Mimaki®

Brand-new Hybrid Digital Textile Printer

Tx300P-1800 MkII

Ink set

One way (One ink mounting)

1	Direct sublimation	Sb420 (Bl, M, Y, K, Lbl, Lm)	4	Reactive dye	Rc400 (C, M, Y, K, Bl, R, Or, Lk)
2	Disperse dye	DD400 (C, M, Y, K, R, Gray, Violet, Pink)	5	Reactive dye	Rc500 (C, M, Y, K, Bl, R, Or, Lk)
3	Textile pigment	TP400 (C, M, Y, K, Bl, R, Lk)	6	Acid Reactive dye	Ac400 (C, M, Y, K, Bl, R, Or, Lk)

Hybrid (Two types ink mounting)

1	Dye sublimation (transfer)：Sb411 (Bl, M, Y, K) / Textile pigment: TP400 (C, M, Y, K)
2	Direct sublimation：Sb420 (Bl, M, Y, K) / Textile pigment : TP400 (C, M, Y, K)
3	Dye sublimation (transfer)：Sb411 (Bl, M, Y, K) / Direct sublimation：Sb420 (Bl, M, Y, K)

One way：Direct sublimation (Sb420) can be printed with 4 or 6 colors and Textile pigment (TP400) with 4 or 7 colors. The other ink types can be printed with 8 colors.
Hybrid：Possible to print 4 colors per ink type. *The combination of Direct sublimation (Sb420) + Dye sublimation (transfer) (Sb411) will be available at a later time.

Specifications

Item		Tx300P-1800 MkII
Printhead		On-demand piezo head (4 printhead in-line)
Print resolution (Depends on ink type)		360 dpi, 540 dpi, 720 dpi, 1,080 dpi, 1,440 dpi
Max. print width		1,920 mm (Textile) 1,940 mm (Paper)
Max. media width		1,920 mm (Textile) 1,950 mm (Paper)
Ink	Type/Color	4/6/7/8c (*)
		Direct sublimation : Sb420 (Bl, M, Y, K, Lbl, Lm)
		Disperse dye : DD400 (C, M, Y, K, R, Violet, Pink, Gray)
		Textile pigment : TP400 (C, M, Y, K, R, Bl, Lk)
		Reactive dye : Rc400/500 (C, M, Y, K, Lk, R, Bl, Or)
		Acid dye : Ac400 (C, M, Y, K, Lk, R, Bl, Or)
		Dye sublimation (transfer) : Sb411 (Bl, M, Y, K)
	Package size	2L Ink pack
Media thickness		1.0 mm or less
Media roll weight		40 kg or less
Media type		Natural fiber (Cotton, Silk, Hemp), Chemical fiber (Polyester, Nylon) *Excluding elastic media Paper
Certifications		VCCI class A, FCC class A, ETL UL 60950-1 ETL CE Marking (EMC, Low voltage, Machinery directive, and RoHS), CB, REACH
Interface		USB 2.0 Hi-speed / Ethernet 1000BASE-T
Power		Single-phase AC100 to 120V / AC200 to 240V 50/60Hz ± 1Hz
Power consumption		(AC100V) 1,440W×1, (AC200V) 1,920W×1
Operation environment		Temperature: 20 - 30 degC, Humidity : 35 - 65% Rh (Non-condensation)
Outer sizes (WxDxH)		3,200 × 965 × 1,857 mm (126.0 × 38.0 × 73.2 in)
Weight		260 kg (573.2 lb)

* The color number depends on the ink type and with/without Hybrid. In the case of Hybrid, four colors are applied for each ink type.

Options

Item	Code	Remark
Mist catch unit	OPT-J0396	
Small relay box	OPT-J0370	Interlock controller between a main unit and an external heater
Relay box2	OPT-J0407	For turning on/off the media drying heater by interlocking with printing operation
Slip sheet holder unit	OPT-J0405	Holder unit using for prevention of ink set-off
1 inch holder unit	OPT-J0399	Feeder unit for 1 inch-core media

Software

Either TxLink4 Lite or RasterLink6Plus is bundled under the selection at the time of your purchasing.

Professional RIP software with new features and more advanced for textile printing

TxLink4 Lite
TxLink4

◆ Color replacement function for Raster / vector data and CMYK / RGB images
◆ The "16 bit rendering" for super fine color gradation
◆ The "Parallel RIP " and the "Load balancing" for high work efficiency

Mimaki original RIP software which is highly functional and easier to operate.

