Tx300P-1800B

Sophisticated RIP software maximizes the performance of Tx300P-1800B

Professional software RIP for multi colour separation
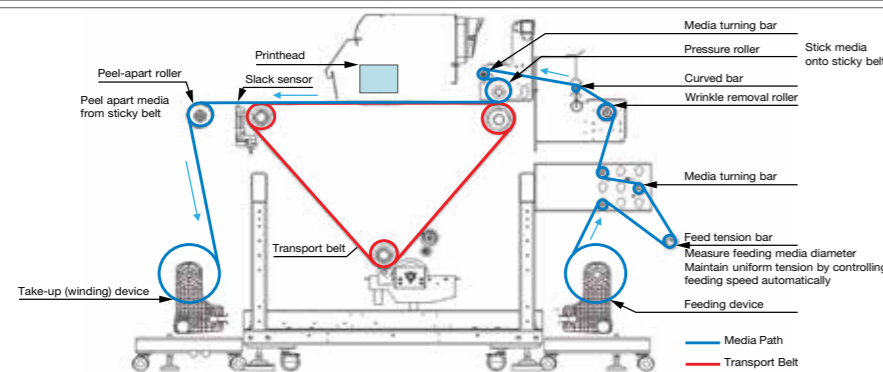**Software RIP for Multi Color Separation**

TxLink3 Lite

- Spot colour can be assigned to each colour on separation plates.
- ICC profile creation from CMYK + spot colours.
- Colour replacement on raster data.
- A variety of panelling functions, including step-and-repeat layout, which are useful for textile designing.

Specifications

Item	Tx300P-1800B		
Printhead	On-demand piezo head (4 in-line printheads)		
Print resolution	360dpi, 540dpi, 720dpi, 1,080dpi, 1,440dpi		
Drop size	Minimum 6pl, Maximum 24pl (Varies depend on ink type)		
Head height	Manual adjustment (2.0mm~7.0mm)*Standard:3mm		
Maximum print width	1,880mm		
Maximum media width	1,900mm		
Ink	Type/Colour	Sublimation dye ink: Sb420 (Bl, M, Y, K, Lbl, Lm)	
		Disperse dye ink: Dd400 (C, M, Y, K, R, Grey, Violet, Pink)	
		Textile pigment ink: TP400 (C, M, Y, K)	
		Reactive dye ink: RC400 (C, M, Y, K, Bl, R, Or, Lk)	
		Acid dye ink: AC400 (C, M, Y, K, Bl, R, Or, Lk)*[1]	
	Package size	2L Ink pack	
Media thickness	1.0mm or less		
Roll media weight	40kg or less		
Roll diameter	φ250 mm or less		
Media type	Natural fibre (cotton, silk, hemp etc.) Chemical fibre (polyester, nylon etc.)		
Certification	VCCI class A, FCC class A, ETL UL 60950-1 CE Marking (EMC, Low voltage, Machinery directive, and RoHS), CB, REACH, RCM		
Power supply	Single-phase (AC100~120V/200~240V ±10%)×2 50/60Hz±1Hz		
Power consumption	AC100V : 1.44kW x2 / AC200V : 1.92kW x2		
Interface	For print data: Ethernet 1000BASE-T / USB 2.0 Hi-speed For e-mail: Ethernet 10BASE-T / 100BASE-TX / 1000BASE-T		
Operational environment	Temperature: 20 - 30 °C (68 - 86 F°) Humidity: 35 - 65% Rh (Non condensing)		
Dimensions (WxDxH)	3,183 x 1,912 x 1,844mm		
Weight	627kg		

*[1] AC400 will be available in the future

Options and Supplies

Item		Product No.	Remarks
Sublimation dye ink: Sb420	Blue	I-SB420-BLD-2L-1	2,000 ml Ink pack
	Magenta	I-SB420-MD-2L-1	
	Yellow	I-SB420-YD-2L-1	
	Black	I-SB420-KD-2L-1	
	Light blue	I-SB420-LBD-2L-1	
	Light magenta	I-SB420-LMD-2L-1	
Disperse dye ink: Dd400	Cyan	I-DD400-C-2L-1	2,000 ml Ink pack
	Magenta	I-DD400-M-2L-1	
	Yellow	I-DD400-Y-2L-1	
	Black	I-DD400-K-2L-1	
	Red	I-DD400-R-2L-1	
	Grey	I-DD400-G-2L-1	
	Violet	I-DD400-V-2L-1	
	Pink	I-DD400-P-2L-1	
Textile pigment ink: TP400	Cyan	I-TP400-C-2L-1	2,000 ml Ink pack
	Magenta	I-TP400-M-2L-1	
	Yellow	I-TP400-Y-2L-1	
	Black	I-TP400-K-2L-1	
Reactive dye ink: RC400	Cyan	I-RC400-C-2L-1	2,000 ml Ink pack
	Magenta	I-RC400-M-2L-1	
	Yellow	I-RC400-Y-2L-1	
	Black	I-RC400-K-2L-1	
	Blue	I-RC400-BL-2L-1	
	Red	I-RC400-R-2L-1	
	Orange	I-RC400-OR-2L-1	
	Light black	I-RC400-LK-2L-1	
Acid dye ink: AC400*[1]	Cyan	TBA	2,000 ml Ink pack
	Magenta		
	Yellow		
	Black		
	Blue		
	Red		
	Orange		
	Light black		
Flushing liquid 03		FL003-Z-22	Flushing liquid for head cleaning. 220ml cartridge
Flushing liquid 03		FL003-Z-2L	Flushing liquid for head cleaning. 2L pack
Flushing liquid 12		FL012-Z-22	Flushing liquid for TP400 ink. 220ml cartridge

