



Simplicity | Stability | Specially

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**CRON: taking the lead in revolutionizing the printing industry.**

# ABOUT US

For over 20 years, CRON has been in pursuit of  
True Image, True Color and True Print.



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 its 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 an 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 5000 units around the world and supplied products and services to almost one hundred countries and regions.

CRON insists 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 are offset CTP system, HDI flex CTP, Emerald environmental protection plate and EZcolor intelligent printing system which is face to industry 4.0 age.

CRON applies its strategy of "make scientific and technological innovation the driving force, make long-lasting quality, make progress everyday" from the beginning to the end. CRON aims to improve the product system, and develop its four core products, which are offset CTP, HDI flexo CTP, Emerald environmentally friendly plates and the EZcolor 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 its belief, and move diligently ahead!

# GLOBAL CRON



## CRON FAMILY

- Hangzhou CRON Machinery & Electronics Co., Ltd. — CTP And Other Related Equipment
- Jimu — Environmental CTP Plates
- CRON Intelligent technology — Research of intelligent printing technology
- CRON Europe
- CRON- ECRM
- CRON Graphics(Malaysia)
- CRON HONGKONG
- CRON Shenzhen
- CRON Beijing

CRON continues to promote its international strategy and reinforce its subsidiaries in Dusseldorf Germany, Boston USA and Serdang Malaysia. More than 50% of CRON's products have been sold to overseas markets.

CRON's international strategy has been successful, not only because of the hard work of the 100+ engineers, but also because of the 100+ dealers around the world who serve both new and old customers.

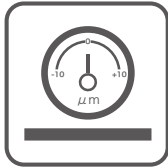


## CRON HDI — THE NEW FORCE IN FLEXTO IMAGER

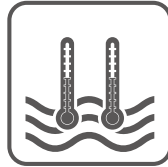
The new CRON HDI is derived from CRON' s Offset CTP technology, which is a highly mature product used widely around the world. CRON has focused on the prepress industry for decades, and has gained a number of national awards and intellectual property patents. At present, CRON has more than 5,000 CTP 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.

# EXCELLENT CRON HDI



Highly refined external drum



Constant temperature and dual-cooling system



V-shape guide



State-of-the art 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  $5 \mu\text{m}$ ) 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  $\pm 0.5^\circ\text{C}$ . 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.

RoHS



CE





CRON has identified three key performance indicators. Tolerance of less than 1% change in dot reproduction. Plate registration error of less than 1%mm. Ink supply error of less than 1%. 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.

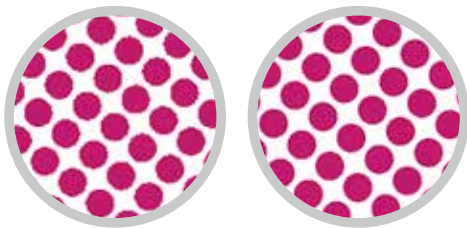
# Superior High Resolution Flexo Imaging

## High resolution is the foundation of high quality plate making.

CRON HDI brings the latest technology to flexo, packaged with resolutions of 4800/5080 dpi and is even capable of resolutions of more than 10000 dpi.

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.

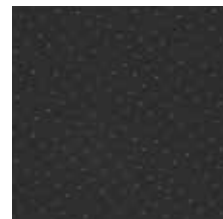
- (1) Makes printed colors richer;
- (2) Enhances the precision of security printing;
- (3) Solves the sawtooth noise reduction problem causes by PCB circuit printing.



