

# 浙江日发纺织机械股份有限公司 ZHEJIANG RIFA TEXTILE MACHINERY CO.,LTD

Add: RIFA Digital Technology Zone, Xinchang Hi-tech Industrial Park, Zhejiang,China(312500) 地址: 浙江省新昌县高新技术产业园区日发数字科技园

# 山东日发纺织机械有限公司 SHANDONG RIFA TEXTILE MACHINERY CO.,LTD

Add: North of Songgui Road & West of Zhonghua Road, Xuying, High-tech Industry Development Zone, Liaocheng, Shandong, China(252000)

地址:山东省聊城市高新技术产业开发区许营镇中华路西、松桂路北 电话(Tel): 400-999-8008 / 86-635-2999515

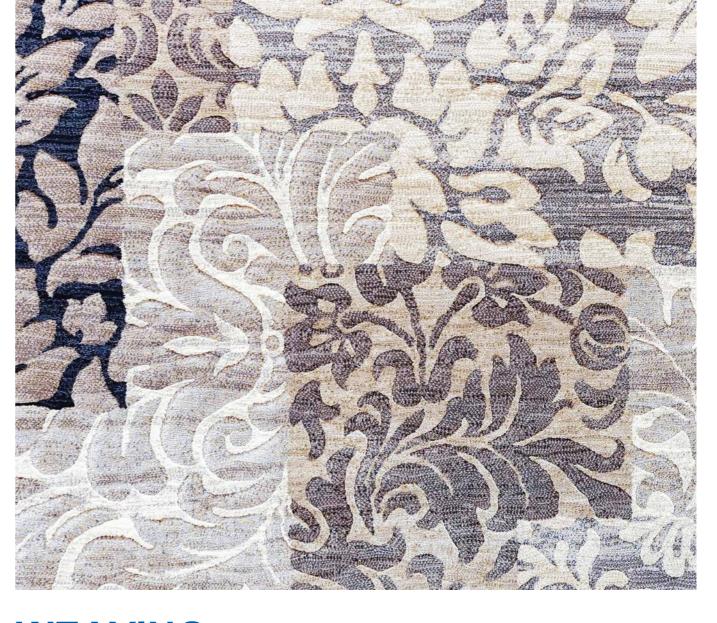
传真(Fax): 86-635-8516735

www.rifatm.com

This sample is used for reference only and is not serving as a basis for technical acceptance. For the purpose of improving product quality, our company reserves the right to change product specifications without notice.

本样本仅供参考,不作为技术验收的依据。 为提高产品质量,本公司保留更改规格之权力,恕不另行通知。





# **WEAVING** Solutions

织造解决方案

喷气织机 AIR JET LOOM





# 关于日发纺机

浙江日发纺织机械股份有限公司成立于2002年,注册资金6948.7万。公司系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,国家火炬计划重点高新技术企业,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的梦想"为使命,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设备生产企业。二十几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、非织造四大解决方案,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。

山东日发纺织机械有限公司系日发纺机全资子公司,致力于研发、制造具有国际水准的各类无梭织机。公司主要产品为系列喷气织机、喷水织机、剑杆织机、毛巾织机、特种织机、针刺、水刺非织造布设备、自动穿经机,三十多年的专业经验使山东日发纺机成长为我国无梭织机的主要研发、制造基地。

## **About Us**

Zhejiang Rifa textile machinery co., ltd. is founded in 2002 with a registered capital of 69.487 million yuan. 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" and the mission of "Provide users with intelligent textile equipment system solutions, and help users gradually realize the dream of a digital factory", 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. For over twenty years, the company has successfully developed four solutions such as spinning, fibre 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-twise 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 etc 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".

Shandong Rifa Textile Machinery Co., Ltd. is a wholly owned subsidiary of Zhejiang Rifa Textile Machinery Co., Ltd., devoting itself to research and manufacture top grade all kinds of shuttleless looms. air jet loom, water jet loom, rapier loom, terry towel loom, special loom and needle&spunlace non-woven equipment, automatic warp drawing machine. More than 30 year experience has it grown to be the main research and manufacture base of shuttleless weaving machines.



## RFJA30系列

喷气织机 AIR JET LOOM



#### 极其简便的操作性能

RFJA30喷气织机在每一个细节都贯穿了其 操作的简便性,任何人都可以简单的进行操

#### Simple Operation Performance

The Simple operation concept is reflected on every details of RFJA30, erverybody can operate easily.

