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For the purpose of improving product quality, our company reserves the right to change product specifications without notice.



SPINNING Solutions

纺纱解决方案

MK9 梳棉机
MK9 CARDING Machinery



关于日发纺机

日发纺机创建于1993年,是国家重点高新技术企业、国家机械工业重点骨干企业、国家863计划CIMS工程示范企业、全国CAD应用工程示范企业、中国纺织机械协会副会长单位。现旗下控股山东日发纺织机械有限公司、安徽日发纺织机械有限公司、浙江日发纺机技术有限公司。

公司以“成为敏捷化的国际性公司”为愿景,以“为用户提供智能纺织装备系统解决方案,并协助用户逐步实现数字化工厂梦想”为使命,秉承“质量、创新、快速反应”的核心价值观,致力于机电行业的“数字科技”,已成为国内外享有高知名度的纺织装备生产企业。多年来已成功开发了清梳联、并条机、转杯纺纱机、喷气涡流纺纱机、倍捻机、直捻机、假捻变形机、精密并纱(络筒)机、自动穿经机、喷气织机、喷水织机、剑杆织机、毛巾织机、特种织机、针织圆机、无缝内衣机、袜机、非织造布设备等系列的上百种产品,能够为行业提供纺纱、前准备、织造、非织造等解决方案,涉及纺织行业的各个领域。产品遍及全国各地,并销往全球30多个国家和地区,在各个行业的市场占有率位居前列。



日发纺机正致力于创造崭新的“数字科技”理念,在未来的整机生产中,建立“人流、物流、信息流”的互动平台,实现科技、环境、制造的和谐统一。铸就“信息化、敏捷化、国际化”的机械制造生产基地。

安徽日发纺织机械有限公司系日发纺机全资子公司,注册成立子2013年,位于马鞍山承接产业转移示范园区内。公司主要产品为清梳联、并条机、转杯纺纱机、针刺、水刺非织造布设备,继承日发纺机三十多年的专业经验使安徽日发纺机成长为高端纺纱装备研发制造基地。

About Us

Zhejiang Rifa textile machinery co., ltd. is founded in 1993. The company is a China national key high-tech enterprises, a key enterprise of the China national machinery industry, a demonstration enterprise of both China national 863 program CIMS engineering and China national CAD application engineering, a China national torch plan high-tech enterprise, and a vice president unit of China textile machinery association. It now holds three subsidiaries: Shandong Rifa textile machinery co., ltd., Anhui Rifa textile machinery co., ltd. And Zhejiang Rifa textile machinery tech co., ltd.

With the vision of “become an agile and international company”, the mission of “Provide users with intelligent textile equipment system solutions, and help users gradually realize the dream of a digital factory” and the core values of “quality, innovation and rapid response”, Zhejiang Rifa Textile Machinery Co., Ltd. is devoted to the area of “digital technology” in mechanical and electrical industry, and has become a well-known textile equipment manufacturer with excellent reputation at home and abroad. Over the years, the company has successfully developed four solutions such as spinning, fiber preparation, weaving and non-woven, including blow-room machine, draw frame, rotor spinning machine, air jet vortex spinning machine, two-for-one twister machine, twister machine for tire cord, false-twist texturing machine, precise winding machine (precise rewinding machine), automatic warp drawing machine, air jet loom, water jet loom, rapier loom, terry towel loom, specific loom, circular knitting machine, seamless knitting machine, hosiery machine and non-woven equipment, and hundreds of machines. These products have been distributed to all areas around China and sold to more than 30 foreign countries and regions with a leading market share in each respective industry.

RIFA is devoting itself to create a whole new theory of digital technology, establishing an interactive platform of “people flow, material flow and information flow”, realizing harmony and unify of science and technology, environment and manufacturing, and aiming to become a manufacturing base of “informatization, agility and internationalization”.

Anhui Rifa Textile Machinery Co., Ltd. is a wholly owned subsidiary of Zhejiang Rifa Textile Machinery Co., Ltd., it is founded in 2013, located in Ma'anshan City. The leading products are blow-room machine, draw frame, rotor spinning machine, needle&spunlace non-woven equipment: succeeding above 30 year professional experience from zhejiang Rifa, anhui Rifa has grown to a top grade spinning research and manufacturing base.





