.4 m²/h (3.7~2.0J/cm²) 9600 dpi **	
Plate type	Digital flexo plate, Letterpress, Ablative film		
Plate thickness	0.11mm ~ 3mm		
Net weight	500 kg		
Power supply	Single phase 220V ± 5% 50/60Hz		
Rated Power	4.3 KW		
Dimension	1160×900×950 mm (W×L×H)		
Environment	18~28℃; RH: 40%~60%		

The speed data in this sheet is for the Max. size.HDI-400 series' maximum peripheral length is 560mm

* When the plate making accuracy is 9600dpi, the maximum output of 2.0mm is not more than 1.1m²/h.

** When the plate making accuracy is 9600dpi, the maximum output of 2.0mm is not more than 1.7m²/h.

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

CRON HDI

Model	HDI-600S	HDI-600S+	HDI-600H	HDI-600H+
Max. size	660 × 560 mm (26 × 22 inch)			
Min. size	100 × 130 mm (3.9 × 5.1 inch)			
Plate loading	Manual mounting, Auto loading			
Resolution	4000 dpi or 4800/5080 dpi	4000/8000 dpi or 4800/5080/9600 dpi		
# S series speed	1.1~2.5 m^2/h (4.5~2.0J/cm^2) 4800/5080 dpi			
# S+ series speed	1.1~2.5 m^2/h (4.5~2.0J/cm^2) 4800/5080 dpi	1.0~1.5 m^2/h (4.5~2.0J/cm^2) 9600 dpi *		
# H series speed	2.0~4.5 m^2/h (4.5~2.0J/cm^2) 4800/5080 dpi	2.0~2.4 m^2/h (4.5~2.0J/cm^2) 9600 dpi **		
# H+ series speed	3.5~4.5 m^2/h (4.5~2.0J/cm^2) 4800/5080 dpi	2.4 m^2/h (4.5~2.0J/cm^2) 9600 dpi **		
Plate type	Digital flexo plate, Letterpress, Ablative film			
Plate thickness	0.11mm ~ 3.94mm			
Net weight	780 kg			
Power supply	Single phase 220V ± 5% 50/60Hz			
Rated Power	5.1KW			
Dimension	1400×1175×1050 mm (W×L×H)			
Environment	18~28°C; RH: 40%~60%			

Label printing companies usually have a variety of types of presses. They may use letterpress, flexo and dry film at the same time. CRON HDI-600 can meet the demands of different types of presses to make plates.

CRON HDI-600 is the first automatic plate-making machine that doesn't need to use tape to secure the plate.

CRON HDI-600 is designed for high-resolution label printing.

HDI-600 automatic tail clamping

The speed data in this sheet is for the Max. size.HDI-600 series' maximum peripheral length is 560mm

* When the plate making accuracy is 9600dpi, the maximum output of 2.0mm is not more than 1.1m^2/h.

** When the plate making accuracy is 9600dpi, the maximum output of 2.0mm is not more than 1.7m^2/h.

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HDI-920 Series Technical Specifications

Model	HDI-920S	HDI-920S+	HDI-920H	HDI-920H+
Max. size	920 × 675 mm (36 × 26.5 inch)			
Min. size	100 × 130 mm (3.9 × 5.1 inch)			
Plate loading	Manual mounting, Auto loading			
Resolution	4000 dpi or 4800/5080 dpi	4000/8000 dpi or 4800/5080/9600 dpi		
# S series speed	1.0~2.4 m^2/h (4.5~2.0J/cm^2) 4800/5080 dpi			
# S+ series speed	1.0~2.4 m^2/h (4.5~2.0J/cm^2) 4800/5080 dpi	1.0~1.6 m^2/h (4.5~2.0J/cm^2) 9600 dpi *		
# H series speed	2.0~4.5 m^2/h (4.5~2.0J/cm^2) 4800/5080 dpi	1.7~2.4 m^2/h (4.5~2.0J/cm^2) 9600 dpi **		
# H+ series speed	3.6~4.5 m^2/h (4.5~2.0J/cm^2) 4800/5080 dpi	2.4 m^2/h (4.5~2.0J/cm^2) 9600 dpi **		
Plate type	Digital flexo plate, Letterpress, Ablative film			
Plate thickness	0.11mm ~ 3.94mm			
Net weight	880 kg			
Power supply	Single phase 220V ± 5% 50/60Hz			
Rated Power	5.6KW			
Dimension	1650×1300×1100 mm (W×L×H)			
Environment	18~28°C; RH: 40%~60%			

CRON HDI-920 is the ideal model for mid-web flexo printers.

Whether for labels, tags, flexible packaging, paper cups, folding cartons or books, CRON HDI-920 can easily handle the task.

CRON HDI-600 is the first automatic plate-making machine that doesn't need to use tape to secure the plate.

CRON HDI-920 can deal with a variety of brands of letterpress plates with excellent results.