#### 卓越的高速性能和低振动

一,通过设计更加合理的经位置线和打纬动 平衡系统,大幅降低了织机振动和噪声,从 而实现了超高速。与超高速相匹配的高水平 引纬系统和开口系统以及全新的机架结构使 织机即使在极高速情况下也可以保持良好的 织造性能。

#### Excellent Performance On High Speed And Low Vibration

High speed performance is one of the most important peculiarities of air jet looms, more suitable design on warp yarn path position and beating dynamic balance system highly reduced the vibration and noise, it helps to realize higher speed working. The high level designed weft insertion system; shedding system and brand new designed frame structure ensure the loom is always stable when working at high speed.

RFJA30系列喷气织机是我司推出的具有先进性能的喷气织机, 在继承吸收RFJA20 型织机的织造优点下,为用户提供更高的织造要求。其主要特点如下:

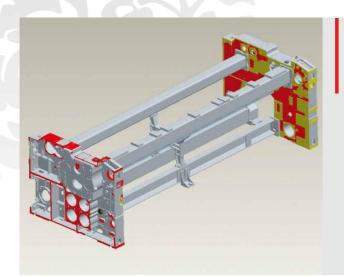
- ○配备新型电控系统
- ○全新的低振动打纬平衡结构
- ○全新的双后梁送经结构
- ○使用了超节能的电磁阀及喷嘴
- 全新的机架结构
- ○全新的主喷及延伸喷气包结构
- ○更高效的引纬系统
- ○强大的织造专家系统

RFJA30 air jet loom is developed by our company which has advanced performance on the base of the merit of RFJA20E, it is developed for meeting higher weaving requirement. Its main features are as follows:

- O Adopts new type electronic control system
- O New designed low vibration beating balance system
- O New designed double back rest let-off structure
- O Adopts super power-saving electromagnetic valves and nozzles O Powerful weaving expert system
- O New designed frame structure
- O New designed air bag structure of main nozzle and stretch nozzle
- O Higher efficiency weft insertion system

RIEA 日发纺机

喷气织机 AIR JET LOOM



#### 新型的机架结构及高速适应性

由于采用了高刚性结构的机架、大直径的织轴齿轮以及内装在油浴中的积极式送经驱动轴等,使织机进一步实现了高速化,可以更加灵活地适应高密织物的织造要求。同时优化了两侧箱型墙板和横梁结构,提高了抗振性和可靠性好,确保了织机超高速化、宽幅化和低噪音。

# New Designed Frame Structure And Flexibility For High Speed

Adopts high rigid frame structure, big diameter beam gear and positive let-off driving beam with bath lubrication, which make loom suit for the high density fabric at high speed. Both side cam box wall board and frame structure have been optimized, it well improved resistance to vibration and dependability, and well ensures the loom work in high speed; wider width and low noise.

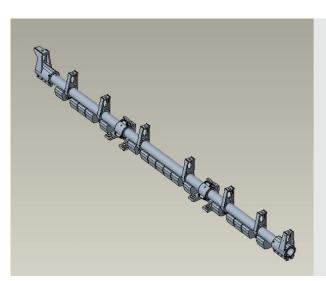


#### 智能化操作系统

图形化操作界面,各项功能图标一目了然,操作简单。预存多种织物织造参数方案,并可以进行修改或新增,一键生成相关织造参数,实现工艺智能化处理;先进的流量自动算法,实时计算耗气量,实现工厂管理数字化;可实现引纬角度及气压的在线自动调整,最大限度减少气耗。

#### New Electronic Control System

The graphical operation interface is adopted. In the interface, the icon of each function is clear and transparent, the operation is simple. Various fabric weaving parameter schemes are pre-saved in the system, and the parameter schemes can be modified or added, and related weaving parameters can be generated through one key, the intelligent treatment of the process is realized. The advanced flow automatic algorithm can calculate the air consumption in real time, the digitization of factory management is realized. The online automatic adjustment of weft insertion angle and air pressure can be realized, and air consumption is minimized.



#### 打纬动平衡结构

摇轴采用新型打纬动平衡机构,提高了织机打纬力,降低了整机振动,更为有效的保证了高支高密度织物的织造。

#### New Designed Beating Dynamic Balance System

The beating axis adopted new designed beating dynamic balance system, it improved the beating-up force of the loom, and the vibration of the whole machine is reduced, it is more effectively ensured to weave the high-count and high-density fabric.

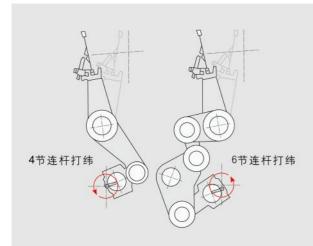


#### 张力自动调整

织机启动时自动调整经纱张力,以消除停车过程中的张力变化,从而防止停车档的产生。

#### **Automatic Tension Adjustment**

Warp tension can be adjusted automatically when loom is started, this can avoid tension change during loom stops and further avoid stop marks.



