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FOUNDER EAGLEJET™

HIGH-DEFINITION COLOR INKJET WEB PRESS

4400CHD/5600CHD/6600CHD

BEIJING FOUNDER EASIPRINT CO.,LTD.

After wide market application and continuous improvement of high-speed color inkjet web presses, P5200C and P4400C/5600C, Founder EagleJet™ developed

High-definition Color Inkjet Web Press P4400CHD/P5600CHD/P6600CHD in 2022.

With the benefits including high quality comparable to offset printing, lower ink cost, efficient and stable production release, and extended service life, the new-generation HD color press will become the key factor for customers in the market competition by its excellent printing quality and lowest comprehensive cost.

High Quality Completely Comparable to Offset Printing

① High-Precision Printhead

With the help of industrial piezoelectricity of 1200DPI and more sophisticated technology for controlling the combination of multi-level ink droplets, the printed image is presented perfectly with minimal graininess, smoother color tones and richer gradations.

② High-precision printhead assembly

High-precision alloy materials as well as advanced processing and assembling technologies are adopted to ensure precisely utilizing of the printhead.

③ Specific High-Performance Ink

The specific aqueous pigment ink made by top ink manufacturers could be applied to a wider range of paper, with is excellent permeability and adhesion characteristics, color saturation, and drying performance.

④ New Mechanical Platform

- **Perfect spray shape and precision of ink droplets are realized by controlling printhead height accurately.**

The structure of the roll group and assembly process have been optimized precisely, which ensures the roll-to-roll stability of paper running in the state of high speed up to 150m/min.

- **Unique And Reliable Synchronous control technology at High Speed.**

The encoder combined with blue-ray technology supports the exact match between the spray from the printhead and the paper moving, which improves effectively to ensure registration accuracy and uniformity of color tones.

- **Brand-New Closed-Loop Tension Control System**

Real-time tension compensation and digital control are realized during running, which fully guarantees the stability of moving paper and thus greatly enhances the stability of high-speed printing.

⑤ New Inkjet Screening Technology

- Based on the "Founder inkjet halftone screening technology" dedicated to Founder inkjet equipment, combined with the characteristics of 1200dpi printhead and permeability and adhesion of ink on paper, the multi-bit depth variable ink-droplet screening technology was specifically designed to intelligently distribute the ink-droplet size and configure automatically best screening mode.

- Two advanced technologies, the FM control technology of blue noise and green noise and custom high line AM screen technology, provide high printing quality comparable to 300dpi offset printing.

- This screening technology has presented better printing quality with less ink amount, which reduces the drying requirements of pages with large ink amounts, and thus effectively improves the printing stability of large-ink pages at high speed.

⑥ Founder ColorTools Color Management Technology (Inkjet Version)

- On the basis of decades of offset printing color management technology and process experience, combined with the characteristics of inkjet technology, a number of technological innovations have been broken through, such as workflow color management technology, AI color separation control technology, accurate simulation control technology of spot color with fixed color gamut, image saturation enhancement technology based on matching with illuminants, BPC (Black Point Compensation) technology in color gamut, accurate color reproduction control technology at low ink amount, etc.

- It greatly reduces professional requirements for color management technicians, which realizes the one-key operation in the field of industrial inkjet printing color management.

- The excellence of the 1200dpi printhead and the new screen is not just continuous advantages of color reproduction from offset printing, but also the increased option of high saturation, which helps to meet the color demand for higher saturation in some businesses.

⑦ "ElecRoc" Text Processing Technology

- **Text processing technology applied on outlines**

The technology shows advantages on maintaining outlines smooth and slight to guarantee text quality.

- **Text blackness control technology**

It can reduce properly the black ink amount of the text without endangering reading comfort, meanwhile, keep the black ink amount in the CMYK color picture, which protects the best gradation of color tones.

- **The technology of converting CMYK color to black color texts**

The disposal avoids directly the inaccurate registration problem in inkjet printing of CMYK color texts.

