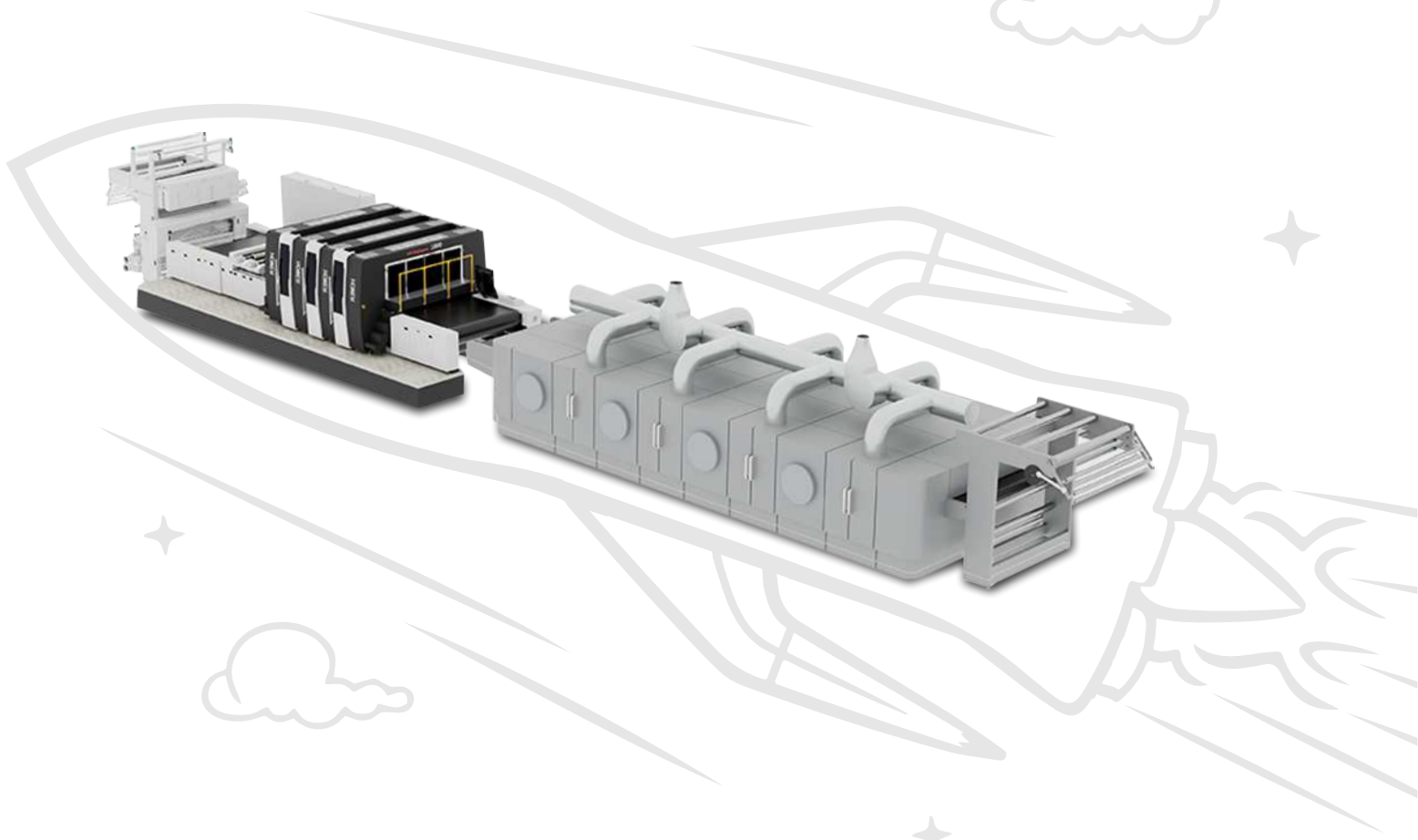


ROCKET

THE FUTURE OF **DIGITAL TEXTILE PRINTING**

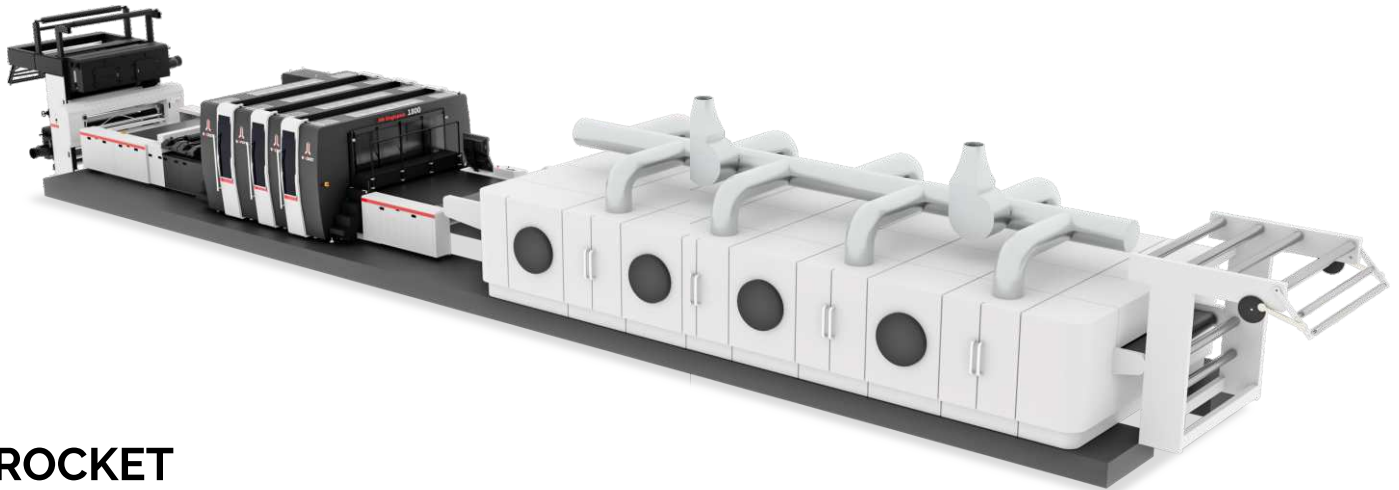


Sustainable Speed, Vibrant Quality



SINGLE PASS SERIES

ROCKET Single Pass High-speed Digital Printer



ROCKET

Singe Pass High-Speed Digital Printer

A new era of mass production

Digital printing enters the era of Single Pass flexible mass production. HOMER consistently works to transcend the boundaries of production capabilities and break through technological innovations, unlocking more possibilities for textile business and digital transformation. ROCKET, as the name suggests, utilizes mature Single Pass technology to introduce an industrial-grade, automated digital printing solution to the textile industry. It offers mass production, quality, flexibility, reliability, and exceptional cost effectiveness. This revolutionary equipment completely transforms the conventional notions of rotary/flatbed printing, achieving unprecedented efficiency and delivering outstanding printing quality, capacity, and efficiency to your production facility.

No plate-making, on-demand printing, and a streamlined printing process.
Achieves the speed and cost of rotary printing while rivaling the quality and precision of flatbed printing.

- Max. printing speed: 75 m/min (Rocket K) ; 80 m/min (Rocket X)
- Max. Resolution : 2400 DPI
- Max. printing width: 1850 mm
- 4-8 color modes

Industrial flexible production, compatible with both mass production and small-batch rapid response. Inline design for industrial, automated, and integrated digital printing.

Encompasses the entire production processes from fabric entry, pre-processing, transport, printing, drying, to fabric collection. Green printing in line with future textile trends.

ROCKET K

Industrial-grade Piezoelectric Printhead

Expanding Competitive Advantages in Textile Printing

SINGLE PASS SERIES | ROCKET Single Pass high-speed digital printer

Single Printhead Enables Wide-format Printing, Reducing Printhead Splicing Difficulty and Time

- A single printhead effectively prints a width of 108 mm to 112 mm, requiring fewer print heads to achieve wide-format printing.

High Productivity and High Precision, Long-term Satisfaction for Various Printing Applications

