

# Product Guide



# TS55-1800

74" Roll to Roll Dye-sublimation Printer (Paper Transfer)



Distributed by:



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# TS55-1800 PRODUCT FEATURES



## High Productivity

- Maximum print speed of 1,453 sqft/h
- Standard print speed of 538 sqft/h
- MAPS is available with 2-pass mode

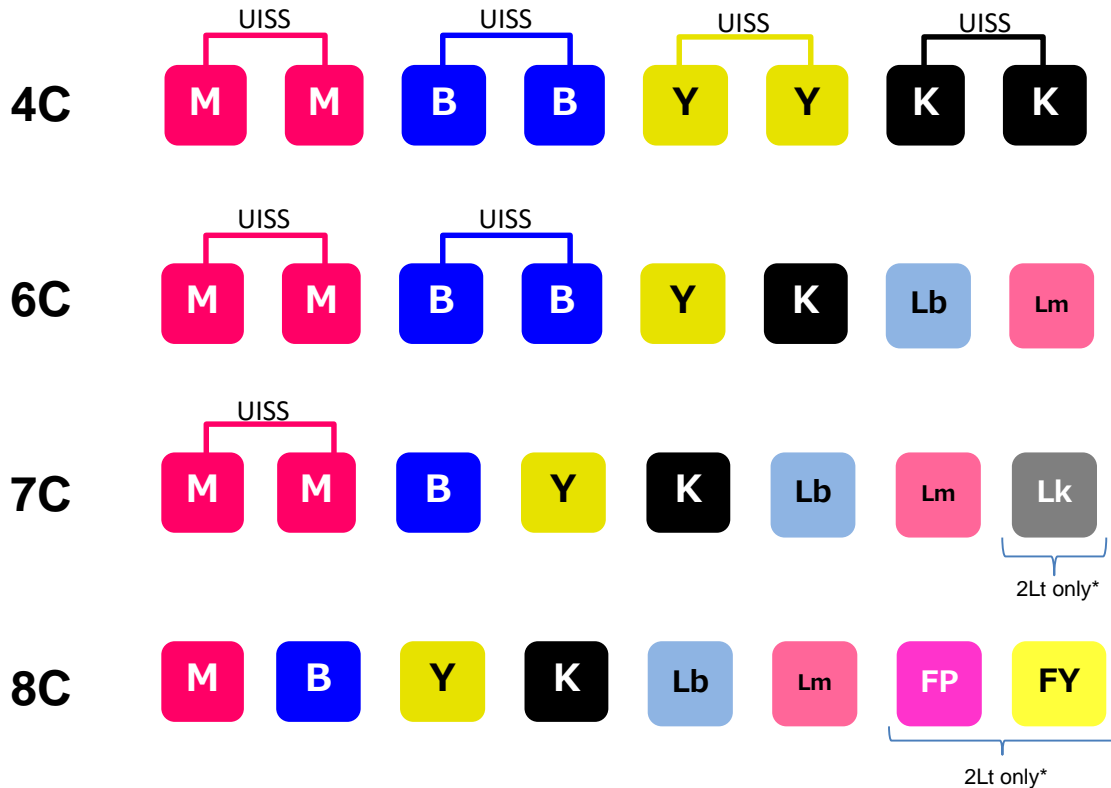
## Unattended production

- Low cost 10kg ink tank option is available
- UISS allows 20kg ink supply per color with 4C ink set
- Mimaki Vision Jet-X Mini Jumbo roll (8,202 ft)

