



HIGH RESOLUTION DIGITAL INKJET PRINTER

CATALOGUE

www.fhes.com

MD SERIES



F-FOCUS

H-HONEST

E-ENDEAVOR

S-SOLIDARITY

FOCUS ON CODING AND MARKING FOR TWENTY YEARS



FHES high resolution digital inkjet printer is widely used in various industries. as the performance expectations of inkjet printer change day by day. FHES keep pace with the times, there are complete solutions in packaging of food, beverage, tobacco and alcohol, agricultural products, medicine and various industrial products.

PIEZO INKJET PRINTER

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COMPANY PROFILE

2003

Founded in 2003

4+20

More than 20 models in 4 series

50+

Up to 50 ink optional



Zhejiang FHES Technology Co. Ltd is a manufacturer of high resolution digital inkjet printing equipment. It is a national high-tech enterprise with Ningbo municipal engineering technology center and ISO quality management system, we own dozens of invention and utility model patents.

We have provided more than 5,000 customers with distinctive high resolution coding and marking solutions. The brands we serve include SAMSUNG, Apple, SNOPEC, CNPC, Shell, Wahaha, Snow beer, D&P etc.

The company's core team has 20 years of R&D and implementation experience on coding and marking equipment. Can provide customers with comprehensive and detailed services. The team is committed to developing inkjet printing equipment and system solutions that meet future needs. Reduce the cost of use, extend the service life, and improve the expectations of safety and environmental protection.

After years of dedicated research and development, it has formed four major product series, dozens of products, and product applications cover almost all industries.

FOCUS

The company's core team has been focusing on the coding and marking industry for 20 years. We understand the industry needs and applications better than our customers.

HIGH EFFICIENCY

With strong design, R&D, and production capabilities, we realize proofing-design-production-delivery for customers at the fastest speed.

EASY TO USE

The company continues to improve product structure and performance, providing customers with fully functional and easy-to-use coding equipment.

STABILITY

The company insists on quality first and provides the most stable and reliable inkjet coding and marking equipment to the market.

PRE-SALES AND AFTER-SALES SUPPORT

The company continues to innovate, and always stands at the forefront of the research and development of piezo inkjet printers, develops products suitable for future needs, and provides customers with strong product support.

The company has a proofing center equipped with professional proofing engineers to provide product samples with dozens of inks.

The company's pre-sales and after-sales support team has an average of more than ten years of experience in the sign industry, and can provide partners with strong remote support.



PRODUCT FEATURES

PIEZO INKJET PRINTER ADVANTAGES

High resolution printing

• Compared with traditional marking equipment, the physical resolution of piezo inkjet printers can reach up to 600DPI, and other resolutions such as 180, 300, and 360 are available.

Excellent nozzle durability

• Whether it is oil-based ink for permeable surface materials or UV-curable ink for non-permeable surface materials, because it does not contain solvents, under normal maintenance, even if it is stopped for a long time, the nozzle is not easy to be blocked.

Environmentally friendly

• Both oil-based inks and UV-curable inks used in piezo inkjet printers have no VOC emissions

Large format printing

• The printing format of a single printhead is 32.4mm, 54mm, 71.8mm, etc., and the printing speed is not affected by the adjustment of the number of content lines and height, and a larger printing format can be obtained through the multi-head seamless splicing technology.

Fast printing speed

• Based on current piezo nozzle technology, the highest ignition frequency can reach 100K, singlehead printing speed can reach more than 200 meters/minute under 600*600DPI.

TECHNICAL DATA

Printhead type

- Industrial high-resolution piezo printhead

Printing lines

- Unlimited number of lines within the print height range

Printing speed

- 0-600 meters/min

Printing content

- Fixed and variable text, pictures, various encodings, databases

Printing font

- Any font supported by Windows system

Data interface

- Network interface, USB, RS232

Communication interface

- Gigabit network

Controller

- 13. 3 inch high resolution industrial pad

Humidity

- Below 85% non-condensing

Barcode type

- EAN8, EAN13, UPC-A/E, CODE 39, CODE128, EAN128, GS1 DataBar (including 2D composite), Data Matrix, QR, PDF417.....