日发前纺源自英国Crosrol原创技术, 得益于日发纺机强大的技术研发平台, 经过不断的技术革新, 勇于推陈出新, 逐渐形成了具有核心竞争力的前纺全流程设备, 日发前纺致力于为客户提供卓越智能化解决方案。

Rifa pre-spinning developed from the original technology of Crosrol in the United Kingdom. Thanks to the powerful technology research and development platform of Rifa Textile Machinery, through continuous technological innovation, it has the courage to innovate and gradually formed a full-process pre-spinning equipment with core competitiveness. Rifa is committed to providing customers with excellent intelligent solutions.

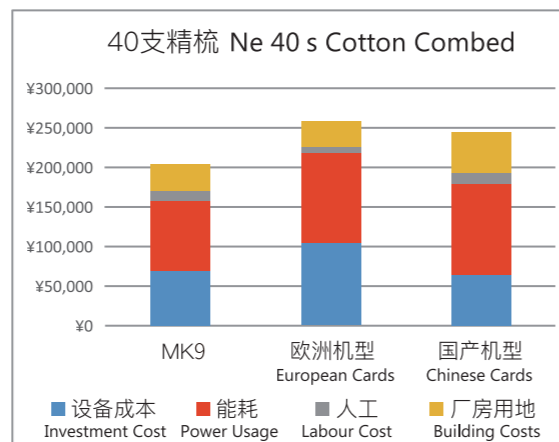
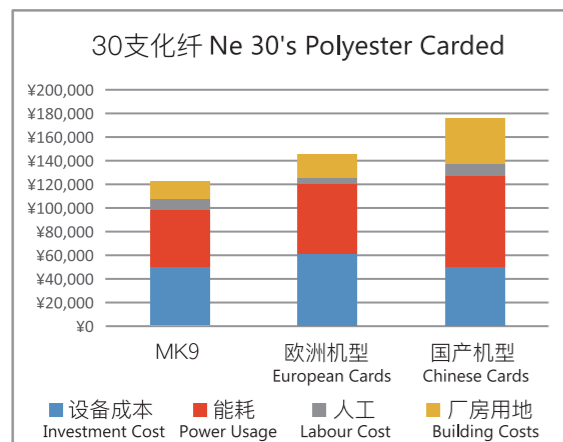
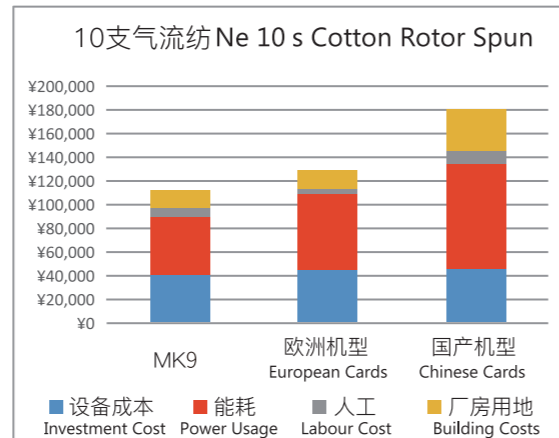
梳棉机
CARDING MACHINERY

所谓成本,有以下四项可量化的指标:

- 设备成本
- 使用能耗
- 人工成本
- 厂房使用成本

To analyse the total cost for the Carding process, the four quantifiable costs are namely:

- Capital (Machinery) Investment
- Power Consumption per Kilo of sliver produced
- Direct labour requirement
- Building operation costs



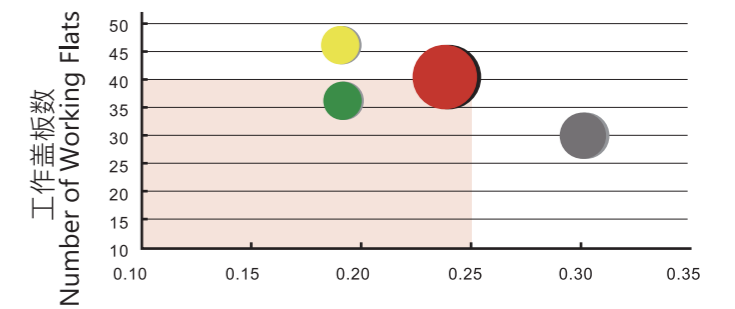
长期使用成本的降低是未来利润增长的基石
Evaluating the "Total Ownership Cost is the key influence on sustainable profitability when evaluating machinery selection

对以下三项的优化是MK9梳理能力的完整体现:

- 梳理面积
- 梳理速度
- 离心力

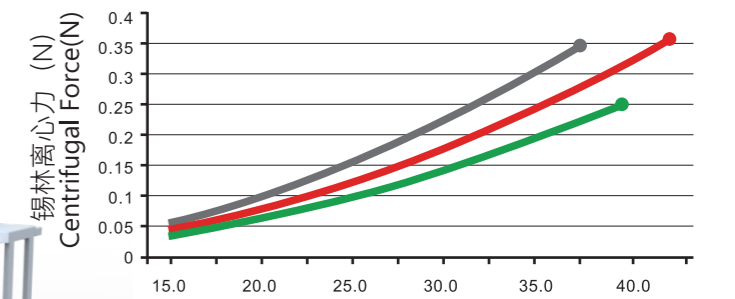
The power of a Carding machine is obtained by optimizing the three key influential factors for the Carding process :

- Carding Area
- Carding Speed
- Centrifugal Force



锡林线速在35m/sec时的离心力 (N)
Centrifugal Force (N)@35 Meters/Second Surface Speed

- Crosrol 梳棉机 Crosrol cards
- 小锡林梳棉机 32" Card
- 高产50"梳棉机 Hi-Tech 50" Card
- 传统50"梳棉机 Traditional 50" Card



锡林表面线速度 (m/sec)
Cylinder Surface Speed(Meter/Second)

- Crosrol 40" 锡林 Crosrol 40" Cylinder
- 传统型 50" 锡林 Conventional 50" Cylinder
- 小锡林 32" Cylinder

Crosrol的设计理念保证了MK9新型高产梳棉机不仅仅在这四个单项中都表现优异,并且在总的成本上更是有惊人的优势。正是这种优势确保了Crosrol的客户拥有更强的竞争力和可持续发展性,利润空间往往更大。

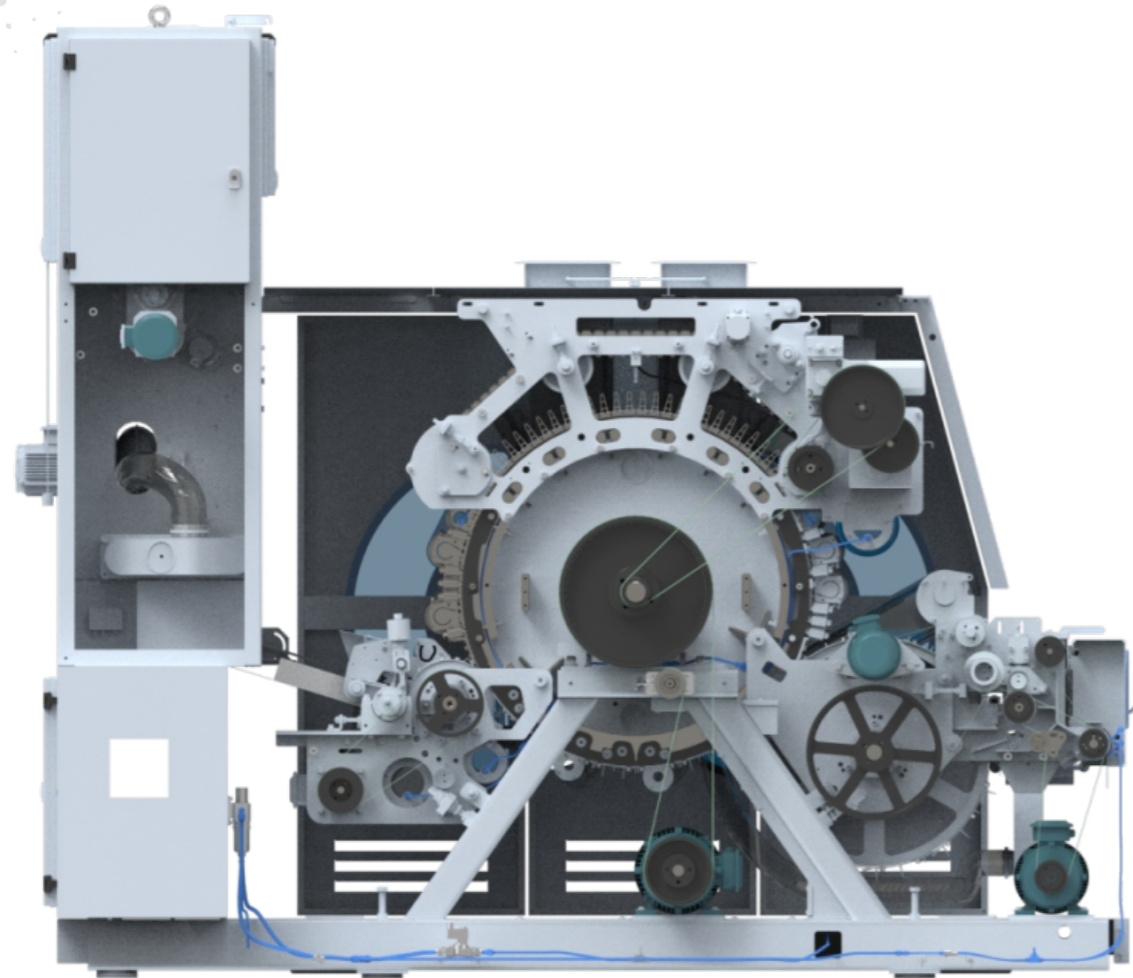
These are the fundamental factors for the design process of all Crosrol cards, The MK9 Card not only achieves high marks in all four individual categories but as a total solution offers the lowest cost per kilo of Sliver produced of any machine available today. This concept of low "Total Ownership Cost" drives sustainable profitability throughout the Spinning mill.