## User friendliness

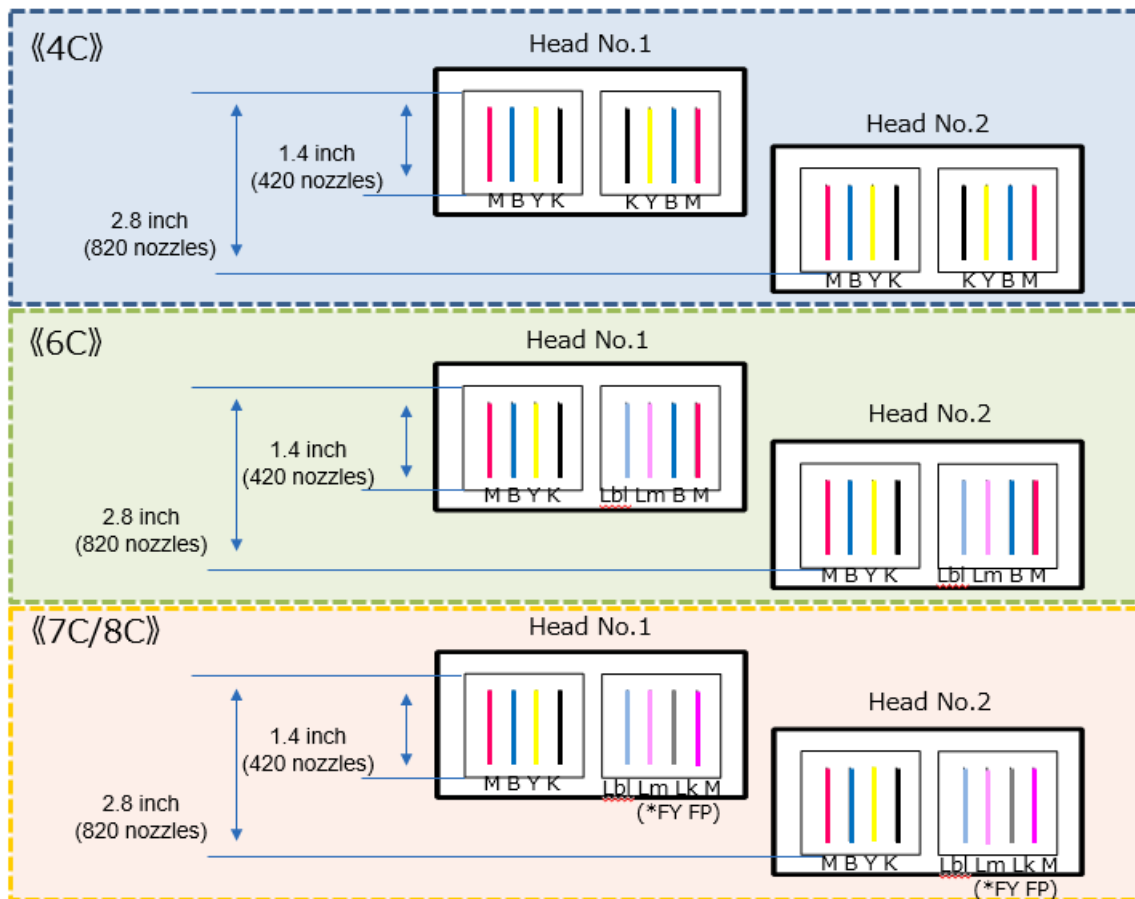
- Stable printing with NCU/NRS
- LED lights to check the print result while printing
- Help function guides the use of machine

# Sb610 Ink sets

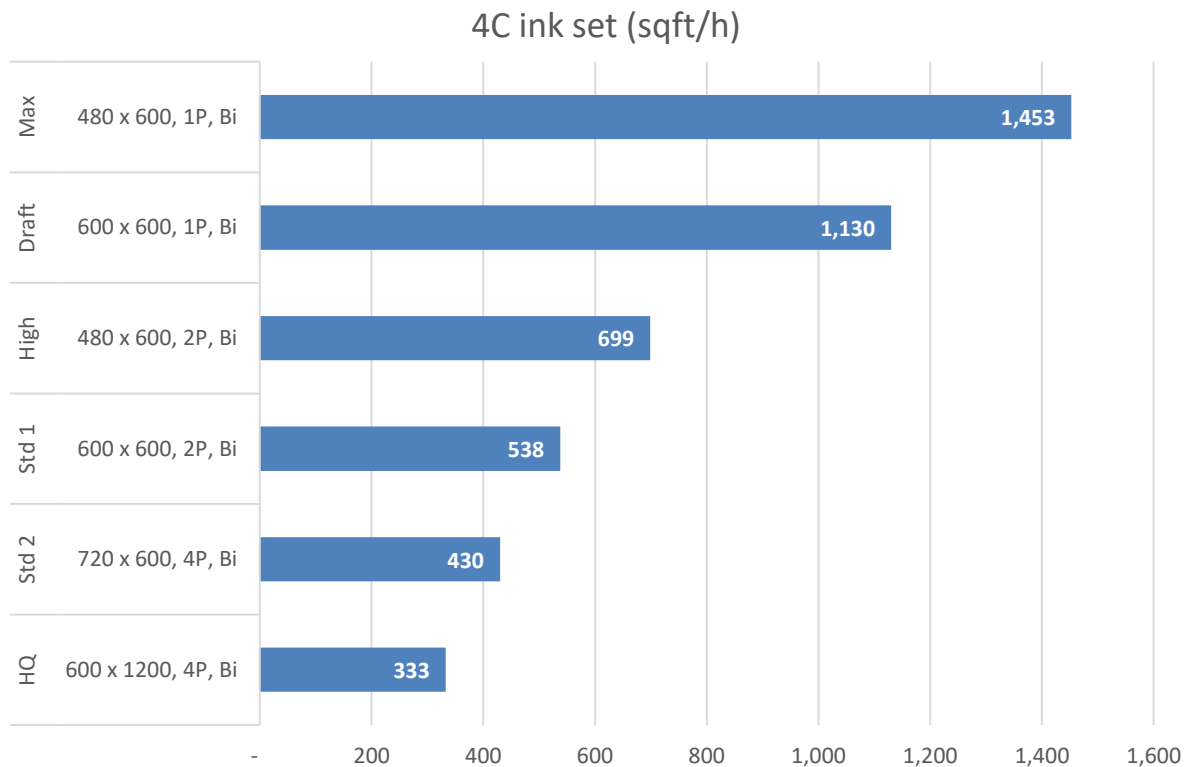


\*Combination of 10kg and 2Lt will become possible with an option.

