

KARL MAYER

WE CARE ABOUT YOUR FUTURE



WARP KNITTING
经编机

TM 2

TM 3

TM 4

TM 4-EL

Tricot machines for diverse uses in textile production
特里科经编机，所生产的面料适合多种用途



TRICOT MACHINES: A PERFECT COMBINATION OF EFFICIENCY AND PRECISION

特里科经编机：高效与精准的完美组合

Your Benefit – Our Solution 您的优势 – 我们的解决方案

Complete machine concept for your business success 助您成功的全系列机器理念

The huge variety of modern textiles requires the focusing of attention on different aspects and certain specific conditions during production.

For many basic applications machines are fully compliant with customers' requirements.

The **TM series** combines the basic equipment for easy operation with the latest production monitoring technology.

For 2-bar, 3-bar and 4-bar fabrics KARL MAYER offers **TM 2, TM 3, TM 4** and **TM 4-EL**.

- Highly economic machines for standard applications
- New KAMCOS® 2 operator interface for easier use and integration of assistant apps
- Integrated monitoring systems for highly efficient production
- Integrated camera for fabric monitoring
- Integrated Laserstop for yarn breakage detection
- Functional LED lighting
- High KARL MAYER quality standard
- Highest operational reliability
- Long service life

现代纺织品的种类繁多, 在生产过程中必须根据产品种类和终端应用制定不同的生产工艺。

在很多应用领域, TM系列经编机完全能满足客户的需求。

TM系列将有助于简化操控的基本配置与最新的生产监控技术结合在一起。

针对两梳、三梳、和四梳面料, 卡尔迈耶提供 **TM 2, TM 3, TM 4**和**TM 4-EL**机器。

- 满足标准应用的经济型经编机
- 全新的卡迈酷斯®2界面让操控更简便, 同时支持移动设备App
- 集成式监控系统, 提升生产效率
- 照相自停装置用来监控布面品质
- 激光自停装置用来检测断纱
- 多功能LED照明系统
- 符合卡尔迈耶高质量标准
- 最佳的运行稳定性
- 较长的使用年限

TM 2, TM 3 and TM 4:

For all kinds of 2-bar, 3-bar and 4-bar tricot fabrics

- Covers the basic requirements of the market
- Flexible machine for quick reaction to the market
- Highest reliability

TM 2, TM 3和TM 4:

适合生产两梳、三梳和四梳特里科面料

- 满足市场的基本需求
- 灵活的机器, 能快速应对市场变化
- 稳定、可靠

TM 4-EL:

For all kinds of 4-bar tricot fabrics

- Highest pattern flexibility due to EL-drive

TM 4-EL:

适合生产各类四梳特里科面料

- EL电子横移让花型变换更灵活





Wide range of applications allows a quick reaction to the demands of the market.

适合多种应用领域, 能对市场需求作出迅速反应。

End uses 终端应用	TM 2	TM 3	TM 4	TM 4-EL
upholstery fabrics 内饰织物	×	×	×	×
sportswear 运动装	×	×	×	×
toy plush 玩具绒		×		
shoe fabrics 鞋材	×	×	×	×
outerwear 外套	×	×	×	×
mosquito nets 蚊帐	×			
coating substrates 涂层基底	×	×		
automotive textiles 汽车用纺织品			×	×
home textiles 家用纺织品			×	×

TM 2; TM 3

Technical data

技术参数

Working width / Gauge

4572 mm = 180 inches
(186 inches)
TM 2: E 14, E 28, E 32
TM 3: E 28, E 32
Working width extension

Bars / knitting elements

Individual needle bar and tongue bar synchronously milled, compound sinker
TM 2: 2 ground guide bars
TM 3: 3 ground guide bars

Warp beam support

Free-standing for sectional beams:
TM 2: 2 × 32"
TM 3: 1 × 40", 2 × 32"

KAMCOS® 2

(KARL MAYER COMMAND SYSTEM)

Operator interface to configure, control and adjust the electronic functionality of the machine. KARL MAYER Connect user assistance. Multiple interfaces for third-party software. Easy and intuitive user guidance.

Integrated monitoring systems

- Integrated Laserstop
- Integrated Camera

Integrated lighting

Uniform illumination of the working area showing machine operation status

Yarn let-off device

For each completely mounted warp beam position: one electronically controlled yarn let-off drive, driven by geared motor, controlled by Motion Control
Option: feeler roller device

Fabric take-up

Electronically controlled, continuous execution four-roller system driven by geared motor, controlled by Motion Control
Option: driven selvedge spreaders

Batching device

Standard: No. 52
Option: No. 34 B

Pattern drive

N-drive with
TM 2: 2 pattern discs
TM 3: 3 pattern discs
Integrated tempi change gear drive
Standard: 16:1
Option: 12:1 and 24:1