Printing direction

- 360° any direction

Printing mode

- Single or continuous printing

Ink type

- Oil-based ink, water-based ink, uv curing ink

Ink color

- Black, white, single color, invisible color

Software

- EasyPrint Multifunctional printing system

Operation system

- Windows7 64bit and above

Power requirement

- 100-240 VAC 50/60Hz

Printer power

- 100-850W

Ambient temperature

- 0° C to 50° C

FHES INDUSTRIAL INK SYSTEM



Various properties and colors of ink can be selected

- Metal coding inks
- Paper coding inks
- High adhesion ink on varnish surface
- Special substrate glass and ceramics ink
- PE, BOPP special plastic substrate ink
- Industry anti-counterfeiting invisible ink
- Resistant to alcohol wiping, soaking ink
- White, red, yellow, blue, green and other color ink
- Low odor, retort resistant, low migration special ink
- Customized ink for customers

FHES INKJET PRINTER FEATURES

No limited installation

- Durable stainless steel design can be installed on almost any production platform.

Simple operation

- With the friendly user interface, you can easily operate the equipment by instructions

Ink cost management

- The software has advanced ink cost management functions, which can accurately calculate the ink cost of printing

Database printing

- The standard EasyPrint printing software already includes the database printing function, which can be compatible with TXT, EXCEL, CSV and other data packages

Powerful net-communication function

- Equipped with a communication interface based on network protocol, it can communicate with ERP, MES system and various special software to realize various complex coding applications.

Smart ink level management

- The low ink level alarm can prevent the shutdown caused by the lack of ink, and cooperate with the sound and light alarm to provide support for the staff

FWS-Fault warning system

- Through the prompts given by the alarm lights, the repairs can be quickly implemented according to the maintenance manual, reducing downtime and improving maintenance efficiency

One-click emptying

- When replacing different types of ink or stopping the equipment for long term, the one-click emptying function is used to empty the ink path of the equipment easily.

Automatic machine cleaning

- This function can be used to easily complete the cleaning and maintenance of the whole machine before long-term stopping of the equipment, so that the equipment is always in the best condition

Integrated circuit control ink system

- Both the intelligent siphon and the negative pressure ink system are based on ARM integrated circuit control, with outstanding performance, stability and reliability, and powerful functions.

Ink homogenization self-awakening system

- Keep precipitation inks such as white ink from precipitation, prevent ink precipitation from affecting print quality, or even block the print head, and do not need to discharge ink for cleaning in short or medium-term shutdowns.

Convenient information editing

- Using a 13.3-inch 1080P high-resolution industrial touch screen, the user can directly complete the editing of various texts, graphics, one or two-dimensional codes, and variable data, can also directly upload the printing content through the USB interface or network protocol.

LD SERIES HIGH-RESOLUTION DIGITAL INKJET PRINTER



LD SERIES - SMART SIPHON STANDARD MODEL

It can meet the continuous production of 7*24 hours, taking into account the advantages of product performance and procurement cost, and can be quickly deployed to various production lines to achieve high-precision digital inkjet marking

The innovative intelligent siphon ink supply system with a number of patents is different from the traditional siphon system. It is more intelligent, easy to use and flexible, retains the advantages of the super stable siphon ink supply system.

FHES's advanced technologies such as fault warning, multi-level liquid level management, intelligent self-awakening cycle, ink degassing, rapid modularization, one-click emptying, and one-click machine cleaning are all used.

