



# KARL MAYER

WE CARE ABOUT YOUR FUTURE

WARP KNITTING  
经编机

**HKS 3-M**

**HKS 3-S**

**HKS 3-M (P)**

Tricot machines for diverse use in textile production  
适合多个应用领域的特里科经编机





---

**TRICOT MACHINES:**

**A PERFECT COMBINATION OF  
EFFICIENCY AND PRECISION**

**特里科经编机：高效与精准的完美结合**

---

## Your Benefit – Our Solution

### 您的优势 – 我们的解决方案

## Three machine concepts for your business success

### 助您成功的三个机器理念

The huge variety of modern textiles requires attention to be focused on different aspects and certain specific conditions during production.

Therefore KARL MAYER offers the possibility to choose between three concepts for three bar tricot machines.

Depending on their specific business and market demands our clients can take their best possible choice between the types HKS 3-M, HKS 3-S and HKS 3-M (P).

- High-performance knitting machines capable of producing a wide range of products
- An extended range of patterns and articles
- Highest operational reliability
- Long service life
- New ergonomic design for optimised handling
- 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
- Lower power consumption thanks to LEO® (Low Energy Option)
- Functional LED lighting

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。

因此, 卡尔迈耶三梳特里科经编机包含了三个可选的机器理念。

根据所从事的业务领域和市场, 您可以在HKS 3-M, HKS 3-S和HKS 3-M (P)三款设备中做出最好的选择。

- 高性能经编机, 具备广泛的产品适应性
- 更宽泛的花型和产品类别
- 优异的操作可靠性
- 长久的使用年限
- 全新的人体工程学设计, 具备更佳的操作性
- 卡迈酷斯® 2界面让机器操控更加简便, 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
- 应用了LEO®低能耗技术, 降低能源消耗
- 多功能LED照明系统



## HKS 3 Series

### Machine details and overview

### 机器详情和预览



#### HKS 3-M

##### The flexible version for all sorts of articles

- Highest versatility of products
- Suitable for low stitch density
- Wide range of available gauges (E18 – E32)
- Wide range of working width (130" – 280")

##### 适合各类面料的灵活型高速经编机

- 优异的产品多样性
- 适合生产密度较低的面料
- 多个机号配置(E18–E32)
- 多个工作门幅配置(130"–280")

#### HKS 3-S

##### The highly productive machine for elastic and rigid structures

- Offers a high production speed with a wide range of textiles
- Designed for highest performance for standard fabrics

##### 生产弹力和无弹面料的高产能经编机

- 较高的生产速度
- 生产常规面料时能发挥最佳性能

#### HKS 3-M (P)

##### The flexible version for all sorts of articles including pile fabrics

- Flexible machine for special applications such as pile or very high lapping

##### 能生产各种面料的灵活型经编机，包括毛圈织物

- 满足特殊需求的灵活型经编机，例如生产毛圈织物或实现较大针背横移



A wide range of applications allows quick reactions 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 最终用途	HKS 3-M	HKS 3-S	HKS 3-M (P)
automotive textiles 汽车用纺织品	x <sup>1</sup>	x	x
upholstery fabrics 室内装饰织物	x <sup>1</sup>		x
sportswear 运动服	x	x	x
toy plush 毛绒玩具	x <sup>1</sup>		x
shoe fabrics 鞋面材料	x	x	x
outerwear 外衣	x <sup>1</sup>	x	x
flags 旗布	x		x
ground fabrics for printing 印刷基布	x		x
mosquito nets 蚊帐布	x		x
coating substrates 涂层基布	x		x
cleaning textiles 清洁布	x <sup>1</sup>		x
lingerie 内衣		x	
swimwear 泳装		x	

<sup>1</sup> No pile, only flat fabrics  
不能形成毛圈, 仅形成平面织物

# HKS 3-M; HKS 3-S

## Technical data

### 技术参数

Working width 工作门幅	HKS 3-M		HKS 3-S	
	gauge from 机号从	to 到	gauge from 机号从	to 到
130" (+ 2" working width extension) 130英寸 (+2英寸工作门幅)	E 18	E 32	E 28	E 40
180" (+ 6" working width extension) 180英寸 (+6英寸工作门幅)	E 18	E 32	E 28	E 40
210" (+ 8" working width extension) 210英寸 (+8英寸工作门幅)	E 18	E 32	—	—
238" (+ 10" working width extension) 238英寸 (+10英寸工作门幅)	E 28	E 32	—	—
280" 280英寸	E 28	E 32	—	—

#### Bars/knitting elements

Individual needle bar with compound needles, slider bar with plate slider units (½"), sinker bar with compound sinker units, three guide bars with guide units. All bars are made of carbon-fibre-reinforced plastic.