#### 优化设计的打纬机构

利用计算机优化设计的四连杆打纬机构,打纬动程短、振动小、对应的引纬时间长,在超高速运转时,能进行强有力的稳定打纬,织造出高质量的织物产品。窄幅机采用了在高速适应性方面获有优秀评价的4节连杆打纬。宽幅机则采用了引纬时间卓有余地的6节连杆打纬,从而实现了高速时的稳定引纬。

#### Optimum Designed Link Beating Motion

A 4-link beating motion that works excellently at ultra-high speed and a short connecting rod are used for standard looms. A 6-link beating motion with more time allowance for filling insertion is used for wider looms, thus achieving more stable filling insetion.



#### 节能型引纬系统

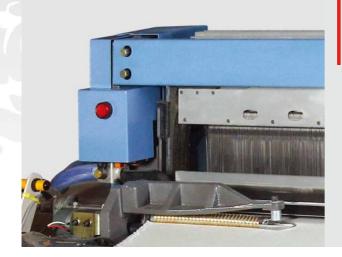
集流腔一体型的新型电磁阀灵敏度极高,在进行精密喷射的 同时使空气压力得到稳定实现了在超高速运转时的稳定引 纬。前上撑档和辅喷气包合成一体直接连接新型电磁阀,缩 短了从电磁阀到喷嘴的距离,提高了高速适应性,降低了空 气消耗。

#### Low-power Weft Insertion

A new type electromagnetic valve manifold is with high sensitivity, this can ensure a stable air pressure during accurate jetting and stable weft insertion at high speed. The integration of stay pin and sub-air bag connects new type electromagnetic valve, this can shorten the distance from valve to nozzle, and improve machine speed and efficiency.



喷气织机 AIR JET LOOM

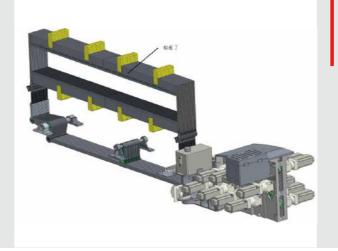


#### 纬停故障自动处理装置

发生纬向故障时自动处理掉纬纱,自动恢复机台运行,明显减少用过工。

#### APR System

Failure weft can be handled and re-start the loom automatically, this system can reduce workers obviously.

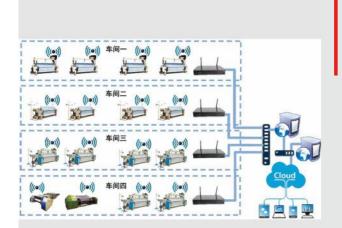


#### 电子开口

实现伺服马达独立控制每片综框,织物组织、综框静止角、平 棕时间、运动方式等参数,通过控制面板自由选择设定,操作 简便,可实现不同织物的任意切换,拓宽了织机品种适应性, 同时避免了多臂机的"禁区"限制。

#### Electronic shedding

The servo motor can independently control the parameters of each heald frame, including fabric weave, repose angle of heald frame, time of heald levelling, motion mode, etc. And users can make selection freely and setting through the control panel, the operation is simple and convenient, and different fabrics can be switched conveniently. It improves the adaptability of the loom to the varieties of fabrics, and avoids the limitation caused by the "forbidden zone" of dobby.



#### 集中联网

具有强大的联网功能,可以在线查看织机的运行状态及效率、产量等各项参数。

#### **Network Application**

With powerful network functions, all the working status, efficiency, production and various parameters can be read online.

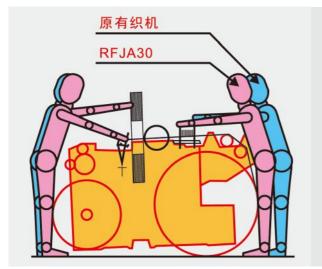


#### 变频调速

通过变频器控制.可以不需要变更小皮带盘,就能方便的调整车速。

#### Inverter Speed Adjustment

Inverter controls the speed adjustment without changing belt wheels. It is convenient to adjust the speed.



#### 可操作性

RFJA30织机针对挡车工操作方便的原则,在不改变卷装容量的前提下,对机架高度进行降低设计。

#### **Easier Operational**

RFJA30 is easier to operate for operators, without reducing of beam capacity; the loom frame height has been reduced for easier operational.