Electrical equipment

Speed-regulated main drive, power-failure safe, including inching motion function, total connected load 25 kVA

Oil supply

Heating, cooling by means of circulating air heat exchanger, circulation by means of electric pump, pressure lubrication for crankshaft, filter with dirt-monitoring system

工作门幅/机号

4572 mm = 180英寸
(186英寸)
TM 2: E 14, E 28, E 32
TM 3: E 28, E 32
加宽的工作门幅

床体/成圈机件

同步铣削的嵌入式针床和针芯床, 复合沉降片床
TM 2: 2把地梳
TM 3: 3把地梳

经轴架

独立的经轴位置, 可安装盘头的边盘直径:
TM 2: 2 × 32英寸
TM 3: 1 × 40英寸, 2 × 32英寸

卡迈酷斯®2 (卡尔迈耶控制系统)

操作界面, 用于设置、控制和调节机器的电控部分功能。卡尔迈耶连线用户支持。第三方软件的多重接口。简单、直观的用户指导。

配套监控系统

- 激光自停装置
- 照相自停装置

集成式照明

工作区域的照明均匀、清晰, 显示机器的运行状况

送经机构

每个完全独立安装的经轴位置配备一套电子送经机构, 通过电机驱动, 受运动控制系统控制
选配: 反馈罗拉装置

牵拉机构

电子控制, 连续执行, 4罗拉系统由电机驱动, 受运动控制系统控制
选配: 主动式扩边器

卷取机构

标准: 52
选配: 34 B

提花机构

N型横移机构
TM 2: 2片花盘
TM 3: 3片花盘
包括行程变换齿轮
标准: 16:1
选配: 12:1和24:1

电子设备

调速主电机, 断电保护, 慢速传动功能, 机器总连接负载为25千伏安

供油

加热装置, 通过空气流通式热交换装置冷却, 通过电泵实现循环, 曲柄连杆加压润滑, 配备防脏报警过滤器

TM 4; TM 4-EL

Technical data

技术参数

Working width / Gauge

3302 mm (3454 mm)
= 130 inches (136 inches)*
4572 mm = 180 inches
(186 inches)*
E 28, E 32
*Working width extension

Bars / Knitting elements

Individual needle bar and tongue
synchronously milled, com-
pound sinker, four ground guide
bars (maximum shogging 1")

Warp beam support

Four warp beam positions
(free-standing), for sectional
beams of 812 mm (32 inches)
flange diameter
Optional service platform

KAMCOS® 2

(KARL MAYER COMMAND SYSTEM)

Operator interface to configure,
control and adjust the electronic
functionality of the machine.
KARL MAYER Connect user
assistance. Multiple interfaces
for third-party software. Easy
and intuitive user guidance.

Integrated monitoring systems

- Integrated Laserstop
- Option: Integrated Camera

Yarn let-off device

For each completely mounted
warp beam position: one elec-
tronically controlled yarn let-off
drive, driven by geared motor,
controlled by Motion Control
Option: feeler roller device
For each completely mounted
warp beam position: one feeler
roller device for the readjust-
ment of the yarn feeding values
related to the circumference of
the sectional beam

Fabric take-up

Electronically controlled,
continuous execution four-roller
system driven by geared motor,
controlled by Motion Control

Batching device

Option: 6, 34 B, 34 E

Pattern drive

TM 4: N-drive with four
pattern discs
Standard: 16:1
TM 4-EL: Electronic guide bar
control system (EL)

Electrical equipment

Speed-regulated main drive,
power-failure safe, including
inching motion function, total
connected load 25 kVA or 35
kVA (EL)

Oil supply

Heating, cooling by means of
circulating air heat exchanger,
circulation by means of electric
pump, filter with dirt monitoring
system

工作门幅/机号

3302 mm (3454 mm) = 130英寸
(136英寸)*
4572 mm = 180英寸
(186英寸)*
E 28, E 32
*加宽的工作幅宽

床体/成圈机件

同步铣削的嵌入式针床和针芯床,
复合沉降片, 4把地梳(最大横移1
英寸)

经轴架

4个经轴位置(独立式), 可安装变盘
直径为812mm(32英寸)的盘头。
选配:走道板

卡迈酷斯®2 (卡尔迈耶控制系统)

操作界面, 用于设置、控制和调节机
器的电控部分功能。卡尔迈耶连线
用户支持。第三方软件的多重接口。
简单、直观的用户指导。

配套监控系统

- 激光自停装置
- 选配: 照相自停装置

送经机构

每个完全独立安装的经轴位置配
备: 一套电子送经装置, 通过马达驱
动, 受运动控制系统控制
选配: 反馈罗拉
每个完全独立安装的经轴位置配
备: 一个反馈罗拉, 可根据盘头的周
长调节纱线的送经量

