

KONICA MINOLTA

NEW TEXTILE PRINTING SYSTEM

Nassenger VII

High-speed printing performance of 210m²/hour!



512
Nozzles

210
Max m²/h

1,850
mm
Fabric width

LASER
Sensor

900
dpi

5L
Ink Bottles

Green

- Equipped with new high speed multi-nozzle inkjet printheads
- High printing speed: maximum 210m² per hour with a maximum fabric width of 1,850mm
- Integral nozzle check function
- Accurate production of subtle tints, tones and colour gradients
- High capacity 10L ink tanks

The Nassenger VII includes a scanning print unit and a precision fabric transport unit. A separate un-winder and drier etc. will be needed to complete the print system.

The essentials of imaging

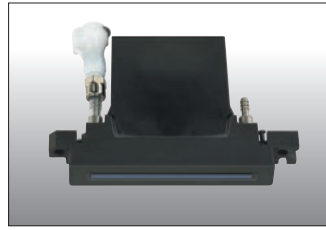
New Printhead

Equipped with high speed multi-nozzle inkjet printheads

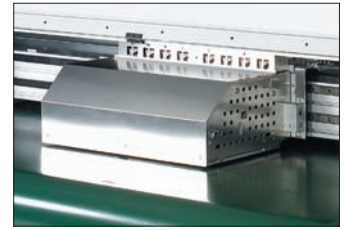
The 512 nozzle high-speed printhead has been developed specifically for use in Nassenger VII. Printing only when required, the piezo printheads use ink extremely efficiently.

This makes the Nassenger VII very economic to use. The shared mode design of the printhead requires only low drive voltages, and has a long service life, making the heads environmentally friendly when compared to other piezo systems.

● New Inkjet Printhead



● Carriage Unit



Print Speed

540 x 360 dpi	210 m ² / h
540 x 540 dpi	145 m ² / h
540 x 720 dpi	115 m ² / h
720 x 720 dpi	85 m ² / h
720 x 900 dpi	70 m ² / h
900 x 900 dpi	55 m ² / h

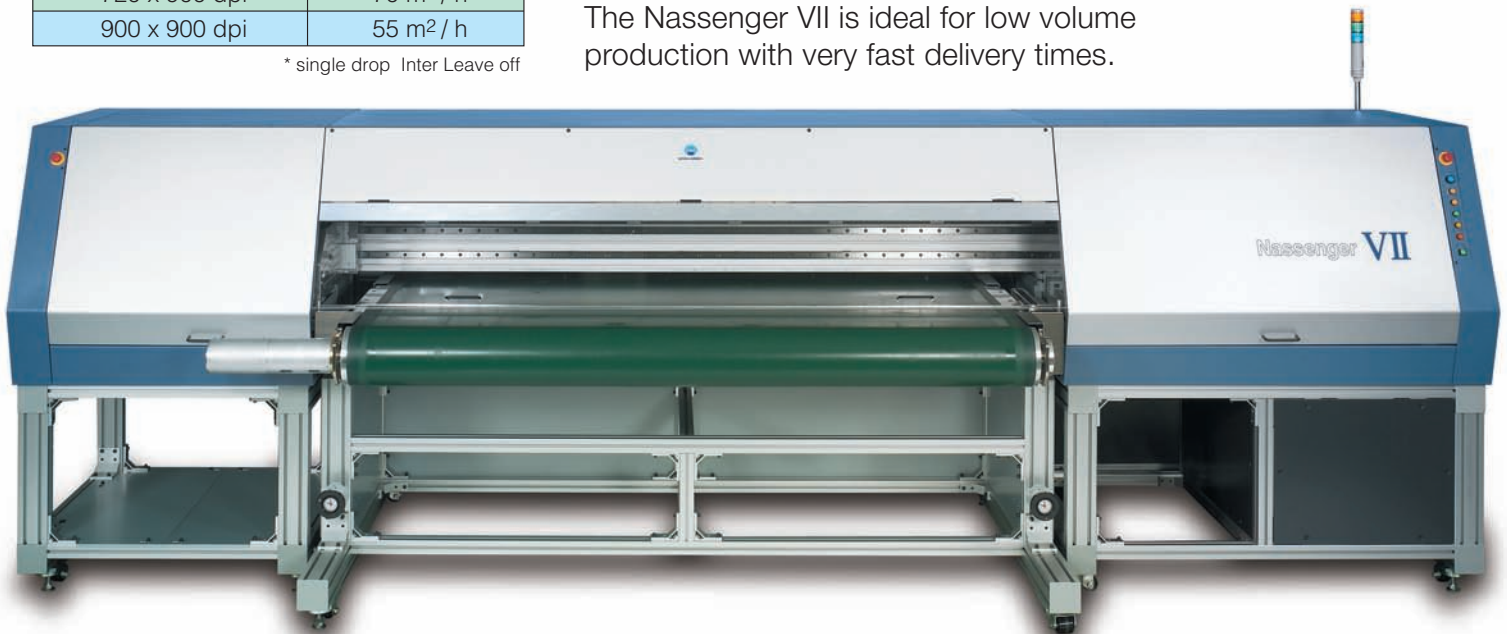
* single drop Inter Leave off

Productivity

High printing speed: maximum 210m² per hour

The new Nassenger VII uses 24 inkjet printheads and provides significantly increased production rates – up to 3.6 time more than the Nassenger V.

