For TEXTILES & APPAREL

Water-based sublimation transfer inkjet printer

TS55-1800

Mimaki™

Software

TxLink4 Lite or ResterLink6 Plus is bundled according to user's request.

Professional software RIP for multi color separation
Software RIP for Multi Color Separation
TxLink™4 Lite

Compatible RIP software with usability and high function
Raster Link 6 PLUS

Specifications

Unit

Item		TS55-1800
Print head		Head Assy Stagger layout
Print resolution		480 dpi, 600 dpi, 1,200 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) *1
	Capacity	2L ink pack
Safety standard		VCCI Class A/FCC Class A/Compliant with IEC 62368-1 CE Mark (EMC,Low voltage,Machinery Directive,RoHS) CB Report/REACH/Energy Star/RCM/EAC
Interface		Ethernet 1000BASE−T (Reco ended) /USB2.0 Hi-speed
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 degrees, 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)

*1 Lk,Fy, and Fp are to be available later.

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	

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 290 mm (11.4 in) /Feeding 600 mm (23.6 in) Max. width: 1,910 mm (75.1 in) Max. printable width: 1,900 mm (74.8 in)
Power		Single phase AC 200−240 V × 1
Power consumption		(AC 200 V) 1.0 kW or less
Outside dimensions (W × D × H)		Unit size: 2,770 × 905 × 600 mm (109.1 × 35.7 × 23.7 in) Size with the main unit: 3,240 × 1,850 × 1,857 mm (127.6 × 72.9 × 73.2 in)
Weight		100 kg (220.5 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)		Unit size: 824 × 1,035 × 383 mm (32.4 × 40.7 × 15.0 in) Size with the main unit: 4,108 × 1,035 × 1,484 mm (161.7 × 40.7 × 58.4 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 AC 100−120 V/AC 200−240 V × 1
Power consumption	(AC 100 V) 1.0 kW or less/ (AC 200 V) 1.0 kW or less
Outside dimensions (W × D × H)	Unit size: 2,336 × 108 × 236 mm (92.0 × 4.3 × 9.3 in) Size with the main unit: 3,240 × 775 × 1,857 mm (127.6 × 30.6 × 73.2 in)
Weight	15 kg (33.1 lb)

The evolution of production printing

TS55-1800

The "TS55-1800" is a revolutionary sublimation transfer inkjet printer for apparel/textile achieving high-speed printout of up to 140 sqm/h (1,506 sq.ft/h), superior functionality and convenient options suited for stable, long-term printout sessions at reduced cost.

Standard model

With optional units equipped
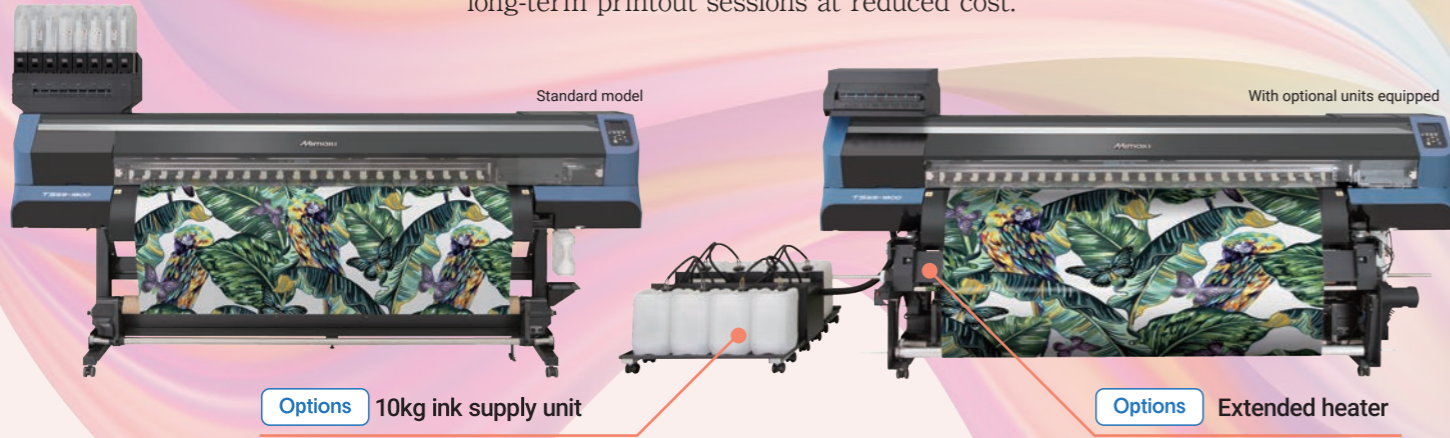
Options 10kg ink supply unit

Options Extended heater

Options Mini-jumbo roll unit

Rear view with optional units equipped

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.
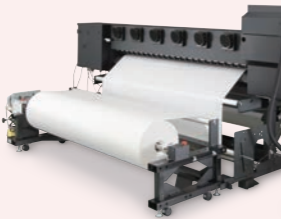
■ **"Mimaki Vision Jet–X" mini-jumbo rolls featuring approximately 2,500 m (8,202 ft) of transfer paper announced concurrently with model "TS55-1800".**

