

并条机

DRAW FRAME

JWF1366^{pro} | JWF1313 | JWF1312G



沈阳宏大华明纺织机械有限公司

SHENYANG HONGDA HUAMING TEXTILE MACHINERY CO., LTD.

企业简介

沈阳宏大华明纺织机械有限公司隶属于经纬纺织机械股份有限公司，主要生产和经营并条机及其前后工序的智能输送装置，拥有70多年的研发和制造经验，产品远销亚洲、欧洲、美洲、非洲的多个国家和地区。公司追求先进的技术、严格的管理、一流的产品和服务，不断完善研发体系，增强企业的自主创新能力，先后被认定为“省级企业技术中心”、“中国纺织机械行业产品研发中心”、“高新技术企业”并通过了ISO9001质量管理体系认证和欧盟CE认证。公司实现用数字信息技术改造传统产业，提升企业核心竞争力，实施CIMS工程，决策支持系统，办公自动化系统，工程设计自动化系统，企业资源计划(SAP)系统等。公司立足中国，辐射全球，在世界多个国家设有服务站和备件库，并配备本土化服务人员，能方便快捷的为当地客户提供高效的服务。公司坚持“以人为本、协同、创新、卓越”的理念，遵循“顾客第一、信誉第一、质量第一”的宗旨，竭诚为全球纺织客户提供优质的设备和解决方案。

ABOUT US

SHENYANG HONGDAHUAMING TEXTILE MACHINERY CO., LTD. belongs to JINGWEI TEXTILE MACHINERY CO.,LTD. mainly produces and operates drawing and the intelligent conveying device for the front and rear processes, with more than 70 years of research and development and manufacturing experience, products are exported to many countries and regions in Asia, Europe, America and Africa. The company pursues advanced technology, strict management, first-class products and services, constantly improves the research and development system, and enhances the independent innovation ability of enterprises. Has been identified as the "provincial enterprise technology center", "China Textile machinery industry product Research and development center", "high-tech enterprises" and passed the ISO9001 quality management system certification and the EU CE certification. The company realizes the transformation of traditional industries with digital information technology, enhances the core competitiveness of enterprises, implements CIMS engineering, decision support system, office automation system, engineering design automation system, enterprise resource planning (SAP) system, etc. Based in China, the company radiates the world, has service stations and spare parts warehouses in many countries in the world, and is equipped with localized service personnel, which can provide efficient service for local customers conveniently and quickly. The company adheres to the concept of "people-oriented, collaboration, innovation, excellence", follows the purpose of "customer first, reputation first, quality first", and strives to provide high-quality equipment and solutions for global textile customers.

目录 Contents

JWF1366 ^{pro} 单眼匀整并条机	
JWF1366 ^{pro} SINGLE DELIVERY AUTOLEVELLER DRAW FRAME	01
JWF1313 并条机	
JWF1313 DRAW FRAME.....	11
JWF1312G 匀整并条机	
JWF1312G AUTOLEVELLER DRAW FRAME	17
各机型主要规格	
MAIN SPECIFICATIONS.....	23

JWF1366^{pro} 单眼匀整并条机

SINGLE DELIVERY AUTOLEVELLING DRAW FRAME



JWF1366型并条机是我公司新一代平台化设计的单眼自调匀整并条机，具备扎实的市场应用基础，最新优化推出的JWF1366^{PRO}，提升了吸风系统性能、罩壳密封性和结构稳定性，采用了全独立电机直驱上下圈条，配备全时自调匀整及在线检测系统，自清洁吸棉箱，气动直驱自动换筒，高效自动生头，免加油球轴承皮辊，集中加油等，可组合使用，节省占地。

JWF1366 draw frame is a new generation of platform design of our company's single-delivery autolevelling draw frame , with a solid market application foundation, the latest optimized JWF1366^{PRO}, improve the performance of the suction system, cover sealing and structural stability, the use of full independent motor direct drive top and bottom coiling, Equipped with all-time autolevelling and online detection system, self-cleaning suction box, pneumatic direct drive automatic can change, efficient automatic generating sliver head, oil-free ball bearing roller, centralized refueling, etc., combined two deliveries may save layout.

操作保养

OPERATION AND MAINTENANCE

更加便捷的操作及保养

NAS或USG3双匀整系统可供选择；
NAS系统可实现全时匀整；
主机及自调匀整操作均在触摸屏上完成，使操作并条机如同手机般方便；
维护保养时，操作者可正面对机器的大多数部位进行操作，减少维护保养难度；
高加工精度的差速箱和检测箱等匀整执行机构保障了高速下的稳定运行；
标配免加油皮辊，皮辊随摇架同步起落；
新型气动换筒装置稳定可靠；
新型一体式免拆卸压力棒；
牵伸区轴承采用集中润滑形式。

More convenient operation and maintenance

NAS or USG3 autolevelling systems are available;
NAS system can achieve all time autolevelling;
The operation of the main machine and autolevelling is completed on the touch screen, which makes the operation as convenient as a mobile phone;
During maintenance, the operator can operate most parts of the machine directly to reduce the difficulty of maintenance;
High precision differential box and detection box ensure the stable operation at high speed;
It is equipped with oil free top roller, which rises and falls synchronously with the spring arm;
The new pneumatic can-changing device is stable and reliable;
New integrated pressure bar without disassembly;
Centralized lubrication is adopted for the bearing in the drafting area.



重塑平台架构、打造高效清洁系统

REINVENT THE PLATFORM ARCHITECTURE FOR AN EFFICIENT CLEANING SYSTEM

稳定、高效的“新”吸风清洁系统

独立的吸风系统，各清洁点均有独立吸风管道；
优化提升的棉箱布局；
风道透明，便于观察及处理风道内积花；
独立的上下吸风通道，可通过调整风板对上下风道风量进行调节；
配备高效的自清洁吸棉箱，风机变频控制，可调风量。

Stable and efficient "new" suction cleaning system

Independent suction system, each cleaning point has an independent suction pipe;
Optimized and improved suction box layout;
Transparent suction channel for easy observation and handling of clustered flyings;
Independent upper and lower suction channel, can adjust the air volume of the upper and lower duct by adjusting the air plate;
Equipped with efficient self-cleaning suction box, fan frequency control, adjustable air volume.

多操作按钮设置

MULTI OPERATION BUTTON SETTINGS

在非主要操作侧，设置常用操作控制按钮，提供操作效率。

On the non-main operation side, common operation control buttons are set to provide operation efficiency.



新大空间吸棉箱

NEW LARGE SPACE SUCTION BOX

新机架布置方案，一侧全部放置吸棉箱，有效增加棉箱空间

New machine architecture layout, with suction box placed on one side, effectively increasing the space of suction box

靠近牵伸区一端设置棉网和风道接口，缩短风道长度，减小阻力损失

Install a cotton mesh and air duct interface near the drafting area to shorten the length of the air duct and reduce resistance loss

风机和风翼轮上下布置，减小棉箱厚度

The suction motor and fan wheel are arranged up and bottom to reduce the thickness of the cotton box

使用大尺寸风翼轮和大功率风机保证吸风清洁效果

Using large-sized fan wheel and high-power suction motor to ensure clean suction efficiency



上掀式罩壳开启，方便清洁及保养操作

THE UPPER LIFT COVER IS CONVENIENT FOR CLEANING AND MAINTENANCE OPERATION

侧向罩壳采用上掀式开启方式，开启角度140° 提供充足操作空间，为操作人员进行清洁及保养操作。

The side cover is opened by the upper lift mode, and the opening Angle 140° provides sufficient operating space for the cleaning and maintenance operations.

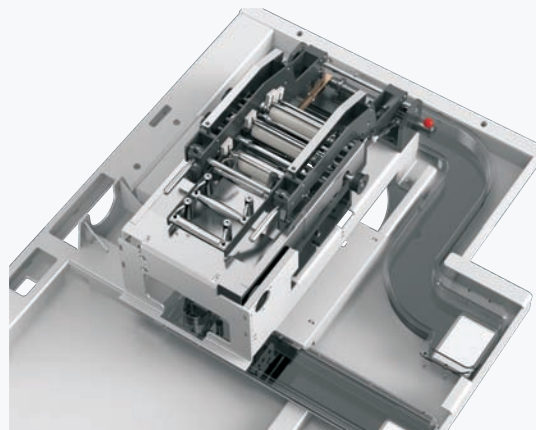
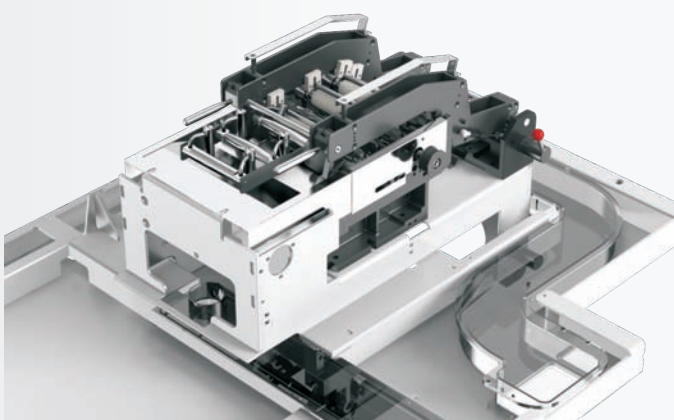


吸塑风道，阻力小，观察方便

PLASTIC SUCTION DUCT, SMALL RESISTANCE, EASY TO OBSERVE

上、下吸风主风道采用吸塑材质，内壁光滑，飞花及杂质不易附着，风道整体全透明结构，可以直接观察风道内部状态。

The upper and bottom suction main duct is made of plastic suction material, the inner wall is smooth, flyings and impurities are not easy to attach. The overall structure of the air duct is fully transparent, which can directly observe the internal state of the air duct.



