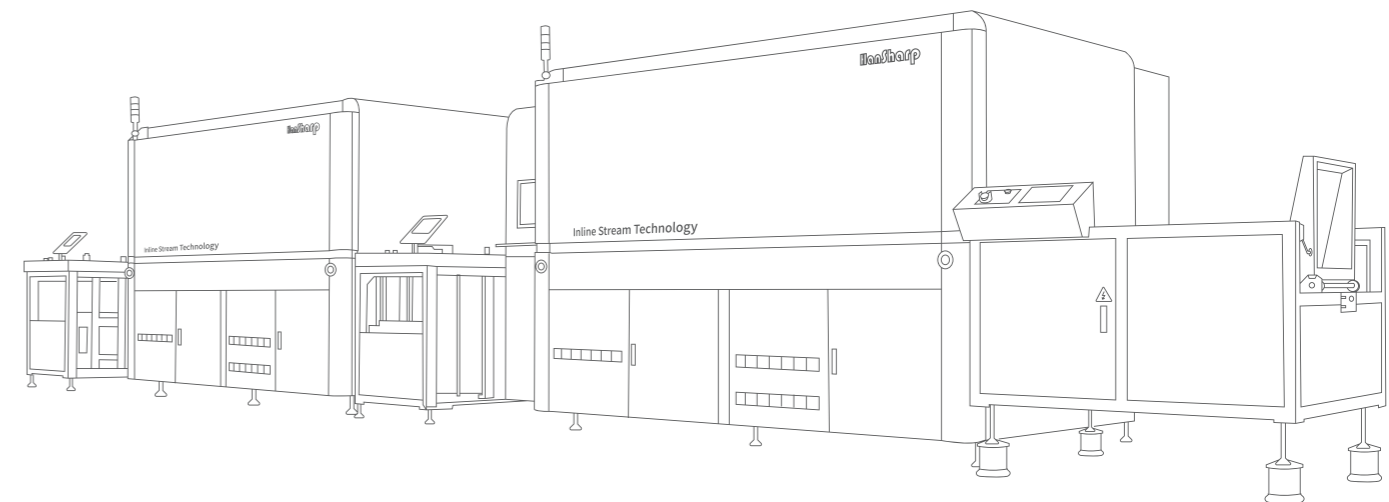


Neutron Series

INLINE STREAM INKJET PRINTER



■ INLINE STREAM TECHNOLOGY



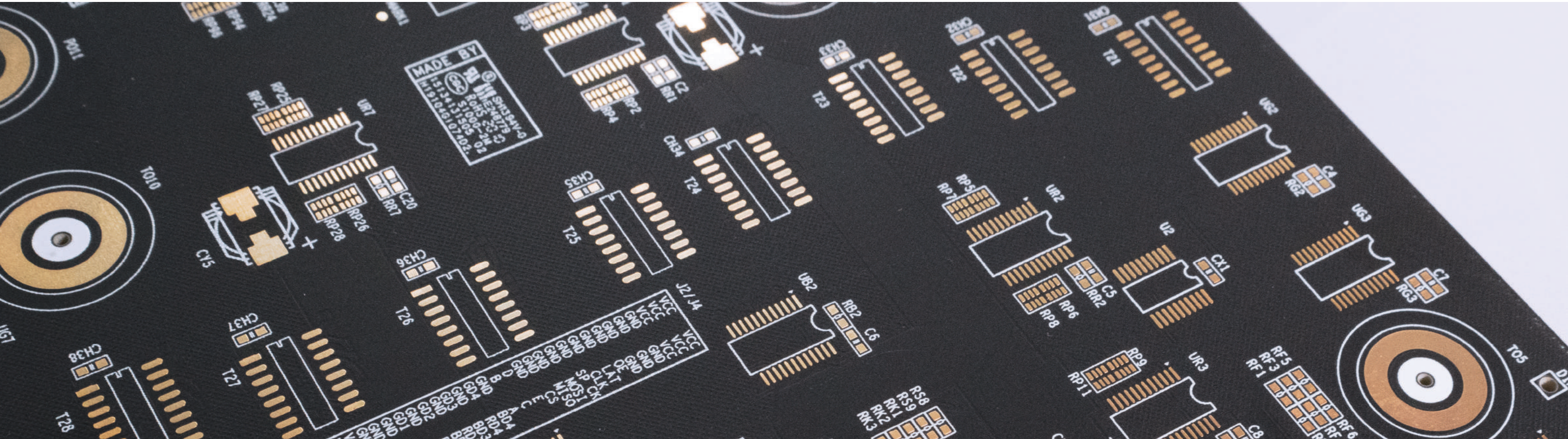
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@The above information is for reference only, Shenzhen HanSharp Precision Digital Printing Equipment Co., Ltd. reserves the right of final interpretation, subject to change without notice, the final information subject to contract.