Crosrol创新的设计理念完成了梳理面积、梳理速度和离心力的完美结合,使得MK9梳棉机在极致梳理力上有了进一步的提升。

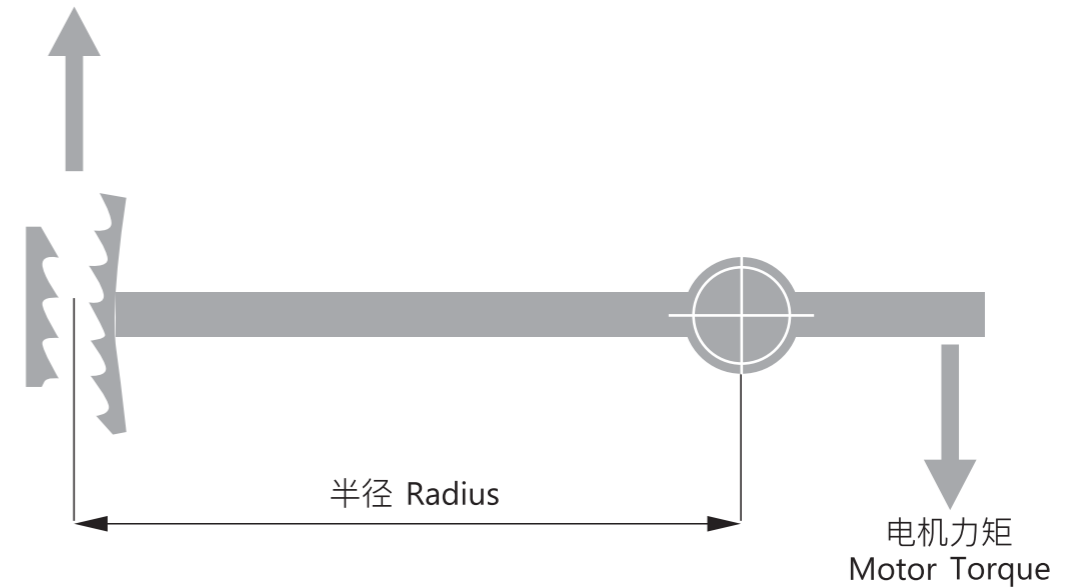
有了梳理力的保障,配合Crosrol著名的梳理速度和离心力的完美结合,使得MK9梳棉机在极致梳理力上有了进一步的提升。精准性把控和稳定性使MK9成为了高产梳棉机中最完美的选择。

The innovative design concept of Crosrol completes the perfect combination of carding area, carding speed and centrifugal force, which further improves the ultimate carding force of the MK9 card.

With the guarantee of carding force and the perfect combination of Crosrol's famous carding speed and centrifugal force, the MK9 card has further improved the ultimate carding force. Accurate control and stability make MK9 card the perfect choice for today's high efficiency spinning units.