新型气动换筒配智能断条实现断条和连续生产

SPARE CANS UNIT(OPTIONAL)

气动直驱自动换筒加智能免维护断条系统，品种适应性强，断条效率99%以上。

选配多备筒机构使该机真正实现连续生产免看护功能，能够大大减少挡车工劳动强度。

Pneumatic direct drive automatic can changing and intelligent maintenance-free breaking system, strong variety adaptability, breaking efficiency of more than 99%.

The optional multi-spare can mechanism makes the machine truly realize the continuous production without care function, which can greatly reduce the labor intensity.

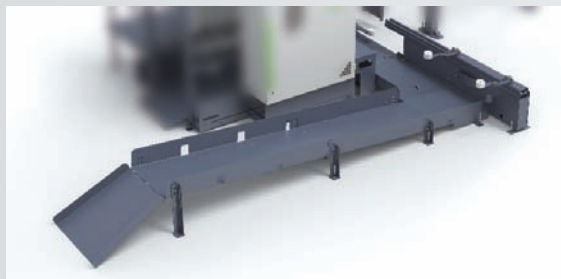
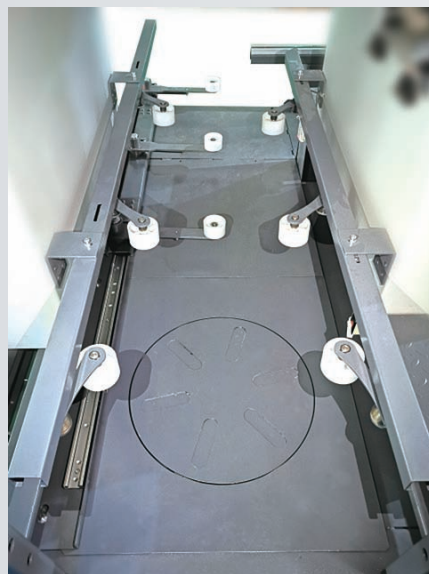
可选多备筒装置，最多可以储备10个预备条筒(选配置置)

根据用户场地及需求进行定制，实现适时自动补筒功能；
单机备筒存储数量最多可达10个，减少用工，开车效率也得到有效的保障；
更加适用于高速或气流纺车间。

Optional spare cans unit, up to 10 spare cans can be reserved (optional)

According to the user site and needs to customize, to achieve timely automatic can-filling function; The storage quantity of single machine and standby cans can reach up to 10, which can reduce the labor force and ensure the efficiency of starting;

It is more suitable for high speed or open-end spinning workshop.



皮辊及上清洁

TOP ROLLER & CLEANING

免加油皮辊配合新型钢棒清洁保障效率和质量

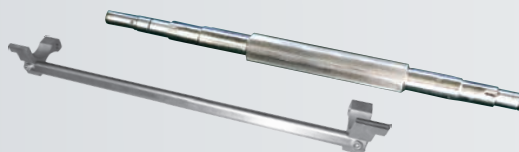
采用免加油皮辊，无需加油维护；
皮辊随摇架同步起落，可快速清理飞花或缠棉；
新型钢棒清洁装置，有效的保证了高速时的清洁效果；
新型一体式免拆卸压力棒，有效控制浮游纤维，操作方便。

Oiling free roller with new steel cleaning bar ensures efficiency and quality

The use of oiling free roller, without refueling maintenance;
The top roller rises and falls synchronously with the cradle, which can quickly clean up flying flowers or entangle cotton;

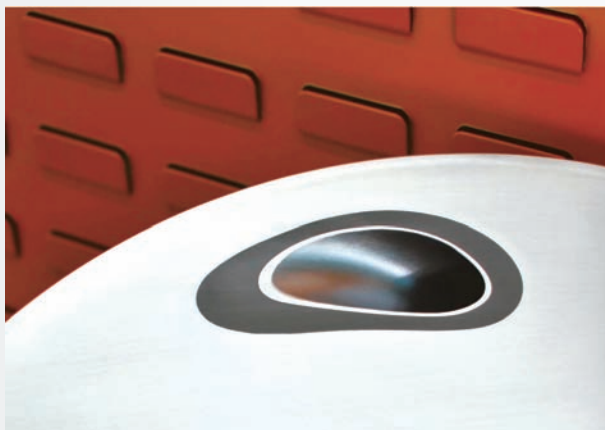
The new steel bar cleaning device effectively ensures the cleaning effect at high speed;

The new integrated pressure bar without disassembly can effectively control the floating fiber and is easy to operate.



电机直驱圈条系统

MOTOR DIRECT DRIVE COIL SYSTEM



新型圈条盘满足更多需求

新型圈条盘，独有圈条斜管空间曲线，采用不锈钢表面，具有两种规格斜管直径，满足客户不同需求，兼容性更强。（更多规格请详询业务人员）

New coiler meets more needs

New type coiler, unique inclined tube space curve, stainless steel surface, inclined tube diameters are available in two specifications, meet the different needs of customers, stronger compatibility. (For more specifications, please consult sales personnel)



圈条电机直驱

上下圈条分别采用盘式电机独立直驱，电机与盘体组装，没有了传动零件，更利于高速、没有了易损件，大大降低维护成本。

独立电机直驱，使圈绕比、圈绕张力全部实现电子调节、无需换轮，应对各种品种，圈绕成型都能够调整到最优；同时能够实现斜管不集尘。

Coiling motor direct drive

The upper and lower coilings are independently driven by disk motor, and the motor is integrated with the disk body, without transmission parts, which is more conducive to high speed and no wearing parts, greatly reducing maintenance costs.

Independent motor direct drive, so that the coil ratio, coil tension all achieve electronic adjustment, no need to change the wheel, to deal with a variety of varieties, the coil forming can be adjusted to the best; At the same time, it can realize that the inclined pipe does not collect dust.

全时自调匀整

ALL TIME AUTOLEVELLING

可选配公司自主研发的NAS全时自调匀整及在线检测系统，从启、停、低速、高速各个阶段均具备真实匀整效果；
配备高效的气动生头功能，提高生产效率。

The NAS all time autolevelling and online detection system independently developed by our company can be selected to achieve true autolevelling effects from start, stop, low speed, and high speed stages. Equipped with efficient pneumatic head generating function to improve production efficiency.



出条质量监控

DELIVERY QUALITY CONTROL

在线检测系统可以实时跟踪出条质量情况，对条子的CV%、A%、粗细节、波谱图等进行质量监测，减少了实验室对条子的质量检查工作量。

The online detection system can be real-time tracking of delivery quality situation. CV%, A%, thick and thin section, spectrum and so on of the slivers quality are tested, which reduces the quality of laboratory inspection.



匀整向导

AUTOLEVELLING GUIDE

便捷的匀整向导功能让匀整调整不再只能依赖专业人士

优化自调匀整操作步骤，符合棉纺工艺和用户应用习惯，自调匀整的操作不再依赖专业技术人员，操作简单易上手，有效防止误操作；

调整方便，放大倍数、死区长度调整不再依赖外置PC端，触摸屏上直接操作；

自调匀整采用数字量控制，抗干扰能力强，保障棉条质量。

The convenient autolevelling guide function makes the adjustment no longer dependent on professionals

Optimize the autoleveller operation steps, in line with the cotton spinning process and user application habits, autoleveller operation is no longer dependent on professional and technical personnel, easy to operate, effectively prevent misoperation;

It is easy to adjust. The adjustment of magnification and dead-part is no longer dependent on the external PC, and can be operated directly on the touch screen;

Autoleveller adopts digital control, which has strong anti-interference ability and ensures sliver quality.



远程运维（选配）

REMOTE OPERATION AND MAINTENANCE (OPTIONAL)

可选配远程运维系统，用手机随时随地可以监控设备

通过以太网接口及云平台实现远程运维，远程连接电脑、手机等可视设备，可根据用户需求定制功能，实现对设备的故障诊断、数据分析、技术升级等操作。

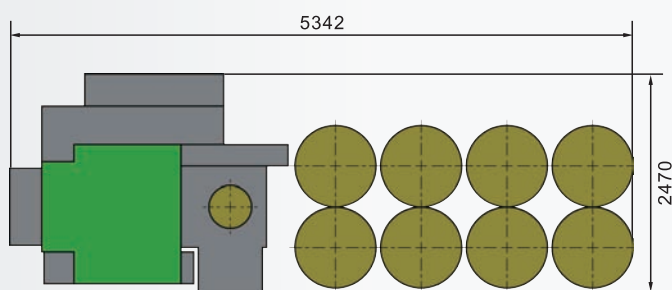
Optional with remote operation and maintenance system, mobile phone can monitor the equipment anytime and anywhere

Through the Ethernet interface and cloud platform to achieve remote operation and maintenance, remote connection of computers, mobile phones and other visual devices, according to user needs to customize functions, to achieve the equipment fault diagnosis, data analysis, technology upgrading and other operations.