#### Warp beam support

3 × 812 (32") (free-standing)  
Option: 3 × 1016 (40") (free-standing)  
HKS 3-M: option: 1 × 1016 (40"), 2 × 812 (32") (free-standing)

#### LEO®

Low Energy Option

#### 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

#### Yarn let-off device

Electronically controlled, driven by geared motor

#### Fabric take-up

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

#### Batching device

No. 6  
Option: No. 33, 34A, 34B, 34E  
280": No. 52, Option: No. 34B

#### Pattern drive

N-drive with three pattern discs, integrated tempi change gear

#### Electrical equipment

Total connected load 25 kVA

#### Oil supply

Cooling by means of air heat exchange  
Option: oil/water heat exchanger

#### 床体/成圈机件

装有复合针的嵌入式针床, 装有针芯块(½")的针芯床, 装有复合沉降片的沉降片床, 装有导纱针块的三把梳栉。所有床体均由碳纤维增强塑料制成。

#### 经轴架

3 × 812 (32") (独立式)  
选配: 3 × 1016 (40") (独立式)  
HKS 3-M: 选配: 1 × 1016 (40"), 2 × 812 (32") (独立式)

#### LEO®

低能耗

#### 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

#### 送经机构

电子控制, 由电机传动

#### 牵拉机构

电子控制, 4罗拉系统, 连续执行, 由电机传动

#### 卷取机构

6号卷取机构  
选配: 33, 34A, 34B, 34E号卷取机构  
280英寸: 52号卷取机构, 选配: 34B

#### 提花机构

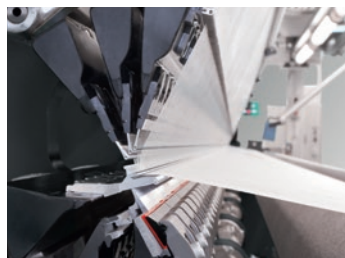
安装3片花盘的N型提花机构, 包含行程变换齿轮

#### 电子设备

机器总连接负载25千伏安

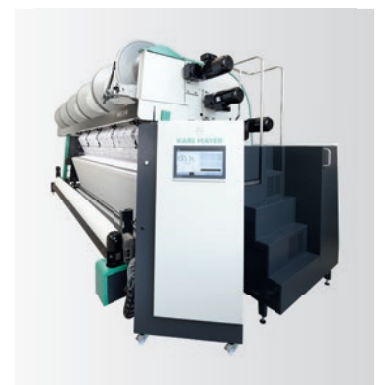
#### 供油

通过空气热交换器冷却  
选配: 油/水热交换器



HKS 3-M knitting elements  
HKS 3-M成圈机件

Ergonomic design for easy access to the working area  
人体工程学设计便于工作人员进入工作区域开展检修



# HKS 3-M (P)

## Technical data

### 技术参数

Working width 工作门幅	HKS 3-M (P)	
	gauge from 机号从	to 到
130" (+ 2" working width extension) 130英寸 (+2英寸工作门幅)	E 24	E 32
180" (+ 6" working width extension) 180英寸 (+6英寸工作门幅)	E 24	E 32
210" (+ 8" working width extension) 210英寸 (+8英寸工作门幅)	E 28	only w/o pile 带/不带毛圈沉降片 E 32

#### Bars/knitting elements

Individual needle bar with compound needles, slider bar with plate slider units (1/2"), sinker bar with compound sinker units, pile bar with pile sinker units, three guide bars with guide units. All bars are made of carbon-fibre-reinforced plastic. HKS 3-M (P): pile bar with pile sinker units

#### Warp beam support

3 × 812 (32") (free-standing)  
Option: 3 × 1016 (40") (free-standing)

#### LEO®

Low Energy Option

#### 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

#### Yarn let-off device

Electronically controlled, driven by geared motor

#### Fabric take-up

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

#### Batching device

No. 6  
Option: No. 34B, 34A

#### Pattern drive

N-drive with four pattern discs, integrated tempi change gear

#### Electrical equipment

Total connected load 25 kVA

#### Oil supply

Cooling by means of air heat exchange  
Option: oil/water heat exchanger

#### 床体/成圈机件

装有复合针的嵌入式针床, 装有针芯块(1/2")的针芯床, 装有复合沉降片的沉降片床, 装有毛圈沉降片的毛圈沉降片床, 装有导纱针块的三把梳栉。所有床体均由碳纤维增强塑料制成  
HKS 3-M (P): 装有毛圈沉降片的沉降片床

