

# DS Series

DS-1600 DS-1800

Mimaki

## Direct Dye-Sublimation System

"Print quality is up, costs come down,  
DS series came to get the answer: Direct Print onto media"

"Introducing a high resolution system which is more ecologically friendly and provides more efficient operation as compared to traditional sublimation transfer systems."



### High, sharp print quality

Direct printing provides fine lines and sharp edges compared to using transfer system.

### Environmental-friendly

No need to use transfer paper.

### Reduced cost

This system requires no transfer paper or liner paper. Its running costs are much lower than the cost of traditional transfer systems.

### Improved efficiency of the operation

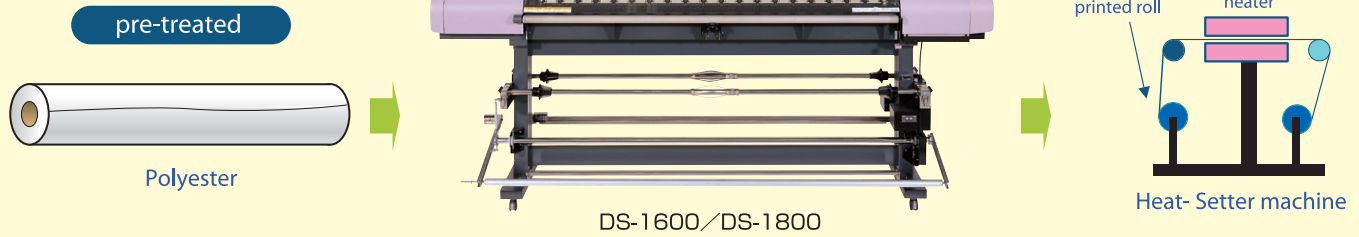
The system avoids cockling of printed transfer paper and mistakes made by wrinkling transfer paper when transferring the ink onto fabric.



## Direct dye-sublimation printing system

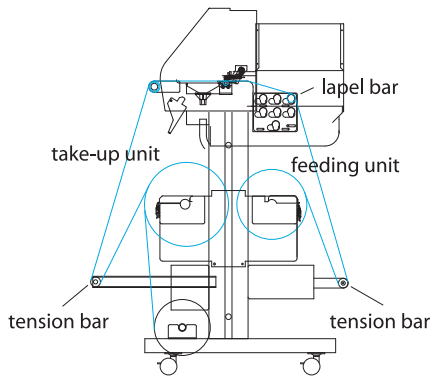
Print

post-treatment



### Equipped with media take-up device and media feeder with a dancer roller

The tension bar moves up and down to adjust proper feeding. Suitable for continuous operation.



### Fabric supply mechanism

In addition to the drive roller and friction roller, the take-up unit and feeding unit with a dancer roller cause tension in the fabric to prevent it from wrinkling. The fabric retainer holds both edges of the fabric preventing it from touching the print head.



### Ditch for penetrated ink

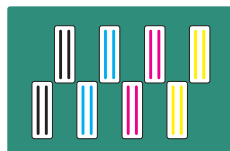
In order to prevent ink from penetrated the fabric from marking other fabrics, a ditch is available.



### High-speed print heads

The head configuration employs array of two staggered print heads.

1-way (single ink set) for fast printing and 2-way (dual ink set) for multipurpose printing are available. In addition both print modes can use either high speed print of 4-color or high quality print of 6-color.



### Specifications

Item	DS-1600	DS-1800	
Printing head	Method	Piezo-electric drop on demand	
	Nozzle configuration	Eight heads (4 x 2 lines, stagger arrangement)	
	Number of nozzles	<6-color print> 1-way: 360 nozzles 2-way: 180 nozzles <4-color print> 1-way: 720 nozzles 2-way: 360 nozzles	
Resolution	360, 540, 720 dpi		
Maximum printing width	1620mm (63.7")	1850mm (72.8")	
Head height adjustment	1.2mm (0.04") to 10mm (0.39")		
Print Modes 1*)	6-color printing	360 x 360 dpi : 2/4/8 passes, unidirection/bidirection	
		360 x 540 dpi : 3/6/12 passes, unidirection/bidirection	
		360 x 720 dpi : 4/8/16 passes, unidirection/bidirection	
	4-color printing	360 x 360 dpi : 1/2/4 passes, unidirection/bidirection	
		360 x 540 dpi : 3/6/12 passes, unidirection/bidirection	
		360 x 720 dpi : 2/4/8 passes, unidirection/bidirection	
Ink type	Sublimation dye ink	Color (black, cyan, magenta, yellow, light cyan, light magenta)	
	Textile pigment ink	Color (black, cyan, magenta, yellow)	
Ink volume	6 color print	1-way: 220cc x 2/color, 2-way: 220cc x 1/color 2*)	
	4 color print	1-way: 220cc x 4/color, 2-way: 220cc x 2/color	
Fabric	Type	Polyester / Cotton 3*)	
	Width	200mm (7.8") - 1650mm (64.9")   200mm (7.8") - 1900mm (74.8")	
	Thickness	less than 7mm (0.27")	
	Outside diameter	less than ø 250 mm (9.84")	
	Roll weight	less than 30kg (66lbs)	
	Roll inside diameter	1.5" - 3"	
	Printing surface	Printing can be made on either side	
	Roll end treatment	Light adhesive tape is used to allow the paper to be removed	
	Margin (roll fabric)	10mm (0.39") ± 0.5mm (0.01"), left side and right side	
	Interface	IEEE 1394, IEEE 1284	
Command	MRL-1E (ESC/PV.1 base) Mimaki original command		
Operational environment	Temperature	15 °C ( 55°F ) - 30 °C ( 86°F )	
	Humidity	35 - 65 % Rh ( no condensation )	
Power	AC 100 - 240 V ± 10% ( auto voltage ), 50/60 Hz ± 1 Hz		
Power consumption	less than 500W		
Weight		230kg (507lbs)   250kg (551lbs)	
	Width	2750mm (108.3")   3040mm (119.7")	
Outside dimensions	Depth	940mm (37.0")	
	Height	1350mm (53.2")	

1\*) Some combinations of pass drawing direction, scan speed and resolution may not be supported.

2\*) capacity of textile pigment ink cartridge is 210cc.

3\*) Any fabric that expands/shrinks with moisture or stretches cannot be used.

Specifications are subject to change without notice due to technical improvements, etc.  
DS18V1.0106

## MIMAKI ENGINEERING CO., LTD.

2182-3 Shigeno-otsu, Tomi-city, Nagano 389-0512, Japan  
Tel: +81-268-78-2288  
trading@mimaki.jp www.mimaki.co.jp

## MIMAKI USA, INC.

150 Satellite Boulevard, suite A, Suwanee, Georgia 30024, U.S.A  
Atlanta +1-888-530-3988 Boston +1-888-530-3986  
Los Angeles +1-888-530-3987 Chicago +1-888-530-3985  
www.mimakiusa.com

## MIMAKI EUROPE B.V.

Stammerdijk 7E,  
1112 AA Diemen, The Netherlands  
Tel: +31-20-4627-640  
www.mimakieurope.com