TECHNICAL DATA

MODEL	LD50	LD70	LD70Plus	LD100	LD200	LD300
PRINTING HEIGHT	32.4mm	72mm	72mm	32.4mm	54mm	54mm
PHYSICAL RESOLUTION	300DPI	180DPI	360DPI	300DPI	600DPI	600DPI
INK DOT SIZE	3PL	35/50PL	12/35PL	7PL	7PL	5/7PL
SPEED RESOLUTION	110m 600*300DPI	50m 180*180DPI	50m 360*360DPI	110m 600*300DPI	220m 300*600DPI	300m 300*600DPI

* Final speed depends on printing content and printing frequency.



APPLICATION SCENARIOS

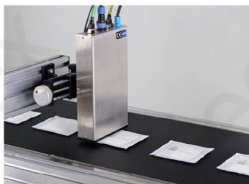
Flexible function expansion

LD series reserves the possibility for multi-nozzle expansion. A set of ink paths can be equipped with up to 4 printhead modules. Currently, there are 6 different types of printhead modules to choose from. New sprinkler modules can be deployed in minutes.

Multiple sets of ink paths are controlled uniformly through a single set of software, which can be expanded to a maximum of 254 printhead modules.

The LD series reserves the possibility for function upgrade. The upgrade between different equipment models only needs to replace the print head module, and the upgrade of printing height, accuracy and speed can be completed with the least investment.

The stainless steel and aluminum print head brackets can achieve multi-dimensional fine adjustment, 360° printing in any direction.



Collecting advantages and functions in one machine, small body, exquisite workmanship.

SAMPLE DISPLAY



SD SERIES HIGH-RESOLUTION DIGITAL INKJET PRINTER



SD SERIES- SMART SIPHON ADVANCED MODELS

In order to meet more stringent on-site environment requirements, limited installation space, vertical printing, horizontal printing, flat printing, etc., SD series mini-print head modules equipped with FHES intelligent siphon ink supply system can meet 360-degree printing at any direction.

The unique structural design provides great expansion possibilities. One independent ink cartridge module can carry up to two print heads, and a single machine can connect up to two sets of independent ink cartridge modules with four different types of print heads.

TECHNICAL DATA

MODEL	SD50	SD70	SD70Plus	SD100	SD200	SD300
PRINTING HEIGHT	32.4mm	72mm	72mm	32.4mm	54mm	54mm
PHYSICAL RESOLUTION	300DPI	180DPI	360DPI	300DPI	600DPI	600DPI
INK DOT SIZE	3PL	35/50PL	12/35PL	7PL	7PL	5/7PL
SPEED RESOLUTION	110m 600*300DPI	50m 180*180DPI	50m 360*360DPI	110m 600*300DPI	220m 300*600DPI	300m 300*600DPI

* Final speed depends on printing content and printing frequency.

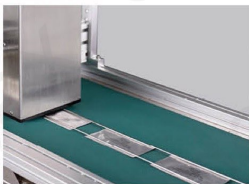
APPLICATION SCENARIOS

Simple and exquisite appearance

All stainless steel chassis, equipped with 13.3-inch high-resolution 1080P touch screen, friendly user interface, the staff can quickly and proficiently operate.

Advanced integrated circuit ink system

The integrated circuit control ink system based on the ARM system platform has outstanding performance, high integration, small size, less failure points, convenient maintenance and more stable and reliable.



SAMPLE DISPLAY



MD SERIES

HIGH-RESOLUTION DIGITAL INKJET PRINTER



MD SERIES- NEGATIVE PRESSURE STANDARD MODELS

Meet the requirements of high-speed and high-intensity production, the maximum printing speed can reach 600 m/min, 7*24 hours of continuous production; the whole machine is designed with 304 stainless steel, IP54 protection grade, and meets the high requirements of GMP or other working environments; The double print heads and dual-nozzle design can meet more complex applications, and the maximum printing format can reach 210 mm.

The innovative negative pressure ink system with a number of FHES patents, the negative pressure accuracy reaches the industry's highest level of $\pm 0.01\text{Kpa}$, which ensures the stable operation of the equipment under high-speed operation, without deinking, continuous line, and no ink accumulation. FHES advanced technologies such as multi-level constant temperature, multi-level liquid level management, intelligent self-awakening cycle, one-click emptying are all integrated in the equipment.