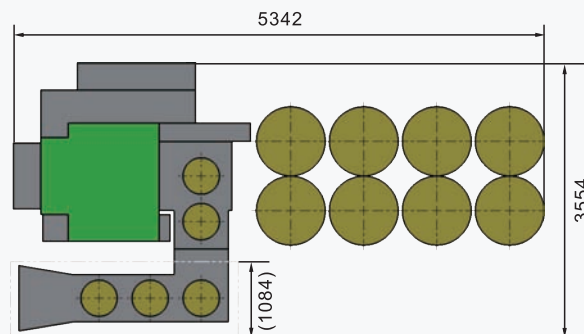
占地示意图（地坑安装）

DIMENSION(PIT INSTALLATION)

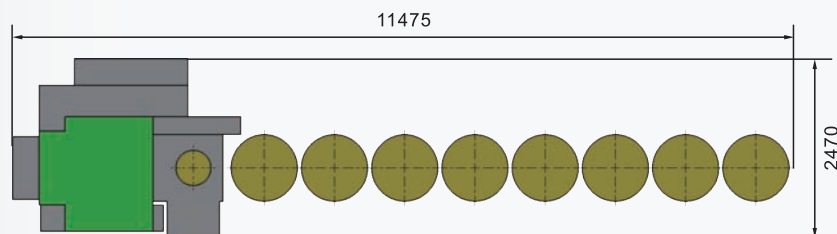
喂入 $\phi 600\text{mm}$ （ 2×4 排列），输出 $\leq \phi 600\text{mm}$ （标配）
feeding $\phi 600\text{mm}$ （ 2×4 ），output $\leq \phi 600\text{mm}$ （Standard）



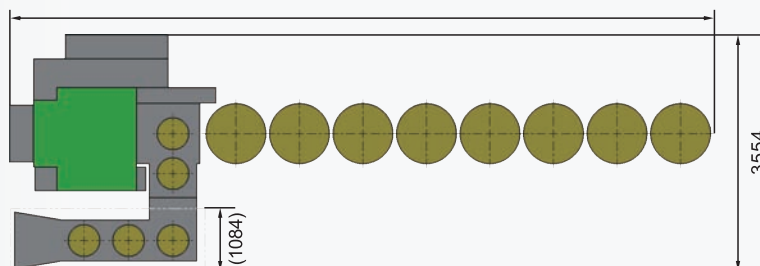
喂入 $\phi 600\text{mm}$ （ 2×4 排列），输出 $\leq \phi 600\text{mm}$ （带多备筒装置）
feeding $\phi 600\text{mm}$ （ 2×4 ），output $\leq \phi 600\text{mm}$ （With preparation-can device）



喂入 $\phi 1000\text{mm}$ （ 1×8 排列），输出 $\leq \phi 600\text{mm}$
feeding $\phi 1000\text{mm}$ （ 1×8 ），output $\leq \phi 600\text{mm}$



喂入 $\phi 1000\text{mm}$ （ 1×8 排列），输出 $\leq \phi 600\text{mm}$ （带多备筒装置）
feeding $\phi 1000\text{mm}$ （ 1×8 ），output $\leq \phi 600\text{mm}$ （With preparation-can device）



梳并联系统

CARDING TO DRAWING LINK

在并条工序互联的技术上，我们先后开发出了梳并联系统、并并联、并粗联系统。

梳并联系统是将多个梳棉机输出棉条，不经过条筒周转、直接喂入并条机导条、进入并条工序加工。大大缩短了传统生产流程，适合于特定品种的超短流程新型纺纱。

In terms of technology for interconnecting drawing processes, we have successively developed Carding to Drawing Link system, Drawing to Drawing Link system, and Drawing to Roving Link system.

The Carding to Drawing Link system is the process of outputting slivers from multiple carding machines, without going through the can turnover, directly feeding them into the drawing machine creel and entering the drawing process for processing. Significantly shortened traditional production processes, suitable for specific varieties of ultra short process new spinning.

并并联输送系统

DRAWING TO DRAWING LINK

并并联，是基于物流运输技术发展的理念，应用于棉纺并条工序头道并条与末道并条之间的条筒运输系统，无需人工，条筒自动实现输出、喂入下一工序、空筒返回、备筒送入头并等流程，实现全自动连续工作。

Drawing to Drawing Link is a concept based on the development of logistics transportation technology, applied to the sliver cans transportation system between the breaker and finisher drawing processes in the spinning drawing process. It does not require manual labor, and the sliver cans automatically realize processes such as output, feeding into the next process, empty cans return and backup cans feeding into the breaker, achieving fully automatic continuous work.

并粗联智能输送系统

DRAWING TO ROVING LINK

并粗联，解决并条工序到粗纱工序条筒自动化输送问题，定位高端智能化纺纱车间，真正实现节省人工。

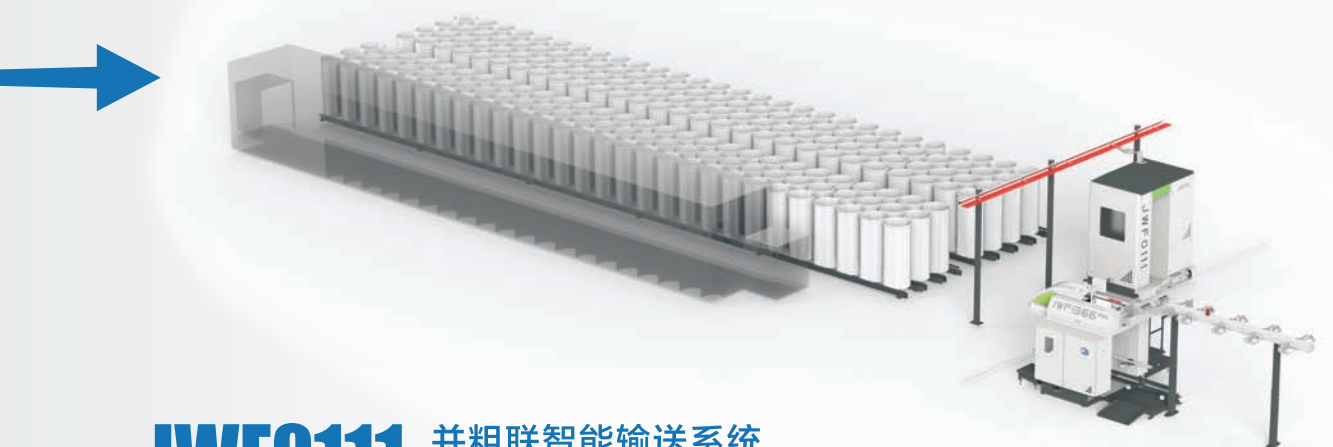
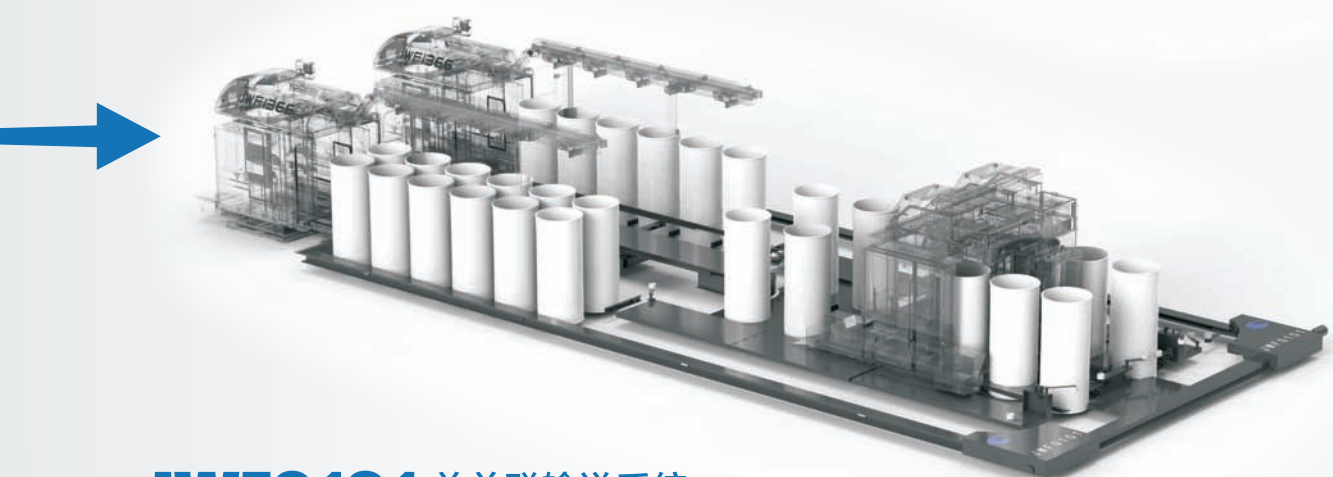
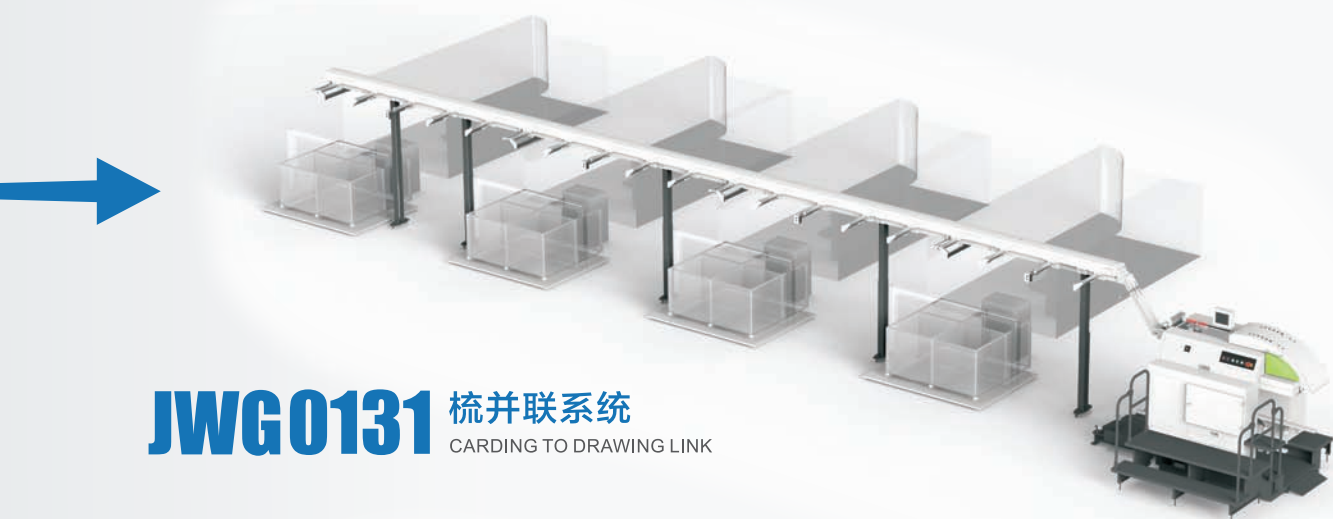
采用轨道子母车方式解决并条到粗纱的条筒输送问题，该系统由并条机进出接口、灵动母车、穿梭子车、条筒摆放模块几部分构成，条筒采用无脚轮形式。子车每次运载2个空/满棉条筒，可实现最大60米/分钟的行驶速度，每套系统可满足3万锭规模车间的末并工序至粗纱工序间条筒输送工作，可替代2-3人工作量。