Founder combines the 1200dpi high-precision industrial Printhead with tiny ink droplets and constantly perfected technologies including the web mechanical platform, upgraded tension and drying system, new screening, text processing, color management as well as high-performance specific ink, etc.Therefore, the new-generation press has realized brilliant color quality which is superior to that of offset printing on inkjet digital printing paper, And comparable to that of offset printing on common offset uncoated paper.

That means high productivity and market competitiveness in the mid-to-high-end printing market for customers!

Ultra-Low Ink Cost

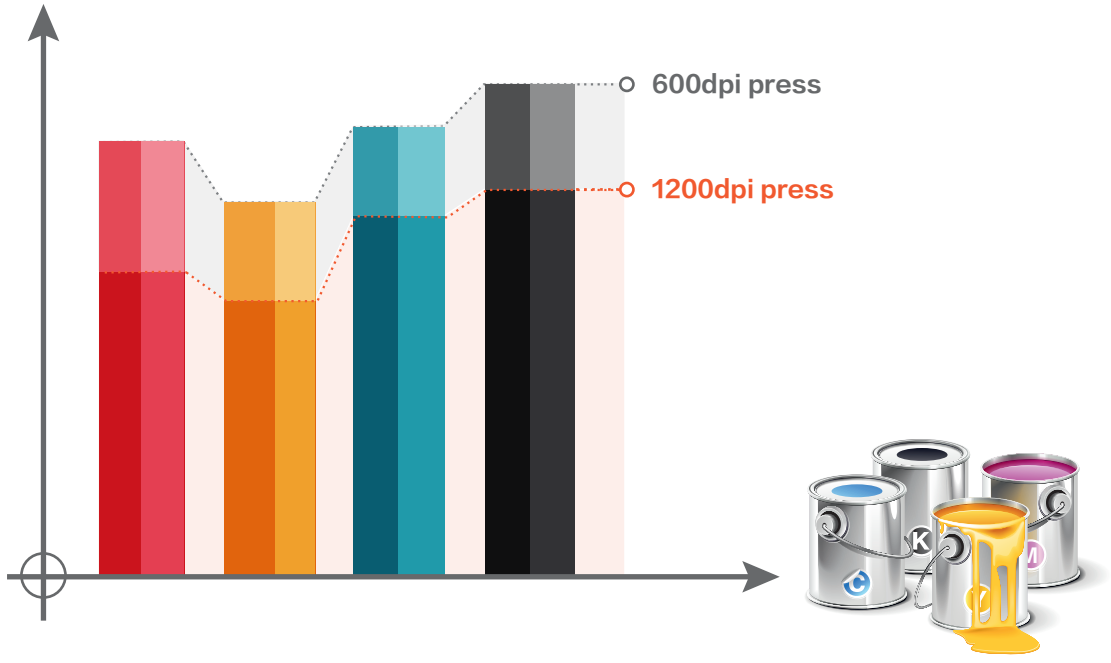
① Improved Screening Technology

Better Printing Quality with Less Ink Amount. Compared with 600dpi color presses, the ink amount in HD presses can be saved by 30%-40% under the same printing conditions.

Founder also developed an ink calculator, which helps to estimate the ink consumption before printing.

② Upgraded Ink Supply Technology

The latest sixth-generation circulating ink supply system greatly reduces nozzle clogging, which decreases ink wasted in cleaning maintenance by 50%.



Super Long Service Life

Casting Frame

- Casting structure and advanced assembly technology applied on the base and wallboard of the mechanical platform ensure the structural stability and shock resistance of the whole machine in long-term operation, which helps to match the service life of offset presses.
- The servo control system from well-known brands is accurate, stable, and durable, which is reliable to ensure safe and stable paper transmission, matched with paper breakage, double sheet and tail detection, etc.

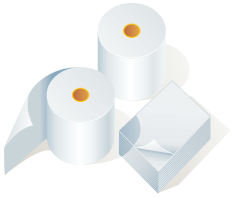
Stable High Production Release

① Minimize the Downtime Caused By Nozzle Clogging

Circulating ink supply technology with online detection greatly reduces the probability of nozzle clogging, and at the same time realizes the function of automatic white-line compensation, which protects the whole printing of one or more jobs, without stopping to maintain nozzles.