# Print head configuration



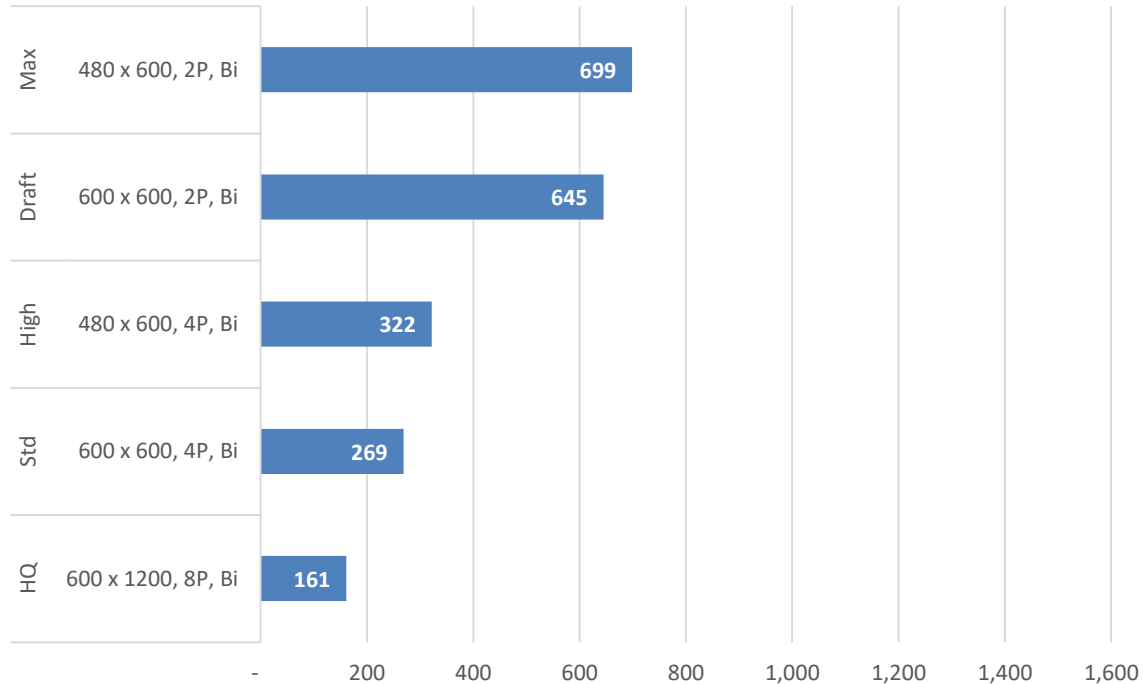
# Print speed (4C)



# Print speed (6C/7C/8C)



6C/7C/8C ink set (sqft/h)



# Options - 10kg ink supply unit



In comparison to 2L ink pack, Large quantity ink tank(10kg) is more useful for the continuous printing and the running cost reduction.

10kg ink tank



10kg ink tank unit



Ink supply path on printer



Available for B.M.Y.K.Lb.Lm



# Options - Mini Jumbo roll unit



Mini jumbo roll reduces downtime for replacing media and saves labor.

### Specification of options

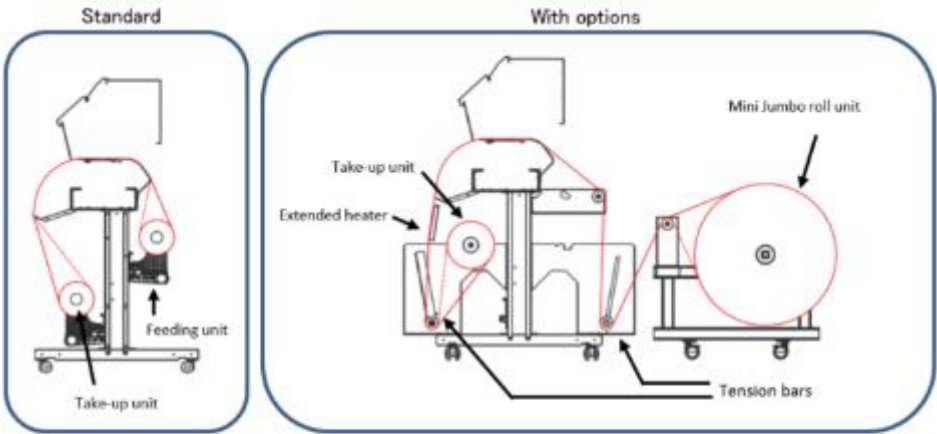
1. Feeding device : Diameter:  $\phi$ 23.6 inch Weight: 661.4 lbs or less
2. Take-up device : Diameter: $\phi$ 11.4 inch Weight: 220.5 lbs or less
3. Power:Single phase AC200~240V
4. Air compressor:0.5MPa (500kPa/5bar)
5. Demensions: 109inch  $\times$  35.6inch  $\times$  23.6inch
6. After setting on printer : 160inch  $\times$  72.8inch  $\times$  73.1inch
7. Weight: 220.5 lbs

### Paper: Mimaki Vision Jet-X® Mini-162, Supplied by Neenah Coldenhove

1. Length: 2500m (8,202 foot)
2. Width: 1.62m (64inch)
3. GSM: 57g/sqm
4. Weight: 232kg (512lbs)
5. Diameter: 500mm (19.7 inch)
6. Thickness: 0.08mm
7. Print side: Outside
8. Packing: 1 pallet (2 rolls)

### Notes

- Use hand-lift or other lifting machines for setting mini jumbo roll.
- Don't remove mini jumbo roll by yourself.
- Standard feeding/ take-up device are available even using mini jumbo roll unit.



