

Biaxtronic® C0

## Biaxtronic® C0

Warp knitting machines with course-oriented parallel weft insertion

对应线圈横列进行平行铺纬的经编机



**KARL MAYER**



# TEXTILE SOLUTIONS. TEXTILE PERFECTION.

## KARL MAYER'S textile machines.

### 纺织解决方案,让纺织尽善尽美

#### 卡尔迈耶的纺织机器

Something which began 70 years ago in Obertshausen has now become part of our everyday lives. Textiles produced on KARL MAYER's machines surround us in both our private and professional lives, providing comfort, security and safety.

The success story of KARL MAYER, the company set up by Mr. Karl Mayer in 1937, began 10 years later with the production of tricot machines. Nowadays, this family-run, German company leads the world in the warp knitting machine sector. For the section Warp Preparation for weaving and warp knitting, KARL MAYER offers innovative complete solutions for the weaving industry, especially with the brands KARL MAYER, BENNINGER, ROTAL, SUCKER and GRIFFIN.

The development of this textile world demands a global strategy: „Worldwide customer-oriented“ is one of KARL MAYER's most important objectives.

A keen awareness of quality, expert engineering and innovative products are at the heart of KARL MAYER – and this is what makes our customers all over the world trust us completely.

Our joint success is based on this trust, together with the dialogue and close cooperation which we foster with our customers. This is why KARL MAYER supplies machines tailor-made to very specific requirements. This makes our clients more and more successful, and better equipped to face the future – and it makes us experts in the textile chain.

To meet this responsibility, we have extended our operations to other areas of textile production.

Our strategy of developing other commercial segments in the textile chain gives our customers the opportunity to grow with us and, at the same time, prepares us for future challenges.

The concepts of 'future' and 'responsibility' go hand in hand at KARL MAYER. The development of new technologies, are just as important here as furthering the careers of our employees and providing training for our clients since, as far as we are concerned, the best future lies with people and their ideas.

KARL MAYER – we care about your future.

70年前始于奥博茨豪森的事情现在已成为我们日常生活的一部分,卡尔迈耶机器生产的纺织品就在我们的周围,无论是我们的私人生活还是职业场所,它们让我们的生活更加舒适、安全。

卡尔迈耶先生于1937年创办了卡尔迈耶公司,10年后生产特里科机器,成功故事由此展开。如今,这家德国家族企业引领着世界经编行业。在经纱准备领域,卡尔迈耶为机织行业提供完备的创新型解决方案,拥有 KARL MAYER、BENNINGER、ROTAL、SUCKER 以及 GRIFFIN 这些知名品牌。

纺织世界的发展需要全球化的战略,“以全世界的客户为导向”是卡尔迈耶最重要的目标。

对质量、专业技术和创新产品的敏锐洞察力是卡尔迈耶的核心,也正是这些使我们取得了世界各地客户的完全信任。

我们的共赢正是基于这种信任,以及与客户的联系和紧密合作。正是因为这些,卡尔迈耶能按照客户的特殊需求量身定制机器,使我们的客户获得越来越大的成功,并且面向未来配备了更好的装备—它使我们在纺织链上更为专业化。

为了担负起这样的责任,我们的业务范围已经延伸到纺织生产的其他领域。

发展纺织链上其他商业领域的策略让我们的客户有机会跟我们一起成长,同时,让我们准备迎接未来的挑战。

在卡尔迈耶,“未来”和“责任”的概念是连在一起的。新技术的研发与促进员工事业,以及向客户提供技术培训同等重要,我们坚信,人类和他们的思想会开创最美好的未来。

卡尔迈耶—我们关注您的未来!

# Biaxtronic® CO

## Warp knitting machines with course-oriented parallel weft insertion

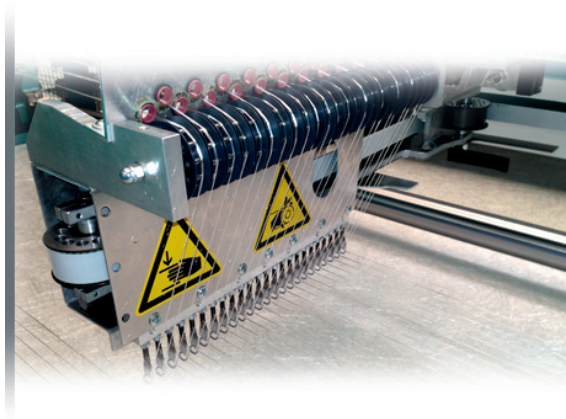
### 对应线圈横列进行平行铺纬的经编机

The wide-ranging applications of warp-knitted biaxial multiply fabrics and the resulting high demands on the processing of various yarns, especially technical materials, represent an ambitious challenge for those involved in the development of the respective machine technology.