Drawing to Roving Link, solving the problem of automated conveying of cans from drawing process to roving process, positioning high-end intelligent spinning workshop, and truly achieving labor saving.

The system adopts the track sub mother vehicle method to solve the problem of conveying the cans from the drawing to the roving. The system consists of: the draw frame inlet and outlet interface, the flexible mother vehicle, the shuttle sub vehicle, and the cans placement module. The cans adopt a form without casters. The sub vehicle can carry 2 empty/full cans at a time, achieving a maximum travel speed of 60 meters/minute. Each system can meet the needs of conveying the sliver cans between the finisher drawing process and the roving process in a 30000 spindle workshop, replacing 2-3 manual labor.

联解决方案

FOR DRAWING PROCESS



JWF1313 并条机

DRAW FRAME

最大输出直径可达1200mm

MAXIMUM OUTPUT DIAMETER UP TO 1200mm



JWF1313型智能并条机是沈阳宏大华明新一代的非匀整并条机，创新的传动形式及电子牵伸、最大输出直径可达1200mm大条筒、智能断条、罗拉监控、独立吸风通道等功能的使用使该机能够以小的投入成本为用户创造出超值的效益。

上圈条独立传动，采用电机直驱技术，保障设备在高速、高质等情况下的稳定生产，可靠性更高，工艺调整更方便。

JWF1313 smart draw frame without autoleveller is our latest generation. The use of innovative driving form, electronic drafting, maximum output diameter up to 1200mm, intelligent breaking device, roller monitoring, independent suction channel make the machine be able to minimize the cost for the user to play the value of the benefits.

Upper coiling independent transmission adopts, adopting motor direct drive technology to ensure stable production under high-speed, high-quality and other conditions, with higher reliability and more convenient process adjustment.



2×800
m/min

生产速度
Production speed

低投入高效率

- 生产速度可达2×800米/分钟；
- 对比传统双眼并条机及进口并条机，投入成本可减少30%–50%；
- 双眼输出条筒直径达到1.2米规格（对比输出600mm）的并条机，每天工作量平均减少1小时，直径1.2米规格的并条机，每天工作量平均减少1.5小时。

Low input, High efficiency

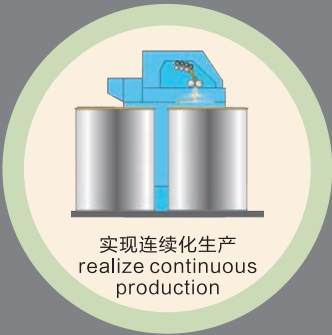
- Production speed can be up to 2×800 M / min.
- Cost can be reduced by 30%–50% compare with the traditional and import.
- Two-head delivery diameter of 1.2 meter draw frame(contrast output 600mm) can reduce the average daily workload of 1 hour.φ1.2 meter draw frame can reduce the average daily workload of 1.5 hour.

操作更简单

- 双驱动控制牵伸区，重量调整（总牵伸倍数）在触摸屏上完成，简单快捷；
- 新型自动换筒装置搭配智能断条功能实现连续化生产；
- 日常操作动作均在机前完成，节省大量的工作时间；
- 触摸屏设置在主机的中间位置，符合人机工程学设计原理，便于数据查看和日常操作。

Simple operation

- Double drive control draft area, weight adjustment (total draft multiple) is completed on the touch screen, simple and fast;
- The new type of automatic can-change device is equipped with intelligent breaking function to realize continuous production;
- Daily operations are completed in front of the machine, saving a lot of working time;
- The touch screen is set in the middle of the machine, which conforms to the ergonomic design principle, and is convenient for data viewing and daily operation.



实现连续化生产
realize continuous
production

自动换筒，智能断条
Automatic can-change,
intelligent breaking

有效清洁保养便捷

- 主传动采用国际品牌高精度轴承，为高速、高质提供保障，同时延长了维护周期；
- 打开机器罩壳主传动部位均设计在触手可及的位置，减少维护工作难度；
- 罗拉监控系统可准确检测出当前牵伸倍数，避免机械故障导致棉条定量错误，减少维护难度及实验室工作量。

Effective cleaning, Easy maintenance

- The main drive adopts high-precision bearing of international brand, which provides guarantee for high-speed and high-quality, and at the same time prolongs the maintenance cycle;
- The main transmission parts are designed at the accessible position to reduce the difficulty of maintenance work;
- The roller monitoring system can accurately detect the current draft multiple, and avoid mechanical failure causes the sliver quantitative error, reduce maintenance difficulty and laboratory workload.



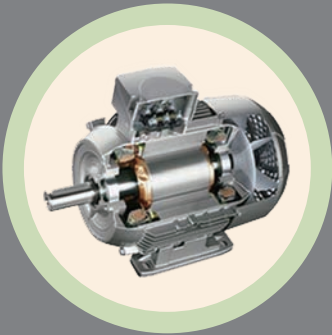
罗拉监控，减少维护难度
Roller monitoring, reduce
maintenance difficulty

节能环保

- 使用符合国家节能标准的节能高效电机，可实现大功率低能耗；
- 无传动箱的设计使传动灵活轻便，降低功率消耗。

Energy conservation, environmental protection

- High power and low energy consumption can be achieved by using energy-saving and efficient motors that meet the national energy-saving standards;
- The design without transmission box makes the transmission flexible and light, and reduces the power consumption.



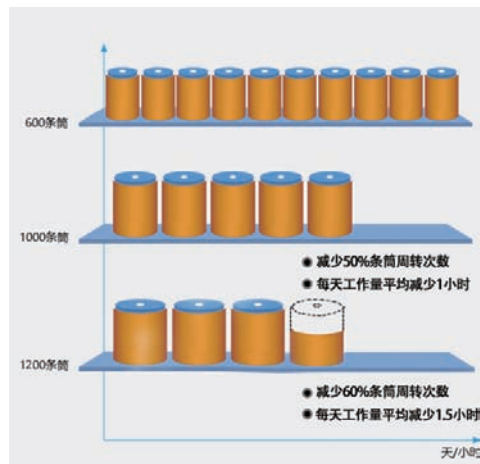
节能高效电机
Energy efficient motor

双眼输出1.2米条筒并条机

TWO-HEAD DELIVERY DIA. 1.2 METER DRAW FRAME

该机通过客户长期试纺验证，稳定可靠。相较于输出600条筒，直径1米的大条筒具有更大的容量，同等产量下可减少50%周转次数，每天相当于减少一个小时的工作量。直径1.2米的大条筒同等产量下可减少60%周转次数，每天相当于减少1.5小时的工作量。

The machine has been proved stable and reliable by long-term trial spinning. Compared with the output of 600 cans, the Dia. 1 meter has a larger capacity, which can reduce the turnover times by 50% under the same output, equivalent to reducing the workload of one hour every day. The Dia. 1.2 meter can reduce the turnover by 60% under the same output, equivalent to reducing the workload of 1.5 hour every day.