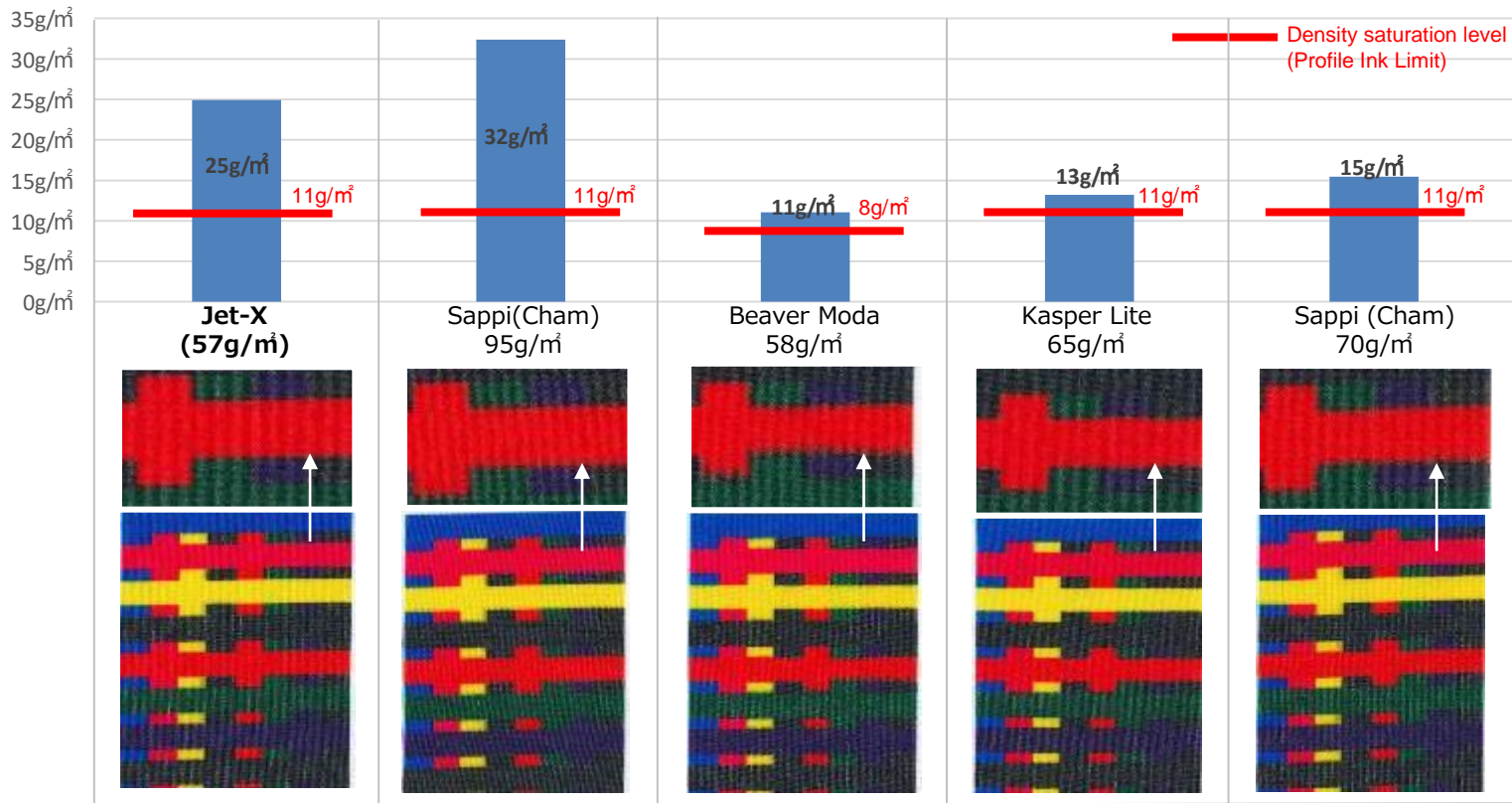
Media spec	Standard	Mini Jumbo Roll Unit
Feeding	Diameter: $\phi$ 250mm (9.8 inch) Weight: 45kg (99.2 lbs) or less	Diameter: $\phi$ 600mm (23.6 inch) Weight: 300kg or less (661.4 lbs)
Take-up	Diameter: $\phi$ 250mm (9.8 inch) Weight: 45kg (99.2 lbs) or less	Diameter: $\phi$ 290mm (11.4 inch) Weight: 100kg or less (220.5 lbs)