- Achieves the fastest speed of 70 m/min for 600 * 600 DPI images.
- Optional resolutions: 600 DPI to 2400 DPI.

True Grayscale Variable Ink Droplet Technology, Further Enhancing Printing Quality

- Implements variable ink droplet printing, where the nozzle can sense three consecutive pulse signals, resulting in ink droplet sizes of 5/7/12 pl.
- Large ink droplets produce vibrant colors, while small ink droplets are suitable for high precision images. Combining multiple ink droplet sizes creates smoother and more natural color transitions.

High Durability, Long-term Stability Even in Harsh Industrial Environments

- Utilizes an externally sealed structure, with a stainless-steel nozzle panel and metal cover, ensuring the safety and reliability of the print heads .

Independently Developed Core Printhead Driving Technology, Successfully Applied in Various Fields

- A core driving system has been specifically developed for this series of print heads, as well as key technologies such as gray control, waveform adjustment, ink channel circulation, intelligent negative pressure, and ink matching.
- Years of successful applications in digital direct printing and paper printing, with numerous proven case studies.

FEATURES

Reactive Ink

- Chemical Bonding
- Best suited for printing on natural fibers like cotton, linen, and silk
- Provides a soft and natural feel to the fabric
- Offers excellent wash fastness
- Bright Colors
- Steaming Process
- Environmental Impact

Color Series



Application



Disperse Ink

- High Temperature Fixation
- Ideal for printing on polyester and polyester-blend fabrics
- Produces bright and vivid colors
- Water Resistance
- Good resistance to UV light

Color Series



Application



ADVANTAGES

Colorful, Rich, and High-Quality Performance

Our self-developed digital inkjet inks deliver rich, vibrant colors and high performance.

Versatile Ink Solutions

Various inks available for different materials and applications ensure versatility.

Adaptability to Industrial Print Heads

Our inks adapt well to common industrial print heads, suitable for high-speed single-pass printing.

Customized Solutions

We offer customized ink colors and designs to meet diverse customer needs.

Comprehensive Ink Testing

Our complete ink test system ensures optimal performance with industrial print heads.