RasterLink6 PLUS

◆ Intuitive and easy-to-understand operability "Icon display for quick recognition"
◆ Time saving by "registering favorites" operation setting

Representing faithfully the PDF data with transparent effect
◆ PDF data image with transparent effect is faithfully printable as the original.

Supplies

Item		Code
Direct sublimation ink Sb420 2L Ink pack ECO PASSPORT certified ink	Blue	I-SB420-BLD-2L-1
	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 2L Ink pack	Cyan	I-DD400-C-2L-1
	Magenta	I-DD400-M-2L-1
	Yellow	I-DD400-Y-2L-1
	Black	I-DD400-K-2L-1
	Red	I-DD400-R-2L-1
	Violet	I-DD400-V-2L-1
	Pink	I-DD400-P-2L-1
	Gray	I-DD400-G-2L-1
Textile pigment ink TP400 2L Ink pack	Cyan	I-TP400-C-2L-1
	Magenta	I-TP400-M-2L-1
	Yellow	I-TP400-Y-2L-1
	Black	I-TP400-K-2L-1
	Red	I-TP400-R-2L-1
	Blue	I-TP400-BL-2L-1
	Light Black	I-TP400-LK-2L-1
Reactive dye ink Rc400 2L Ink pack	Cyan	I-RC400-C-2L-1
	Magenta	I-RC400-M-2L-1
	Yellow	I-RC400-Y-2L-1
	Black	I-RC400-K-2L-1
	Light Black	I-RC400-LK-2L-1
	Red	I-RC400-R-2L-1
	Blue	I-RC400-BL-2L-1
	Orange	I-RC400-OR-2L-1
Reactive dye ink Rc500 2L Ink pack	Cyan	I-RC500-C-2L-1
	Magenta	I-RC500-M-2L-1
	Yellow	I-RC500-Y-2L-1
	Black	I-RC500-K-2L-1
	Light Black	I-RC500-LK-2L-1
	Red	I-RC500-R-2L-1
	Blue	I-RC500-BL-2L-1
	Orange	I-RC500-OR-2L-1
Acid dye ink Ac400 2L Ink pack	Cyan	I-AC400-C-2L-1
	Magenta	I-AC400-M-2L-1
	Yellow	I-AC400-Y-2L-1
	Black	I-AC400-K-2L-1
	Light Black	I-AC400-LK-2L-1
	Red	I-AC400-R-2L-1
	Blue	I-AC400-BL-2L-1
	Orange	I-AC400-OR-2L-1
Dye sublimation (transfer) ink* Sb411 2L Ink pack ECO PASSPORT certified ink	Blue	I-SB411-BLT-2L-1
	Magenta	I-SB411-MT-2L-1
	Yellow	I-SB411-YT-2L-1
	Black	I-SB411-KT-2L-1

Dye sublimation (transfer) (Sb411) can be used only in Hybrid.
The "ECO PASSPORT" authenticates the safety and security for chemicals used during the production of textile dyes / pigments and auxiliaries and finishing agents.

Item	Code	Remark
Flushing liquid 03 220ml	C-FL003-Z-22-1	Flushing liquid for head cleaning For One way (Excluding TP400) and for Hybrid (mounting Sb420/Sb411)
Flushing liquid 03 2L	C-FL003-Z-2L-1	Flushing liquid for ink replacement
Flushing liquid 12	C-FL012-Z-22-1	Flushing liquid for head cleaning For One way (TP400) and for Hybrid (mounting TP400)
Mist catch filter	SPC-0810	Filter for OPT-J0396 Mist catch unit

Ultimate Advantage

Both textile and paper printing is available with a single printer unit.

Brand-new Hybrid Digital Textile Printer

Tx300P-1800 MkII

Ultimate Printer playing two roles in one, available for both textile and paper

Tx300P-1800 from Mimaki splendidly reproduces rich color gradation and delicate sophisticated lines in textile printing. In Tx300P-1800 MkII, these capabilities have been taken to a new level, and long-awaited print on paper is now available with the "hybrid ink capability" which is another unique feature of this series.

As Dye sublimation ink (transfer) for printing on transfer paper has been added, you can now select from 3 types of ink sets; "Dye sublimation ink (transfer) + Textile pigment ink", "Dye sublimation ink (transfer) + Direct sublimation ink", "Direct sublimation ink + Textile pigment ink".[*1][*2]

Enabling print on paper will expand the possibilities of new materials and applications drastically.

