TxLink3 Professional

High-performance software RIP produces a new color expression

For TEXTILES & APPAREL

High-speed 1.8-m wide-format Direct-to-Textile Printer

MM700-1800B

Mimaki™

Color re-creation function

Wide range of color re-creation with Raster , Vector data, CMYK and RGB image. Specified color amount and laboratory values are ideally expressed. It can cope with colors configured in color patch.
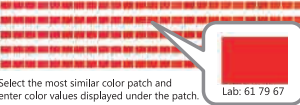
Closer to desired color

Color re-creation function converts the printed and attempted color, when they are different, closer to the ideal color.

Print Similar Colors

Similar color chart

Select the most similar color patch and enter color values displayed under the patch.
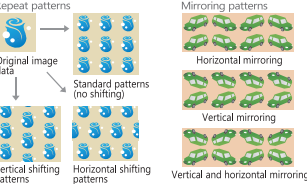
Lab: 61 79 67

This function allows you to find appropriate color values for the target color. A similar color chart can be printed using the "Print Similar Colors" tool in the "Swatch Books" and "Named Colors" dialog boxes.

### Color replacement on raster data broadens the range of colors

Color replacement is critical for textile printing. The TxLink3 offers simple color replacements on raster and vector data as well as the ability to produce different color patterns. Various color replacement functions can represent desired colors.

Step and repeat

Repeat patterns

Original image data

Standard patterns (no shifting)

Vertical shifting patterns

Horizontal shifting patterns

Mirroring patterns

Horizontal mirroring

Vertical mirroring

Vertical and horizontal mirroring

One large seamless pattern can be created from smaller image data. Furthermore, several shifting and mirroring patterns are provided to add design variation.

Multicolor profile creation

Without multicolor profile

With multicolor profile (blue & orange)
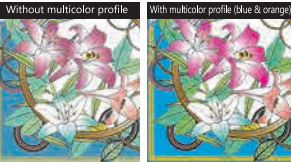
A multicolor profile for CMYK and spot colors (blue, red, orange, and other colors) can be created. The profile is created automatically by following the wizard. Users only have to print and measure* the color chart.

*Before measuring the color, please fix the color by heating. A colorimeter is not a standard feature of TxLink3.

Color combine
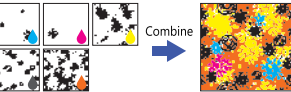
Combine

This function assigns color to each separated image data set* and combines them into a single image data set. Colors can be assigned from color values, the swatch book, and measured colors. The stacking order of layers is easily changed.

* Image data that is separately created for each color.

Exceptional Speed and Quality with High Stability

Specifications

Item		MM700-1800B
Printhead		Drop on-demand piezo inkjet technology (16 printheads: 4 in-line printheads are arranged in 4 staggered lines)
Print resolution		300 dpi, 600 dpi, 900 dpi, 1,200 dpi
Maximum print width		1,800 mm (70.9 in)
Maximum media width		1,800 mm (70.9 in)
Ink	Type/Color	Reactive dye ink: Rc600 (C,M,Y,K,Or,Bl,Lm,Lk) Sublimation dye ink: TBD Textile pigment dye ink: TBD Acid dye ink: TBD
	Package size	20 L ink pack
Media thickness		5 mm or less
Roll media weight		200 kg or less (total weight after printing, including the ink that was printed)
Certifications		UL/CSA60950-1 / CE Marking (Machinery directive, EMC / RoHS)
Interface		Ethernet
Power supply		3-phase AC200 V±10% 103.3 A or 3-phase AC400 V±10% 93.6 A, 50/60 Hz±1 Hz
Power consumption		3-phase AC200 V: 34.8 kVA 3-phase AC400 V: 64.8 kVA
Operational environment		Temperature: 20 °C – 26 °C (68 °F – 78.8 °F) Humidity: 30% – 60% Rh (non-condensing)
Dimensions (WxDxH)		5,200 × 5,750 × 2,000 mm (204.7 × 226.3 × 78.7 in)
Weight		Feeding unit: 1,500 kg (3,306.9 lb), Main Body: 6,500 kg (14,330 lb), Drier / Winder unit 1,160 kg (2,557.3 lb), Additional Drier Heater: 891 kg (1,964.3 lb)