Environmentally Friendly Printing

Certified environmentally friendly inks support sustainable printing practices.



SPECIFICATIONS

Maximum Resolution	600*2400 DPI(ROCKET K)	1200*2400 DPI(ROCKET X)
Maximum Capacity	75 m/min(ROCKET K)	80 m/min(ROCKET X)
Print Mode	Single Pass	
Printhead	Industrial grade piezoelectric printhead	
No. of Printheads	Max. 272 Printheads(ROCKET K)	Max. 128 Printheads(ROCKET X)
Droplet Size	5/7/12 pl(ROCKET K)	4 pl(ROCKET X)
Color Mode	4-8 color mode	
Ink	Reactive ink, Disperse ink, Pigment ink, Acid ink	
Ink Capacity	Self Defined	

MATERIAL, WINDING, DRYING

Material Information	Max.imum Print Width	Max.imum Media Width	Applicable Media Weight
	1850 mm	1850 mm	50g/m ² -300 g/m ²
Media Feeding	Woven/knitted/both, three options (pre-set)		
Dispatch	Fabric trolley		
Printed Media	Natural fibers and blended woven fabrics, etc.		
Dryer Types	Steam (Standard), Electricity, Thermal Oil, Natural Gas		

ELECTRIC, GAS, WATER PARAMETERS

Printer Voltage	AC380V± 10%, three-phase 100 kW 50 Hz/60 Hz
Air Pressure/Volume	0.6-0.8 Mpa 1m ³ /hr(dry without oil and water)

ENVIRONMENT

Temperature	20-30°C (68-82 °F)
Humidity	45 - 60% (non-condensing)

INSTALLATION DIMENSION

Printer Measurement	10500 mm *4500 mm * 3000 mm (L*W*H)			
Printer Packing	40" container* 3			
Dryer Measurement	20000 mm * 3600mm * 3000 mm (L*W*H)			
Dryer Packing	40" container* 5			
Installation Site Requirement	35000 mm * 7000 mm * 4000 mm (L*W*H) Recommendation only			
Equipment parameters	Printer Net Weight	Printer Weight with Packing	Dryer Net Weight	Dryer Weight with Packing
	24 T	26 T	7.5 T (5 sections)	9 T (5 sections)

ROCKET X

Industrial Higher-resolution Printhead

A New Leap in Quality and Efficiency

Larger Printing Width, Suitable For Harsh Production Environments

- Wider Printing Width: Each printhead module offers a generous **117 mm** printing width, enabling efficient double-color inkjet. This minimizes printhead usage, simplifies maintenance, and reduces costs.
- High Precision Output: With a high ignition frequency and **1200 DPI** precision, it ensures excellent color uniformity, especially on light backgrounds. Tailored for swift and steady single pass production.

Precise Printing at Greater-height and Improved Nozzle Panel Firmness

- Avoid damage to the printhead surface caused by fabric rapid transmission during high-speed single pass printing.
- Better protection on nozzle panel, which is resistant to physical impact and chemical corrosion.

Optimized Ink Supply Structure for More Stable Inkjet

- Avoid ink color change caused by temperature rise during long-run operation, ensuring stable printing quality.

Variable Printing Speed

- Printing speed and ink volume can be adjusted in accordance with different designs to meet the diverse needs of customers.

Uniquely Designed Printhead Cleaning System

- Cleaning printheads does not require special operations or techniques, extending the useful life of printheads.



TECHNICAL SUPPORT



- **High precision belt moving control**
High precision in fabric attachment and closed-loop feedback system help to transport printing medium continuously and stably in the printing process.
- **Adjustable platform suction**
The suction intensity of the platform can be adjusted for different materials to ensure the flatness of the printing media.
- **Variable droplet printing technology**
Utilizing the technology of variable ink droplet printing, the size of ink drop can be accurately controlled.
- **Tension adjustable continuous unwind/wind Technology**
Servo motor is used for fabric feeding and collection to ensure accurate movement. The receiving system is equipped with laser measurer on coil diameter with automatic adjustment, which ensures constant speed and orderly winding.

- **Automatically constant humidity and automatic surface wiping system**

The constant humidity of the printhead and automatic surface cleaning are essential for stable and continuous operation. Material waste is less. Work efficiency has improved. And defective products are cut to the minimum.

- **Stable and durable ink supply system**

HOMER Direct-to-Fabric Printer Series primarily employs a peristaltic pump, automatic negative pressure control, and ink degassing in its ink supply system. The peristaltic pump ensures pressure remains consistently stable. Coupled with precise automatic negative pressure adjustments and an ink degassing membrane module, this configuration guarantees a smoother and uninterrupted ink flow and ultimately enhances printing stability. A perfect choice for industrial-grade applications.

- **Printhead anti scratch system**

A reliable anti-scratch system provides effective protection for printheads, reducing potential damage from printing materials and extending the printhead's lifespan.

- **Printhead cleaning station**

A complete printhead cleaning station can quickly clean the printhead and avoid blockages.





HOMER
Digital Textile Printer



ROCKET

THE FUTURE OF DIGITAL TEXTILE PRINTING



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