极易操作的双眼大条筒并条机

TWO DELIVERIES LARGE CAN DRAW FRAME IN EXTREMELY EASY OPERATING

新型的“工”字形整机架构，延续传统操作习惯，日常操作均在机前完成。对于现有使用过国内并条机的操作者，几乎无需培训即可直接操作。

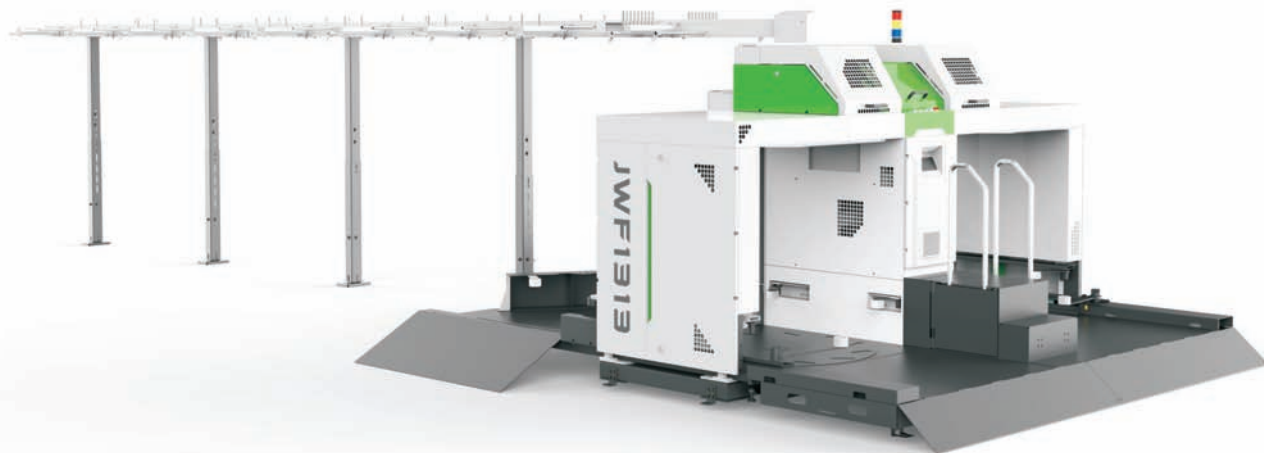
配合可延展脚踏，正常运转时折叠状态，需要生头等细致操作时，可拓展至操作区，让用户更安全方便的操作。

对比传统双眼并条机，取消传动箱，缩短传动链，使整机在功率消耗、速度、生产成本、维护保养等方面均有很大优势。

The new "I" type structure continues the traditional operation habits, and daily operations are completed in front of the machine. For the existing operators who have used domestic draw frame can operate directly without training.

With the extendable foot plate, it can be folded in normal operation, and can be extended to the operation area in case of head shaping and other detailed operations, so that users can operate more safely and conveniently.

Compared with the traditional double deliveries draw frame, the transmission box is cancelled, the transmission chain is shortened, so that the whole machine has great advantages in power consumption, speed, production cost, maintenance, etc.



电子牵伸，调整定量无需变换轮

ELECTRONIC DRAFTING, QUANTITATIVE ADJUSTMENT WITHOUT CHANGING GEAR

双电机驱动牵伸区，可无极调整牵伸倍数，牵伸倍数控制精度达0.001，系统响应频率高；在生产过程中无论是调整重量还是变换工艺，操作者只需要在触摸屏输入目标重量，系统自动计算牵伸倍数，自动完成调整，操作便捷。

双电机驱动的应用使机械传动简单高效，从主电机到牵伸区只需两级传动，设备运转灵活、机械故障率低、备件损耗量低。

Double motor drive draft area, infinitely adjustable draft multiple, draft multiple control accuracy of 0.001, high system response frequency; in the production process, whether to adjust the weight or change the process, the operator only needs to input the target weight on the touch screen, the system automatically calculates the draft multiple to complete the adjustment, convenient operation.

The application of double motor drive makes the mechanical drive simple and efficient. Only two-stage drive is needed from the main motor to the draft area. The equipment operates flexibly, the mechanical failure rate and the loss of spare parts are low.



具有专利^①的在线监控功能

PATENT ONLINE MONITORING FUNCTION

配备高精度罗拉转速监控，实时监控牵伸区运转状态，通过监控牵伸倍数，实现非匀整并条机“在线监控功能”，在喂入正确的情况下保证出条定量稳定。

如牵伸区出现故障，罗拉监控系统会检测出牵伸区牵伸倍数异常并报警停车，减少了维修工作难度。

This machine is equipped with high precision roller speed monitoring, real-time monitoring the draft area operation state, the "online monitoring function" of draw frame without autolevelling can be realized by monitoring draft multiple, and the quantitative stability of draw frame can be guaranteed under the condition of correct feeding.

If there is a fault in the draft area, the roller monitoring system will detect the abnormal draft multiple in the draft area and alarm to stop, reducing the difficulty of maintenance.

(^①专利号 patent number: ZL 2016 1 0075541.X)



盘式电机上圈条，高速稳定

盘式电机独立直驱，电机与盘体集成，没有了传动零件，更利于高速、大大降低维护成本。

圈绕张力实现电子调节、无需换轮，应对各种品种，圈绕成型、圈绕张力、圈绕比”都能够调整到最优；同时能够避免斜管集尘。

The disc motor is independent and directly driven, and the motor is integrated with the disc body. Without transmission parts, it is more conducive to high speed, greatly reducing maintenance costs. The coil tension can be electronically adjusted without the need for wheel changes, and the coiling forming, ratio, tension can be adjusted to the best for various varieties; At the same time, it can avoid inclined pipe dust collection.



新型自动换筒机构配合智能断条

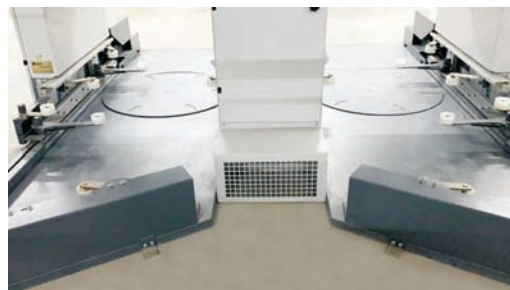
ALL-NEW AUTOMATIC CAN CHANGE STRUCTURE

新型自动换筒结构，减少换筒行程（占地面积）20%；同时机构设计简洁、稳定，更稳定也更易维护。

智能断条：在触摸屏上相应修改断条强度，即可实现不同品种的自动断条功能。调节简单方便，适应品种范围广，与自动换筒配合使用，实现并条机连续化生产。

All-new automatic can-change structure reduce the can change distance (area covered) 20%; The design of the mechanism is simple and stable, and it is more stable and easier to maintain.

The intelligent breaking only needs to modify the strength on the touch screen to realize the automatic breaking function of different varieties. Simple and convenient adjustment, wide range of adaptability, and use with automatic can-change to realize continuous production of draw frame.



直接、有效的清洁系统

DIRECT AND EFFECTIVE CLEANING SYSTEM

左右眼风道独立，吸风互不干扰，独立吸棉箱位于左右眼中间，风量各自独立调整，风道分别直达清洁点。清洁效率较传统并条机提升50%。

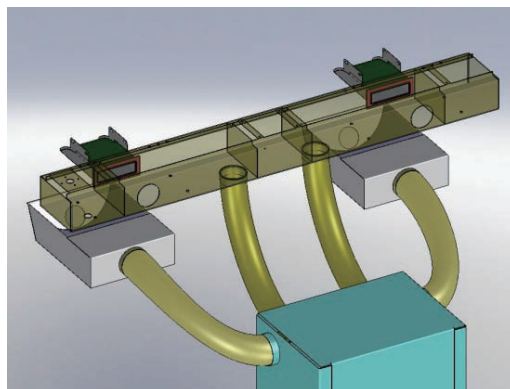
同时配有欠压报警装置，当棉箱飞花过多、负压不足时，提示立即清理，以保证良好的吸风清洁系统。可选配自动拨棉清洁系统。

上清洁为钢棒清洁，适应高速，有效、稳定。

The left and right air ducts are independent, and will not interfere with each other. The independent cotton suction box is located in the middle, the air volume is adjusted independently, and the air ducts reach the cleaning point directly. The cleaning efficiency is 50% higher than that of traditional draw frame.