② Efficient Paper Roll Replacement

Automatic adjustment of printing parameters after paper replacements is realized through online detection, which saves time for manually fine-tuning.



③ Multi-Technology Avoids Wrinkles And Dirt Of Large-Ink Jobs In High-Speed Production

- The upgraded drying system highly improved the drying capacity of large-ink-amount jobs.
- The page ink drop processing technology can reduce separately target ink for pages with super-large ink amounts, which realizes the high-quality printing of the whole job.

④ The Professional Inkjet Imposition Function For Continuous Paper

The function provides flexible and diverse imposition methods for books and periodicals printing, and at the same time supports perfect bound, saddle stitch, sewing, and other binding methods. That means one production line can be applied to different business types of customers to enhance production efficiency.

⑤ Powerful RIP Processing

The excellent RIP cluster control capability helps A4 color files be processed up to [3000 pages]* per minute, which is the basis of full-speed printing. (*: Under the conditions required by Founder)

⑥ Founder Digital Printing Cutting System

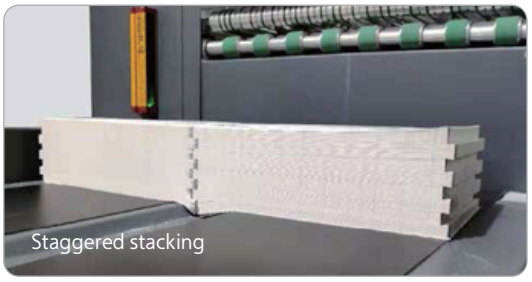
Introduce the post-press technology of internationally famous manufacturers.

The cutting technology of internationally renowned manufacturers has been introduced and improved for domestic paper. After the actual production of a large number of domestic black-and-white web machines, it is verified as a powerful weapon for efficient and stable production, and high efficiency of binding delivery.

Stable, continuous high quality and high production releases can help customers to take more orders during peak production seasons and reduce expenses including the depreciation of equipment, labor, field rent, energy consumption, equipment maintenance, and others, so as to realize real comprehensive cost competitiveness.

Founder Digital Printing Cutting System

Cooperated with famous foreign manufacturers,
Founder digital printing cutting system optimized width for domestic paper.
In addition, Founder also introduced intellectual properties, to successfully realize localized production and greatly reduce procurement costs.
It is an ideal solution for web digital printing to improve production efficiency and reduce paper waste.


Staggered stacking

Features

❶ Fast Production Speed

The maximum production speed reaches 137 m/min and ensures the production requirement of 120 m/min when connecting inkjet equipment.

❷ Leading Cutting Technology In China

Founder's cutting technology can meet the requirements of not only tissue paper cutting but also the accurate cutting of smaller sizes with the unique small-diameter rotary cutter.

❸ Simple Setup And Quick Specification Conversion.

The paper cutting specification can be changed by simply set in the touch screen without downtime to improve efficiency and reduce paper waste.

❹ Staggered Stacking Is Convenient For Post-Process Operation.

The staggered stacking, realized through the simple touch screen setting, simplifies the paper separation in the post-process, which reduces labor and improves production efficiency.

❺ Compacted Structure Helps To Reduce Power Consumption And Working Space.

Founder Digital Printing Cutting System Technical Specifications

Items	Parameters
Cutting speed	137m/min,connect inkjet press 120m/min(max.speed)*
Paper Weight	40g-200g(Some papers need to be texted.)
Web width	140-560mm
Stack length	90mm-710mm
Stack height	250mm
Max. stagger distance	15mm
Power	220V，50HZ，10A

*The actual speed is influenced by different papers and files.