# Mimaki Vision Jet-X Mini Jumbo Roll



Jet-X is a 57gsm thin paper but it's possible to make a transition from thicker paper



# Core technologies - MAPS (Mimaki Advanced Pass System)



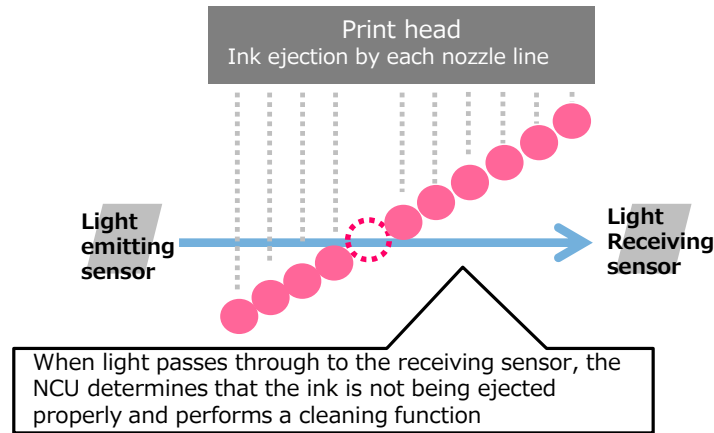
<p>《MAPS》 Banding and uneven color printing are reduced by scattering swath boundaries. Beautiful print image is obtained.</p>	<p>The diagram illustrates the MAPS process. On the left, a 'Print Head' is shown moving across a grid. The resulting image shows a smooth, uniform blue color. A magnified view of the dot pattern shows a regular grid of dots with a small square highlighting a specific dot. This magnified view is then shown as a smooth, uniform blue color.</p>
<p>《Normal pass》 Banding(lateral stripes) appears between passes. Printing stripes and uneven color causes deterioration of the image quality.</p>	<p>The diagram illustrates the normal printing process. On the left, a 'Print Head' is shown moving across a grid. The resulting image shows distinct horizontal bands of color. A magnified view of the dot pattern shows a regular grid of dots with a small square highlighting a specific dot. This magnified view is then shown as a smooth, uniform blue color.</p>

# Core technologies - NCU (Nozzle check Unit)



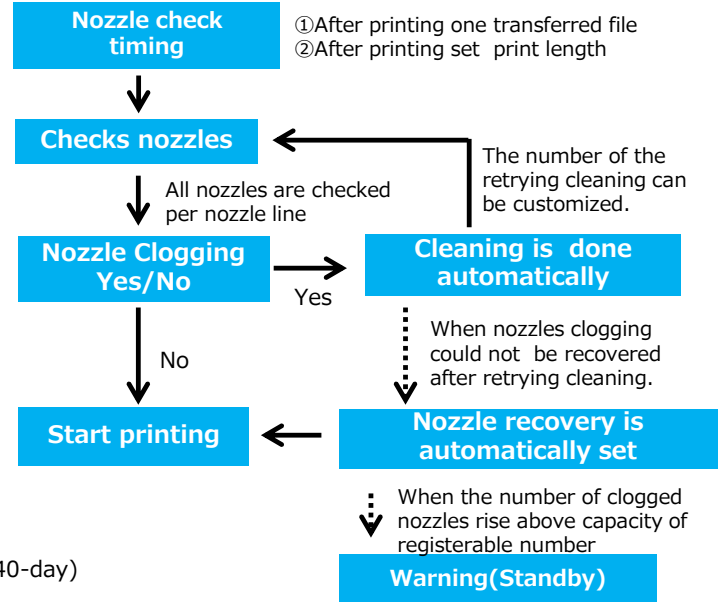
1. Nozzle condition is automatically checked per transferred file or set print length
2. When nozzle clogging is detected, cleaning is automatically executed
3. When nozzle clogging is not recovered by cleaning, Nozzle Recovery System is automatically done, and starts printing

【Image of NCU function】



Nozzle check time : 43sec/check  
 Nozzle check ink consumption : 732cc/year  
 (Operating Condition: One check/hour x 10-hour operation/day x 240-day)

【NCU operation flow】



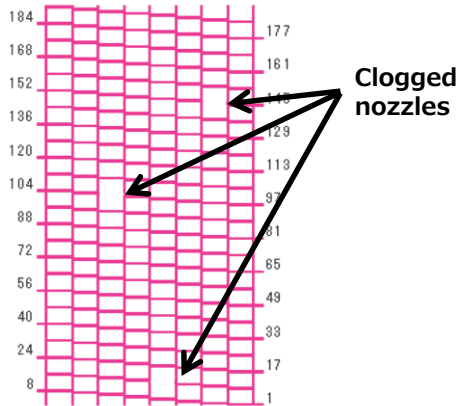
\*When setting nozzle check by length, the color may differ when the NRS is performed in the middle of printing.