梳理力 Carding Force



27%↓

做到同样的锡林离心力要求, Crosrol梳棉机
27%功耗节省

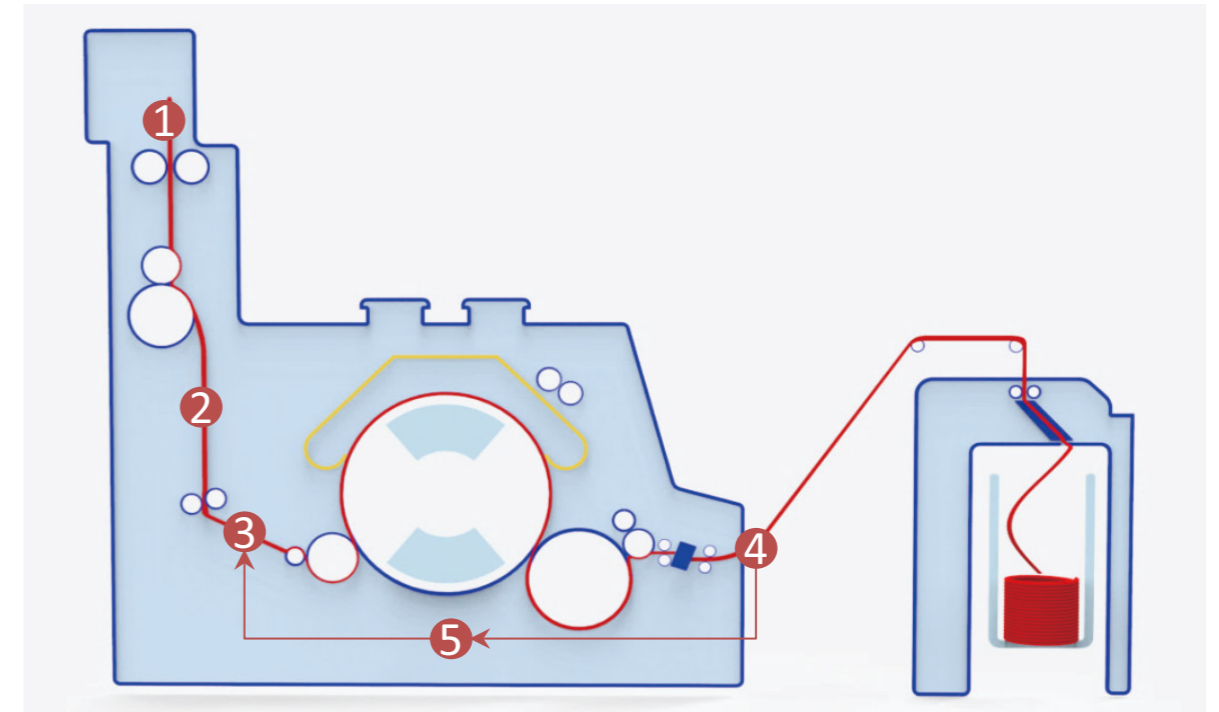
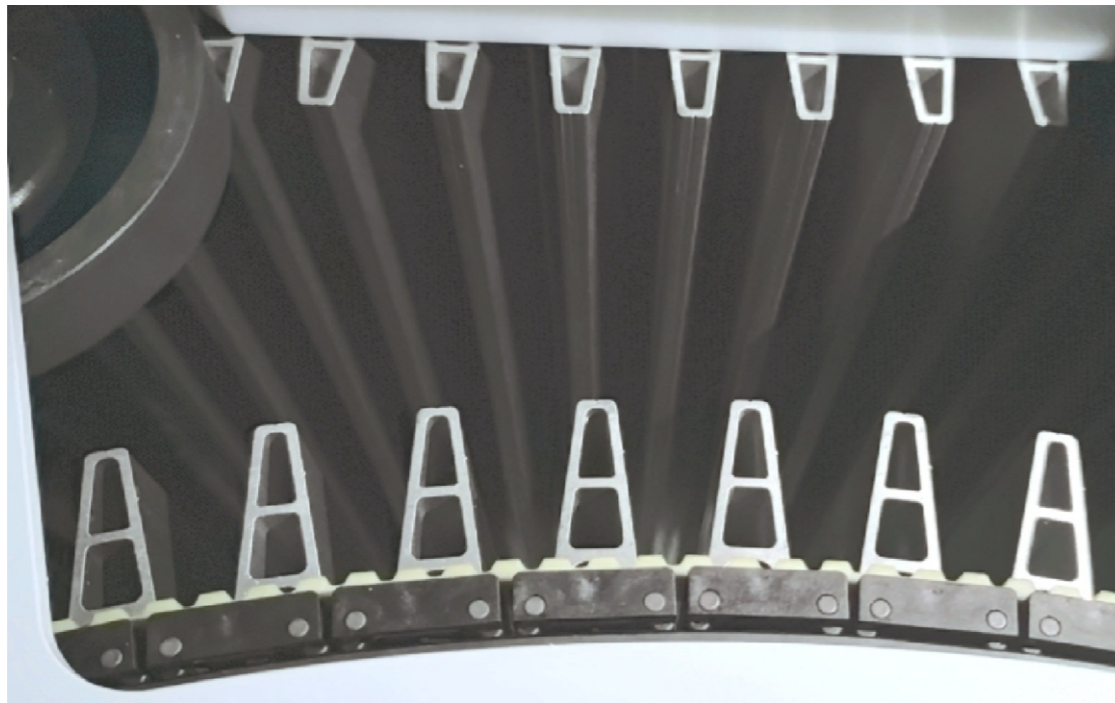
For the same given Carding force a Crosrol
cylinder utilizes 27% less Power than a
conventional carding machine.