The Nassenger VII is ideal for low volume production with very fast delivery times.



Fabric Variety

Maximum fabric width of 1,850mm

Capable of handling fabric widths up to 1,850mm, the unit is ideal for interior fabric applications including curtains and bedding.

Nassenger VII makes a diverse range of fabric printing applications possible.

Dye-Affinity Chart

⊙ Best ○ Acceptable

Ink type	Cotton	Rayon	Hemp	Silk	Wool	Nylon
Reactive dye ink	⊙	⊙	○	○	○	○
Acid dye ink				⊙	⊙	⊙

Reliability

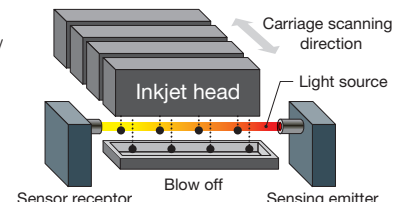
Equipped with a nozzle check function

A nozzle-check function is equipped to ensure stable jets from all nozzles.

A new head nozzle-check function has been adopted to achieve major improvement in printing reliability.

Technology for backing up reliability Ink jet sensor (via temperature feedback)

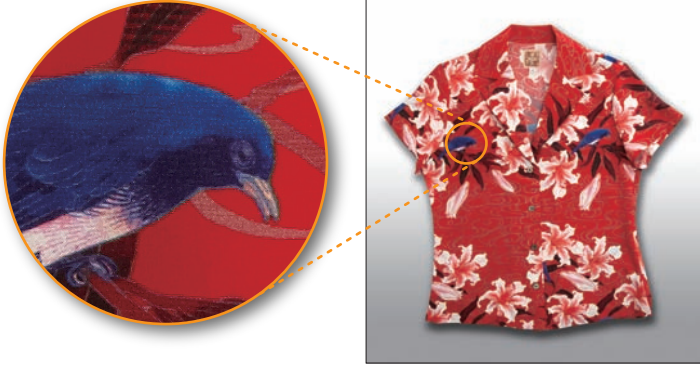
The jet characteristics of each nozzle are detected by an Laser sensor. This information is fed back for nozzle monitoring and to set stable jetting condition.



Quality

Accurate production of subtle tints, tones and colour gradients

The new high-speed printhead has multi-drop print functionality that produces richer colours and smoother transitions from light to dark tones. Effects that can only be printed using inkjet are enhanced by the use of multi-drop technology.



Sample

Capacity

High capacity 10L ink tanks

The 10L ink tanks built into Nassenger VII make long print runs possible and improve productivity. Inks are supplied in 5L bottles and in-line degassing units ensure that print quality remains constant and printhead reliability is optimised.

● Ink Supply Unit



The lid is opened to replenish the ink supply

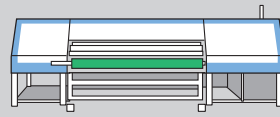


● Ink bottles

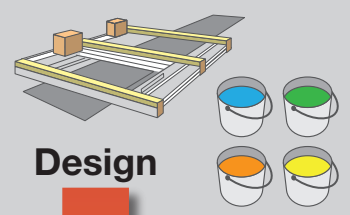


The comparison of print process

■ Inkjet textile printing



■ Screen textile printing



Design

Preprocessing
Image arrangement
Sample printing
Image arrangement
Product printing

Design

Image arrangement
Plate design
Colour tracing
Plate making
Ink mixing for sample
Production hardware maintenance / check
Sample printing
Plate washing / storage
Treatment of waste ink
Production of ink
Production hardware maintenance / check
Product printing
Plate washing / storage
Treatment of waste ink

Post processing

To sewing processing

1-14 days

The digital plateless system of the Nassenger VII greatly reduces the process from planning and design to sample creation, and further delivers high productivity on through mass-production.