NEUTRON

PCB digital inkjet production enters the era of mass production

- Throughput: 7000 panels/day.
- Inline Stream Technology.
- A digital inkjet intelligence that links the front and back processes of production.
- Horizontal production mode, stable transmission and high-speed printing, quality assurance, simplified character production, realize the linkage of the development process and post-baking process.
- Six work tables dual-channel innovative design, maximizing the use of printhead utilization.
- Multi-functional design, the whole production is continuous, stable and reliable.
- Grayscale printing technology, meeting the PCB small legends clear, while ensuring that the fill area full, flat, uniform.



HIGH SPEED

The throughput is 7.5panels/min which could meet the demand of developing line output and achieve smooth and continuous mass production.



INFORMATIZATION

Powerful software function, real-time communication and on-demand printing with factory MES system.



SMART

Integration of printing, conveying, plate turning and staging, intelligent production, interconnected input and output, meeting the needs of big data.



NEW BEYOND

Create the inline stream technology in an innovative way to shorten the PCB production process, directly linking the front and back processes.



NEW DESIGN

Inline stream technology and six work tables dual-channel mode maximize the utilization of print-heads to reduce operating costs.



FULL QUALITY

Advanced grayscale printing technology to achieve perfect output of small legends and fill areas at the same time.

An industrial digital printing solutions provider

Independent printhead-drive technology

Self-developed control system

Self-developed MES system

Independent ink industrial chain

Remote service maintenance system and local services

Superlative Inline Stream Technology meets the future needs of the PCB industry

Elaborately create the inline stream technology, and adopt the unique inline stream design solution. The Inline Stream Technology includes upstream and downstream printing systems, transmission system, plate turning machine and temporary storage system, taking over the linkage between the front and back processes and reducing the PCB manufacturing process.



Horizontal flowing operation fully streamlines the intermediate transfer link for PCB batch in-line production.



Significantly improve the PCB printing efficiency while ensuring stable production rhythm.



Truly solve the problems and high cost of inline printing.



Six work tables dual-channel design solution to achieve higher printing efficiency.



On-demand printing and interconnected production can be achieved through smart communication in conjunction with factory requirements.

NEUTRON SERIES

Inline Stream Inkjet Printer

High-end hardware driver configuration Long-term stable and efficient production

Leading industrial machinery and hardware function design in the industry help every detail of the equipment realize the high stability.



X and Y directions are driven by magnetic levitation, high reliability and dynamic performance of hardware drive.



International leading multi-axis motion control system ensures the precision and stability of the system.



Achieve arbitrary nozzle compensation to ensure the long-term stability of printing quality.

Full Solution Design Craftsmanship builds and forges brand

HanSharp integrates HanGlory's years of digital inkjet experience to create a full solution of digital inkjet equipment to power the sustainable development of digital inkjet technology for the PCB industry in legend and solder mask.



New breakthrough in throughput, quality, refinement and stability

The Neutron series integrate a variety of advanced technologies such as printhead control, graphic expansion and contraction, grayscale printing, and ink drop control to achieve a finer, more perfect display of production performance and product quality.

Aa

Advanced grayscale printing software help achieving the perfect high-end quality of small legends and fill area at the same time.



CCD 4-point alignment mode on the line, and automatic measurement of the panels twist and shrinkage, ensuring the unity and accuracy of alignment.



