Water-based sublimation transfer inkjet printer

TS55-1800

Mimaki™

Software

TxLink4 Lite Edition or RasterLink6PLUS is bundled according to user's request.

Further evolved professional use Textile RIP software with new features

TxLink4™ Lite

Newly developed RIP software with usability and high function

RasterLink6 PLUS

Specifications

Unit

Item		TS55-1800
Print head		Head Assy Stagger layout
Print resolution		600 dpi, 720 dpi, 1200 dpi
Maximum print width		1,940 mm (76.4 in)
Maximum media width		1,950 mm (76.8 in)
Rolled media weight		45 kg (99.2 lb)
Ink slot		8
Ink	Type/Color	Sb610 (Bl/Y/M/K/Lbl/Lm/Lk/Fy/Fp)
	Capacity	2L ink pack
Safety standard		VCCI-Class A, FCC-Class A, UL 60950, CE Marking (EMC, Low Voltage Directive, Machinery Directive, RoHS Directive) CB Report, RoHS, ENERGY STAR, RCM, EAC
Interface		USB 2.0 Hi-speed, Ethernet 1000BASE-T
Power		Single phase AC 100–120 V/AC 200–240 V × 1
Power consumption		(AC 100 V) 1.44 kW (AC 200 V) 1.92 kW or less
Operational environment		Temperature: 20-30 degC (68-77 degF) Humidity: 35–65% Rh (Non condensing)
Outside dimensions (W × D × H)		3,240 × 713 × 1,857 mm (127.6 × 28.1 × 73.1 in)
Weight		202 kg (445.3 lb)

Supply

Item	Item code	Discription
Sublimation transfer ink Sb610 2L Pack	SB610–BLT–2L	2,000 ml pack
	SB610–YT–2L	
	SB610–MT–2L	
	SB610–KT–2L	
	SB610–LBT–2L	
	SB610–LMT–2L	
	SB610–LKT–2L	
	SB610–FYT–2L	
	SB610–FPT–2L	
Sublimation transfer ink Sb610 10 kg Bottle	SB610–BLT–BJ	
	SB610–YT–BJ	
	SB610–MT–BJ	
	SB610–KT–BJ	
	SB610–LBT–BJ	
	SB610–LMT–BJ	
Flushing Liquid 03 Cartridge	FL003-Z-22-1-KA	220ml cartridge
Flushing Liquid 03 2L Pack	FL003-Z-2L-1-SA	2L Ink pack

Option

Mini–jumbo roll unit

Item		Mini-jumbo roll unit
Roll media size		Max. weight: Winding 100 kg (220.5 lb) /Feeding 300 kg (661.4 lb) Max. diameter: Winding 280 mm (11in) /Feeding 600 mm (23.6 in) Max. width: 1,950 mm (76.7 in) Max. printable width: 1,940 mm (76.3 in)
Power		Single phase AC 200–240 V × 1
Power consumption		(AC 200 V) 1.0 kW or less
Outside dimensions (W × D × H)		2,773 × 905 × 602 mm (109.1 × 35.6 × 23.7 in)
Weight		191 kg (421.1 lb)

10kg Ink supply unit

Item		10kg Ink supply unit
Ink set		4-colors/6-colors/7-colors/8-colors *2
Ink	Type/Color	Sb610 (Bl/M/Y/K/Lbl/Lm/Lk/Fy/Fp)
	Capacity	10 kg ink tank (Per color) Lk, Fy and Fp are supplied by 2L pack
Outside dimensions (W × D × H)		824 × 1,035 × 383 mm (32.4 × 40.7 × 15.0 in)
Weight		35 kg (77.2 lb)

*2 The 6C, 7C and 8C are to be available later.