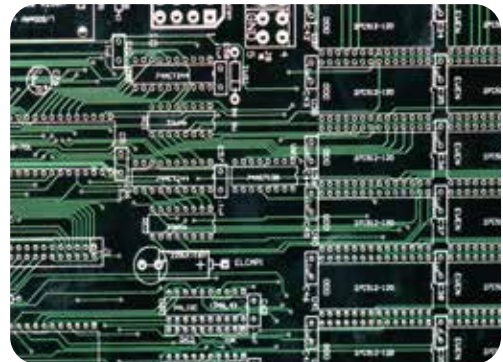
Dot reproduction: 4000dpi vs9600dpi



0.01mm positive line and negative line



1% dot



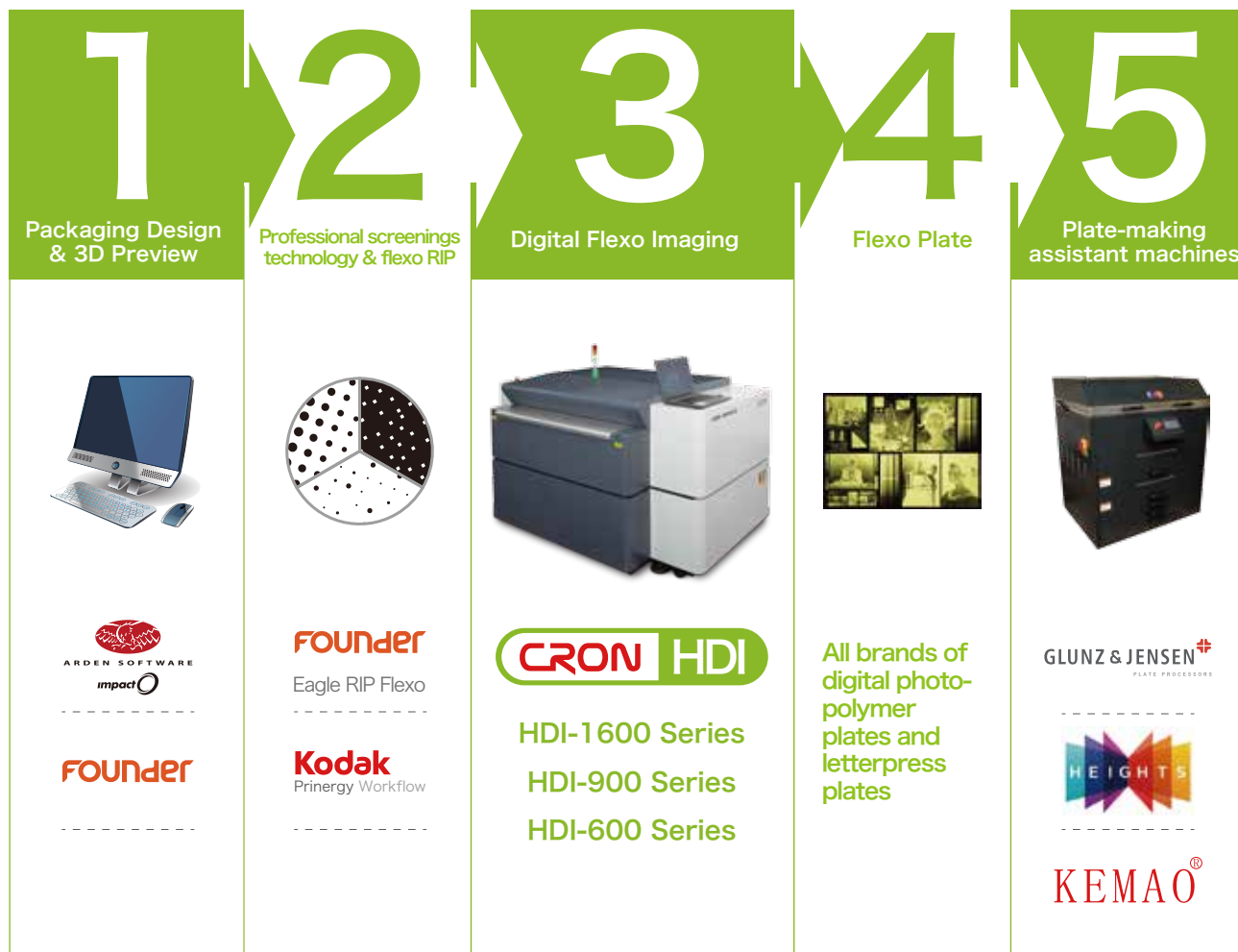


# CRON HDI A Complete Flexo Solution

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, Heights and KEMAO 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.