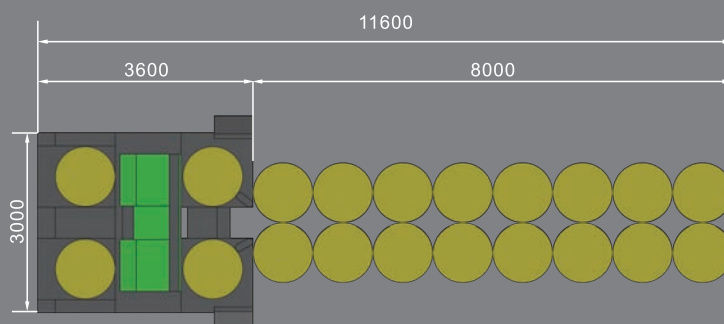
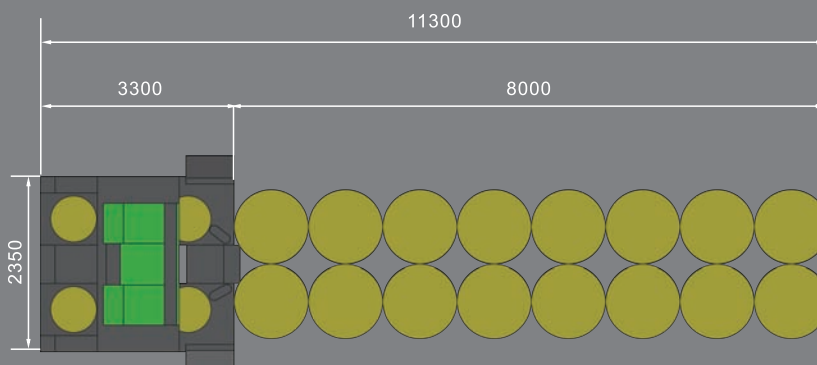
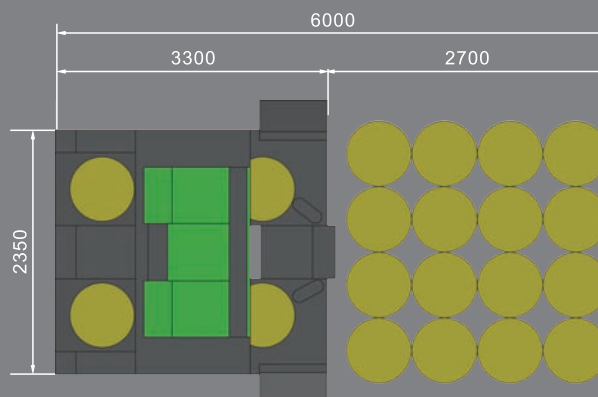
At the same time, it is equipped with undervoltage alarm device, when the cotton box flyings too much and the negative pressure is insufficient, it will prompt to clean to ensure a good air suction cleaning effect. Optional automatic cotton box cleaning system.

Upper cleaning is steel bar cleaning, suitable for high speed, effective and stable.



占地示意图（地坑安装）

DIMENSION(PIT INSTALLATION)

JWF1313喂入 $\phi 1000\text{mm}$ （ 2×8 排列），输出 $\phi 1000\text{mm}$ （标配）JWF1313 feeding $\phi 1000\text{mm}$ （ 2×8 ），output $\phi 1000\text{mm}$ （Standard）JWF1313喂入 $\phi 1000\text{mm}$ （ 2×8 排列），输出 $\phi 600\text{mm}$ JWF1313 feeding $\phi 1000\text{mm}$ （ 2×8 ），output $\phi 600\text{mm}$ JWF1313喂入 $\phi 600\text{mm}$ （ 4×4 排列），输出 $\phi 600\text{mm}$ JWF1313 feeding $\phi 600\text{mm}$ （ 4×4 ），output $\phi 600\text{mm}$ 

JWF1312G 匀整并条机

AUTOLEVELLER DRAW FRAME



JWF1312G并条机总结了近千台用户装机使用经验，深入生产实践，结合现代纺织技术新工艺要求而开发的一款适应范围广泛的短片段双眼匀整并条机。

JWF1312G型并条机配备乌斯特全新的USG3匀整监控系统或NAS全时匀整系统，更好的保障了输出棉条质量，配备自动生头、棉箱自清洁等功能。尤其体现在纺制精梳品种，高质量、占地面积少及保养成本低廉等几个方面，与进口同类产品相比在其性价比上占有明显的优势，可以充分满足各种纺纱条件的需要，是理想的可普及产品。

JWF1312G draw frame has summarized the installation and use experience of nearly 1000 users. Through in-depth production practice, and in combination with the new technological requirements of modern textile technology, it has developed a short segment double deliveries autolevelling draw frame with a wide range of applications.

JWF1312G draw frame is equipped with USTER's USG3 autolevelling system or NAS all time domain autolevelling system which better ensures the quality of the output. It is equipped with pneumatic sliver head generating, suction box self-cleaning and other functions. Especially in terms of spinning and combing varieties, high quality, small floor space, and low maintenance costs. Compared with similar imported products, JWF1312G drawing frame has significant advantages in terms of cost performance, can fully meet the needs of various spinning conditions, and is an ideal and popular product.

自调匀整系统 AUTO LEVELLING SYSTEM

喂入棉条在经过检测罗拉时被检测，通过伺服电机与差速(差动)齿轮箱改变主牵伸区的牵伸倍数，实现了牵伸的自动调控，获得高质量的输出棉条。在输出端，能自动检测输出棉条的质量，并显示支数等变化。该机的匀整范围均为 $\pm 25\%$ ，采用数字通信系统，抗干扰能力强。

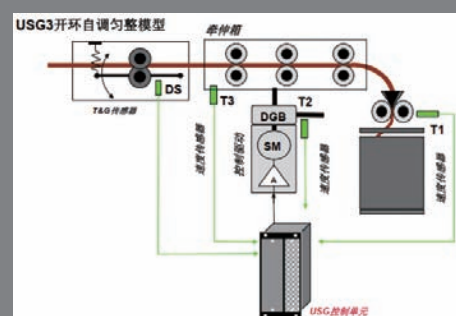
The feeding sliver is detected when passing the detection roller. Changes the draft multiple of the main draft area through the servo motor and the differential gearbox, realizes the automatic control of the draft, and obtains the high-quality output sliver. At the output end, it can automatically detect the quality of the output sliver and display the change of the number of slivers. The evenness range of the machine is $\pm 25\%$. It is the digital communication system with strong anti-interference ability.



USG3匀整过程 USG3 autolevelling process

利用TG罗拉测得到的信号，自调匀处理器为伺服电机计算出一个转动值，当被检测的那段条子进入主牵伸区的牵伸点时，通过控制驱动系统在正确的时间内来自动修正并条机的牵伸倍数，以达到对条子质量波动的改善。

Using the signal measured by the TG roller, the autoleveller processor calculates a rotation value for the servo motor. When the detected sliver enters the drafting point of the main drafting area, the driving system is controlled to automatically correct the drafting multiple of the draw frame within the correct time, in order to improve the quality fluctuation of the sliver.



匀整系统效果保障 EFFECT GUARANTEE OF AUTOLEVELLING SYSTEM

高加工精度的匀整执行机构，差速齿轮箱、检测齿轮箱及凹凸罗拉加工精度进一步提高，检测精准，执行机构稳定可靠，且维护便利，有效满足600米/分的速度条件下的稳定运行及动态响应特性。

The autolevelling actuator with high machining accuracy. The machining accuracy of differential gearbox, detection gearbox and T&G roller is further improved, the detection accuracy is accurate, the actuator is stable and reliable, and the maintenance is convenient, which effectively meets the stable operation and dynamic response characteristics under the speed of 600m/min.

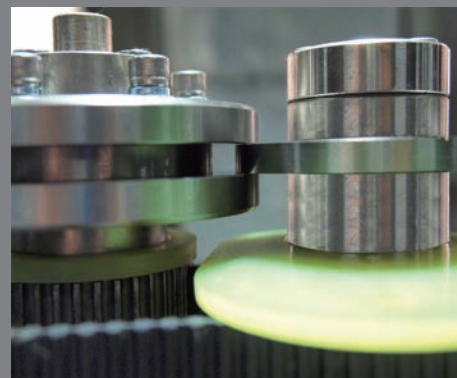


凹凸罗拉检测部件 T&G ROLLER DETECTING

采用新结构设计，提高机械系统自身的响应频率，提高检测精度；
采用齿形带传动形式，提高传动精度；提高匀整系统的检测精度，
最终实现匀整系统的高控制精度。

The new structure design is adopted to improve the response frequency of the mechanical system and the detection accuracy;

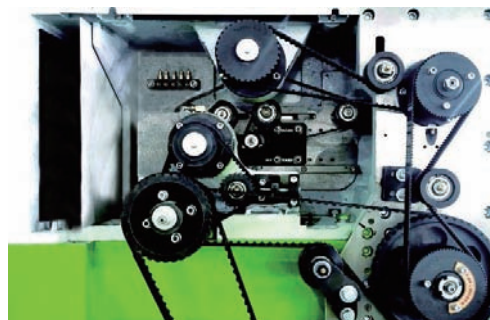
Based on the gear belt transmission, the transmission accuracy is improved; the detection accuracy of the autolevelling system is improved, and finally the high control accuracy of the leveling system is realized.