Extended heater

Item	Extended heater
Power	Single phase AC100-120V/AC200-240V±10% 50/60Hz ±1Hz
Power consumption	(AC 100 V) 1.0 kW or less/ (AC 200 V) 1.0 kW or less
Outside dimensions (W × D × H)	2,336 × 108 × 236 mm (91.9 × 4.2 × 9.2 in)
Weight	15 kg (33.1 lb)

The evolution of production printing

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Mimaki Global Network

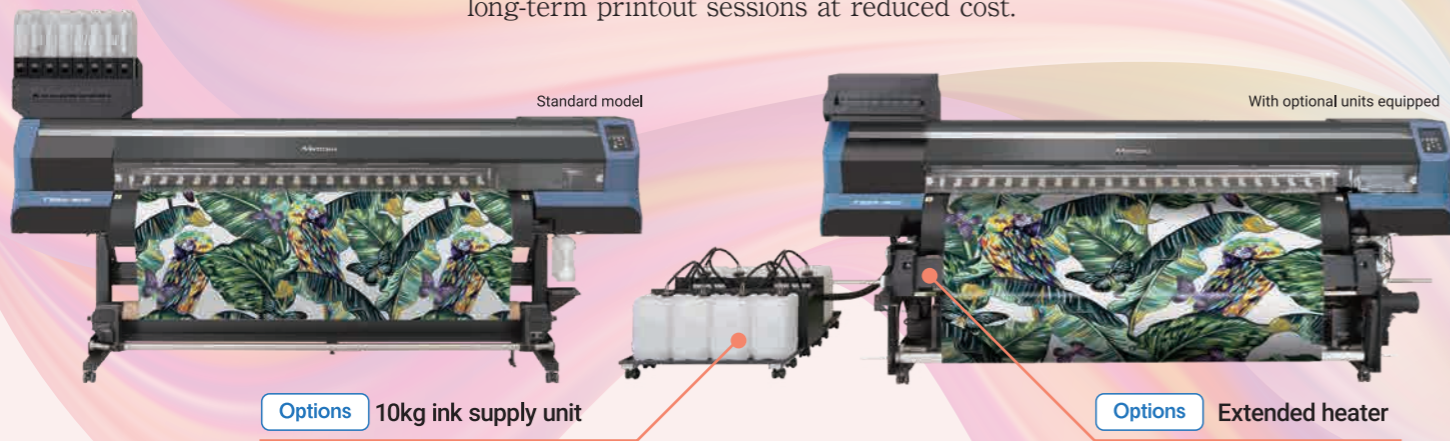|			
USA	MIMAKI USA, INC.	Europe	MIMAKI EUROPE B.V.
Brazil	MIMAKI BRASIL COMERCIO E IMPORTACAO LTDA	Indonesia	PT. MIMAKI INDONESIA
India	MIMAKI INDIA PRIVATE LIMITED	Australia	MIMAKI AUSTRALIA PTY. LTD.
Taiwan	MIMAKI ENGINEERING (TAIWAN) CO.,LTD.	China	SHANGHAI MIMAKI TRADING CO.,LTD.
Singapore	MIMAKI SINGAPORE PTE. LTD.	Thailand	MIMAKI (THAILAND) CO.,LTD.

DB30323–02

TS55-1800

The "TS55-1800" is a revolutionary sublimation transfer inkjet printer
for apparel/textile achieving high-speed printout of up to 135 sqm/h (1,453 sq.ft/h),
superior functionality and convenient options suited for stable,
long-term printout sessions at reduced cost.

Standard model

With optional units equipped

Options 10kg ink supply unit

Options Extended heater

Options Mini-jumbo roll unit

Rear view with optional units equipped

Providing for high productivity

Maximum printout speed mode 135 sqm/h (1,453 sq.ft/h) /Standard quality mode 50 sqm/h (538 sq.ft/h)

Adoption of the newly developed print heads ensures high-quality print even at a high speeds, achieving 130% productivity over our conventional model (TS300P-1800) with standard quality mode printing at 50 sqm/h (538 sq.ft/h). By newly enabling the use of "MAPS" function in high-speed mode (65 sqm/h; 699 sq.ft/h) printing, TS55-1800 achieves excellent image quality even with high speed printing.