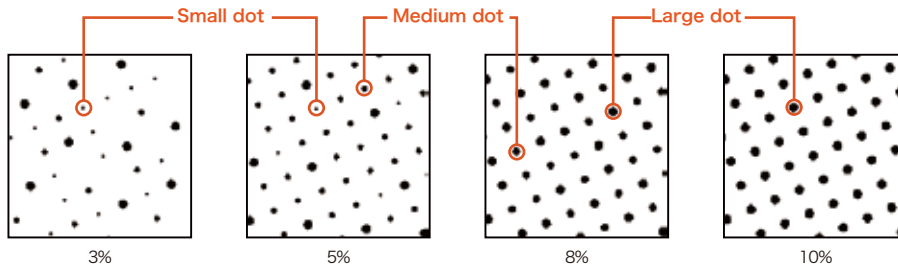


# Perfect Cooperation With Hardware

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 RIP, Kodak Prinergy 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.

## FlexoRound Balance Screening



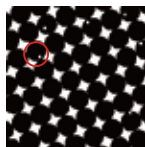
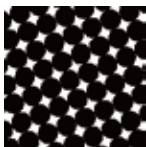
## Miracle Cell technology

End value of miracle cell

Miracle cell type sets to single, density of extract tiny dots is fixed

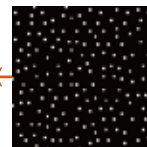
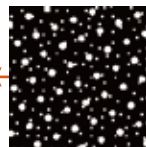
No extract tiny dots

End value of miracle cell



79%

80%



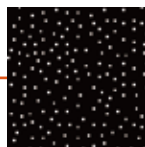
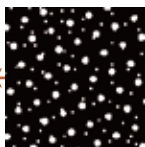
80%

90%

100%

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

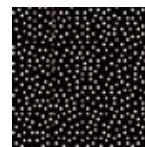
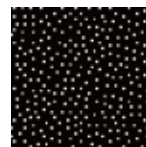
Different miracle cell density setting



80%

90%

100%



100%

Miracle cell density: 6

100%

Miracle cell density: 10

100%

Miracle cell density: 15

## CRON HDI HDI-600 Series



HDI-600 head clamp



HDI-600 automatic tail clamp

Label printing companies usually have a variety of types of presses. They may use letterpress, flexo, thermal offset printing and dry film at the same time.

Now, companies don't need to buy multiple pieces of equipment. 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.

The fully auto-clamping system is also compatible with thermal offset plates. The plate-making process is safer and plate making is more efficient.

CRON HDI-600 lives for high-resolution label printing.

# Technical Specifications

Model	HDI-600S	HDI-600S+	HDI-600H
Common size	510 × 635 mm (20×25 inch)		
Max. size	560 × 660 mm		
Min. size	100 × 100 mm		
Plate loading	Manual mounting, auto loading		
Resolutions	2400/2540/4000/4800/5080 dpi	2400/2540/4000/4800/5080/9600 dpi	
※ S series speed	1.0-2.3 m <sup>2</sup> /h (4500-2000mj/cm <sup>2</sup> ) 4000/4800/5080dpi	1.0-1.9 m <sup>2</sup> /h (4500-2000mj/cm <sup>2</sup> ) 9600dpi (S+)	
※ H series speed	1.8-4.3 m <sup>2</sup> /h (4500-2000mj/cm <sup>2</sup> ) 4000/4800/5080dpi	1.9-2.9 m <sup>2</sup> /h (4500-2000mj/cm <sup>2</sup> ) 9600dpi	
Laser wavelength	about 20 sheets/h (2400dpi、510mm) (S/S+)	about 28 sheets/h (2400dpi、510mm)	(H)
Plate type	830 nm		
MAX.plate thickness	digital photopolymer plates, ablative films, polyester-base letterpress plates, thermal letterpress plates and metal matrix flexo plate		
MIN.plate thickness	≤3.94mm & ≥0.10mm		
LED main exposure	Optional		
Net weight	900 kg		
Power supply	Single phase 220V±5% 50/60Hz		
Rated Power	5.5KW		
Dimension	1400×1175×1050 mm (W×L×H)		
Environment	18-25°C; RH: 20%-70%		