能够最大限度减少和控制每公斤纱线生产的用电量, 是一个纺纱厂成功的关键因素之一, 在这方面, MK9梳棉机是唯一的选择, 通过设计和配置达到此目的, 请参考以下内容:

- 40英寸(1020mm)锡林直径, 与常规梳棉机相比, 电动机驱动扭矩减少27%
- 锡林通过变频器驱动, 能够保证在30Hz-40Hz最佳范围内运行
- 所有电动机均采用节能电机, 通过IE3认证标准, 这些标准都远高于亚洲市场的同类标准
- 罗拉轴承均采用简单的深沟钢球、自动调心轴承, 进一步降低运行负载

Being able to minimise and control the electricity consumption per kilogram of yarn produced is one of the key factors for the success of a spinning mill and in this regard the MK9 card is the only option, designed and configured to achieve this, please Refer to the following:

- 40 inch (1020mm) cylinder diameter, motor drive torque reduced by 27% compared to conventional cards
- The cylinder is driven by converter, which can ensure that it operates within the optimal range of 30Hz-40Hz.
- All motors use energy-saving motors with the IE3 certification standards, which are far higher than similar standards in the Asian market
- All roller bearings used deep groove steel balls, self-aligning bearings, further reduce operating load.



活动盖板是梳理质量的保证

- 活动盖板和锡林间的梳理作用是梳棉机的核心，克罗斯罗尔始终关注这个关键功能，多年致力于研究追求完美盖板功能，因此在梳棉领域克罗斯罗尔活动盖板系统是非常卓越的。
- 采用同步齿形带驱动高精度铝合金活动盖板，由独立电机控制，具有易于拆装和无级调速的特点。