Post processing

To sewing processing

2-4 weeks

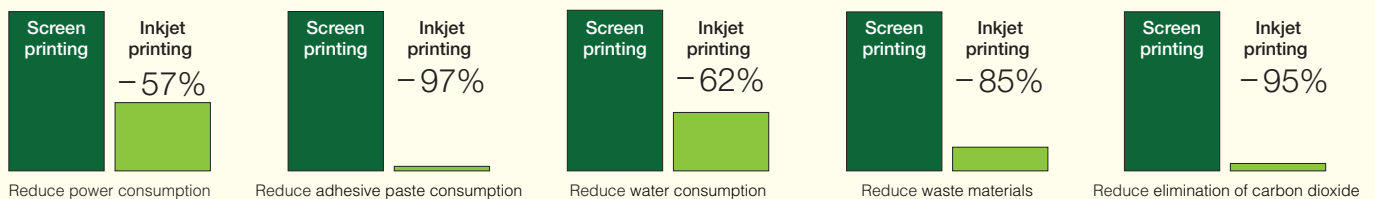
Green

Environmentally Friendly Inkjet printing

Comparison of environment load "Screen printing vs Inkjet printing"

Greatly reduces environmental load over conventional processes.

Inkjet dyes are plateless on-demand inks. They contribute greatly to energy reduction efforts in manufacturing processes.



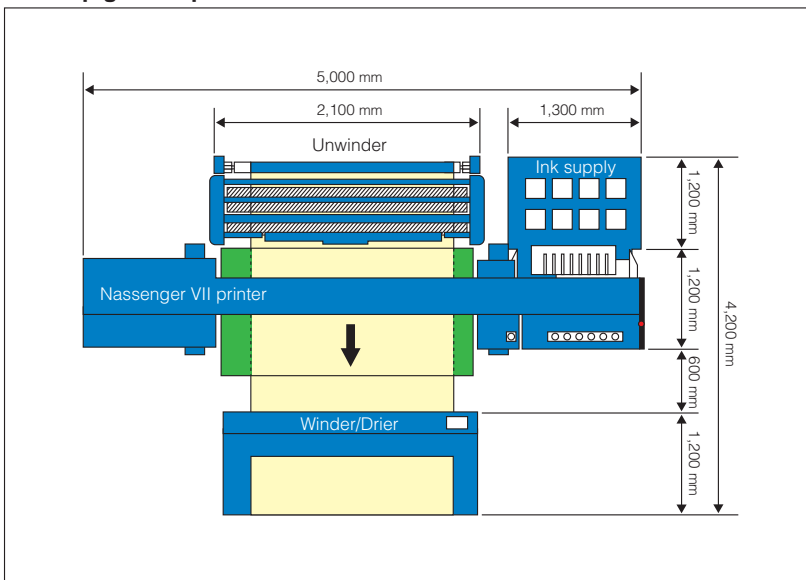
* Results taken from in-house comparison

■ Specifications			
Product Name	Nassenger VII		
Technology	Drop on-demand Piezo inkjet technology		
Printhead	512 Nozzle Water-Based Inkjet Printhead x 24pcs		
Ink Types	Reactive Dye Ink	Yellow, Cyan, Black, Pink, Gray, Extra Magenta, Blue, Orange, Sky	
	Acid Dye Ink	Yellow, Magenta, Cyan, Black, Light Magenta, Light Cyan, Light Black, Blue, Red	
Max. Printing Width	1,850mm		
Min. Printing Width	100mm		
Print Modes	Main Scanning	Resolution [dpi]	540, 720, 900
		DPD	Single Drop, Multi-Drop, 2-Drop
		Direction	Unidirectional printing, Bidirectional printing
		I/L	User-selectable
	Sub-Scanning	Resolution [dpi]	360, 540, 720, 900, 1080
Operating Environment	Mechanical Operation	15~30°C 40~70%RH	
	Inkjet Correction Control	20~28°C 40~70%RH	
Ink Supply System	Mechanism	Supplied by Motor-Driven Pump	
	Tank Capacity	10 L/each color	
	Ink Bottle	Dedicated Bottle (5L/each color)	
Maintenance of Printhead	Printhead Cleaning	Wet Cleaning	
	Nozzle Detection	Faulty nozzle detected by laser beam	
	Capping	Wet Capping	
	Maintenance	Auto/Manual Maintenance	
Dimensions	Scanning Unit	W 4,446 x D 815 x H 1,450 (mm)	
	Fabric Transport Unit	W 2,419 x D 1,411 x H 917 (mm)	
	Ink Supply Unit	W 1,230 x D 880 x H1,250 (mm)	
Weight	Scanning Unit	approx. 240 kg	
	Fabric Transport Unit	approx. 300 kg	
	Ink Supply Unit	approx. 145 kg (without ink)	
RIP Supported	RIP software of Wasatch Computer Technology recommended		
Transport Method	Endless Belt		
Power Supply	Scanning Unit	AC200 V Single Phase 50/60Hz Common (Japan)	
	Fabric Transport Unit	AC230 V Single Phase 50Hz Common (EU)	
	Ink Supply Unit		

* Details set out are current as of January 2009. The product specification is subject to change without prior notice.

** The Nassenger VII includes a scanning print unit and a precision fabric transport unit. A separate un-winder and drier etc. will be needed to complete the print system.

● Set up ground plan



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