*1: It is possible to load only one ink as with conventional models.
*2: The combination of "Dye sublimation ink (transfer) + Direct sublimation ink" is to be supported later.
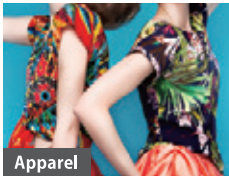
(The image shows a condition of print on paper.)

Hybrid

- Able to manage to use **two types of ink** properly in response to your needs.
- Available to print on **both paper and textile** with a single printer unit.
- Possible to create printed fabric simply **with your existing processing** equipment only such as heat press etc.

Hybrid ink set
(Two types of inks can be loaded at the same time.)

| Sports apparel | Fashion apparel | Wall paper | Poster | Soft sign |

One way and Hybrid are available.

One way

- Versatile use and ink type for direct printing in accordance with material and purpose.
- Four colors for high **productivity** Six/seven/eight colors for **superior expressiveness.**
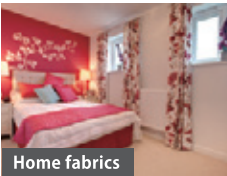
One way ink set (1 type of ink is loaded)

| Apparel | Silk product | Fashion articles | Home fabrics | Car seat | Soft signage |

Service engineers are no longer needed.

You can easily replace platens to suit the media type (textile or paper).

Ink receiving spacer (for textile)	
Platen (for paper media)	

Media conveyance route

→ Media route

| For textile | For paper |

Print speed (Hybrid ink set)

4C Direct sublimation ink (Sb420)

	ml/h
High speed 540x360 6p Bi Hi	25
Standard 720x720 8p Bi Hi	18
High quality 720x1080 18p Bi Hi	9

0 5 10 15 20 25 35 ml/h

4C Dye sublimation (Transfer) ink (Sb411)

	ml/h
High speed 540x360 6p Bi Hi	25
Standard 720x720 8p Bi Hi	18
High quality 720x1080 18p Bi Hi	9

0 5 10 15 20 25 35 ml/h

4C Textile pigment ink (TP400)

	ml/h
High speed 540x720 6p Bi Hi	10
Standard 720x720 12p Bi Hi	7
High quality 720x1080 18p Bi Hi	4

0 2 4 6 8 10 12 ml/h

In comparison with One way of four colors set, the ink set of Hybrid of Direct sublimation and Textile Pigment reduces the number of loaded heads for respective ink colors, and thus slows down printing and makes a slight difference in the color tones.
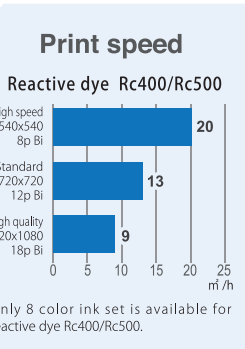
Rich variety of ink types in One way for any printing application
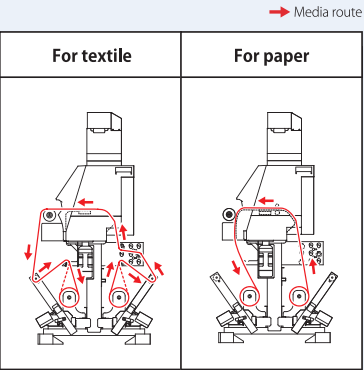
Ink type	Color	Feature	Media(Textile)	Pre-treatment	Post-treatment	Application example
Direct sublimation Sb420	Bl, M, Y, K, Lbl, Lm	Ink for direct sublimation print. It allows to print directly onto textile.[*1]	Polyester	Necessary	Heating / Washing	Soft signage / Sports apparel / Fashion apparel
Disperse dye DD400	C, M, Y, K, R, Violet, Pink, Gray	High color fastness is achieved by dispersing dye particles in water with dispersant and heating at a high temperature to fix the color.	Polyester / Nylon	Necessary	Steaming (heat + water) / Pressure treatment / Washing	Industrial textile / Home fabrics / High-class apparel
Textile pigment TP400	C, M, Y, K, R, Bl, Lk	Ink containing binder (bonding agent) to fix the pigment to fibers by applying heat. As this ink requires only the heat-fixing process after print, the post-process equipment can be simplified.[*1,2]	Cotton / Hemp / Other textiles [*3]		Heating	Apparel / Home fabrics / Fashion articles
Reactive dye Rc400,Rc500	C, M, Y, K, Lk, R, Bl, Or	It provides excellent color development and color reproducibility. Combination of dyestuff molecules and fibers delivers superior water resistance, scratch resistance, and light resistance.	Cotton / Hemp / Silk / Rayon	Necessary	Steaming (heat + water) / Washing	Apparel / Home fabrics
Acid dye Ac400	C, M, Y, K, Lk, R, Bl, Or	Property of acid is utilized to vividly dye animal-based materials such as wool, leather and silk as well as nylon and other protein-based man-made fibers.	Wool / Leather / Silk / Nylon	Necessary	Steaming (heat + water) / Washing	Apparel / Home fabrics

