

A photograph of a Melco EMT16X embroidery machine in a factory setting. The machine is white and grey, with a control panel on the right side featuring a keypad and a red emergency stop button. A tray of colorful thread spools is mounted on top. The machine is working on a blue fabric. The background shows other similar machines in a factory environment.

# **melco** EMT16X

NEXT GENERATION COMMERCIAL EMBROIDERY

# Real Modular Functionality

Nearly 20 years ago, Melco redefined efficiency with the first networkable, modular embroidery system. Melco EMT16X is the latest generation of the most efficient, productive system in the world.

What does a "modular" embroidery system do? With the Melco Operating System (MOS), you control every machine on the network from a single computer. This enables management of individual machines as needed, without interrupting production on the entire network. No other system gives you this level of control and flexibility! More on this below.

## Modular Embroidery Network

With Melco EMT16X, you decide how many machines are needed and when, and how you want to use them. Run just one machine, or multiple. Sew tote bags on three machines, and a hat on one. Produce different designs, or all the same. Grow your business slowly, one machine at a time, or add multiple machines, whenever you like.

The Melco Operating System (MOS) acts as your network interface, providing performance monitoring for each machine. This gives the operator control of individual machines from a single computer. Conventional multi-head machines do not provide performance feedback on individual machines from a singular point.

- Use the MOS to load design files, monitor machine performance, and manage machine settings.
- Add or remove individual machines as needed to optimize embroidery production.
- Start and stop individual machines without interrupting production on the entire network.
- Run different designs on different products at the same time.
- Enjoy the benefits of a single-head embroidery machine and a multi-head embroidery machine from one awesome, flexible system.

## Simple, User-Friendly Operation

One of the many core features that sets Melco apart from other machines is the patented Acti-Feed™ thread control technology. This automatic thread feed system is easy to use, unlike systems that rely on manual thread tensioning adjustments.

With Acti-Feed™, most EMT16X functions are automated. User input is only required for basic actions such as loading a design, selecting a hoop, and choosing a material. Acti-Feed™ and MOS handle the rest! Thread feed and speed are monitored and adjusted automatically, delivering fast, precise, high-quality embroidery. Melco EMT16X is a truly intelligent system!

If you're new to embroidery, you'll enjoy the user-friendly machine and software functions. If you're running older model Melcos (XT/XTS or EMT16 Series), you'll appreciate knowing the EMT16X is backwards compatible in many cases\*, so it's easy to add to your current Melco network.

\*Some limitations may apply. Ask your Melco representative about compatibility with your current Melco system.

## Here are some other things to know about Melco:

- Melco is based in the United States, just north of Denver, Colorado
- We have an extensive nationwide training and support network.
- We provide industry-leading customer service and support.
- Buying parts and accessories is easy through our web store, ShopMelco.com.
- We provide applications support to help you get the most out of your machine and software.



**New Grabber Blade**



**New Thread Tube Assembly**



**New Hoop Arms**



# Melco EMT16X Feature Enhancements!

## Outstanding performance, efficiency, and stitch quality!

Thanks to enhanced Melco stitch dynamics, the frequency of "thread issues" is minimized. This means more run time per machine, and greater ROI potential. In addition to amazing efficiency and performance, stitch quality is outstanding.

### Performance Feature—Enhanced Auto Trimming

Melco EMT16X includes a new auto trimming system that is durable and reliable. Overall trim time has been reduced dramatically, which in turn reduces overall sew time. The self-sharpening carbide knife assembly consistently slices poly, rayon, metallic, and thick Burmilana thread. It's also virtually maintenance-free.

### Performance Feature—Automatic Tie-In and Tie-Out Stitches

Tie-In and Tie-Out stitches are critical for quality finished embroidery. Normally, this process requires manual editing. With Melco EMT16X, at user discretion, these critical stitches can be automatically added to the design, improving sew quality and durability.

### Time Saving Feature—66% Reduction in Bobbin Tail Length

At a tiny 6mm, these short bobbin tails produce tight, clean embroidery, reducing the time needed for finish-trimming by hand.