# Core technologies - NRS (Nozzle Recovery System)



If a nozzle clog is not cleared via the maintenance function, the other nozzles can be assigned to continue printing

**Nozzle check pattern**



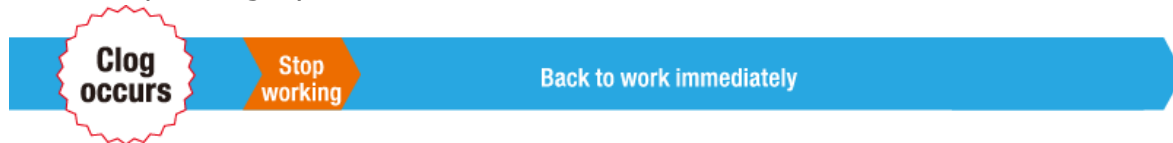
Register the number of clogged nozzles



**Use the other nozzles instead of clogged nozzles**

- 10 nozzles can be registered per 1 nozzle line
- The print speed does not change by using NRS
- Depending on the condition of the nozzle, NRS does not work
- When using low passes, NRS does not work
- When using MAPS4, NRS may not work in some mode

【Continuous printing by NRS】





## 【Intuitive Operation】



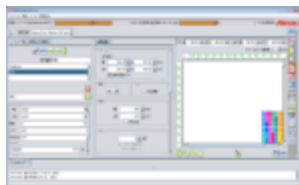
1

The main information is in one screen. The status of printer, the progress of ripping, the status of job can be checked at a glance. Nesting or composition of job are displayed visually.



2

The visual icons on the right side of the screen allows for the easy and quick setting of the print condition.



3

Frequently used setting can be registered as "My Favorite". Up to 30 settings can be registered.

## 【Useful functions】

- Color chart creation  
The color charts of RGB/CMYK/Spot color can be created easily
- Step & Repeat function
- Print finish time calculation
- Ink amount calculation
- Print progress display
- Automatic arrangement function
- Profile batch printing  
The best profile can be found easily when trying to print on media which has never been used before.
- Web update function



## **Added convenient new functions**

1. Upgraded production process with parallel RIP calculation function and load balancing function
2. Enables beautiful gradation with 16 bit rendering
3. Easy to use nesting
4. Spot color assignment to spot channel
5. Equipped with variable print data function specialized for sports apparel use
6. Image mask function
7. Ability to process PDF transparencies

## **Useful functions from TxLink 3**

1. Excellent color replacement function
2. Step & repeat function
3. Multicolor profile creation function
4. Color combine function \* Professional edition only

# New functions - 16bit rendering



Improvement on gradation by 16bit rendering



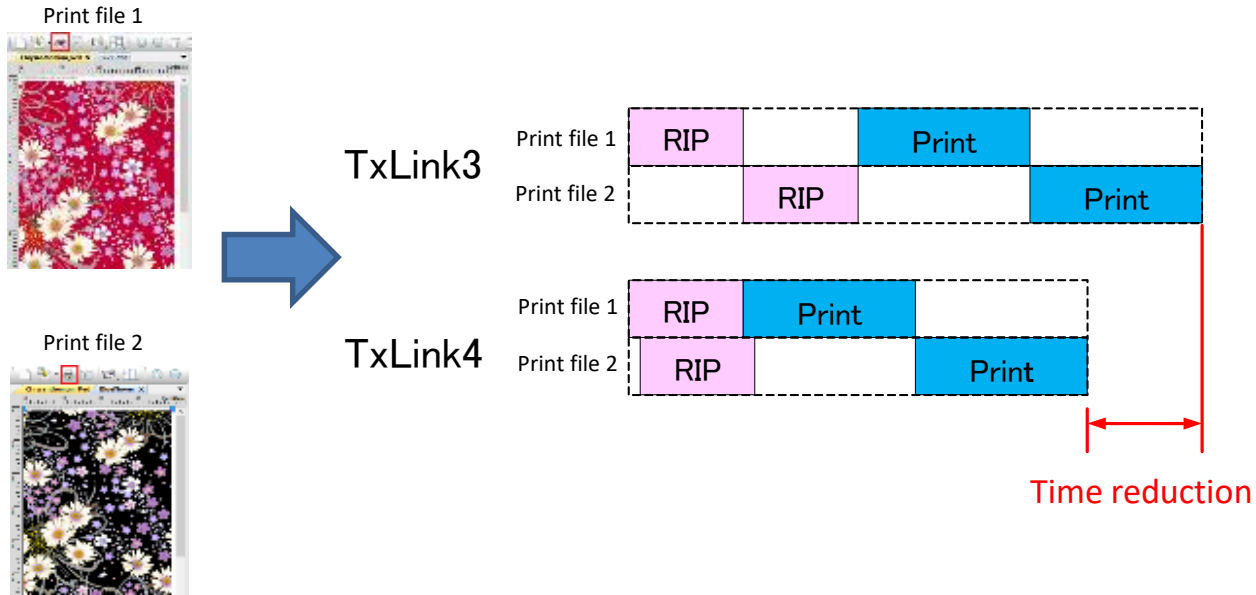
Rendering by file format

No.	Vector/Raster	Format	rendering	notes
1	Raster	TIFF	16bit	Gray, Lab color spae:8bit
2		PSD	16bit	
3		JPEG	16bit	Gray, Lab color spae:8bit
4		PNG	16bit	Gray, Lab color spae:8bit
5		BMP	16bit	Gray, Lab color spae:8bit
6	Vector	EPS	8bit	Gradation is the same with TxLink3
7		PS	8bit	Gradation is the same with TxLink3
8		PDF	8bit / 16bit	Default : 16bit TxLink3 capability mode : 8bit

# New functions - Parallel RIP



Up to 8 print files can be processed at the same time \*Additional license needs to be purchased.