The revolving flats guarantee the carding quality

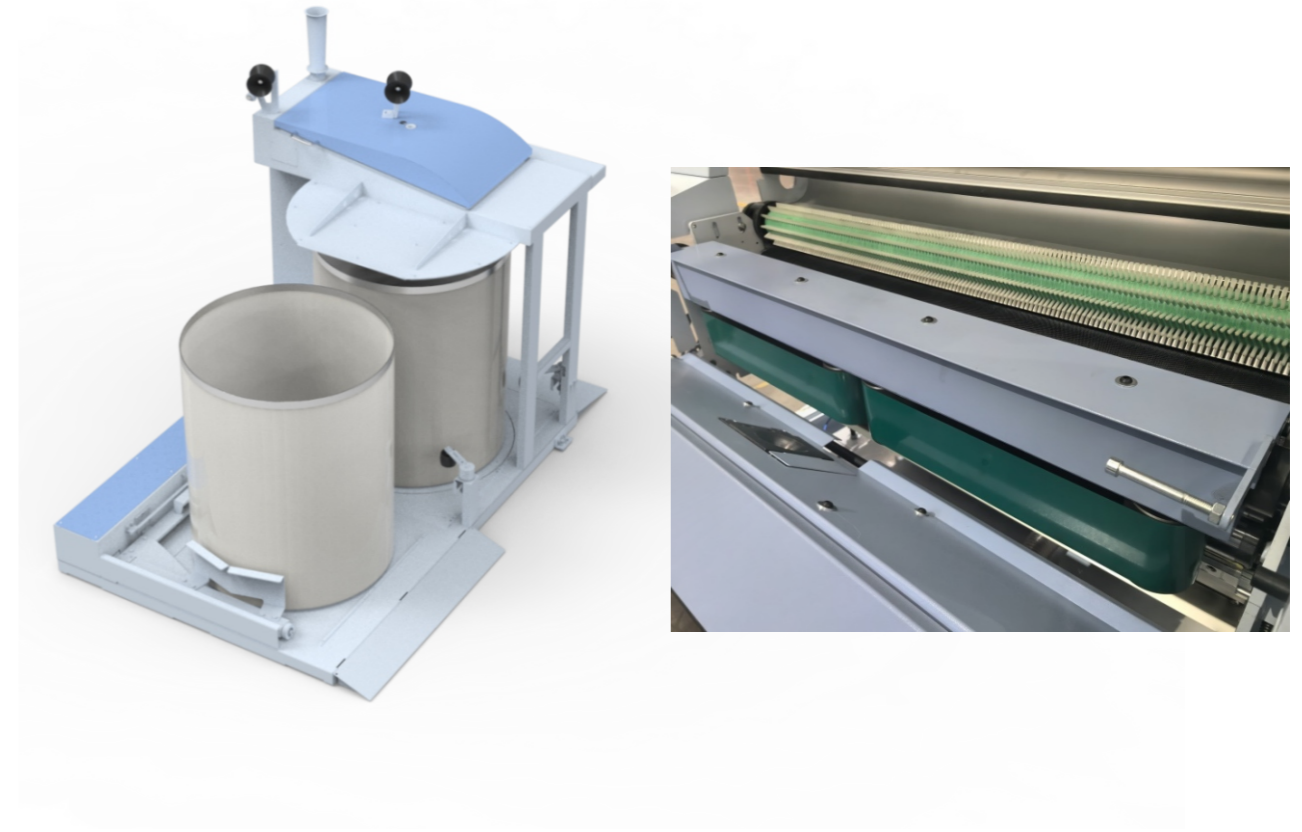
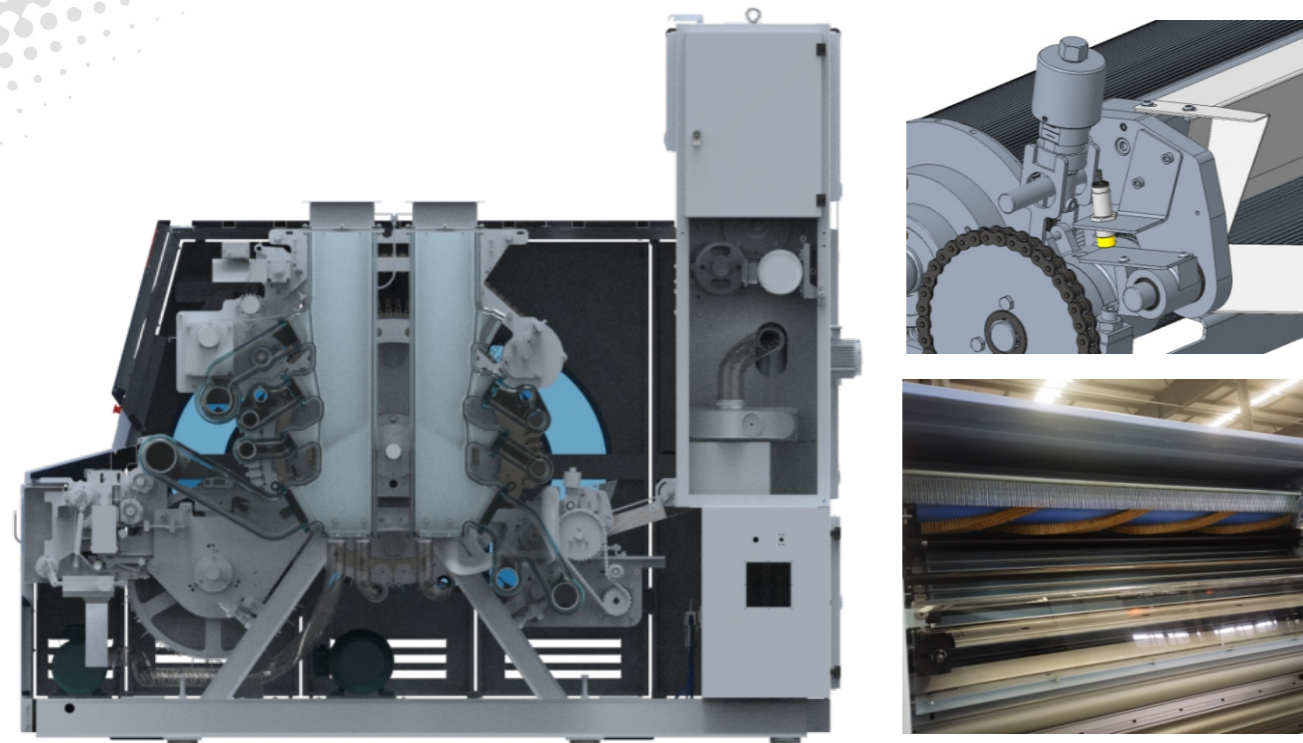
- The carding function between the revolving flats and the cylinder is the core of the carding machine. Crosrol has always paid attention to this key function, and has devoted itself to research and pursuit of the perfect flat function for many years. Therefore, in the field of carding, the Crosrol revolving flat system is very excellent.
- Aluminum alloy revolving flats driven by synchronous toothed belt are controlled by individual motor, it's convenient for maintenance, and the speed could be step-less adjusted.