### Performance Feature—New Needle Plate Design

Melco reengineered the needle plate, creating one with more surface area to secure fabric and reduce material flagging. Not only does this help produce high-quality embroidery, it also reduces the appearance of marring or shine on the fabric caused by contact with the presser foot and needle plate.

### Performance Feature—New Hoop Arms

New, ultra-rigid hoop arms enable smooth performance and optimal stitch quality.

### Performance Feature—Redesigned Thread Tube Assembly

Extended thread tubes and new thread cone stabilizers deliver secure, smooth, consistent thread feed. The new design is compatible with a wide variety of thread cone shapes.

### User-Friendly Feature—New Grabber Blade

Machine operators will appreciate this new feature for easy needle changes and threading. The new grabber blade features a refined shape and matte black finish to reduce glare, making it easier to change and thread needles.

### User-Friendly Feature—New Bobbin Case Access Panel

When it's time to change the bobbin, simply flip the new panel down for quick, easy access. When it's time to install the cap driver for hat embroidery, simply turn a thumb screw to remove the access panel. No tools required!

### New Optional Accessory—XL Hoop

Say bye to large wooden hoops that are subject to warping and splintering! Designed by Melco, this high-quality composite hoop enables you to utilize the full sew field of Melco EMT16X. It's sure to become a favorite for those who embroider large designs on jacket backs and other large items. Includes extended hoop arms.

## New Lower Arm Assembly with Redesigned Trimming System



New "flat" needle plate design for optimal sew quality.

Self-Sharpening knife assembly is virtually maintenance-free!

New bobbin case cover for easy access.



# High-Tech is Standard!

Many of these core, foundational technologies can only be found on Melco embroidery machines.

The features listed here have been a staple of the Melco embroidery machine platform since 2002. Some features, like barcode scanning, are included where other brands may offer it only as an option at additional cost.

Simple PC-Based Interface, Barcode-Ready!



16 Needle Commercial Embroidery Machine, Single or Multi-Head

Acti-Feed™ Thread Control

Precise Laser Registration

Adjustable Presser Foot

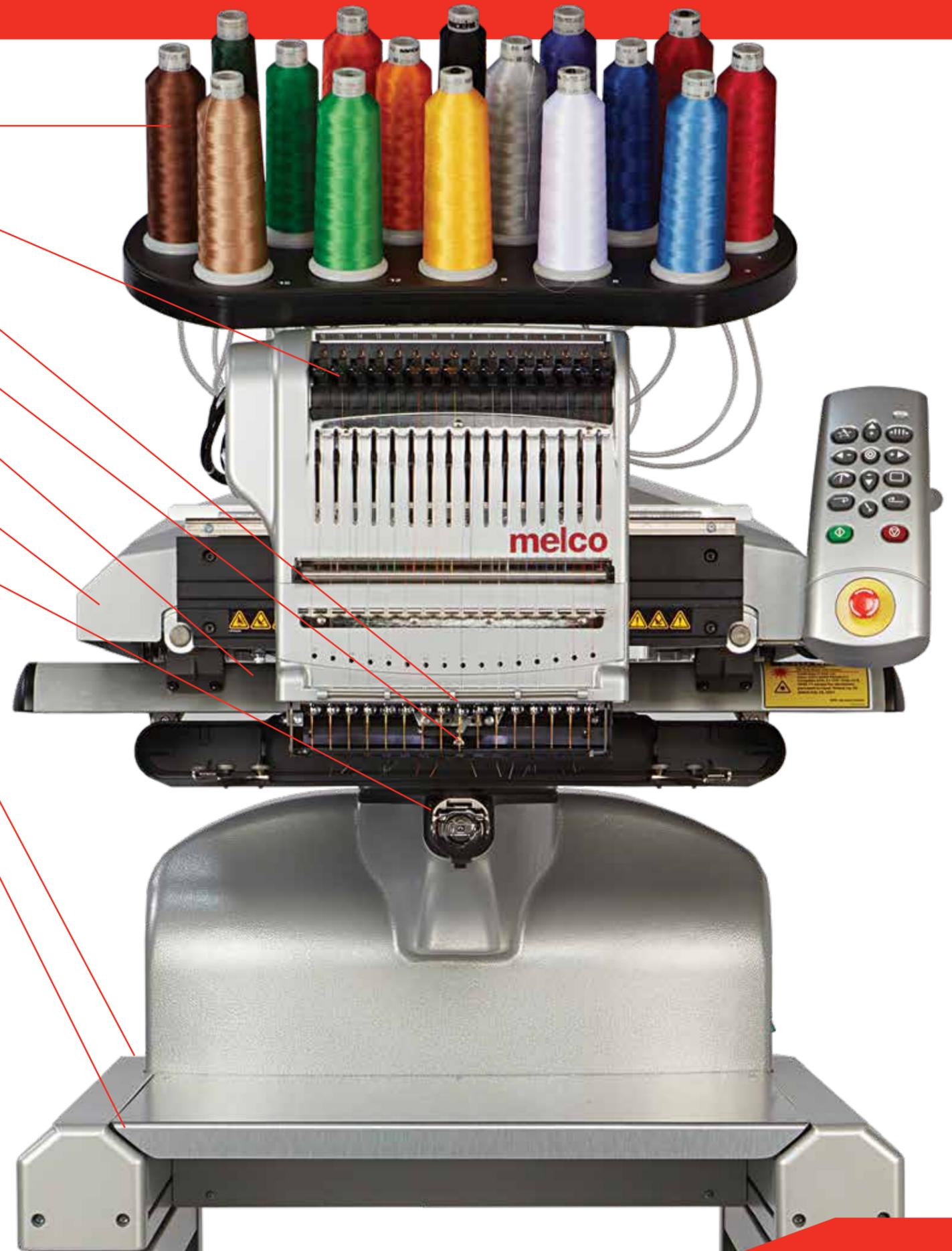
High Speed Pantograph (1500 Stitches per Minute)

