
PRECISION INKJET / GLOBAL DELIVERY

MD SERIES

Precision negative-pressure control and motorized positioning

International platform / 304 stainless steel / Multi-orientation printing



Illustrative MD Series enclosure and dual-printhead modules. Motorized mechanism and screen interface depend on the delivered configuration.

Control both ink supply and printhead position

MD serves print stations requiring negative-pressure ink supply, fine alignment and international deployment. Configure the machine for the printhead, ink and substrate.

01 / INK

Intelligent Negative-Pressure Ink Supply

Manage ink supply, liquid level and operating status around the negative pressure required by the nozzles.

02 / MOTION

Motorized printhead positioning

Include printhead positioning in the operating workflow for alignment and dual-head stitching.

03 / PLATFORM

International-edition hardware

i7 touchscreen computer with 8 GB memory, optional 16 GB; brushed 304 stainless-steel enclosure.

04 / SOFTWARE

Multilingual Easyprint

Windows and Linux support with a multilingual interface, configured for the export project.

MD product positioning

MD shares the international configuration and modular architecture with SD, but uses intelligent negative-pressure ink supply and motorized printhead positioning. Like VD, it uses negative pressure; key differences are positioning capability and station adaptability.

Control the nozzle operating condition precisely

Negative-pressure ink supply maintains an appropriate ink meniscus at the nozzles, reducing seepage and supply fluctuation risks.

INTELLIGENT NEGATIVE PRESSURE

Negative-pressure, level and refill control maintain ink supply within the printhead operating window. Calibrate settings for the printhead, ink viscosity, pipe height and print orientation.

01 / SETPOINT

Negative-pressure setpoint

Define the nozzle pressure operating range for the printhead and ink combination.

02 / FEED

Refilling and liquid level

Coordinate ink-supply status and refilling according to the selected ink-path hardware.

03 / STATUS

Visible status

View compatible liquid-level, pressure and alarm information in one interface.

04 / CARE

Maintenance workflow

Include cleaning, air purging and recovery steps in the delivered operating procedure.

03 / Motorized positioning

Printhead alignment without repeated manual adjustment

The motorized mechanism simplifies adjustments to print position, dual-head seams and station changeovers.

01 / POSITION

Fine position adjustment

Adjust the printhead's relative position within the mechanism's permitted travel, reducing repeated on-site disassembly.

02 / STITCH

Dual-head alignment

When stitching on one face, inspect the seam using print samples and fine-tune printhead position with the mechanism.

03 / CHANGEOVER

Changeover efficiency

When changing material or print height, verify mechanical position using validated operating steps.

04 / SERVICE

On-site maintenance

Perform positioning and print testing in separate steps for installation, calibration and service handover.

Suggested alignment procedure

Confirm mounting reference and print distance → adjust printhead position electrically → inspect drop placement or seam on a sample → retest and lock settings.

Adjustable directions, travel, controls, homing and position-save functions depend on the chosen motorized mechanism and delivered drawings.

04 / Station adaptability

Arrange the line for the print face and head combination

MD uses a modular printhead platform. Verify print orientation and negative-pressure settings for the selected head and on-site height.

01 / TOP

Downward printing

For packaging, panels and stations that access products from above.

02 / SIDE

Side printing

For side marking or vertical stations, check nozzle orientation, negative pressure and print distance.

03 / ANGLE

Angled stations

Choose an angle for the product surface and available machine space; validate with samples and extended operation.

04 / DUAL

Dual-head combinations

Stitch on one face or print at separate stations, using motorized positioning to optimize alignment.

Installation options compared with VD

VD primarily uses downward printing and same-direction dual-module stitching. MD permits more flexible project-specific head arrangements, tuned with pressure settings and motorized positioning. Verify each orientation and its performance with the chosen head and ink path.

Shared computing, software and enclosure configuration with SD

MD and SD share a platform configuration for cross-region deployment, training and service.

Touchscreen computer	Intel i7; 8 GB memory standard, 16 GB optional.
Screen	13.3-inch industrial touchscreen; confirm display specifications from the delivered configuration.
Operating system	Easyprint supports Windows and Linux.
Language	Multilingual interface; confirm delivered languages for the software version.
Enclosure	Brushed 304 stainless steel on front, sides and rear panel.
Printhead module	Modular interface; configure two heads for the job and verify drive and ink path.

One workflow for adjustment, changeover and delivery

For stations with many batches, frequent layout changes or dual-head alignment, confirm the final configuration through sample tests.

01 / PACKAGING

Packaging and labels

Update content, batch codes and traceability codes with each job; adjust head position for material dimensions.

02 / COMPONENT

Multiple faces and irregular parts

Select head orientation and print distance for product positioning and station space.

03 / STITCHING

Dual-head width extension

Use motorized alignment and samples to check the dual-head seam and effective print width.

04 / EXPORT

Delivery across regions

Consistent software workflows and multilingual interfaces support overseas installation and training.

From proposal to production site

Confirm head, ink, orientation, print distance, line speed and curing together. Determine delivery settings through test prints, alignment and continuous-running tests. Do not state pressure or mechanism specifications without the specific head and station context.

MD, SD and VD serve different applications

This comparison describes the series design direction. Confirm actual heads, ink and station configuration in the order.

Comparison item	MD international edition	SD international edition	VD Series
Ink Supply	Intelligent negative pressure	Intelligent siphon	Intelligent negative pressure
Printhead positioning	Motorized positioning	Motorized positioning	Mechanical adjustment
Print orientation	Multiple orientations*	Multiple orientations*	Downward printing
Computing platform	Intel i7	Intel i7	Series configuration
Enclosure	Brushed 304 stainless steel	Brushed 304 stainless steel	Powder-coated enclosure
Software and languages	Easyprint / multilingual	Easyprint / multilingual	Configured by project
Product positioning	Negative-pressure international edition	Siphon international edition	Downward-printing platform

* Validate multiple print orientations with the chosen head, ink-path height, pressure range and mounting mechanism.