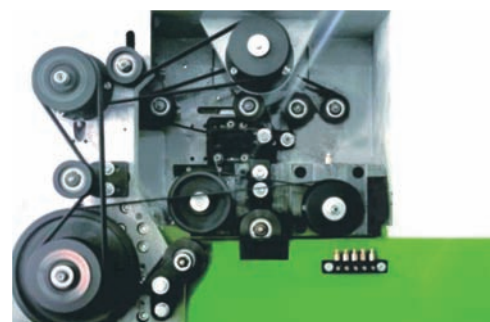
传动系统

DRIVING SYSTEM

一罗拉、压辊、上下圈条为两眼关联传动，二罗拉之后为左右双眼独立传动，两个伺服电机配合两眼的USG3匀整系统分别控制左右两侧二、三罗拉及机后的传动。主传动全部采用齿形带传动，压辊与一罗拉之间设计多档张力牵伸，满足不同条件下的适纺要求，前张力调整全部为敞开式设计，便于调整，传动部件整体密封良好，便于保养维护。



1st roller, canlender roller and upper and bottom coiling are two deliveries related drives, after 2nd rollers are left and right independent drives, two servo motors cooperate with USG3 autoevening system to control 2nd, 3rd rollers on the left and right sides and rear machine driving respectively. The main drive is all driven by toothed belt. The multi-stage tension draft is designed between the canlender and 1st roller to meet the spinning requirements under different conditions. The front tension adjustment is all open design, which is convenient for adjustment. The transmission parts are well sealed and easy for maintenance.



圈绕传动采用平皮带绕有导轮的相交轴传动，采用与棉条运动方向近似的螺旋曲线斜管出条，圈条盘采用不锈钢包覆式结构，组装后整体校正动平衡。设计多档圈条张力和圈绕比数值，满足成形的需要。

标配新型圈条盘，独有圈条斜管空间曲线模型，采用不锈钢表面，具有两种规格斜管直径，满足客户不同需求，兼容性更强。



The coiling drive adopts the intersecting shaft drive with flat belt and guide pulley. The spiral curve inclined pipe with the similar movement direction of the sliver is used for sliver production, and The coiler adopts a stainless steel clad structure. After assembly, the dynamic balance is corrected. The tension and winding ratio of multi-stage coils are designed to meet the needs of forming.

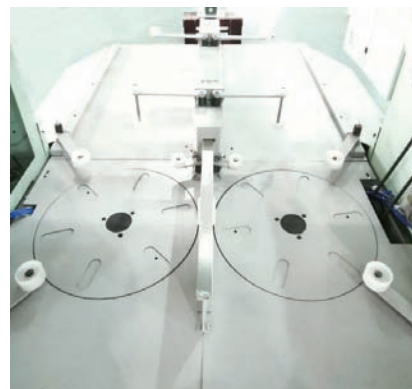
Equipped with the new type of coiler, unique coiling inclined tube spatial curve model, made of stainless steel surface, with two specifications of inclined tube diameters to meet different needs and stronger compatibility.

新型气动换筒配智能断条

NEW TYPE PNEUMATIC CAN-CHANGE WITH INTELLIGENT BREAKING

新型气动换筒装置，稳定可靠，维护保养方便，配合智能断条，系统自动控制拉断棉条，断条率99%以上。

The new pneumatic can-change device is stable and reliable, easy to maintain, with intelligent breaking, the system automatically controls the sliver breaking, and the breaking rate is over 99%.



牵伸系统 DRAFTING SYSTEM



先进的气动生头技术，操作方便，减少人工生头的操作，降低了对挡车工的要求，同时提高生产效率。

罗拉采用特种合金钢材料制造，采用先进热处理工艺，使其加工精度、表面光洁度、表面硬度及内部韧性等机械性能达到优良状态。

上下罗拉轴承均采用滚针轴承，齿形经过优化设计对纤维握持更有利，承载能力及转速经过严格校核，适应高速需要。同时轴向间隙可以随时调整，轴承润滑及保养方便可靠。

采用三上三下压力棒附导向皮辊形式，出条角度经过合理的改良设计，更加适用于高速化生产，集束器采用分体设计，在保证出条顺畅运动的同时，出条接口与喇叭口衔接处尽量减弱反冲气流对纤维的影响，实现少弯钩、无褶皱的理想牵伸状态。

统一皮辊直径，一体式压力棒，新型集束器。

Advanced pneumatic head generation technology, which is convenient to operate, reduces the operation of manual head generation, reduces the requirements for operators, and improves production efficiency.

The bottom rollers are made of special alloy steel and advanced heat treatment technology, which makes the machining accuracy, surface finish, surface hardness, internal toughness and other mechanical properties reach excellent state.

Needle roller bearings are used for top and bottom rollers. The optimized tooth shape is more favorable for fiber holding. The bearing capacity and rotation speed are strictly checked to meet the needs of high speed. At the same time, axial clearance can be adjusted at any time, bearing lubrication and maintenance are convenient and reliable.

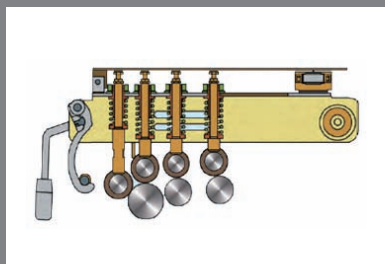
Three over three with pressure bar and guide roller. The output angle is reasonably improved and designed, which is more suitable for high-speed production. The collector adopts the split design, which can ensure the smooth movement of the sliver, reduce the impact of the recoil air flow on the fiber as far as possible at the joint of the outlet and the trumpet, and realize the ideal draft state of less hook and no fold.

Unified the diameter of top rollers, integrated pressure bar, The new type collector.

加压机构 SPRING LOADING

本机标准配置为弹簧加压，加压力稳定。

The standard configuration is spring loading, the loading force is stable, the pneumatic loading is optional.



牵伸示意图
Drafting schematic diagram



弹簧加压
Spring loading



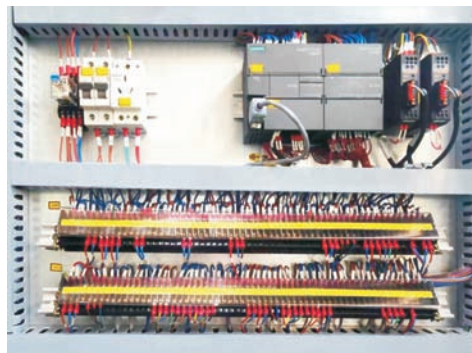
USG3模块
USG3 module

控制系统 CONTROL SYSTEM

电气控制采用(PLC)可编程序控制结合触摸屏技术的使用, 实现整机运行自动化, 控制精确, 减少用工, 提高生产效率。

主电机采用变频调速, 启动曲线平稳, 升速时间可以调整, 从而削弱启停车产生的不利影响, 并可预留计算机管理联网接口。

Electric control adopts PLC programmable control combined with touch screen technology to realize automatic operation of the whole machine, accurate control, reduce labor and improve production efficiency. The main motor adopts frequency conversion speed regulation, the starting curve is stable, the speed up time can be adjusted, so as to eliminate the adverse effects of starting and stopping, and the computer management networking interface can be reserved.



真空吸尘及清洁装置 CLEANING SYSTEM

真空吸尘由电机、风翼轮、棉箱、风道等组成。清洁装置采用单独电机传动, 有利于消除对牵伸传动的干扰。吸尘系统置于主机之外, 左右两眼的风量一致, 风量大小可调节。

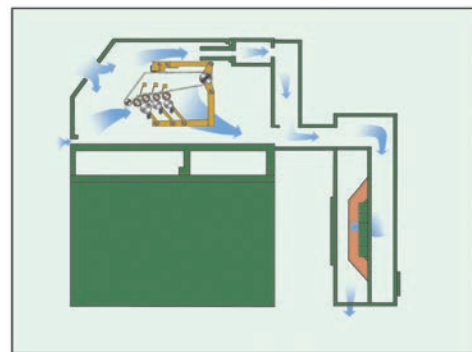
上清洁采用回转绒布揩拭上罗拉, 也可选用金属钢棒清洁装置。

采用负压报警, 自动拔棉杆和气流吹棉, 三重保障, 完成棉箱自动清洁功能, 减少挡车工工作量, 并保证良好的吸风清洁系统。

Vacuum cleaner consists of motor, fan, cotton box, air duct, etc. The cleaning device is driven by a separate motor, which is conducive to eliminating the interference to the draft drive. The dust collection system is located outside the main engine, with the same air volume at the left and right can be adjusted.

The upper cleaning uses a rotary flannel belt to wipe the roller, and the metal steel bar cleaning device can also be selected. The bottom cleaning is a single apron swinging back and forth.

Adopting the unique negative pressure alarm, automatic stripping and airflow blowing, triple guarantee, complete the automatic cleaning function of the suction box, reduce the workload of operators, and ensure the good suction cleaning system.