Scalable—Easily Add Machines to the Embroidery Network

Small Cylindrical Lower Arm for Embroidery on Hats and Pockets

Sturdy, Wheeled Cart for Easy Mobility

Removable Table Top



## Understanding Acti-Feed™ Thread Control

Thread feed is controlled by the patented Acti-Feed™ thread control system, delivering the precise amount of thread automatically. Conventional machines require manual thread tension adjustments. With Melco EMT16X, enter a few simple inputs such as fabric type and hoop selection, and this intelligent system will do the rest!



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# Sew What **You** Want!

**Say "yes" to business that other embroidery shops may have to turn away.**

In addition to bread-and-butter items like polo shirts, tote bags, jackets, and hats, Melco EMT16X is ready to tackle more unique or challenging items. When you pair Melco's advanced technology with amazing accessory items like the popular Melco Fast Clamp PRO, you open up a vast world of possibility. Check out some of the accessories below that expand the capabilities of the machine.

## Melco Fast Clamp PRO

Ask a Melco client what their favorite accessory is, and they're likely to start telling you all about Melco Fast Clamp PRO! This highly adjustable system enables embroidery on items and in small areas not possible before. Visit [Melco.com](http://Melco.com) to learn more!



## NEW XL Hoop Kit

Go big and take advantage of the full sew field Melco EMT16X has to offer! Designed by Melco, this hoop is made of sturdy composite materials that are impervious to warping, something you can't say for traditional wooden hoops. This optional accessory is available for purchase on [ShopMelco.com](http://ShopMelco.com). The kit includes wide hoop arms (not pictured here).



## Cap Driver and 2 Cap Frames

Included with new Melco EMT16X packages, the cap driver and frame kit will have you stitching up high-quality embroidery on hats in no time. The frames are strong, designed to hold hats of many shapes and sizes securely for high quality embroidery. The wide angle frame boasts a 270° sew field, and a maximum height of 3.25".



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# The Melco Advantage

**Melco is an embroidery technology and direct sales organization. Our clients buy industrial embroidery machines direct from our US-based sales team and are trained and supported directly by us.**

Every Melco client has a dedicated sales representative who acts as a consultant and direct point of contact. That is where the relationship begins. Each client also has access to the Melco Support Network, consisting of Training, Customer Service, Technical Support, and Applications Support.

