

C h e n i l l e e m b r o i d e r y m a c h i n e

TCMX series

www.tajima.com



Multi-head Automatic Embroidery Machine

TCMX series Chenille embroidery machine

Integration of Tajima's know-how and the most advanced technologies creates higher value added products.



TCMX 600 Series

Multi-head embroidery machines, specialized for chenille embroidery, in the pursuit of high speed, quietness and productivity. Stable stitching is available at the industry's fastest speed of 750rpm in lineup up to 23 heads!



TCMX Mixed-Type Series

A Mixed type series to increase production efficiency and open the way to versatile embroidery expressions! Chenille embroidery and standard embroidery have been brought together in one embroidery machine. A chenille embroidery head is coupled with a standard embroidery head in a pair (available up to 15 pairs).



TCMX - 601

Single-head model, using the same technologies as the multi-head models. Space-saving and best suited for small lot production!



Chenille embroidery

■ High-speed operation at 750 rpm has been brought to reality.

High-speed operation at 750 rpm (in comparison with our previous specification of 600 rpm) has drastically increased productivity.

■ Automatic change of 6 colors enables versatile multicolor arrangement.

A setting on the operation panel allows the operator to select desired colors.

■ Automatic lift-up mechanism

The Needle, Nipple and Presser foot are automatically lifted up for easier frame exchange operation.

■ Automatic needle height adjusting mechanism

Needle height is adjustable in 10 steps according to the loop height or chain size.

■ Tie-off function to prevent the thread from fraying

Chain stitches are automatically inserted for some stitches after completion of loop stitches for prevention of thread fraying that causes production error.



Standard embroidery head

■ A ball screw drive system has been adopted to reduce the time for color change operation

A ball screw drive system, widely used for precision positioning control of industrial machinery, has been introduced to the color change drive system. The time required for color change from the first to the ninth needles has been reduced from about 3 to 1.1 seconds, drastically improving productivity of multicolor embroidery.



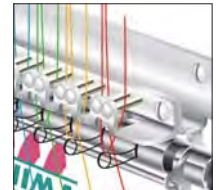
■ Thread breakage detector to prevent production error

A sensor monitors thread movement at all times. If the upper or under thread is broken, this system detects it in an instant and stops stitching to prevent embroidery production from continuing with broken thread. The sensitivity of the sensor is adjustable on the operation panel, depending on the embroidery conditions.



■ Middle thread guide with thread take-up spring, keeping the balance of upper and under threads

The thread take-up spring picks up excess thread and stabilizes the balance of upper and lower threads at high speed operation, improving thread tension. Thread breakage has been reduced by 30 - 50% (compared with our previous specification) due to extra fine satin stitches (2mm or less), needle tip or thread untwisting etc.



■ Spiral tube, Take-up lever guard <PAT>, paying attention to safety

Spiral tubes between the upper thread course stand and the individual tension base protect upper threads against environmental wind, generated by air conditioner, etc. which causes thread to be entangled with each other. Furthermore, uniquely developed covers are mounted onto the take-up levers to prevent threads from getting entangled during high-speed operation and to improve safety in working environments.



Spiral tube



Take-up lever guard (PAT)

Technology and function

■ User-friendly operation panel in pursuit of operational convenience

An easy-to view 17 inch color LCD operation panel and special use keys are designed in a compact interface to enable operation by instinct. The job currently being embroidered on the machine is displayed on the screen in real time <PAT>.

※ 6.5 inch color LCD operation panel is mounted to the models with total machine length 4,330mm or less.



■ Sleep mode function to save energy

The energy saving function of a personal computer has been introduced to the operation panel. Holding down a single button sets the machine in the standby status and pressing it once more cancels this function. Unnecessary power consumption can be kept down without turning off the main power.

■ Data input/output

Design data input or output is available, using USB memory.

*Commercially available USB memory reader/writer is applicable.