■ Print head configuration and layout

4-color mode — 2.8 inch (820 nozzles) — Head unit 1 — Head unit 2 — 1.4 inch (420 nozzles)

6-color mode — 2.8 inch (820 nozzles) — Head unit 1 — Head unit 2 — 1.4 inch (420 nozzles)

Mode	Speed
MAX	135 sqm/h (480 × 600/1P)
	115 sqm/h (360 × 360/1P)
Draft	105 sqm/h (600 × 600/1P)
	80 sqm/h (540 × 360/2P/HI)
Hi-speed	65 sqm/h (480 × 600/2P/MAPS-enabled)
	55 sqm/h (540 × 360/3P/Hi)
Standard	50 sqm/h (600 × 600/2P/MAPS-enabled)
	38 sqm/h (720 × 720/4P/Hi/MAPS-enabled)
Hi-Quality	31 sqm/h (600 × 1,200/4P/MAPS-enabled)
	18 sqm/h (720×1080/9P/Hi/MAPS-enabled)

■ TS55-1800
■ TS300P-1800

0 20 40 60 80 100 120 140 160

Comparison of printout between same image quality requirements

Approx. **130 %** superior to conventional model [standard mode]
TS55-1800 50 sqm/h 4-color 600 × 600 dpi 2P/TS300P-1800 38 sqm/h 4-color 720 × 720 dpi 4P High

＊Comparative printout speed

Technologies for uninterruptedreliable printing operations

■ "MAPS" functionality reduces banding

In ordinary textile printers, the straight pass boundaries often results in bandings and discoloration due to slight misalignment. The "MAPS (Mimaki Advanced Pass System)" functionality provides gradation to printed pass boundaries and maintains stable print quality by reducing banding and uneven color.

MAPS functional image

■ MAPS: **OFF**

■ MAPS: **ON**

■ Minimization of NCU/NRS downtime

Incorporates Mimaki's unique automatic nozzle check unit ("NCU"). When the NCU detects a missing nozzle, it automatically performs cleaning to solve the problem. If the missing nozzle remains unresolved after cleaning, printing is commenced upon switching to an alternate nozzle. The print can be restarted to maintain productivity, without the need to wait for a service representative.

Ink emission is determined to be defective in case of light permeation.

Light-emitting egment of the sensor — Print head — Light-receiving segment of the sensor

Non-ink emitting nozzle is substituted by an alternate nozzle.Setting is automatically adopted based on the information provided by the NCU.

Defective ink emission

Fully automatic — NCU Nozzle Check Unit — Missing nozzle — Cleaning — No missing nozzle — NCU — Continue printing — Missing nozzle — No missing nozzle — NRS Nozzle Recovery System — Continue printing — Continue printing — Continue printing
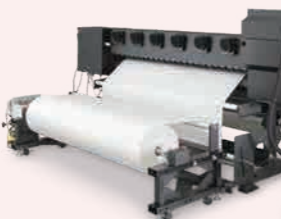
Options aiming for cost reduction

Mini-jumbo roll unit corresponding to high-speed, high-volume demands

This is a feeding unit to load the "Mimaki Vision Jet–X" transfer paper with a length of about 2,500 m (8,202 ft). It reduces the cost per square meter and shortens the downtime due to media replacement, when compared with the case using the previous 150 m (492 ft) -long transfer paper.

■ **The mini-jumbo roll, "Mimaki Vision Jet-X" featuring approximately 2,500m (8,202 ft/h) of transfer paper is announced concurrently with model "TS55-1800".**
Previously using a transfer paper roll of 150m (492 ft) length to print at the maximum print speed (135 sqm/h; 1,453 sq.ft/h) of "TS55-1800", it was incapable to have a continuous printing like all-night operation without operators due to necessity of their paper replacing work. However the combination of the mini-jumbo roll, "Mimaki Vision Jet-X" and "TS55-1800" allows for extended printout sessions unattended. The mini jumbo roll also contributes to reducing the running cost of printer systems with lower per-square meter unit price in comparison to smaller rolls.

When using smaller 150 m rolls: Set → Printout → Set → Printout → Set → Printout
When using "Mimaki Vision Jet–X" mini-jumbo rolls: Set → Printout

Extended heater supporting stable operation

The extended heater attached to the lower portion of the standard heater facilitates the drying of high-speed printing results.