Exceptional Speed and Quality with High Stability

To meet the diverse tastes and preferences in the textile and apparel markets, printing methods are rapidly shifting from analog to digital. The MM700-1800B is a direct-to-textile digital inkjet printer capable of accommodating high-mix low-volume production, still enabling large-lot printing. Its many features ensure reliable production and excellent print results at high speeds.
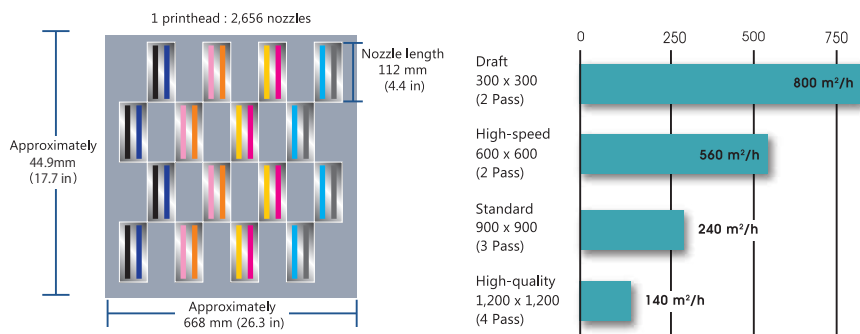
A best-in-class print speed: 800 m²/h

New head for high speed printing

The MM700-1800B employs 16 printheads arranged in four staggered lines to achieve a best-in-class print speeds of 800 m²/h (*1) and 560 m²/h (*2) in draft and standard modes, respectively.
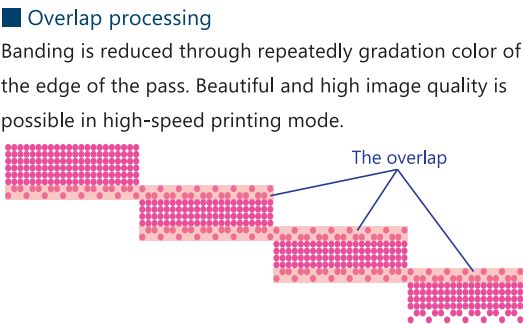
*1: 800 m²/h: 8-color, Draft mode, 300 × 300 dpi, 2-pass
*2: 560 m²/h: 8-color, Standard mode, 600 × 600 dpi, 2-pass

1 printhead : 2,656 nozzles
Nozzle length 112 mm (4.4 in)
Approximately 44.9mm (17.7 in)
Approximately 668 mm (26.3 in)

Mode	Speed
Draft 300 x 300 (2 Pass)	800 m²/h
High-speed 600 x 600 (2 Pass)	560 m²/h
Standard 900 x 900 (3 Pass)	240 m²/h
High-quality 1,200 x 1,200 (4 Pass)	140 m²/h

Speed and beauty, achievable printing technology

■ Belt meandering and belt feeding amount correction functions
Meandering sensor allows straight and accurate textile transportation even during high-speed printing. In addition, high degree accuracy control of the textile feeding, 2-pass, high-quality print without banding is possible.

■ Overlap processing
Banding is reduced through repeatedly gradation color of the edge of the pass. Beautiful and high image quality is possible in high-speed printing mode.

The overlap

Stable and Reliable Operation

### Excellent, reliable textile transportation mechanism

Direct-to-textile print requires high accuracy and a reliable textile transportation system.
Wrinkles or drapes occasionally occur on textile when conventional textile transportation systems are used. The MM700-1800B is equipped with a drive roller bar that pastes and flattens the textile onto an adhesive transportation belt without wrinkling or draping by moving synchronously with the belt drive.

The pressure roller pastes and flattens the textile onto the adhesive transportation belt without wrinkling or draping by moving back and forth synchronously with the belt drive.

Wrinkling   Pressure roller   Printhead
Belt conveying unit
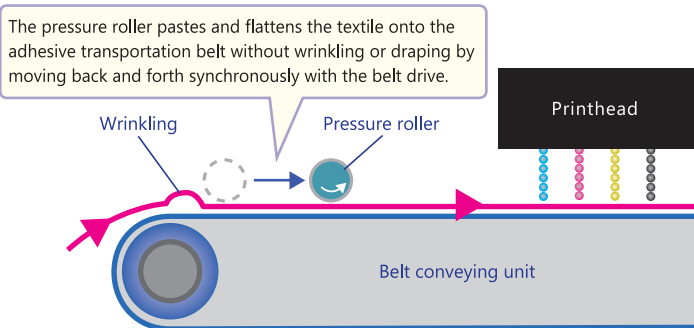
The wrinkle sensor prevents printer problems

The wrinkle sensor detects the wrinkles or drapes occurring in the textile and immediately stops printing to avoid printhead strikes.

