

Printable Fabric And Handling

This manual explains printable fabric, handling method, and precaution.

Please read this manual before use the printer.

Types of fabric that can be used

The types of fabric that can be used with this printer is “Roll” and “Leaf (Cut)” fabric.



- When using the Leaf, be sure that following functions are disabled.
[Feeding] [Take-Up] [Spiral Rlr][Peeling Rlr]

Sizes of fabric that can be used

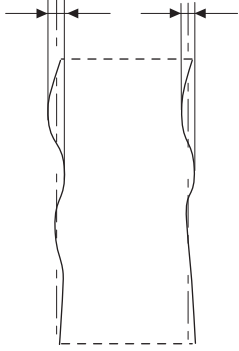
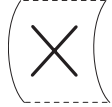
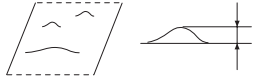
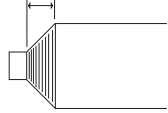


Maximum	1650 mm
Minimum	200 mm
printing width	1620 mm
Thickness	7 mm or less
Roll outside diameter	Ø 270 mm or less
Roll weight	38 Kg or less
Roll inside diameter *	Between 3 to 2 (1.35) inches
Printing surface	Both outward and inward are available
Take-up direction	Both Faces in and Face out are available
Roll end fixation	Light-adhesive tape, which can be removed from the core with ease.

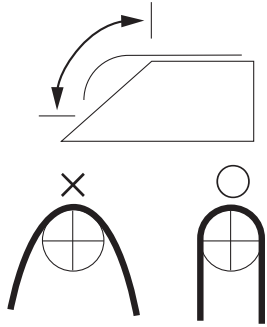
* In case of roll weight more than 5 kg, the diameter shall be 2 inches or more.

Precautions in Handling the Fabric

The following explains how to handle applicable fabric. Observe the following conditions to use this device according to the type and characteristic of the fabric used.

Fabric conditions which enable to print

Item	Condition	Remarks
Width variation	less than $\pm 5\text{mm}$ / one side edge	 A vertical fabric strip is shown with a dashed rectangular outline. Two horizontal double-headed arrows at the top indicate the width at the top and bottom edges. The fabric strip itself is slightly wider at the top and narrower at the bottom, with wavy lines indicating its irregular shape.
Curve when expanded	One-direction curve not allowed	 A dashed rectangular outline represents a fabric strip. Inside, a large 'X' is drawn, indicating that a one-direction curve is not allowed.
Slack height when expanded on a flat surface	2mm or less	 Two diagrams are shown. The left one shows a fabric strip with a wavy line representing slack height. The right one shows a cross-section of a fabric strip with a vertical line and a horizontal line indicating the slack height measurement.
Displacement of roll edge	$\pm 20\text{mm}$, $\pm 2\text{mm}$ for less than 50 mm width fabric	 A diagram of a roll of fabric. A vertical line indicates the edge of the roll, and a horizontal line with a double-headed arrow indicates the displacement of the edge from a reference point.
Inner diameter of roll	2~3 inches	
Fabric core strength	Roll bend of 5mm or less when set (with a fabric core thickness of 5mm or more)	 A diagram of a roll of fabric. A vertical line indicates the center of the roll, and a horizontal line with a double-headed arrow indicates the roll bend measurement.
Length of fabric core exposure from fabric	20mm or more	 A diagram of a roll of fabric. A vertical line indicates the core, and a horizontal line with a double-headed arrow indicates the length of the fabric core exposure from the fabric.

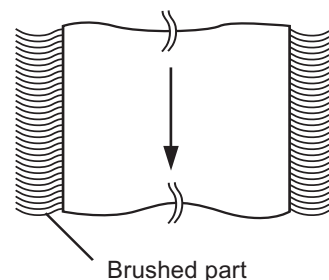
Item	Condition	Remarks
Fixation with fabric core	Tape at up to 3 points or weak adhesion	
Roll outer diameter	Ø270mm or less	
Roll weight	38kg or less	
Print side	Not specified	
Fabric wrinkle	Not allowed	
Hardness	The fabric is twine around the upper part of the peeling roller, not greater than 100mm in JISL1096 cantilever method.	

Carefully observe the following when handling the fabric.



- Pre-processing of fabric
Use pre-processed fabric recommended by MIMAKI.
- Fabric thickness
When setting the fabric, be sure to adjust the head height. Other wise, the fabric and/or the head can be damaged.
- Curled fabric
Do not use fabric with curled edges.
Use of such a fabric may cause contact with the print head nozzle, resulting in inferior ink discharge.
- Do not use fabric whose edges are remarkably loose in comparison with the center. Crease occurs at the fixing section, which may come into contact with the head nozzle face.
- Thick hard fabric cannot be used for unattended operation. When using a denim-like fabric, skew check must be performed by the operator. Once skew starts, the self-restoration action of the fabric itself is disabled. If the fabric is neglected, skew advances to the right or left end of the belt which may cause head jam.
- In case pre-processing of fabric is too hard, it is unable to wind with the peeling roller. Therefore the fabric will slip on the roller and not transfer on the belt properly.
- Brushed fabric is unavailable for Fabric edge guide. The peeling sensor react to the brushed part, and not able to feed fabric properly.