BELT TRANSFER SYSTEM FOR OPTIMUM QUALITY ON STRETCHABLE FABRICS

Belt transfer system for optimum print quality on stretchable fabrics
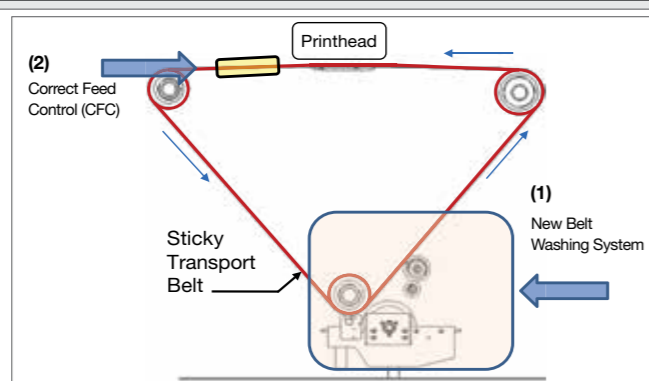
Stable feeding and transportation of the printable fabric is crucial for high quality direct-to-textile printing. Mimaki's advanced belt-fed technology, incorporating a 'sticky belt' transport system ensures high levels of accuracy and image quality even when working with stretchable fabrics.

STICKY BELT TRANSPORT SYSTEM INCORPORATING BELT WASHING FACILITY

The 'Sticky Belt' transport system ensures consistent, high quality printing on stretchable or thin fabrics and is further enhanced by the following additional functions:

1. **Built-in Belt Washing Mechanism** is designed to automatically remove struck-through ink residue from the belt. The mechanism also helps prevent any accumulation of dirt on the belt, thereby maintaining the adhesive qualities of the belt.
(NB: when not required, this function can be turned off to prolong the life of the adhesive belt)

2. **Improved Correct Feed Control (CFC)** incorporates a high resolution encoder unit to measure any belt movement more accurately enabling more effective control of feed length and drive rollers.

• Some of the samples in this folder are artificial renderings • Specifications, design and dimensions stated in this folder may be subject to change without notice (for technical improvements, etc.)
• The corporate and merchandise names written on this folder are the trademark of the respective corporations • Inkjet printers print using extreme fine dots, so colours may vary after replacement of the printing heads, also note that if using multiple printer units, colours could vary slightly from one unit to other unit due to slight individual differences • Compositor's errors reserved

Mimaki

Belt-fed Direct-to-Textile inkjet printer···

TA
TEXTILE & APPAREL

eco

Mimaki
The world imagines… Mimaki delivers

High quality belt-fed direct-to-textile printer for stretchable fabrics…

With its winning combination of quality, high speed and innovative automated belt-fed conveyance system, the Mimaki Tx300P-1800B has been developed to print direct to a broad range of natural and man-made fabrics. Particularly effective for printing on modern stretchable materials, the Tx300P-1800B is ideally suited to the production of fashion, clothing and soft furnishings.

ENGINEERING EXCELLENCE AND CREATIVE INNOVATION

Founded in Japan in 1975, Mimaki Engineering has steadily grown by reputation and influence into a global company with large operational bases in Asia and the Pacific, United States and Europe.

Renowned for award-winning performance, peerless build quality and innovative technology, Mimaki has established itself as a leading manufacturer of wide-format inkjet printers and cutting machines for the sign and graphics, textile and apparel and industrial markets. In addition, Mimaki also provides a comprehensive range of supporting products; hardware, software and associated consumable items, such as inks and cutting blades.

From outdoor signage and billboards to interior decoration and furnishing, from packaging and labels to promotional gifts and apparel, Mimaki is committed to developing technology that sets new industry standards, producing machines and products that turn the imagination of our customers into breath-taking reality.