With the best balance of performance and flexibility, it can be quickly and easily integrated into various production platform, greatly reducing installation and operator work.

TECHNICAL DATA

MODEL	MD100	MD200	MD300	MD200S	MD300S
PRINTING HEIGHT	32.4mm	54mm	54mm	54mm	54mm
PHYSICAL RESOLUTION	300DPI	600DPI	600DPI	1200DPI	1200DPI
INK DOT SIZE	7PL	7PL	5/7PL	7PL	5/7PL
SPEED RESOLUTION	110m 600*300DPI	220m 300*600DPI	300m 300*600DPI	440m 300*1200DPI	600m 300*1200DPI

APPLICATION SCENARIOS

Multi-stage constant temperature system

The ink cartridge, the inside of the print head, and the fixed base plate of the print head form a three-stage constant temperature heating, which makes high-speed printing more stable.

Automatic sprinkler valve

The ink leakage accident caused by forgetting to close the manual valve no longer occurs.

Flexible and changeable application scenarios

Single printhead with single nozzle, single printhead with dual nozzle, dual printhead with single nozzle, dual printhead with dual nozzle, four types are available; the standard pipe is 2.5 meters, and three different pipe lengths of 4.5m, 6.5m and 9.5m for you to choose

Perfect combination of high precision and high speed

The highest physical printing accuracy can reach 1200DPI, and the printing accuracy in the movement direction is 90-5000DPI. The printing speed is not slowed down by the increase of the number of lines, and the maximum printing speed can reach an astonishing 600 m/min.



SAMPLE DISPLAY



HD SERIES HIGH-RESOLUTION DIGITAL INKJET PRINTER



HD SERIES- NEGATIVE PRESSURE ADVANCED MODELS

Standard high-precision intelligent negative pressure ink system, suitable for high-speed, multi-nozzle, large-format vertical printing application requirements, mainly used in packaging and printing industry and various complex high-speed application industries. The unique multi-head and multi-ink circuit design ensures high-speed and even ultra-high-speed stable operation, and can run continuously and stably for 7*24 hours without stopping. The HD series represents the highest manufacturing level in the industry.

Use high-end industrial-grade computers and high-resolution large-screen monitors; A set of high-precision negative pressure ink system is only responsible for the ink supply drive of one print head; 304 stainless steel modular architecture, plug and play; Oil-free stainless steel slide rails ensure high-precision adjustment and durability; A variety of sizes and power LED curing systems are available.

TECHNICAL DATA

MODEL	HD100	HD200	HD300	HD200S	HD300S
PRINTING HEIGHT	32.4mm	54mm	54mm	54mm	54mm
PHYSICAL RESOLUTION	300DPI	600DPI	600DPI	600DPI	600DPI
INK DOT SIZE	7PL	7PL	5/7PL	7PL	5/7PL
SPEED RESOLUTION	110m 600*300DPI	220m 300*600DPI	300m 300*600DPI	440m 300*1200DPI	600m 300*1200DPI

APPLICATION SCENARIOS

Modular Architecture

With the plug-in modular structure design, users can choose to increase or decrease the number of printheads at any time; each set of printheads adopts an independent negative pressure ink system, if the ink path system of any printhead fails, it will not affect other printheads. The multi-head and multi-ink design minimizes the loss of components and greatly increases the service life of the equipment.



Experienced professional design team

HD series are generally installed on various high-speed production lines of customers, such as various types of printing machines, slitting machines, inspection machines, laminating machines, etc. The FHES technical design team has many years of experience and many successful cases in printing and packaging enterprises.



Abundant custom models

A single cabinet can be equipped with up to four print head, and the multi-cabinet cascade connection method can reach up to 48 print heads. Through FHES's advanced multi-head seamless splicing technology, various printing formats can be customized. Get higher printing speed with multi-head stacking technology.

SAMPLE DISPLAY





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