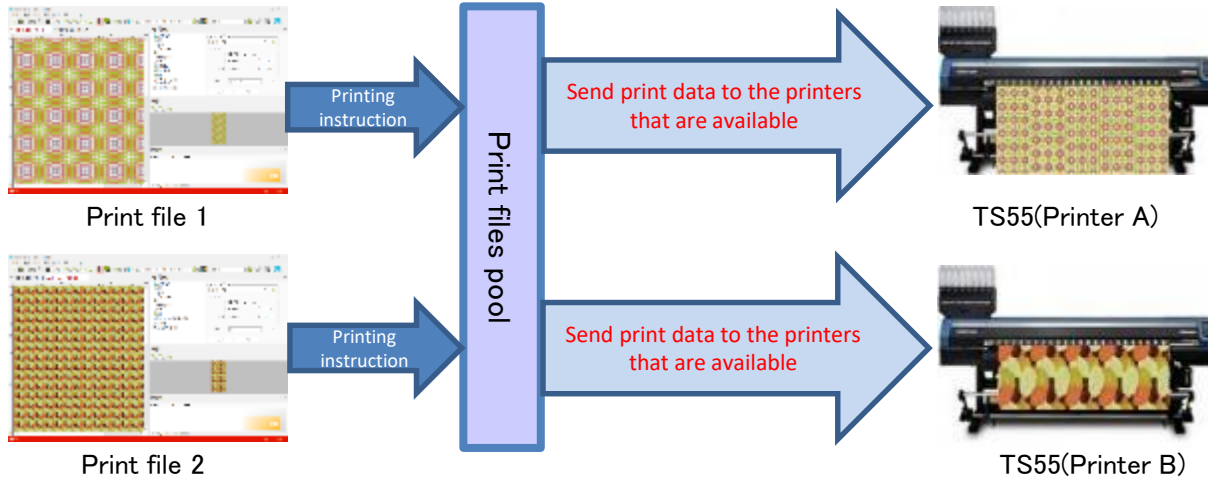




# New function - Printer pool



Load balancing: Automatically send print files to the printers that are on standby



## Notes:

1. Need to purchase additional printer license per printer.
2. The printers need to be the same model and ink sets.

# Specifications: Main Unit



Category	Detail
Printer head	2 Head Assy units (Staggered)
Resolution	480/600/1,200 dpi
Maximum printing width	76.3inch / 1,940mm
Maximum media width	76.7inch / 1,950mm
Maximum roll weight	99lbs
Head height	Manual adjustment: 2.8mm/3.3mm/3.8mm
Ink slot	8
Ink set	4c or 6c or 7c or 8c
Safety standards	VCCI class A / FCC class A / UL 62368-1 ETL CE Marking (EMC, Low voltage, Machinery, RoHS) / CB report / REACH / EnergyStar / RCM
Interface	Ethernet 1000BASE-T (recommended) / USB 2.0 Hi-speed
Power supply	Single phase (AC100~120V) × 1 / (AC200~240V) × 1
Power consumption	(AC100V) 1.44kW / (AC200V) 1.92kW or less
Operating environment	: 20°C~30 humidity 35~65%Rh (avoiding condensation)
Dimensions	127.5inch×28inch×73.1inch / 3,240mm × 713mm × 1,857mm
Weight	445 lbs
Machin light	Above platen • maintenance area
Stable printing system	NCU/NRS

# Option specifications



## Mini jumbo roll unit

Category	Specification
Air compressor	0.5MPa (500kPa/5bar)
Applicable Media	Feeding device : Diameter: $\phi$ 23.6 inch Weight: 661.4 lbs or less Take-up device : Diameter: $\phi$ 11.4 inch Weight: 220.5 lbs or less
Power supply	Single phase AC200~240V x 1
Power consumption	(AC200V) 1.0kW or less
Dimensions	109" x 35.6" x 23.6" After setting on printer : 160" x 72.8" x 73.1"
Weight	220.5 lbs

## Extended heater

Category	Specification
Power supply	Single phase AC100~120V x 1
Power consumption	(AC 100V) 1.92kW or less
Dimensions	Main unit : 127.5" x 4.25" x 9.3" After setting on printer : 127.5" x 28" x 73.1"
Weight	33lbs

## 10kg ink tank supply unit

Category	Specification
Ink set	4c or 6c or 7c or 8c
Dimensions	32.4" x 40.7" x 15" After setting on printer: 160" x 40.7" x 58.4"
Weight	77 lbs