Configure pressure and motorized positioning for the station

Provide material and target line conditions to confirm head, ink path, motorized mechanism and software configuration.

Print job	Content, native resolution, print width, line speed, orientation and material samples.
Ink-supply conditions	Ink type, hose height, negative-pressure operating range and maintenance method.
Motorized positioning	Required adjustment direction, travel, accuracy, controls and installation space.
Overseas delivery	Power, languages, certification, nameplate, network and local service requirements.
Sample validation	Use the actual head, ink, station orientation and motorized mechanism for alignment and continuous-print tests.

MD Model Selection

Corresponding MD and SD models share printing specifications and differ only in the ink supply system.

MD Series: Intelligent negative-pressure ink supply

Model	Print height	Native resolution	Drop volume	Print speed
MD50	32.4 mm	300 dpi	3 pL	220 m/min
MD60	54 mm	300 dpi	5 pL	110 m/min
MD70	72 mm	180 dpi	35/50 pL	70/54 m/min
MD70Plus	72 mm	360 dpi	12/35 pL	50/35 m/min
MD70S	72 mm	360 dpi	30 pL	114 m/min
MD100	32.4 mm	300 dpi	7 pL	220 m/min
MD200	54 mm	600 dpi	7 pL	110 m/min
MD300	54 mm	600 dpi	5 pL	150 m/min

Speed test conditions: native resolution x native resolution, single-drop mode, in m/min.

For example, MD50 reaches 220 m/min at 300 x 300 dpi. The paired speed and drop-volume values for MD70 and MD70Plus retain their source order.

Specifications follow FHES SD270S Introduction and Technical Specifications. The shared specifications of corresponding MD/SD models have been confirmed.

MD Individual Models

All print speeds use the single-drop test conditions specified in the selection table.

<div>MD50</div> <div>Intelligent negative-pressure ink supply</div>			
Print height	32.4 mm	Native resolution	300 dpi
Drop volume	3 pL	Print speed	220 m/min

<div>MD60</div> <div>Intelligent negative-pressure ink supply</div>			
Print height	54 mm	Native resolution	300 dpi
Drop volume	5 pL	Print speed	110 m/min

<div>MD70</div> <div>Intelligent negative-pressure ink supply</div>			
Print height	72 mm	Native resolution	180 dpi
Drop volume	35/50 pL	Print speed	70/54 m/min

<div>MD70Plus</div> <div>Intelligent negative-pressure ink supply</div>			
Print height	72 mm	Native resolution	360 dpi
Drop volume	12/35 pL	Print speed	50/35 m/min

MD Individual Models

All print speeds use the single-drop test conditions specified in the selection table.

<div><div>MD70S</div><div>Intelligent negative-pressure ink supply</div></div>			
Print height	72 mm	Native resolution	360 dpi
Drop volume	30 pL	Print speed	114 m/min

<div><div>MD100</div><div>Intelligent negative-pressure ink supply</div></div>			
Print height	32.4 mm	Native resolution	300 dpi
Drop volume	7 pL	Print speed	220 m/min

<div><div>MD200</div><div>Intelligent negative-pressure ink supply</div></div>			
Print height	54 mm	Native resolution	600 dpi
Drop volume	7 pL	Print speed	110 m/min

<div><div>MD300</div><div>Intelligent negative-pressure ink supply</div></div>			
Print height	54 mm	Native resolution	600 dpi
Drop volume	5 pL	Print speed	150 m/min

MD70S Detailed Specifications

MD70S and SD70S share these specifications, with negative-pressure and siphon ink supply respectively.

Item	Specification
Printhead Type	Industrial piezoelectric printhead
Operator Interface	13.3-inch industrial capacitive touchscreen
Enclosure Material	Black powder-coated finish
Print Lines	Unlimited lines; freely arrange content within the maximum printhead height
Print Speed	0-114 m/min
Print Height	72 mm
Print content	Variable and fixed text, images, PDF, one-dimensional barcodes, two-dimensional codes, databases and more
Print Fonts	Supports fonts available in Windows
Printhead Count	1 printhead
Data Interface	Gigabit Ethernet
External interfaces	Ethernet, USB and RS232
Printing Orientation	Downward or side printing; adjustable through 0-180 degrees
Printing Mode	Single or continuous printing
Ink Types	Oil-based and UV-curable inks
Ink Colors	Black, white, red, blue, invisible inks and more
Printhead Cleaning	One-touch automatic cleaning
Ink Level Detection	Two-level ink detection
Software Functions	Built-in duplicate-code detection and verification to help prevent duplicate codes
Power Supply	AC 220 V
Power Consumption	100 W
Rated Current	2 A

Enclosure material refers to the black powder-coated configuration in the model document. Confirm international-edition material against the original brochure and delivered version.

MD270S Dual-Printhead Configuration

MD270S uses 2 MD70S printhead modules.

Item	Configuration
MD70S	2 printhead modules
Ink supply	Intelligent negative-pressure ink supply

MD270S and SD270S share the corresponding printing specifications. MD uses negative-pressure ink supply; ink system components follow the delivered MD configuration.

Printhead Expansion and Connections

Supports up to 2 printheads; cascading multiple controllers enables additional printheads.

The standard hose is 2.5 m, with custom lengths up to 9.5 m.

Printhead cables are available in 0.6 m, 1 m or 1.5 m lengths, with custom lengths up to 15 m.

Single-printhead specifications and dual-printhead configuration are listed separately. Confirm combined print width, orientation and operating parameters for the project configuration.