10kg ink supply unit corresponding to extended successive printing jobs

Equipment of the large quantity of 10kg (22 lb) ink tank enables long-term successive operations such as over-night printout sessions. The tank achieves significant reductions in running cost and operation time over the standard 2 liter pack cartridges.
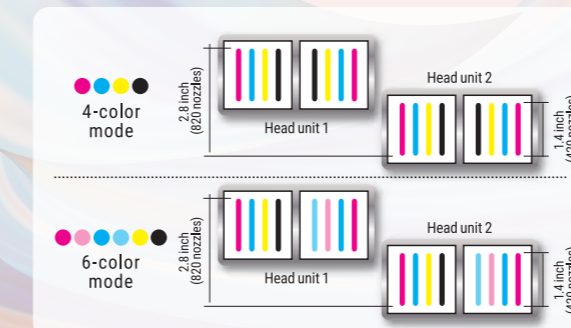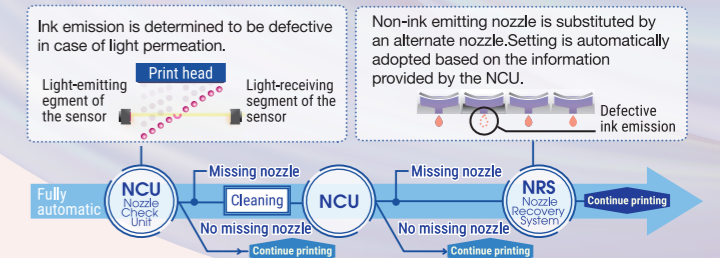
Guaranteed beauty

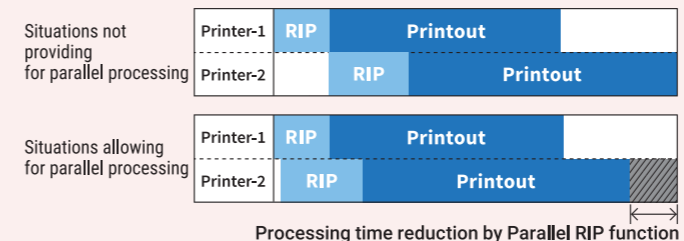### Sophisticated Textile RIP software, "TexLink4 Lite Edition"

New functions were incorporated into the professional "TxLink" RIP software. "16-bit rendering", "Parallel RIP function" and "load balancing function"

■ Parallel RIP and load balancing functions make production more efficient.

The RIP process for multiple pieces of print data can be performed in parallel. In addition, thanks to the load balancing function for print jobs, jobs can be assigned to printers automatically, allowing efficient production when multiple printers are connected.[*1][*2]
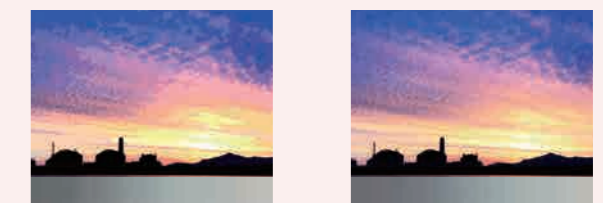
■ Parallel RIP function

RIP processes can be performed in parallel, making production that uses multiple printers[*2] efficient. The parallel process function can handle up to 8 jobs.

Situations not providing for parallel processing:
Printer-1: RIP → Printout
Printer-2: RIP → Printout

Situations allowing for parallel processing:
Printer-1: RIP → Printout
Printer-2: RIP → Printout

Processing time reduction by Parallel RIP function

■ 16-bit rendering[*3] achieves beautiful gradation expression.
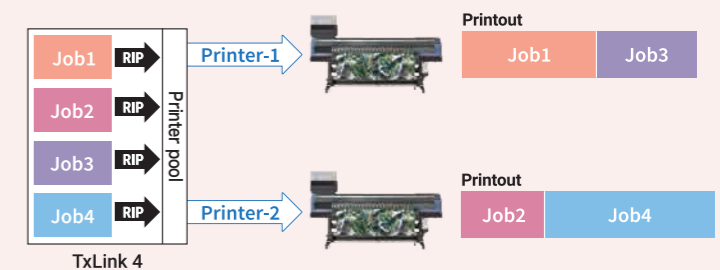
TxLink3 8-bit rendering

TxLink4 16-bit rendering

*3 8-bit rendering is used depending on the file format or color space.

■ Load balancing function

Print jobs are pooled and automatically assigned to multiple printers[*1][*2] (Round Robin system)

Job1 → RIP → Printer-1 → Printout: Job1 | Job3
Job2 → RIP
Job3 → RIP
Job4 → RIP → Printer-2 → Printout: Job2 | Job4

Printer pool

TxLink 4

*1 Identical printers/identical ink-set printers. *2 Additional printer licenses corresponding to the number of connected printers are required.