USB memory



■ "Condition memory" function, supported by Tajima binary format

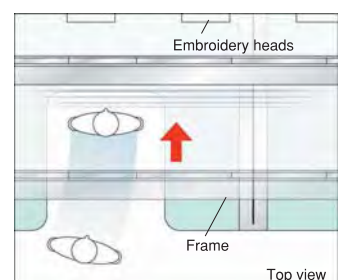
Design start position and stitching conditions, registered by an embroidery machine, can be output to USB memory or other media together with the design data. They can be easily recalled and reusable for reproduction. Tajima binary data format (TBF) is supported to create more complicated designs.

■ LAN support for networking

LAN port is prepared for easy access to networking function, using DG/ML by PULSE (option).

■ Table offset switch <PAT.P>

This special switch is mounted under the table of a jumbo embroidery machine to retract the frame temporarily to any position out of the way for jobs such as threading.



Option

Coiling/Taping device (MT-1)

This device enables both coiling embroidery and taping embroidery. Coiling embroidery finishes core and coiling threads with a soft touch and allows you various coiling variations. (The winding ratio of coiling thread for the core thread is adjustable in 4 steps.) Furthermore, combination with loop and/or chain stitches expands the potentials of you embroidery designs.



Sequin device III twin type <PAT.P>

It is now possible to embroider a max. of 4 different sizes, shapes and colors on each head ! 2 kinds of sequins on one side can be interchanged and embroidered at high speeds as desired. This next-generation Sequin device permits more design options and improves production efficiency.



Sequin device IV

In addition to regular type sequins of 2 - 9 mm dia. sequins, sequins of 10 - 22mm dia. are also available, using additional optional parts. Wide range of sequins are applicable from small to large sizes or in various shapes like noncircular or eccentric type, needed for sequin embroidery according to your applications.



Zigzag cording device

This device, superior in cost performance, allows you to create your designs, combining normal embroidery and cording embroidery even with a normal embroidery machine.



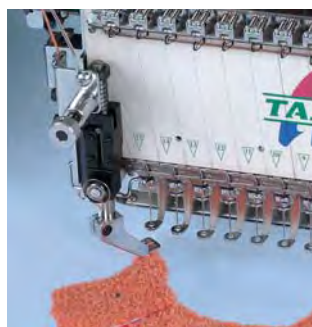
Cording Device (K-2)

The cording device, exclusively used for chenille embroidery.



High-speed cording device (KB-2M)

Various kinds of cording materials can be stitched at high speeds. Exchange of the attachment enables looping embroidery. Simple adjustment of the height varies stitch volume and expands the range of embroidery expressions.



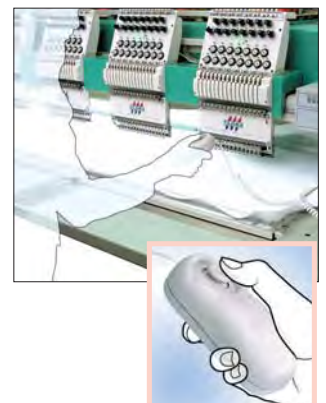
Boring device

A special knife bores fabric and the device overlocks the hole. Hole size is adjustable as needed and the shape can be created in the course of design data making.



Jog remote-controller <PAT>

The jog remote-controller has consolidated the function of frame travel operations. It is independent of the operation panel and allows to move the frame while the operator is close to the needles.



SPECIFICATIONS

TCMX Mixed type Series

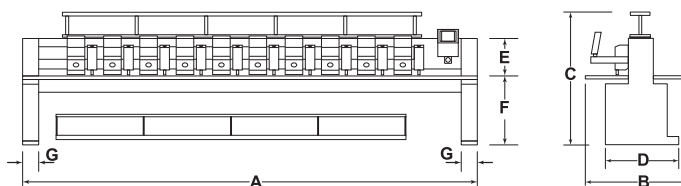
Model	Needles	Paired	Chenille heads	Standard heads	Head interval	Embroidery space(mm)		A	B	C	D	E	F	G
						D x W(offset)	Continuous (w)							
TCMX-60910	6/9	10	10	10	570	680×570 (230)	5,700	7,745	1,830	1,630	1,300	430	833	200
TCMX-60912	6/9	12	12	12	510	800×510 (230)	6,120	8,115	2,070	1,630		430		
TCMX-60915	6/9	15	15	15	510	1,000×510 (230)	7,650	9,645	2,470	1,680		480		