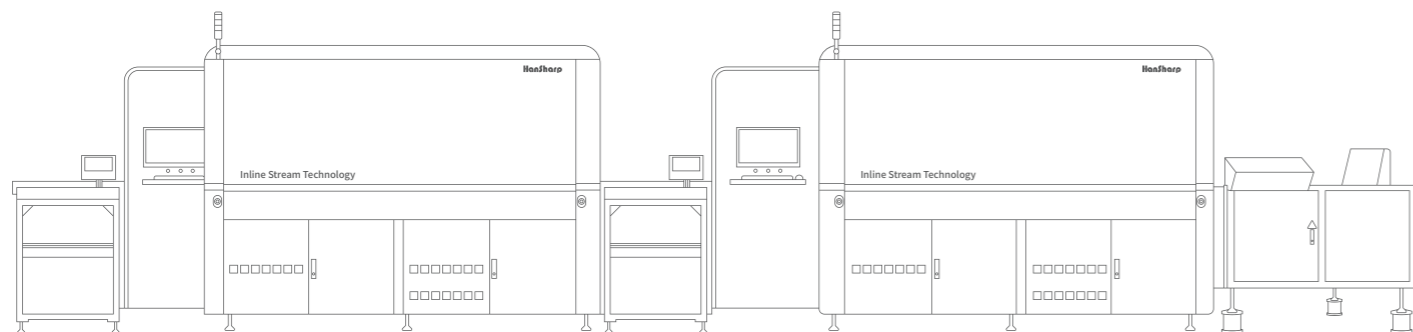
Independent intellectual property rights inkjet system, achieving accurate control of ink droplets under high-speed movement of the super nozzles.



Use industrial higher resolution printheads to achieve higher resolution output, ensuring high quality printing performance.



Unique design of the printhead cleaning system can extend the life of the printhead and ensure printing quality.



Neutron Series Technical Parameters

Max. Print Size: 28.5*25 inch (724*635 mm)

Min. Print Size: 14*16 inch (356*406 mm)

Board Thickness: 0.5-8 mm

Resolution

Mass Production Mode: 1200*600 dpi

Precise Mode: 1200*1200 dpi

Alignment Precision: ±1.4 mil (±35 μm)

Alignment Mode: 4-point to point

Min. Line Width: 2.6 mil (66 μm)

Min. Text Height: 20 mil (0.5 mm)

Printhead: RICOH High Resolution PH

Size of Dot: 50-70 um

Ink Volume of Dot

Small drop: 7 pl; **Medium drop:** 14 pl; **Large drop:** 21 pl

(The choice of small, medium and large drops will be automatically selected by the equipment according to the graphics to ensure the small characters are clear, the fill area are full, flat, smooth and the efficiency is stable.)

Weight: 13,200Kg (Double machine connection)

Clamp Size: More than 3mm

Quantity of Printhead: 12

Throughput: Double machine connection: 360 panels/h (Double-sided legends)

Data Software: RIP Software, Gerber274X, ODB++Input

Security Configuration: Panels height measurement anti-collision system, counting system, traffic light system, etc.

Advantages

Load/Unload: Inline Stream System

Trace Code Print: Continuous variable QR code, DM code, numbers, etc. can be printed according to customer requirements

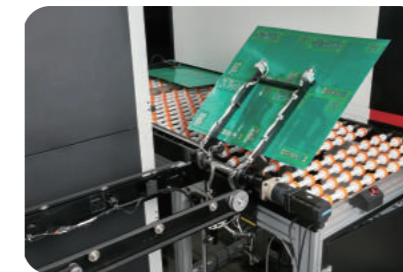
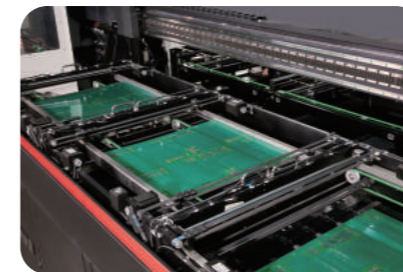
Motor System: Linear Motor System

Printing Platform: Four-sides clamp + vacuum table

Printing Software: Grayscale printing software (high quality and efficiency)

Jobs Management: Jobs queue management system with automatic switching (JQM function); Real-time communication with factory MES system

Neutron Series Modules



NEUTRON

Inline Stream Technology
The Real Demand of PCB Industry

SERIES