KARL MAYER's high-tech Biaxtronic® CO warp knitting machine with parallel weft insertion system is convincing by its extreme flexibility along with simple and solid construction, as well as very user-friendly operation. The outstanding features of the machine are its high production output and top fabric quality.

经编双轴向织物的多种应用和对各种纱线加工的严格要求，尤其是工业用纱线，为机器的研发和生产带来了极大的挑战。

带有平行铺纬系统的卡尔迈耶高品质Biaxtronic® CO经编机拥有高度的灵活性、简洁稳定的结构、以及杰出的用户友好性。机器的杰出优势包括较高的面料产量和顶级的面料品质。



**The machine offers well-tried KARL MAYER quality together with innovative solutions:**

#### Optimized drive elements and weft insertion systems

State-of-the-art materials and complex detailed solutions, especially for the drive technology and weft insertion system, enable high machine speed and high weft layer frequencies, whilst ensuring a gentle processing of the yarn materials.

#### Economical special features

Innovative solutions in the drive technology and detailed technical improvements reduce the operation costs and offer our customers a further increase in productivity and efficiency in the manufacturing of non-crimp fabrics (NCF).

#### Direct link to the future

**KAMCOS®** offers a comprehensive package of benefits, such as: easy operation of all machines via touchscreen, monitoring and control of machines within the company's network as well as remote diagnostic service via Teleservice.

#### Solid and reliable

In spite of all the high-tech functions, our machines remain a typical KARL MAYER product, offering: highest operational reliability, long service life and a valuable piece of engineering work.

这款机器融合了卡尔迈耶杰出的产品质量和技术创新：

#### 优化的驱动和铺纬系统

顶级的原材料和精巧的细节创新，尤其在驱动和铺纬系统方面，在确保对纱线进行柔和加工的同时，还拥有较高的机速和铺纬频率。

#### 经济、可靠

驱动技术上的创新型解决方案和细节技术的改进降低了生产成本，在生产无折皱织物（NCF）的时候，让客户进一步提升产量和生产效率。

#### 直接链接到未来

KAMCOS®可带来一系列优点，例如：触摸屏使得机器操控更加简便，通过公司网络以及网络远程诊断系统对机器实行可靠的监控。

#### 稳定可靠

除了各种高科技功能外，这款机器还是卡尔迈耶的明星产品：持久耐用，稳定可靠，是工程学上的经典之作。



## Biaxtronic® CO

### Warp knitting machines with course-oriented parallel weft insertion

#### 对应线圈横列进行平行铺纬的经编机

##### High-performance machine for glass fiber processing:

The main features of the latest Biaxtronic® CO machine are an increased productivity, an easier and more comfortable machine handling as well as optimized fabric quality.

Detailed innovative solutions especially for the drive technology and the course-oriented weft insertion system enable high machine speed and high weft layer frequencies which on the other hand result in a high production output rate.

Excellent fabric qualities are being realized by the interaction of technically sophisticated machine components. The complementary inserter situated on top of the yarn laying device guarantees a constant draw-off speed directly from the bobbins during the entire laying process also in case of working with heavy yarn material. An integrated conveyor belt guarantees perfect transport of especially lightweight loose chopped strands mat to the stitch bonding area.

Easy reach and handling of all important machine components such as filler thread feeding device, warp beams, yarn guiding elements, and to be close to the weft layer are also important factors to reduce set-up and maintenance time and, thus, increase the efficiency of production. The operation of the machine is done via interactive and symbol-based menu navigation on a color touch screen. The integrated recipe management allows the easy and fast reproduction of article constructions also worldwide via Ethernet interface.

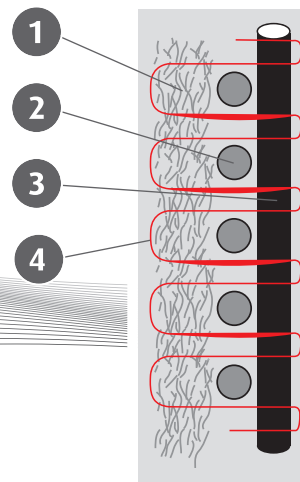
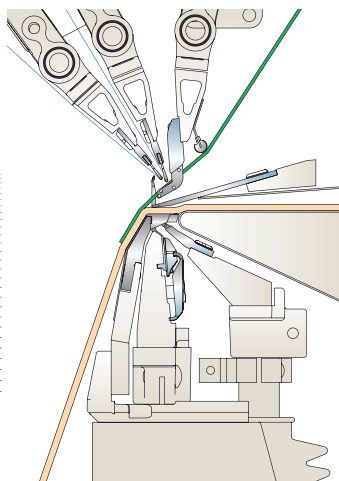
##### 加工玻璃纤维的高性能经编机:

最新型Biaxtronic® CO经编机的主要特色有: 较高的产能、便捷舒适的机器操控, 以及优异的织物品质。

针对驱动技术和对应线圈横列进行平行铺纬的细节化创新解决方案使得机器拥有较高的车速和铺纬频率, 这从另一方面显著促进了产量。

复杂精密的机器组件之间进行精确的相互配合, 使得织物品质优异。纱线铺设装置上方的辅助铺纬器保证了纬纱从筒子上以恒定的速度持续退绕, 当采用较粗纱线时也一样。输送带保证了完美的原料传送, 将轻质、松散的短切纱送至缝编区域。

所有重要机器组件的操控简便, 例如: 衬经纱喂纱装置、经轴、导纱元件、近距离接触纬纱层, 这些特点减少了机器停机与待机的时间, 增加了产能和效率。机器操作通过彩色触摸屏上的菜单实现。综合的菜单式管理使得用户可以通过因特网在全球范围内实现织物的重复生产。



- 1 - Chopped strands mat/Nonwoven
- 2 - Weft thread
- 3 - Warp thread/filler thread
- 4 - Loop system
- 1 - 短切纱/无纺布
- 2 - 纬纱
- 3 - 经纱/衬经纱
- 4 - 线圈

# Biaxtronic® C0

Warp knitting machines with course-oriented parallel weft insertion

对应线圈横列进行平行铺纬的经编机

Rotor blades for wind power plants

Bulk storage tanks, transcontainers

风力发电叶片

大型储存罐，集装箱

Sporting boats

Tanks

运动艇

罐体

Passenger boats

Pipes/pipe relining

客轮

管道系统

Snowboards

Reinforcement parts for cars

滑雪板

汽车车身的增强组件

Surfboards

Machine parts

冲浪板

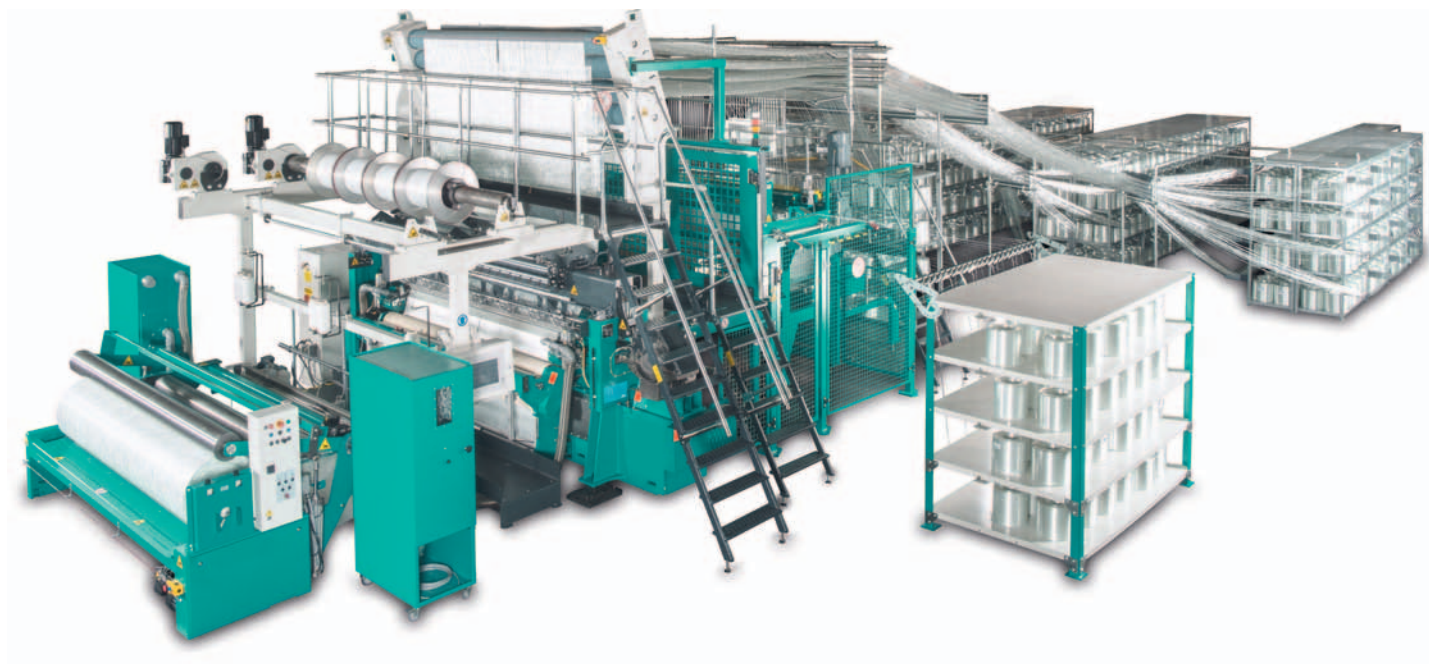
机器部件

Safety helmets

Textile-reinforced concrete

安全钢盔

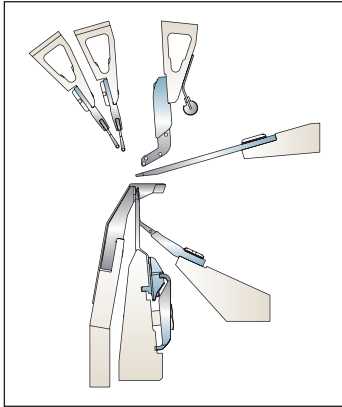
织物增强混凝土



# Biaxtronic® C0

## Technical data

### 技术参数



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#### Working widths

100, 101 or 102 inches  
Further gauges on request

#### Gauges

E 5, E 6, E 7, E 10

#### Bars/knitting elements

compound needle bar, closing wire bar, knockover sinker bar, supporting bar, filler thread bar (movable), counter retaining bar, 1 or 2 ground guide bars (stitch-forming)