The speed data in this sheet is for the Max. size.HDI-920 series' maximum peripheral length is 675mm

* When the plate making accuracy is 9600dpi, the maximum output of 2.0mm is not more than 1.3m^2/h.

** When the plate making accuracy is 9600dpi, the maximum output of 2.0mm is not more than 2.0m^2/h.

CRON HDI-1600 is the first choice for wide format packaging flexo printing companies and plate-making centers.

CRON HDI-1600 has a unique integrated platform that can automatically load and unload large plates, effectively minimizing the chance of damage and avoiding potential waste caused by manual loading of plates. As a result the CRON HDI-1600 is very efficient and production costs are reduced.

Neither air valves nor plastic sheets are needed to seal vacuum holes when using CRON's unique patented leak-proof drum vacuum system. It is simple to use and highly efficient.

HDI-1600 automatically load and unload platform

Model	HDI-1200S HDI-1600S	HDI-1200S+ HDI-1600S+	HDI-1200H HDI-1600H	HDI-1200H+ HDI-1600H+
Max. size	HDI-1200 Series 1000 × 1200 mm (39 × 47 inch) HDI-1600 Series 1524 × 1200 mm (60 × 47 inch)			
Min. size	200 × 200 mm (7.9 × 7.9 inch)			
Plate loading	Manual mounting, Auto loading			
Resolution	4000 dpi or 4800/5080 dpi	4000/8000 dpi or 4800/5080/9600 dpi		
# S series speed	$1.0\sim2.4$ m^2/h ($4.5\sim2.0$J/cm^2) 4800/5080 dpi			
# S+ series speed	$1.0\sim2.4$ m^2/h ($4.5\sim2.0$J/cm^2) 4800/5080 dpi	$1.0\sim1.6$ m^2/h ($4.5\sim2.0$J/cm^2) 9600 dpi		
# H series speed	$2.0\sim4.6$ m^2/h ($4.5\sim2.0$J/cm^2) 4800/5080 dpi	$1.6\sim2.4$ m^2/h ($4.5\sim2.0$J/cm^2) 9600 dpi		
# H+ series speed	$3.8\sim4.6$ m^2/h ($4.5\sim2.0$J/cm^2) 4800/5080 dpi	2.84 m^2/h ($4.5\sim2.0$J/cm^2) 9600 dpi		
Plate type	Digital flexo plate, Letterpress, Ablative film			
Plate thickness	0.11mm ~ 3.94mm			
Net weight	1480 kg			
Power supply	Single phase 220V ± 5% 50/60Hz			
Rated Power	6KW			
Dimension	2315×1150×1175 mm (W×L×H)			
Environment	18~28°C; RH: 40%~60%			

The speed data in this sheet is for the Max. size.HDI-1200/HDI-1600 series' maximum peripheral length is 1200mm

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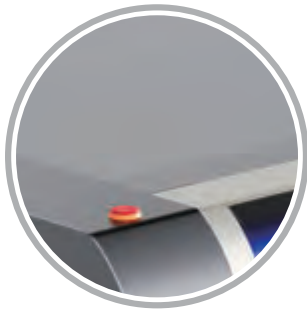
HDI-2000 Series Technical Specifications

Model	HDI-2000S	HDI-2000S+	HDI-2000H	HDI-2000H+
Max. size	2032 × 1270 mm (80 × 50 inch)			
Min. size	200 × 200 mm (7.9 × 7.9 inch)			
Plate loading	Manual mounting, Auto loading			
Resolution	4000 dpi or 4800/5080 dpi	4000/8000 dpi or 4800/5080/9600 dpi		
# S series speed	1.0~2.4 m^2/h (4.5~2.0J/cm^2) 4800/5080 dpi			
# S+ series speed	1.0~2.4 m^2/h (4.5~2.0J/cm^2) 4800/5080 dpi	1.0~1.6 m^2/h (4.5~2.0J/cm^2) 9600 dpi		
# H series speed	2.0~4.6 m^2/h (4.5~2.0J/cm^2) 4800/5080 dpi	1.6~2.4 m^2/h (4.5~2.0J/cm^2) 9600 dpi		
# H+ series speed	3.8~4.6 m^2/h (4.5~2.0J/cm^2) 4800/5080 dpi	2.84 m^2/h (4.5~2.0J/cm^2) 9600 dpi		
Plate type	Digital flexo plate, Letterpress, Ablative film			
Plate thickness	0.11mm ~ 6.35mm			
Net weight	2800 kg			
Power supply	Single phase 220V ± 5% 50/60Hz			
Rated Power	6 KW			
Dimension	2810×1400×1125 mm (W×L×H)			
Environment	18~28°C; RH: 40%~60%			

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 7mm 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

The speed data in this sheet is for the Max. size.HDI-2000 series' maximum peripheral length is 1270mm

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