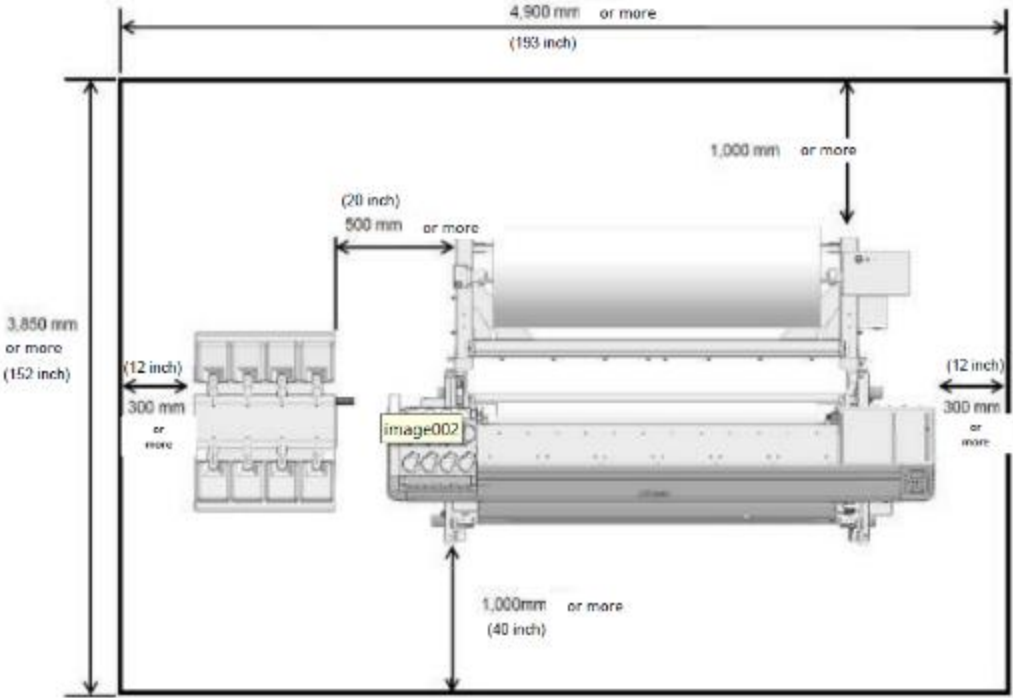
\*B, M, Y, K, Lb, Lm are available in 10kg tank and 2L pack.  
Fy, Fp, Lk are available only in 2L pack.

# Crate dimensions



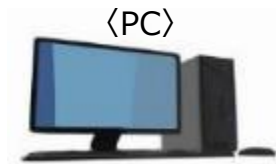
	Width	Depth	Height	Weight	Man power
Main unit	130.1"	29.5"	46.4"	598 lbs	6
Mini Jumbo Roll Unit	114.6"	28.3"	29.5"	360 lbs	2
10kg ink tank unit	13.2"	41.3"	19.9"	TBA	2
Extended heater	98.3"	15.2"	6.5"	46.2 lbs	2

# Installation environment



1. Do not install on the weak surface floor.
2. Make sure to use in a ventilated environment.
  - Environmental temperature: 20°C-30°C
  - Quality assurance temperature: 20°C-25°C
  - Humidity: 35-65%Rh (no condensation)
  - Temperature gradient:  $\pm 10^{\circ}\text{C}/\text{h}$  or less
  - Dust: Equivalent to office environment
3. Do not install on carpets, etc. because those are easy to be charged, and it can effect the image quality.
4. Ink odor generates. Please use the machine in a well-ventilated environment.
5. Do not install in the place where using a photograph fixer or the place with acid steam like acetic acid, hydrochloric acid.

# System configuration



〈PC〉



## Recommended spec

CPU : Core i7 4.2GHz or more  
Memory : 16GB  
storage : 500GB SSD x 2\*  
Network : Ethernet 1000BASE-T (direct connection)\*  
Optical disk drive : DVD-ROM  
Windows10 Pro 64bit  
Monitor : 1920x1200

\*Required : If specifications are not met, some print modes can possibly not work

## 〈Design software〉



PS, EPS, TIFF, BMP, JPEG, PDF, etc.  
TL3 also supports PNG.

\*\*Please use network cable of category6(CAT6).  
Connection by relaying router is not supported.  
When using Ethernet, please build-out printer  
and RIP PC in the same network.  
When using switching hub, please use 1000BASE-T  
supported one.

## TS55 1800 system configuration



### <Standard configuration>

- ① TS55-1800 main unit
- ② 2L ink pack unit
- ③ Standard feeding & take-up device

### <Supplied RIP>

RasterLink6 Plus (Bundled)  
TxLink4 (Option)

## Ink type

Dye sublimation ink - Sb610  
Colors: B.M.Y.K.Lbl.Lm.Lk.Fy.Fp  
Supply: 2L ink pack / 10Kg tank  
\*Fy & Fp are available only in 2L pack but can be  
configured with other 10kg colors by using an option.

## Option

- ① Mini Jumbo roll unit
- ② 10kg ink tank unit
- ③ Extended heater unit