Example of brushed fabric



Appropriate Condition For Feeding Fabric (Table below shows recommended setting. Depend on the pre-processing condition, change the setting to match the fabric)

	Fabric/Weave etc	Setting				Fabric condition		Note
		Spiral roller	Curved bar	Feeding tension bar	Peeling roller	Center loose	pre-processing ^{*4}	
1	Cotton Satin	ON	Straight	Tension bar	Standard	None	Normal	
2	Cotton Satin	ON	Straight	Tension bar	Standard	None	Normal	Cantilever method:80 to 90mm
3	Cotton broad	ON	Straight	Tension bar	Standard	None	Normal	
4	Cotton gauze thick	ON	Straight	Tension bar	Standard	None	Normal	t=0.4
5	Cotton voil 50S	ON	Straight	weight -5 pieces	Standard	little	Soft-Normal	
6	Silk crepe de Chine	ON	45degree ^{*2}	Tension bar	Standard	a lot	Normal	Center loose occur a lot
7	Silk T will	ON	45degree ^{*2}	Tension bar	Standard	little	Normal-Hard	China, Center loose occur
8	Silk Puresilk good	ON	Straight	weight -5 pieces	Standard	None	Normal	
9	Silk 6 Monme chiffon	Through ^{*1}	Straight	weight -5 pieces	Standard	None	Normal	Standard peeling roller is slippery
10	Polyester organdy	ON	Straight	Tension bar	Sand paper #150	little	Normal	Standard peeling roller is slippery. Gumming part is short ^{*5}
11	Polyester pongee	ON	Straight	Tension bar	Standard	None	soft-Normal	
12	Polyester Satin	ON	Straight	Tension bar	Standard	None	Normal	
13	Polyester	ON	Straight	Tension bar	Standard	None	Normal-Hard	300denier, t=0.25
14	Polyester crepe	ON	Straight	weight -5 pieces	Standard	None	soft-Normal	
15	Polyester	ON	Straight	Tension bar	Standard	None	Normal	
16	Polyester chiffon georgette	ON	Straight	weight -5 pieces	Standard	None	soft-Normal	
17	Silk/Wool blend (S90W10)	ON	Straight	Tension bar	Standard	little	Normal-Hard	Center loose occur a little
18	Cotton sheeting gauze knit	(ON)	Straight	weight -5 pieces	Standard	None	Normal	Recommend peeling roller[through]
19	Cotton sheeting knit	ON	Straight	weight -5 pieces	Standard	None	Normal	
20	Lycra (stretch)	ON	Straight	weight -5 pieces	Standard	None	Normal	
21	Spandex (stretch)	ON	Straight	weight -5 pieces	Standard	None	soft-Normal	
22	Spandex (stretch)	Through ^{*1}	Straight	weight -6 pieces	Standard	None	Soft	
23	Polyester thin stretch	Through ^{*1}	Straight	weight 7 pieces (near equal0)	Standard	None	soft-Normal	

Fabric Not Adequate To Feeding (Table below shows recommended setting to feed the not adequate fabric)

	Fabric/Weave etc	Setting				Fabric condition		Note
		Spiral roller	Curved bar	Feeding tension bar	Peeling roller	Center loose	pre-processing	
1	Cotton Satin	ON	Straight	Tension bar	Standard	a lot	Hard	(To cut the gumming part is best) center loose occur a lot. Gumming part is stained and woven.
2	Cotton gauze	Through	Straight	weight 7 pieces (near equal0)	Standard	a lot	Hard	Wave occurs a lot and largely
3	Cotton denim	ON	Straight	Tension bar	Standard	None	Normal	Fabric is stiff and once skew starts, do not stop

^{*1} Spiral roller "through" : Not able to roll the fabric around to a Spiral roller

^{*2} Curved roller "45 degree" : Rotate the curved bar 45 degree from the position of curved bar is not contact with fabric

^{*3} Peeling roller "sand paper#150" : Fabric slips easily on the peeling roller. Use the attached sand paper#150 by rolling around the peeling roller.

^{*4} Pre-process : "Hard" Cantilever method:75 to 100mm, "Normal" : 50 to 60mm, "Soft" : 40mm or less (Example/ A4PPC : about 150mm)

^{*5} Gumming part is short :Center is loose a little

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