Print speed

Reactive dye Rc400/Rc500

	ml/h
High speed 540x540 8p Bi	20
Standard 720x720 12p Bi	13
High quality 720x1080 18p Bi	9

0 5 10 15 20 25 ml/h

Only 8 color ink set is available for reactive dye Rc400/Rc500.

*1: Post-processing such as steaming and washing may be necessary depending on the print conditions.
*2: Beautiful results can be achieved even in high-density color print by performing pre-processing.
*3: It is available to print other textiles than cotton / hemp with pre-treatment. Be sure to make a test print in advance.

Versatile ink combination in Hybrid

| Ink type		Color	Feature	Media(Textile/Paper)	Pre-treatment	Post-treatment	Application example
Ink set 1	Dye sublimation (transfer) ink Sb411	Bl, M, Y, K	Transfers the printed transfer paper in close contact with the media without any pre-treatment. Excellent color development and color reproducibility.	After printing on transfer paper, transferring to polyester		Heating	Soft sign / Sports apparel / Fashion apparel
	Textile pigment ink TP400	C, M, Y, K	Ink containing binder (bonding agent) to fix the pigment to fibers by applying heat. As this ink requires only the heat-fixing process after print, the post-process equipment can be simplified.[*1,2]	Direct printing on cotton, hemp, others (textile[*1]) and paper		Heating	Apparel / Home fabrics / Fashion articles / Wall pape / Poster
Ink set 2	Direct sublimation ink Sb420	Bl, M, Y, K	Ink for direct sublimation print. It allows to print directly onto textile.[*1]	Direct printing on polyester	Necessary	Heating / Washing	Soft sign / Sports apparel / Fashion apparel
	Textile pigment ink TP400	C, M, Y, K	Ink containing binder (bonding agent) to fix the pigment to fibers by applying heat. As this ink requires only the heat-fixing process after print, the post-process equipment can be simplified.[*1,2]	Direct printing on cotton, hemp, others (textile[*1]) and paper		Heating	Apparel / Home fabrics / Fashion articles / Wall pape / Poster
Ink set 3[*4]	Dye sublimation (transfer) ink Sb411	Bl, M, Y, K	Transfers the printed transfer paper in close contact with the media without any pre-treatment. Excellent color development and color reproducibility.	After printing on transfer paper, transferring to polyester		Heating	Soft sign / Sports apparel / Fashion apparel
	Direct sublimation ink Sb420	Bl, M, Y, K	Ink for direct sublimation print. It allows to print directly onto textile.[*1]	Direct printing on polyester	Necessary	Heating / Washing	Soft sign / Sports apparel / Fashion apparel

*1: Post-processing such as steaming and washing may be necessary depending on the print conditions. *2: Beautiful results can be achieved even in high-density color print by performing pre-processing.
*3: It is available to print other textiles than cotton / hemp with pre-treatment. Be sure to make a test print in advance
*4: The ink set 3 is to be supported later.

Mimaki's print technologies

Mimaki Advanced Pass System 4 (MAPS4) reduces banding

Mimaki's unique anti-banding technique MAPS4* is an advanced version of MAPS3. To prevent banding, swath boundaries are overprinted, whereas boundaries prone to banding are printed with fewer ink droplets.

*MAPS4: Mimaki Advanced Pass System 4

■ MAPS : ON   ■ MAPS : OFF
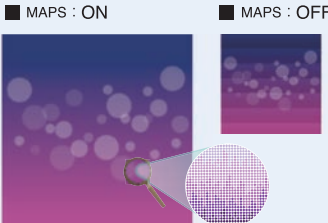
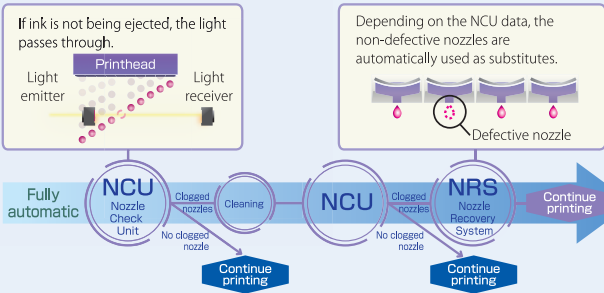### Superior inkjet technology

Mimaki's superior inkjet technology accurately places the ink droplets without losing their perfect circularity. This ensures that texts, lines, and edges are clearly and sharply printed.