吸风示意图
Suction schematic diagram

新型智能断条 NEW TYPE INTELLIGENT BREAKING

在触摸屏上相应修改断条强度, 即可实现不同品种的自动断条功能。调节简单方便, 无需人工维护, 适应品种范围广, 与自动换筒配合使用, 实现并条机连续化生产。

By modifying the strength of breaking on the touch screen, different kinds of automatic breaking can be realized. Simple and convenient adjustment, no need for manual maintenance, wide range of adaptability, and use with automatic can-change to realize continuous production of draw frame.



新型结构的导条架 CREEL

导条传动张力增加多档选择, 满足不同定量、不同品种及不同速度的需求。导条优化提升, 采用芯轴固定、罗拉转动的专利技术, 降低导条高速抖动。

The transmission tension of the creel increases the selection of multiple gears to meet the needs of different quantitative, different varieties and different speeds. The creel is optimized, using patented technology such as mandrel fixation and roller rotation to reduce high-speed jitter of the creel.

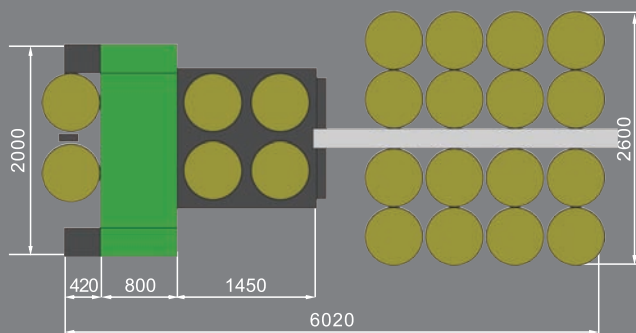


占地示意图（地坑安装）

DIMENSION (PIT INSTALLATION)

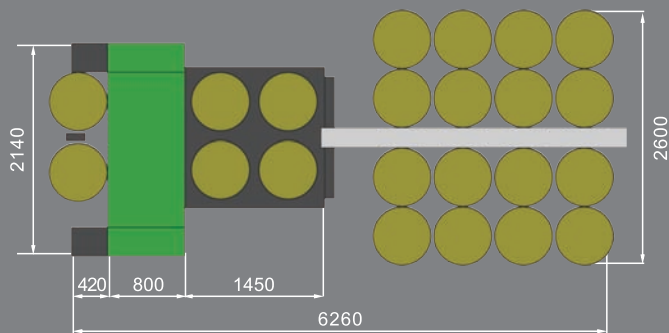
JWF1312G喂入 $\phi 600\text{mm}$ （4×4排列），输出 $\phi 400$ 、450、500mm（标配）

JWF1312G feeding $\phi 600\text{mm}$ （4×4），output $\phi 400$ 、450、500mm（Standard）



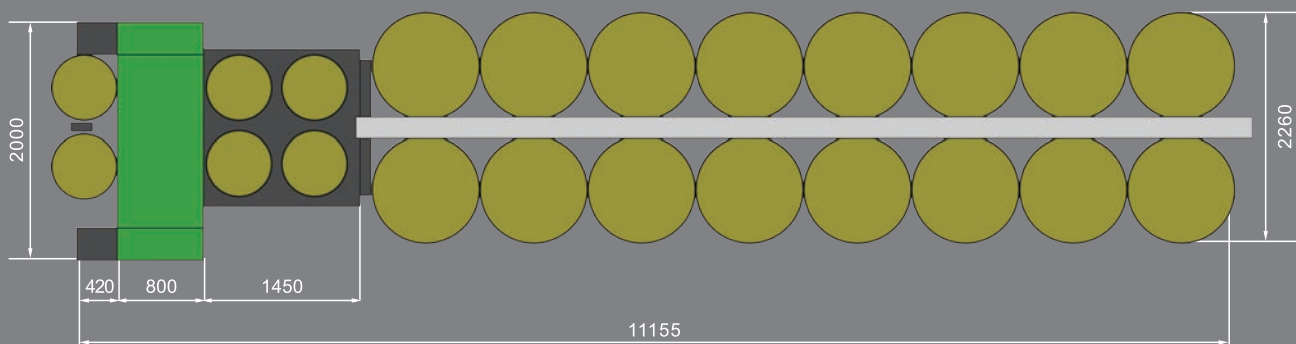
JWF1312G喂入 $\phi 600\text{mm}$ （4×4排列），输出 $\phi 600\text{mm}$

JWF1312G feeding $\phi 600\text{mm}$ （4×4），output $\phi 600\text{mm}$



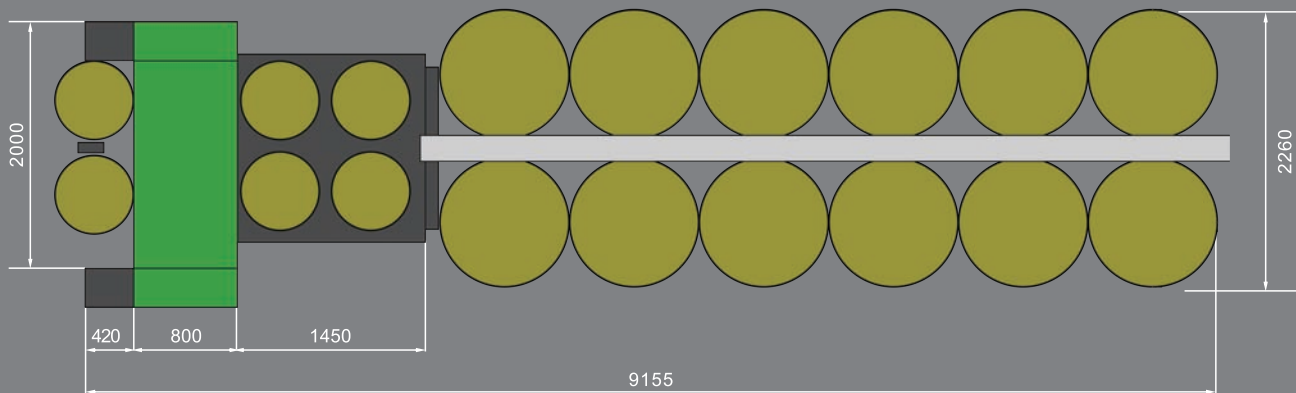
JWF1312G喂入 $\phi 1000\text{mm}$ （2×8排列），输出 $\phi 400$ 、450、500mm

JWF1312G feeding $\phi 1000\text{mm}$ （2×8），output $\phi 400$ 、450、500mm



JWF1312G喂入 $\phi 1000\text{mm}$ （2×6排列），输出 $\phi 400$ 、450、500mm

JWF1312G feeding $\phi 1000\text{mm}$ （2×6），output $\phi 400$ 、450、500mm



各机型主要规格 Main specifications

		JWF1313	
输出眼数 Delivery		2	
自调匀整 Autoleveller		无 non	
适纺纤维长度 Suitable fiber length		22-80mm 棉型纤维 (至高适 22-80mm cotton type fiber (Up to 120mm for	
最大输出速度 Max. output speed		1000m/min	
牵伸形式 Drafting type		三上三下压力棒加导向 Three over three with pressure bar	
牵伸倍数 Drafting multiple		电子牵伸 Electronic drafting	4.75~ 4.75~12.06
装机总功率 Total installed power		14.65kW	
喂入条筒规格 Feeding can	直径 Dia.	≤1200mm	≤1200mm ≤1200mm
	筒高 Height	≤1400mm	
输出条筒规格 Output can	直径 Dia.	600mm/1000mm/1200mm	
	筒高 Height	1200mm	
清洁方式 Cleaning	上清洁 Upper	钢棒 Steel bar	
	下清洁 Bottom	摆动皮圈 Reciprocating apron	摆动皮圈
自动换筒形式 Auto can-change		气动换筒 Pneumatic	气动换筒
自动断条形式 Breaking		智能断条 Intelligent breaking	智能断条
不同配置可能 Different configurations may have different prices,			

JWF1366 ^{pro}	JWF1312G
1	2
有 with	有 with
纺120mm，详询业务人员) spinning, please confirm with the sales staff.)	
1000m/min	800m/min
上罗拉曲线牵伸 and guide roller curve draft	
12.06 (随机 4.75~9.28) (4.75~9.28 with machine)	3.79~11.00 (随机 4.21~ 9.90) 3.79~11.00 (4.21~9.90 with machine)
9.89kW	12.08kW
(>600mm为选用) (>600mm optional)	≤1200mm (>600mm为选用) ≤1200mm (>600mm optional)
≤1400mm	≤1400mm
≤1000mm	≤600mm
1200/1100/900mm	1200/1100/900mm
钢棒 Steel bar	绒带 Flannel belt
Reciprocating apron	摆动皮圈 Reciprocating apron
Pneumatic	气动换筒 Pneumatic
Intelligent breaking	智能断条 Intelligent breaking
导致售价不同， 详询业务人员。 please confirm with the sales staff.	

打造装备旗舰 引领纺织发展

**CREATING A FLAGSHIP IN MANUFACTURING,
LEADING THE DEVELOPMENT OF TEXTILE INDUSTRY**

沈阳宏大华明纺织机械有限公司

SHENYANG HONGDA HUAMING TEXTILE MACHINERY CO.,LTD.



产品规格与外观可能有变更，恕不预先通知。
The specifications and external appearance of this unit are subject to change without prior notice.