#### 经轴架

3 × 812 (32") (独立式)  
选配: 3 × 1016 (40") (独立式)

#### LEO®

低能耗

#### 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

#### 送经机构

电子控制, 由电机传动

#### 牵拉机构

电子控制, 4罗拉系统, 连续执行, 由电机传动

#### 卷取机构

6号卷取机构  
选配: 34B, 34A号卷取机构

#### 提花机构

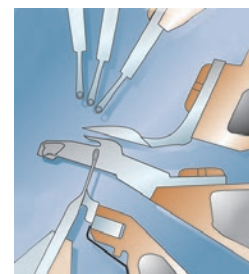
安装4片花盘的N型提花机构, 包含行程变换齿轮

#### 电子设备

机器总连接负载25千伏安

#### 供油

通过空气热交换器冷却  
选配: 油/水热交换器

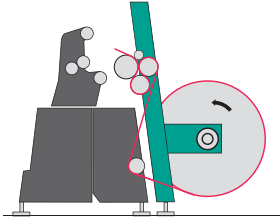


Knitting elements for pile  
含毛圈装置的成圈机件示意图

## HKS 3-Series

### Batching devices

#### 卷取机构

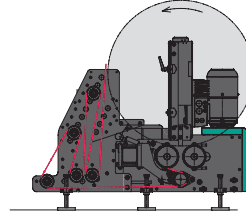


#### No. 6

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)

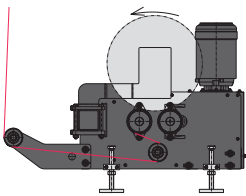


#### No. 34A

Batching device with friction drive, driven by geared motor, regulation to match the stitch courses, relaxation device, spreading roller, fabric edge unrolling appliance, max. batch diameter of 711 mm (28 inches)

#### 34A号卷取装置

摩擦传动的卷取装置，受电机驱动，根据线圈密度大小进行调节，布面松弛装置，扩布辊，防布面卷边装置，最大卷装直径为711 mm (28英寸)

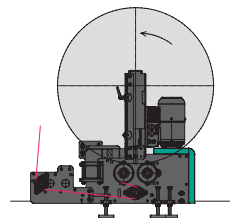


#### No. 52

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)



#### No. 34B / 34E

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

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

**For 34E:** spreading roller, fabric edge unrolling appliance

#### 34B, 34E号卷取装置

摩擦传动的卷取装置，受电机驱动，根据线圈密度大小进行调节。

**34B:** 导布辊，最大卷装直径为914 mm (36英寸)

**34E:** 扩布辊，防布面卷边装置

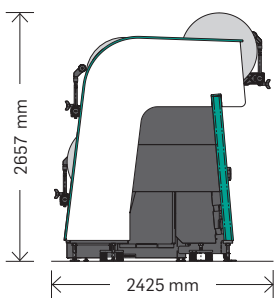
### Dimensions and warp beam support

#### 尺寸和经轴架

#### Height and depth

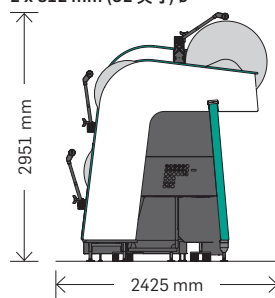
#### 高度和纵深

3 x 812 mm (32 英寸)  $\varnothing$



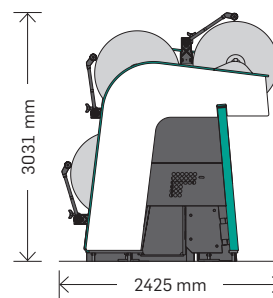
← No. 6 = 2261 mm →  
 ← No. 34A = 2344 mm →  
 ← No. 34B, 34E = 2515 mm →

1 x 1016 mm (40 英寸)  $\varnothing$   
 2 x 812 mm (32 英寸)  $\varnothing$



← No. 6 = 2261 mm →  
 ← No. 34A = 2344 mm →  
 ← No. 34B, 34E = 2515 mm →

3 x 1016 mm (40 英寸)  $\varnothing$



← No. 6 = 2261 mm →  
 ← No. 34A = 2344 mm →  
 ← No. 34B, 34E = 2515 mm →