织物牵拉机构

电子控制, 4罗拉系统由电机驱动,
受运动控制系统控制

卷取机构

选配: 6, 34B, 34E

提花机构

TM 4: 带有4个花盘的N型驱动
机构
标准: 16:1
TM 4-EL: 电子梳栉控制系统 (EL)

电子设备

调速主电机, 断电保护, 慢速传动功
能, 机器总连接负载为25kVA或者
35kVA (EL)

供油

加热装置, 通过空气流通式热交
换装置冷却, 通过电泵实现循环,
曲柄连杆加压润滑, 配备防脏报警
过滤器

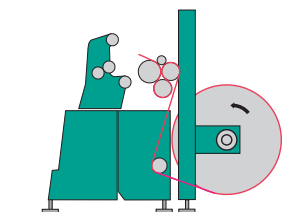
TM 2; TM 3; TM 4; TM 4-EL

Technical data

技术参数

Batching devices

卷取机构

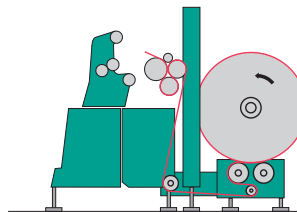


No. 6

Batching device with central drive, with sliding clutch, max. batch diameter of 736 mm (29 inches)

6号卷取机构

轴心传动的卷取机构，带滑动式离合器，最大卷装直径为736mm (29英寸)



No. 34B / 34E

Batching device with friction drive, driven by geared motor, regulation to match the stitch courses

For 34E: spreading roller, fabric edge unrolling appliance

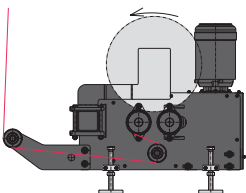
For 34B: deflection roller, max. batch diameter of 914 mm (36 inches)

34B / 34E 号卷取机构

摩擦传动的卷取机构，由电机驱动，根据线圈密度进行调节。

34E: 扩布辊，防布面卷边装置

34B: 导布辊，最大卷装直径为914 mm (36英寸)



No. 52

Batching device with friction drive, driven by geared motor, max. batch diameter of 305 mm (12 inches).

52号卷取机构

摩擦传动的卷取机构，由电机传动，最大卷装直径为305 mm (12英寸)

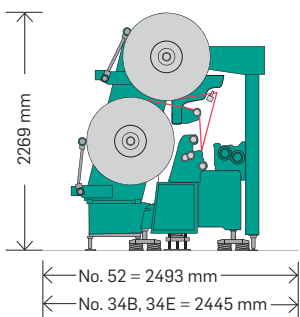
Dimensions and warp beam support

尺寸和经轴架

TM 2

Height and depth 高度和纵深

2 × 812 mm (32") Ø



*without batching device
*不含卷取机构

Working width

工作门幅
180 inches (186 inches)
180英寸 (186英寸)

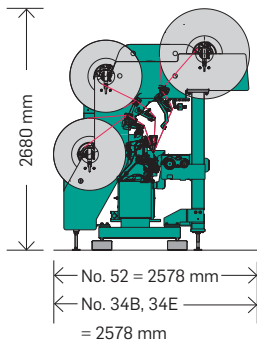
Total width with switch cabinet

机器总宽 (含电柜)
6640 mm

TM 3

Height and depth 高度和纵深

2 × 812 mm (32"),
1 × 1016 mm (40") Ø



Working width

工作门幅
180 inches (186 inches)
180英寸 (186英寸)

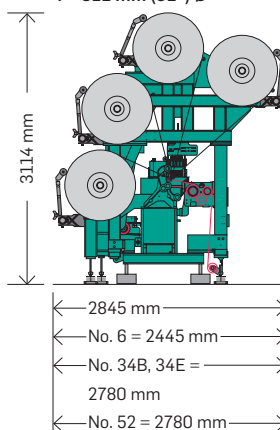
Total width with switch cabinet

机器总宽 (含电柜)
6640 mm

TM 4; TM 4-EL

Height and depth 高度和纵深

4 × 812 mm (32") Ø



Working width

工作门幅
130 inches
130英寸
180 inches (186 inches)
180英寸 (186英寸)

Total width with switch cabinet

机器总宽 (含电柜)
130 inches / 130英寸
N-drive: 5220 mm
EL-drive: 5880 mm
N型驱动: 5220 mm
EL驱动: 5880 mm
180 inches / 180英寸
N-drive: 6640 mm
EL-drive: 7300 mm
N型驱动: 6640 mm
EL驱动: 7300 mm

KARL MAYER Worldwide



Europe **Germany** Obertshausen, Chemnitz, Naila **UK** Shepshed **Italy** Mezzolombardo **Switzerland** Uzwil
Asia **India** Mumbai, Ahmedabad **Hong Kong** **P. R. China** Changzhou City **Japan** Fukui-City
North America **USA** Greensboro

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