整机5处高精度自调匀整技术，确保棉条克重稳定

- 连续喂棉控制系统，始终保证喂棉管道压力稳定。
- 棉箱压力采用PID动态控制，棉箱压力±5Pa，确保筵棉稳定。
- 短片段自调匀整，通过检测棉层厚度调整喂棉罗拉速度，精度高达1毫秒。
- 长片段匀整采用凹凸轮加位移传感器检测方式，即时控制棉条定量并提供差异信号，稳定可靠。
- 短、长片段反馈信号统一进入中央处理系统，根据程序设定对喂棉罗拉转速进行即时调整。

High-precision autoleveller technology to ensure stable sliver weight

- Continuous material feeding control system, always ensure stable pressure in feeding pipe.
- The pressure of the chute adopts PID dynamic control within ±5Pa to ensure the stability of the material lap.
- Short term autoleveller adjusting the feed roller speed by detecting the thickness of the material lap, with an accuracy of up to 1 millisecond
- Long term autoleveller control by real time displacement signal from autoleveller roller sensor, which is reliable and stable.
- Feedback signals of short and long segments are unified into the central processing system, and the rotation speed of the feeding roller can be adjusted in real time according to the program setting.



- 喂棉罗拉设有棉层厚度检测传感器, 当棉层过厚时停机报警。
- 喂棉罗拉处设有金属探测器, 避免金属异物进入梳棉机造成损坏。
- 整机多达17透明处负压吸口, 有效排除杂质和粉尘。
- 标配活动盖板刷辊, 确保每一根活动盖板最佳工作状态。

- The feeding roller is equipped with a material lap thickness detection sensor, when the material lap is over setting, the machine will stop and alarm.
- There is a metal detector at the feeding roller to prevent metal objects from entering the carding machine and causing damage.
- The whole machine has as many as 17 transparent negative pressure suction ports, which can effectively remove impurities and dust.
- Standard revolving flats brush to ensure the best working condition of each revolving flat.

- 采用直线式双筒位自动换筒, 占地面积小; 圈条独立传动, 摆放位置灵活。
- 采用成熟的自动断头装置, 断头动作稳定, 断头成功率高。
- 采用气缸和皮带系统驱动小车的换筒装置, 结构简单, 可靠性高。

- Adopting linear double-can auto-changing which can saving space; individual driving and flexible to put position.
- Full-blown auto-broken-end device is adopted with stable motion and high success rate of eng breaking.
- Can-changing device with carriage driven by cylinder and pulley system is adopted with simple structure and high reliability.

技术规格和尺寸图

SPECIFICATION&DIMENSIONS

设备规格 Machine Specification	MK9 梳棉机 MK9 CARDING Machinery
可加工纤维长度 Raw Materials Fibers Length	16~78mm
喂入宽度 Feed Stock Width	1.2m
生条定量 Sliver Weight	5~10g
5米重量不匀率 5-meter weight unevenness rate	≤1%
装机功率 Installed Electrical Power	12.7KW
实际功率 Consumed Electrical Power	5.2KW 产量以90Kg/小时测算 5.2KW (@ 90 kg's / Hr)
除尘风量 Dusting Extraction Volume	4200m ³ /h , ≥750Pa
压缩气量 Compressed Air Consumption	0.15m ³ /h
出条速度 Delivery Speed	最高350m/min Up to 350 m/min
产量 Production Rate	最高150Kg/小时 Up to 150Kg/Hr
自调匀整 Auto leveling Systems	短、中、长片段 Short, Medium & Long Term
换桶方式 Coiler and Automatic Can Changer	直线型自动换桶 Linear type
条筒规格 Specification of strip tube	直径1m, 高1.2m Diameter 1m, height 1.2m

外形尺寸图 Machine Dimension Drawing