#### KAMCOS® (KARL MAYER COMMAND SYSTEM)

Touchscreen/Operator Interface IPC, Motion Control machine control computer for controlling the main drive, yarn feeding devices and fabric take-up, connected with weft insertion system (SES) and weft transport chain (STK) as well as units for feeding of additional materials, Ethernet/OPC interface for networking and linking to factory data capture system, integrated yarn inspection – Laserstop

#### Warp beam support

1 or 2 warp beam position(s), for sectional beams of max. 815 mm (32 inches) flange diameter

#### Yarn let-off device

for each completely mounted warp beam position:  
1 electronically controlled yarn let-off device

#### Filler thread feeding device

selectable with 4 delivery rollers  
(electronically driven)

#### Pattern drive

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

#### Weft insertion system

MSU S, yarn-laying carriage for 24 threads, unwinding from package creel, complementary inserter

#### Fabric take-up

Electronically controlled, 3-roller take up

#### 工作幅宽

100,101,102英寸  
其他机号根据需要提供

#### 机号

E5,E6,E7,E10

#### 梳栉/成圈机件

复合针针床, 针芯床, 脱圈沉降片床, 挡布针针床, 衬经梳 (活动), 挡板针, 1或2把地梳 (成圈)。

#### KAMCOS® (卡尔迈耶控制系统)

触摸屏/操作界面—终端, 运动控制系统用于控制主电机、纱线喂入装置和织物牵拉, 并且连接到铺纬系统 (SES), 纬纱传送链条 (STK), 以及其他原料的喂入单元, 实现网络工作的以太网接口, 车间数据采集系统。配有纱线扫描激光自停装置。

#### 经轴支架

1或2个经轴位置, 可用边盘直径最大为815mm (32英寸) 的盘头。

#### 送经装置

每个经轴位置配备一套电子送经装置。

#### 衬经纱喂入装置

可选的4罗拉传送系统 (电子控制)。

#### 花型驱动装置

采用花盘的N型驱动机构, 配有行程变换齿轮。

#### 铺纬系统

MSU S, 可携带24根纱线的铺纬小车, 纬纱从纱架退绕, 配有辅助铺纬器

#### 织物牵拉装置

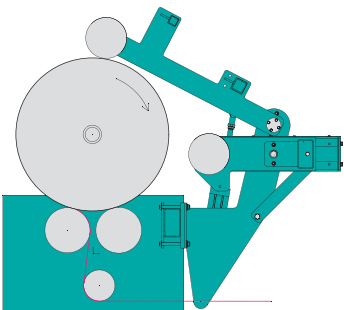
电子控制, 3罗拉牵拉装置。

# Biaxtronic® C0

## Technical data

### 技术参数

#### No. 40-DP



#### Batching device

standard: batching device with pressure roller, max. batch diameter of 1170 mm, torque and/or synchronous control, max. batch weight 4.0 t  
Ejector