… Mimaki delivers

Tx300P-1800B delivers ···

Tx300P-1800B

- Maximum print speed of 53m²/h (when printing with Sb420 sublimation dye ink in 4-colour mode)
- Sublimation, disperse, reactive & acid dye and textile pigment inks
- Belt transfer system for accurate print on stretchable or thin fabrics
- Mimaki Mimaki Bulk Ink System (MBIS) and large volume ink packs
- Latest Mimaki Advanced Pass System (MAPS) to reduce banding
- Nozzle Check Unit (NCU) ensures reliable continuous print operation
- Adjustable head gap setting for thick and woven textiles
- Unique dual ink capability to simultaneously load textile pigment and sublimation dye inks on one printer

- 1,900mm MAX PRINT WIDTH
- 50m²/h MAX. SPEED
- 1,440 DPI MAX RESOLUTION
- UNATTENDED CONTINUOUS OPERATION
- HIGH PERFORMANCE TEXTILE RIP SOFTWARE

Create ··· Fashion and Apparel, including dresses, shirts and scarves, Upholstery and Soft Furnishing fabrics, including bed linen, cushions, curtains and much more…

ADJUSTABLE HIGHER HEAD GAP SETTINGS FOR THICKER FABRICS

- While printing on raised fibre surface textiles, a high head gap setting is required to prevent contact between the printhead and any raised fibres. (FIG.1)
- On more conventional models, restricted head gap reduces the accuracy of ink droplet placement. (FIG.2)
- The Tx300P-1800B employs a new advanced printhead with a high head gap to ensure accurate ink droplet placement, thereby enabling high-quality printing on a wide variety of fabric types. (FIG.3)
- The head gap is now fully adjustable from 2mm up to 7mm in 0.05mm increments, which enables printing on a wide range of different thicknesses of fabric.

Figure1: Head gap

Tx300: New printhead / Conventional printhead

At the high head gap, beautiful print results are delivered on the raised fibre surface by the new printhead.

At the low head gap, the printhead tends to contact with raised fibres, and thereby the print quality is deteriorated.

Figure 2 Conventional printhead Head gap / 5mm
Inaccurate placement of the ink droplets leads to blurring in the printed text and line.

Figure 3 New printhead Head gap / 5mm
Accurate placement of the ink droplets produces sharp, clear text and line.*3

*3. Optimum head gap varies depending on print conditions.
Ink / Sb420 ink
Recommended head gap / 3 mm

HIGH PERFORMANCE TXLINK3 LITE RIP SOFTWARE

1) Colour replacement
Desired colours can be represented by specifying the ink volume of each ink colour.

Create desired colours
When the printed colour differs from that expected, the colour replacement function enables a user to specify the desired printing colour as the target colour. This function is useful for reproducing corporate colours.

Colour replacement by swatch book / named colour
Frequently used colours can be registered in a list, to allow automatic colour replacement when the file is opened in the RIP.

Target colour is reproduced

Easy to create different colour data
With TxLink3 Lite, colours are easily replaced on vector and raster data.

Colour chart printing
Both 'Swatch Book' and 'Named Colour' have a 'Print Similar Colours' function, which enables similar colours to the colour selected to be printed as a chart.

Easy colour replacement on raster data

2) Step and repeat
Large seamless patterns can be produced from a single image, including repeat and mirror patterns.

Original image data / Repeat pattern / Mirroring

Standard patterns / Horizontal patterns / Vertical patterns / Horizontal mirroring / Vertical mirroring / Horizontal & Vertical mirroring

3) Multicolour ICC profile creation
ICC profiles can be created simply to match a target colour by following the wizard.

COLOUR PROFILE CREATION PROCEDURES
1. **Specify the ink colour for each ink slot.**
2. **Set the total ink limit**
   Print the ink limit chart, then set the maximum ink volume.
3. **Measure the ink density error**
   (Adjustment of ink density gradation) Each ink density is measured. Density is automatically calculated and adjusted.
4. **ICC profile creation**
   Measurement of the configuration chart printed from Colour GPS. The profile is automatically created.