## Training & Support

We offer on-site training for your new machine. The advantages here are numerous, including the convenience of training in the comfort of your own familiar location.

After training, you can rely on Customer Service and Technical Support provided directly by Melco. This is a critical piece of any capital equipment investment. Melco EMT16X is a reliable machine, and so are the people at Melco. We're knowledgeable and eager to help, and most importantly, we're accessible.

When it comes to buying parts and accessories for your machine, we have you covered! All parts are stocked and available right from our warehouse just north of Denver, Colorado. We are a USA-based organization, available when you need us!



## Buying from Melco—What to Expect

When you buy from Melco, you're buying direct from the manufacturer. Start small with a single-head package, or go big and build a high-output Melco EMT16X multi-head embroidery network for mass production. Current Melco embroidery machine owners may be able to add EMT16X to their current network\*. Contact a representative to build and quote your system, including software, training, and financing options.

All new Melco EMT16X packages include the following:

- 6 Year Limited Warranty
- DesignShop Digitizing Software
- Melco Operating System
- Cap Driver, and 2 Cap Frames
- 6 of the Most Popular Hoop Sizes
- Power and Networking Cables
- Tool Kit with Oil, Grease, Wrenches
- Machine Stand
- Removable Tabletop
- Starter Kit with Thread, Backing, Needles, and More
- Financing Options

\*Some limitations may apply. Please ask a Melco representative for information about compatibility with legacy Melco machines.

DesignShop  
Digitizing Software



Cap Driver and 2 Frames



Tool Kit



### MELCO EMT16X KEY SPECIFICATIONS

Type/# of Heads	Upper Arm-Lower Arm/1 to 30 Modular
Number of Needles	16
Maximum Tubular Frame Size (XxY)	19.7"x 16.9" (500mm x 430mm)
Maximum Sew Field/Tubular Frame (XxY)	15.7"x16.1" (400mm x 410mm)
Wide Angle Cap Frame	14.1" x 3.25" (360mm x 82mm)
Conventional Cap Frame	5.9"x 2.75" (152mm x 70mm)
Min/Max Sew Speed Flats	300-1500 stitches per minute
Min/Max Sew Speed Caps	300-1200 stitches per minute
Stitch Length Range	Dependent on Hoop Size
User Interface	Melco Operating System (MOS)
Machine Configuration	Up to 30 individual machines, connected by Ethernet
Self-Diagnostics Capability	Retrieves relevant machine data for troubleshooting
Design Memory	Dependent on hard drive, Max file size 500k
Pre-Sew Trace	Laser
Needle to Garment, Garment to Hoop Position	Laser Positioning System
Thread Feed Technology	Patented Acti-Feed™
Thread Break Detection	Upper & Lower Electronic Force Gauge Sensor
Automatic Stitch Backup	Yes
Automatic Trimmer	Yes
Lighting Type Cold Bright	Cold bright LED
Power Supply (V)	90-260V (Single Phase, 50/60 HZ, 4A), Class I (Grounded)
Power Consumption (W)	Typical: 200 Watts Max: 650 Watts
Temperature Range	15-40° C
Humidity	Max 85% Relative Humidity
Installation Category (over-voltage)	II
Pollution Degree	2
Motor Type(s)	Servo, Stepping
Motor Capacity (kV)	X and Z: 100 Watts Y: 250 Watts
Machine Construction Material	Aluminum

### MELCO EMT16X PHYSICAL SPECIFICATIONS

With Cart	
Width	28.5" (724mm)
Height	65.7" (1669mm -3mm) damper compression
Depth	30.7" (779mm) front caster w/ brake extended
Weight	210.5 lbs (95.5kg)
Without Cart	
Width	28.5" (724mm)
Height	37.48" (952mm) (-3mm damper compression, thread tubes 70mm extended)
Depth	29.2" (741mm)
Weight	164.5lbs (74.6kg)