#### Electrical equipment

Speed-regulated main drive, power-failure safe, including inching motion function, total connected load according to the equipment

#### Oil supply

Cooling, recirculation by means of electric pump, filter

#### 卷取装置

标准：带压力罗拉的卷取装置，最大卷取直径1170mm，转矩和/或同步控制，最大卷取重量4吨。

#### 电子设备

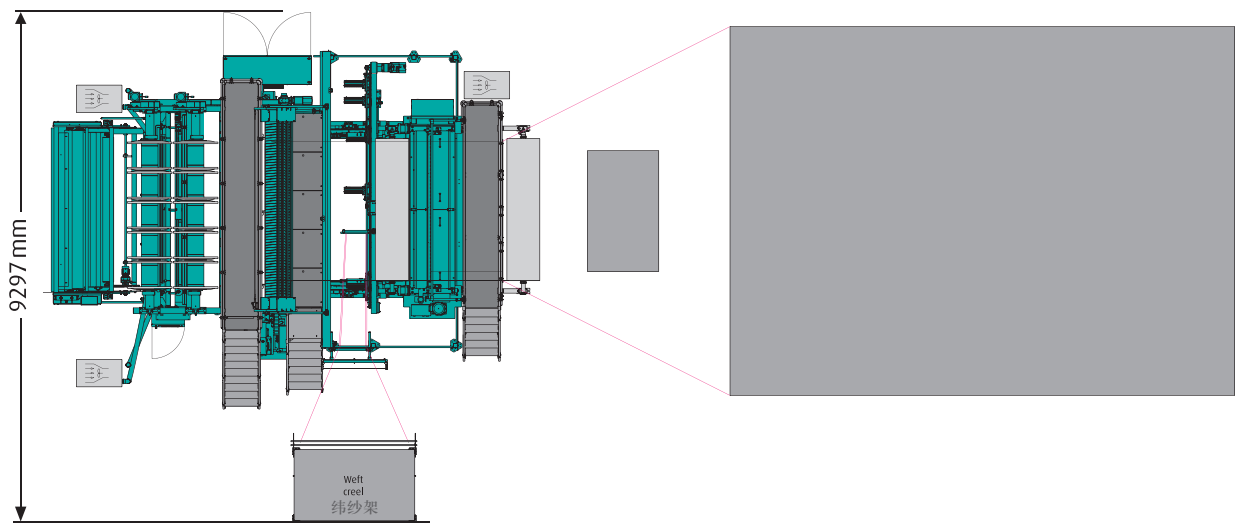
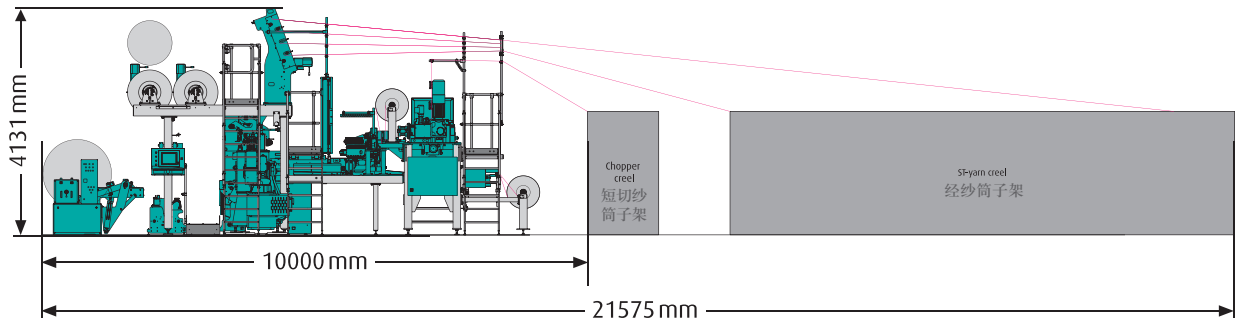
调速主电机，断电保护，慢速传动功能，可进行速度调节，机器总连接负载由具体机型决定。

#### 供油

冷却装置，通过电泵和过滤器实现循环

#### Dimensions 尺寸

Height / 高度	<b>h</b>	4131 mm
Length / 长度	<b>l</b>	21575 mm
Width / 宽度	<b>b</b>	9297 mm



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**we care about your future**



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