※ The speed data in this sheet is for the Max. size.

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

## CRON HDI HDI-900 Series



CRON HDI-900 is the ideal model for medium size flexo printers. Whether for labels, tags, flexible packaging, paper cups, folding cartons or books, CRON HDI-900 can easily handle the task. CRON HDI-900 can deal with a variety of brands of letterpress plates with excellent results.

# Technical Specifications

Model	HDI-900S	HDI-900S+	HDI-900H
Common size	635 × 762 mm (25 × 30 inch)		
Max. size	730 × 920 mm		
Min. size	100 × 100 mm		
Plate loading	Manual mounting, auto loading		
Resolutions	4000/4800/5080 dpi	4000/4800/5080/9600 dpi	
※ S series speed	1.1~2.5 m <sup>2</sup> /h (4500~2000mj/cm <sup>2</sup> )	4000/4800/5080dpi	1.1~1.7 m <sup>2</sup> /h (4500~2000mj/cm <sup>2</sup> ) 9600dpi (S+)
※ H series speed	2.0~4.8 m <sup>2</sup> /h (4500~2000mj/cm <sup>2</sup> )	4000/4800/5080dpi	2.0~2.5 m <sup>2</sup> /h (4500~2000mj/cm <sup>2</sup> ) 9600dpi
Laser wavelength	830 nm		
Plate type	digital photopolymer plates, ablative films and polyester-base letterpress plates.		
MAX.plate thickness	≤3.94mm		
MIN.plate thickness	≥0.10mm		
LED main exposure	Optional		
Net weight	1300 kg		
Power supply	Single phase 220V±5% 50/60Hz		
Rated Power	5.7KW		
Dimension	1650×1210×1100 mm (W×L×H)		
Environment	18~25°C; RH: 20%~70%		

※ The speed data in this sheet is for the Max. size.

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## CRON HDI HDI-1600 Series



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

# Technical Specifications

Model	HDI-1600S	HDI-1600S+	HDI-1600H
Common size	1067 × 1524 mm (42×60 inch)		
Max. size	1200 × 1524 mm		
Min. size	200 × 200 mm		
Plate loading	Manual mounting, auto loading		
Resolutions	4000/4800/5080 dpi	4000/4800/5080/9600 dpi	
※ S series speed	1.1~2.4 m <sup>2</sup> /h (4500~2000mj/cm <sup>2</sup> )	4000/4800/5080dpi	1.1~1.6 m <sup>2</sup> /h (4500~2000mj/cm <sup>2</sup> ) 9600dpi (S+)
※ H series speed	2.0~4.5 m <sup>2</sup> /h (4500~2000mj/cm <sup>2</sup> )	4000/4800/5080dpi	2.0~2.4 m <sup>2</sup> /h (4500~2000mj/cm <sup>2</sup> ) 9600dpi
Laser wavelength	830 nm		
Plate type	digital photopolymer plates, ablative films and polyester-base letterpress plates.		
MAX,plate thickness	≤3.94mm		
MIN,plate thickness	≥0.10mm		
LED main exposure	Optional		
Net weight	1530 kg		
Power supply	Single phase 220V±5% 50/60Hz		
Rated Power	7KW		
Dimension	2315×1150×1175 mm (W×L×H)		
Environment	18~25°C; RH: 20%~70%		

※ The speed data in this sheet is for the Max. size.

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