Wrinkle sensor
Textile feeding direction
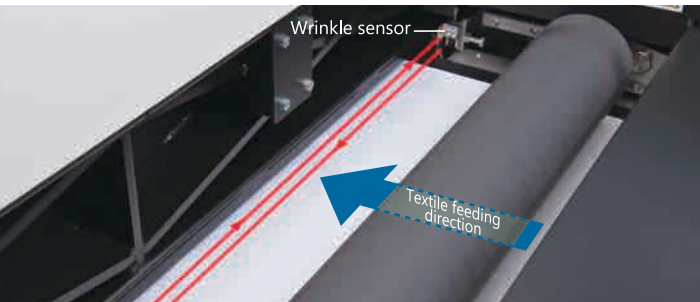
The jam sensor reduces damage to printheads

A highly sensitive sensor attached to the printhead detects even a slightly wrinkled or draped textile surface and prevents a printhead strike or a media jam, thereby reducing printhead damage.
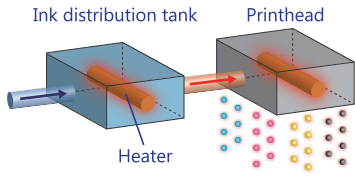
Jam sensor
Printhead
Wrinkling
Jam sensor
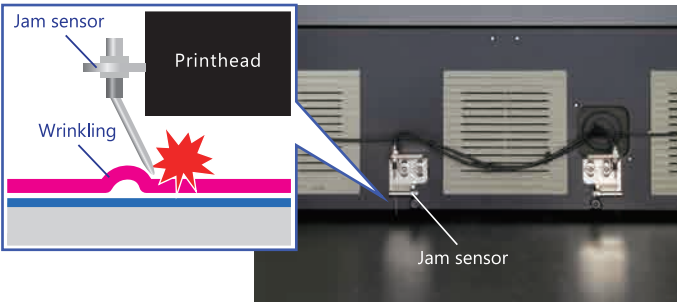
Worry-free operation

20-liter ink packs extend the continuous print operation time

20-liter large-capacity ink packs. The large ink packs ensure longer unattended operation and extended large-lot printing.

Temperature adjustment system increases the head performance

Two-stage temperature control system: a standard for ink distribution tank and head internal heater. Maintaining the optional ink viscosity and a stable ink discharge amount in high-speed printing achieves head performance.

Ink distribution tank   Printhead
Heater

Wide touch panel display

21.5-inch-wide touch panel display provides simple and easy-to-read printer operation status.

Four ink types are available to accommodate a wide range of materials

Four ink types* are provided to suit a wide range of applications. The large-capacity 20-liter ink packs support high-speed printing.

Type	Color	Characteristic features	Applications	Compatible materials	Note
Reactive	C, M, Y, K, Or, Bl, Lm, Lk	Molecules of dyes and fibers are stabilized by covalent binding and deliver high color fastness to water, rubbing and light. This ink reproduces accurate colors vibrantly.	Apparel, Home furnishing	Cotton, hemp, silk, rayon and other materials	
Sublimation	TBD	Dedicated ink for direct sublimation printing. Transfer paper is not required.	Soft signage	Polyester	Available in the future
Pigment	TBD	Only a heating process is needed for color fixation. Post processes are remarkably simplified because steaming, washing and drying are not required.	Home furnishing	Cotton, hemp and other materials	Available in the future
Acid	TBD	Excellent vibrant color reproducibility on animal fibers, and on synthetic protein fibers like nylon.	Apparel, Home furnishing	Wool, leather, silk, nylon and other materials	Available in the future

* One ink type can be selected at the time of purchase to be loaded to the printer; please note that the ink type cannot be changed once it is loaded.

Mimaki genuine unit

Feeding unit

This unit applies the appropriate tension to the textile to ensure stable textile feeding while using an air brake and a dancer bar.

Additional drying heater

To prevent an ink set-off while taking up the textile, the additional heater shortens the ink drying time even at high speed printing with high ink density.

Drier, Winder unit

■ Winder Equipment
A stable winding movement enables the taking up of the textile at high speeds without skewing.

■ The standard drying heater
The heater accelerates ink drying on the textile after printing.*
* Note that the heater may not completely dry the ink if a large amount of ink is applied.

Camera calibration

The camera monitors the distance of the textile feed advancement. The amount of textile feeding is optimized, which therefore improves the accuracy of the dot placement.