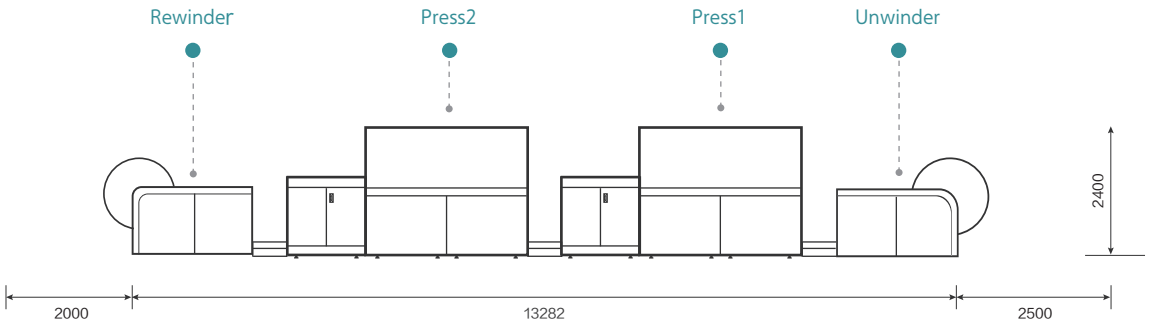
Founder 1200DPI HD Color Inkjet Press Technical Specifications

Printing mode	P4400CHD	P5600CHD	P6600CHD
Technical Specifications			
Printing type	4-colors duplex		
Resolution	1200*1200dpi、1200*960dpi、1200*840dpi、1200*600dpi		
Print speed	150m/min Max*		
Connect Cutter speed	120m/min Max*		
Registration accuracy	± 0.5mm(Front and back)		
Printhead	Industrial Drop-on-demand Piezoelectric		
Ink droplet size	1.5pl、3pl、5pl		
Ink	Water-based pigment ink		
Dry method	Infrared dryer (automatic adjustment on printing speed)		
Digital front-end	Founder EagleJet™inkjet imaging system (Windows Server based)		
Paper			
Max. media width	440mm	560mm	660mm
Max. printing width	440mm	540mm	650mm
Paper type	Uncoated paper,inkjet coated paper,newspaper#, matte coated paper#		
Media thickness	45 gsm – 165 gsm		
Max. roll diameter	1270mm		
AC power			
Mechanical platform	380Vac/20KW		
Dryer system	380Vac/69KWMax	380Vac/90KWMax	380Vac/105KWMax
Digital controller system	220Vac/6KW		
Operating environment			
Temperature	22.5-27.5℃, the best working temperature is 25℃		
Humidity	40-70RH, no condensation， the best working humidity is 50-60%RH		

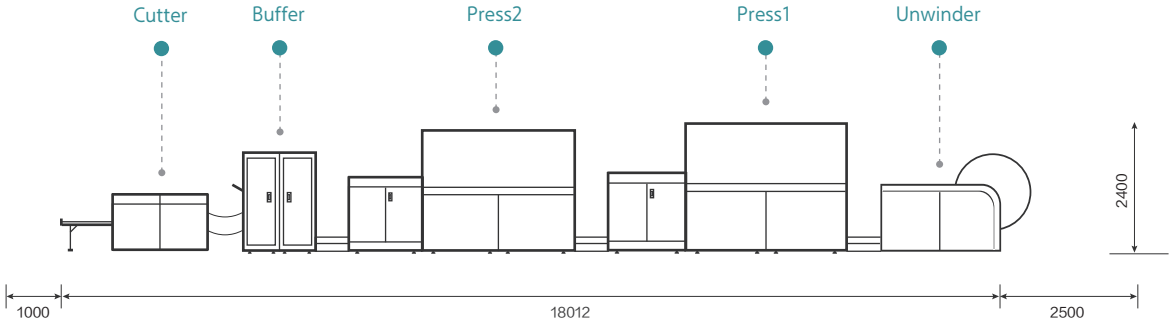
*The actual speed is influenced by different papers and files.
#The brand and specifications recommended by Party B.

Deployment Diagram

P4400CHD/P5600CHD/P6600CHD Roll-to-roll



P4400CHD/P5600CHD Roll-to-cut



Perfect Localized And Fast Service Support.

The founder's localized professional team provides fast and high-quality services including system maintenance, repair, upgrade, etc. Localized production of whole machines guarantees a fast supply of accessories and actual production.

Remote Diagnosis

Combining with the market demand and the actual needs of customers, Founder has developed a remote diagnosis platform for inkjet equipment. With the Internet as well as real-time data analysis and processing technology, the platform can reduce downtime of equipment, and improve the efficiency of after-sales service, thereby providing faster, more accurate and more reliable service.

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