■ No waveform control   ■ Waveform control applied
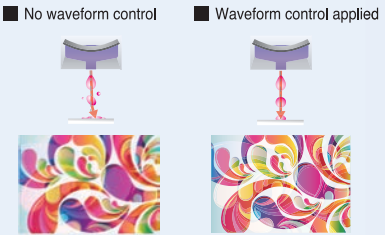
Uninterrupted printing solutions

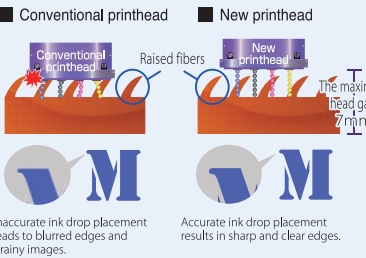### Continuous operation support pack minimizes the downtime

The Nozzle Check Unit (NCU) detects nonfunctioning nozzles and automatically cleans them. If the nozzles fail to operate after cleaning, defective nozzles are replaced by non-defective ones until a technician arrives, and printing is continued. This feature enables uninterrupted print operations and continuous productivity.

If ink is not being ejected, the light passes through.

Light emitter — Printhead — Light receiver

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

Defective nozzle

Fully automatic → NCU Nozzle Check Unit → No clogged nozzle / Clogged nozzles Cleaning → NCU → No clogged nozzle / Clogged nozzles → NRS Nozzle Recovery System → Continue printing

Continue printing   Continue printing

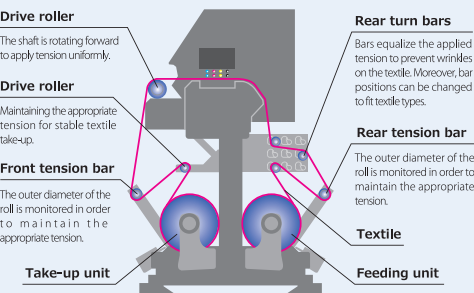## Ultimate design for usability ensuring high-quality production

New printhead allows printing on various types of textile

While printing on raised fiber surface textiles, a high head gap setting is required to prevent contact between the printhead and the nap. In conventional models, such gap conditions reduce the accuracy of ink droplet placement. However, the new printhead ejects ink droplets at a high speed to maintain the straightness of the droplet direction, and accordingly accurate ink droplet placement is achieved. This enables high-quality printing on napped textiles.(Recommended head gap : 3mm)

■ Conventional printhead   ■ New printhead

Conventional printhead / Raised fibers / New printhead / The maximum head gap: 7mm

Inaccurate ink drop placement leads to blurred edges and grainy images.

Accurate ink drop placement results in sharp and clear edges.

Reliable textile feeding mechanism ensures stable printing

Tx300P-1800 MkII can detect automatically changes in tension caused by media roll diameter varying to adjust the tension with a tension bar. Since the tension of media is kept constant, the textile feeding is stable even in high-speed printing and long-length printing to contribute in high-quality printing.

Drive roller
The shaft is rotating forward to apply tension uniformly.

Drive roller
Maintaining the appropriate tension for stable textile take-up.

Front tension bar
The outer diameter of the roll is monitored in order to maintain the appropriate tension.

Rear turn bars
Bars equalize the applied tension to prevent wrinkles on the textile. Moreover, bar positions can be changed to fit textile types.

Rear tension bar
The outer diameter of the roll is monitored in order to maintain the appropriate tension.

Textile

Take-up unit   **Feeding unit**

Standard features of MBIS3 and UISS deliver continuous printing for a long time.

Large two liter ink packs are installed in MBIS3*1 for long-time continuous printing to reduce operating cost.
As soon as one ink container is empty, UISS*2 automatically provides ink from another container without any interruption to printing.
These systems supply ink continuously to ensure unattended continuous printing.

*1 MBIS3: Mimaki Bulk Ink System3
*2 UISS: Uninterrupted Ink Supply System
*3 UISS functions with 4-color operation.

Ethernet supported!
- Establish free and efficient work environment -

More free and efficient work-site environment can be put in place, by editing data using any PC in your office, then sending print data directly to a printer in your work operation site, for example.