Example of a model code

TCMX- 6 09 15
a b c d

a=model name, b=Number of needles (Chenille heads)

c=Number of needles (Standard heads), d=Paired heads



Factory options	Standard head	Automatic lubrication system, Jumbo rotary hook, Sequin deviceⅣ, Sequin device Ⅲ twin type, Zigzag cording device, Position marker		
	Chenille head	Coiling/Taping device(MT-1), Cording device (K-2), Taping device(KT-1)		
Option		Jog remote-controller		
	Standard head	High-speed cording device(KB-2M), Boring device, Emb Lamé attachment		
Stitch length		Ternary: 0.1~12.1mm, Binary: 0.1~12.7mm		
Revolution	Standard heads		Chenille heads	
	Standard embroidery		Chenille embroidery	Coiling embroidery(1/1)
	Max.1,000rpm		Max.750rpm	Max.500rpm
Motor		AC Servo motor x1, Pulse Motor x2		
Power supply		3-phase 200-240V50/60Hz, 350V,380V,400V,415V,440V 50/60Hz is also available with an optional transformer.		
Power consumption		1.6kw		

* Ternary: Tajima code (DST), Binary: Tajima binary format (TBF), Barudan, ZSK

* Consultation for orders of special embroidery like embroider space, number of heads, number of needles is also available.

* Effective embroidery space and running speed may vary depending on machine models, type of product to be embroidered and/or applicable conditions.

* We reserve the right to change the specification for improvements without previous notice.

* No design nor registered trademark of the products contained in this catalog may be used without the prior permission.

TCMX-600 Series

Model	Needles	Chenille heads	Head interval	Embroidery space(mm)		A	B	C	D	E	F	G
				D x W	Continuous (w)							
TCMX-601	6	1	480	460×550	550	1,380	1,185	1,175	720	255	920	200
TCMX-612	6	12		680×480	5,760	7,065	1,830	1,265	1300	430	833	
TCMX-615	6	15	500	680×500	7,500	8,805	1,830	1,265				
TCMX-620	6	20	400	800×400	8,000	9,205	2,070	1,265				

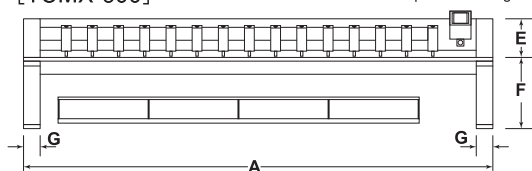
Example of a model code

TCMX- 6 20
a b c

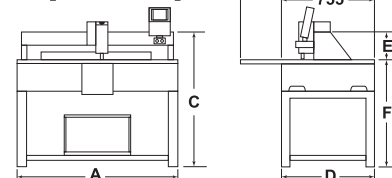
a=model name, b=number of needles, c=number of heads

* The total height of the machine will be by 365mm taller than the value C when the machine is equipped with optional Coiling /Taping device.

[TCMX-600]



[TCMX-601]



Factory options	Coiling/Taping device(MT-1), Cording device (K-2), Taping device(KT-1)		
Option	Jog remote-controller		
Stitch length	Ternary: 0.1~12.1mm, Binary: 0.1~12.7mm		
Revolution	Chenille embroidery		Coiling embroidery(1/1)
	Max.750rpm(Max.800rpm for TCMX-601)		Max.500rpm
Motor	AC Servo motor x1, Pulse Motor x2		
Power supply	Single-phase: 100-120V, 200-240V 50Hz/60Hz (only for TCMX-601) 3-phase 200-240V 50/60Hz, 350V,380V,400V,415V,440V 50/60Hz is also available with an optional transformer.		
Power consumption	1.7kw (140w for TCMX-601)		

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