No ICC profile / ICC profile applied

KEY TECHNICAL FEATURES ···

5 Ink types for a range of applications and textile types*

Ink type	Product name	Colour	Features	Application	Applicable fabric
Sublimation dye	Sb420	Bl, M, Y, K, Lbl, Lm	Sublimation ink for direct printing. No transfer paper is required.	Soft signage	Polyester
Disperse dye	Dd400	C, M, Y, K, R, Grey, Violet, Pink	Inks are fixed by heating and have high durability.	Industrial textile, Luxury apparel, Home furnishing	Polyester, nylon, acetate, and other fibres
Textile pigment	TP400	C, M, Y, K	Simple post-printing process. No steaming, washing and drying processes are required. Inks are fixed only by heating. [*1]	Apparel, Home furnishing	Cotton, hemp, and other fibres
Reactive dye	Rc400	C, M, Y, K, Bl, R, Or, Lk	Inks produce a wide and vibrant gamut of colours, and have water resistance, light-fastness and rub-fastness, as dyestuff molecules bond with the fibres.	Apparel, Home furnishing	Cotton, hemp, silk, rayon, and other fibres
Acid dye	Ac400	C, M, Y, K, Bl, R, Or, Lk	Inks produce vivid and brilliant colours on selected natural or synthetic fibres.	Apparel, Home furnishing	Wool, leather, silk, nylon, and other fabrics

Select an ink type depending on your intended use. The ink type cannot be changed after installation.   [*1] Depending on your print requirements, washing may be recommended.

Unique dual ink capability

With the innovative dual ink capability, Tx300P-1800 can simultaneously load both textile pigment and sublimation dye inks. This enables the use of a single printer to print directly on a wide range of textiles without the need to swap out ink systems.
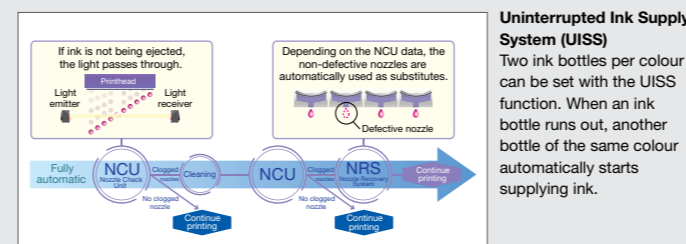
Mimaki's TP400 textile pigment ink and Sb420 sublimation dye ink do not generally require steaming and washing in the post-treatment process, so there is no need for a large space, a huge quantity of water, or special expertise in handling the printed fabric. All that is required is the printer and colour fixing equipment.

Tx300P Series + Colour Fixing Equipment

- Cost reduction
- Space saving
- No special expertise needed

Continuous Uninterrupted Printing Features

Nozzle Recovery Function
In the event of a nozzle malfunction not being repairable by the use of the maintenance function, printing can continue by the use of another nozzle, without any loss of productivity or a reduction in image quality.
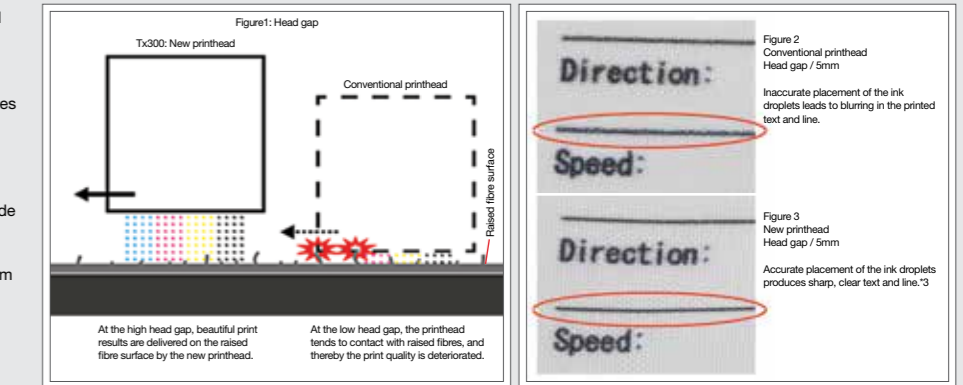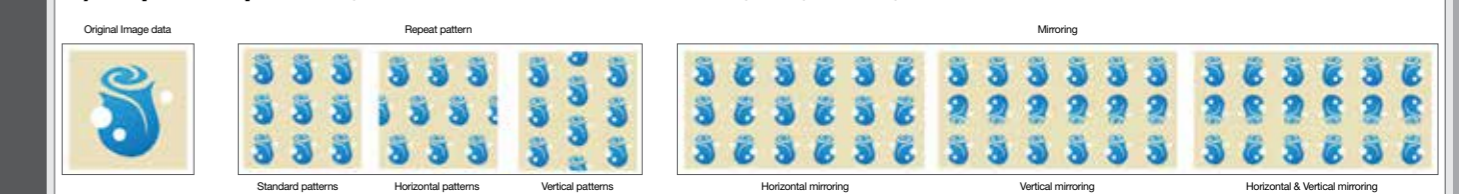
If ink is not being ejected, the light passes through.

Depending on the NCU data, the non-defective nozzles are automatically used as substitutes.

Defective nozzle

NCU / NCU / NRS

Uninterrupted Ink Supply System (UISS)
Two ink bottles per colour can be set with the UISS function. When an ink bottle runs out, another bottle of the same colour automatically starts supplying ink.