Previously, the "TS55-1800" printer running at its maximum speed (140 sqm/h; 1,506 sq.ft/h) using a 150 m (492 ft) roll of transfer paper was incapable of coping with extended continuous operation such as all-night sessions in the absence of operators. The combination of "Mimaki Vision Jet–X" and the mini jumbo roll 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.
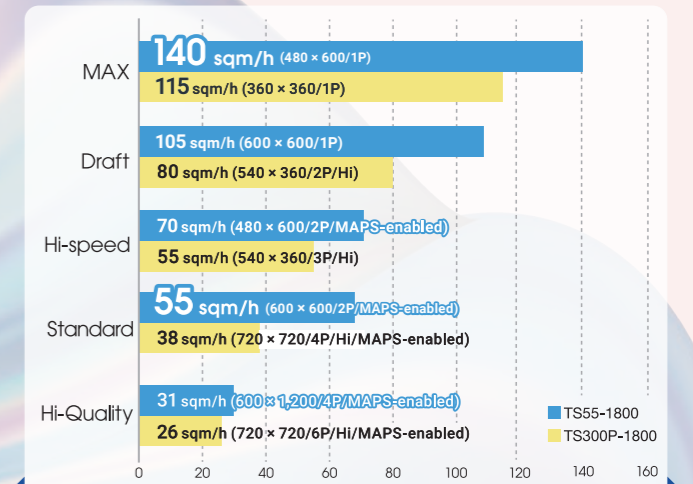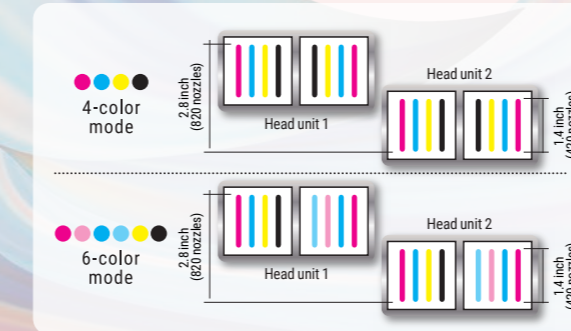
Providing for high productivity

Maximum printout speed mode 140 sqm/h (1,506 sq.ft/h) /Standard quality mode 55 sqm/h (592 sq.ft/h)

Adoption of the newly developed print heads ensures high-quality print even at a high speeds, achieving 140% productivity over our conventional model (TS300-1800) with standard quality mode printing at 55 sqm/h (592 sq.ft/h). By newly enabling the use of "MAPS" function in high-speed mode (70 sqm/h; 753 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)

MAX	**140 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	70 sqm/h (480 × 600/2P/MAPS-enabled)	
	55 sqm/h (540 × 360/3P/Hi)	
Standard	**55 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)	
	26 sqm/h (720 × 720/6P/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. **140%** superior to conventional model [*1] **[standard mode]**
TS55-1800 55 sqm/h 4-color 600 × 600 dpi 2P/TS300P-1800 38 sqm/h 4-color 720 × 720 dpi 4P High

*1 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.
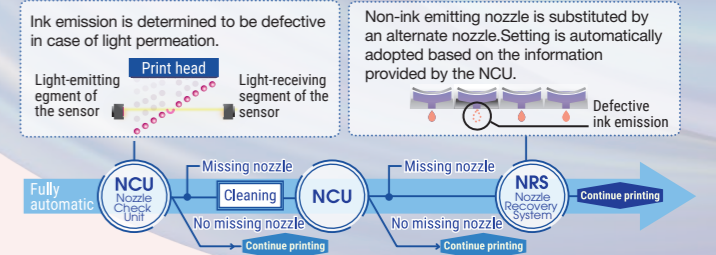
MAPS functional image

■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 —Missing nozzle→ NCU —Missing nozzle→ NRS Nozzle Recovery System → Continue printing
No missing nozzle → Continue printing
No missing nozzle → Continue printing
No missing nozzle → Continue printing

Guaranteed beauty
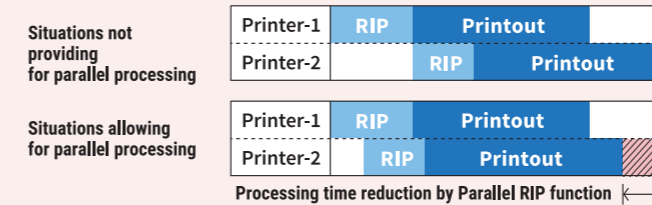
Sophisticated "TxLink4 Lite" RIP software

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 vacant 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[*1.2] 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 ⟷

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

■**16-bit rendering** [*3] **achieves beautiful gradation expression.**
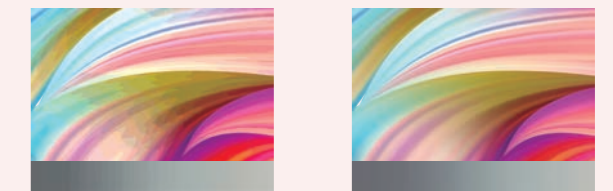
TxLink3 8-bit rendering   TxLink4 16-bit rendering
*3 8-bit rendering is used depending on the file format or color space.

■**Load balancing function**

Print jobs are pooled and automatically assigned to an available printer from among multiple connected printers.[*1.2]

Job1 RIP / Job2 RIP / Job3 RIP / Job4 RIP → Job pool → Printer-1 → Printout Job1 Job4
Printer-2 → Printout Job2 Job3

TxLink 4