#### 稳定的织口

采用加大织前倾角的上置式边撑和接近织口的导纱杆,使织物组织获得稳定的织口。

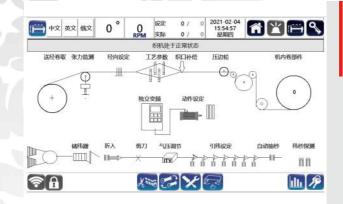
#### Stable Shedding

The up mounted temple has bigger weaving dip angle ; the yarn guiding bar is more closed to cloth-fell . These can make the cloth-fell more Stable .

# **FIFE** 日发纺机

### 玻璃纤维喷气织机

#### FIBERGLASS AIR JET LOOM

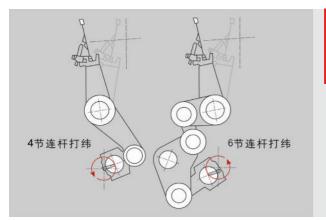


#### 自动化的控制系统

采用高性能32位计算机可实现在线(ONLINE)工艺参数的传递、数据的采集和修改,为实现车间无人化操作、数字化管理、网络化监控,提供了硬件保证软件支持。不仅提供了丰富的信息,而且使用寿命比目前国内普遍使用的智能键盘提高了一倍。

#### **Automatic Control System**

The adoption of high-performance 32-bit computer can realize online transmission of process parameters, data acquisition and modification, and provide hardware assurance and software support for the realization of unmanned operation, digital management and network monitoring in the plant. It not only provides rich information, but also has a service life of twice of the intelligent keyboard commonly used in China.



#### 打纬机构

针对玻纤织物的特性利用计算机优化设计的玻纤专用四连杆 打纬机构,打纬的动程短振动小、对应的引纬时间长,在超高速的运转时能进行强有力的稳定打纬,织造出高质量的织物产品。

#### **Beating Mechanism**

Based on the characteristics of glass fiber fabric, adopt the special 4-link beating mechanism for glass fiber designed and optimized by computer. The beating motion is featured at short travel, small vibration, and long weft insertion time. It can make strong and stable beating during ultra-high speed operation and ensure weave high-quality fabric products.



#### 卷取机构

滚动式织口撑杆、伸幅辊和压布辊,彻底消除玻纤织物卷布时产生的"纬移"现象,使下机布面保持良好风格。卷取辊和导布辊上包裹有专用摩擦材料避免织物产生压痕。



The rolling cloth fell support rod, stretching roller and cloth pressing roller completely eliminate the "removed weft" phenomenon caused by the winding of glass fiber fabric, to maintain a good style of the cloth surface off-machine. The take-up roller and cloth guide roller are wrapped with special friction materials to avoid pressure mark of the fabric.



#### 引纬系统

采用专门适应玻纤纱线的储纬器、主喷嘴、辅喷嘴和牵伸喷嘴等引纬部件使之适应玻纤纱线的引纬需要,减轻了对玻纤纬纱的损伤,同时也降低纱线对引纬部件的磨损,延长使用寿命。

#### Weft Insertion System

Adopt weft insertion components, e.g. weft feeder, main nozzle, auxiliary nozzle and stretch nozzle specially adapted to glass fiber yarn to meet the weft insertion needs of glass fiber yarn, reduce the damage to glass fiber weft yarn, reduce the wear of yarn to weft insertion components, and extend service life.



#### 双后梁电子送经机构

专为玻纤织物设计的双后梁电子送经机构可准确地测出并保持经纱张力,采用AC伺服电机驱动技术控制精度与响应速度大幅度提高,可保证玻纤织物布面质量。

#### Double Back Rest Electronic Let-Off Mechanism

The double back rest electronic let-off mechanism specially designed for glass fiber fabric can accurately measure and maintain the warp tension. The control accuracy and response speed are improved significantly via AC servo motor driving technology, which can ensure the surface quality of glass fiber fabric

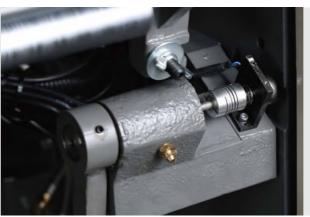


#### 高效吸风装置

高效吸风装置可有效吸走织造时产生的细小纤维,有利于操 作工人的身心健康。



The high-efficiency air suction device can effectively absorb the fine fibers produced during weaving, and it is helpful to the physical and mental health of operators.

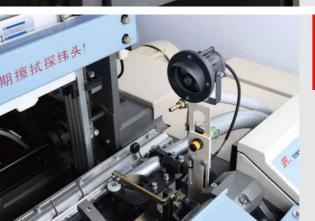


#### 卷布机构

采用AC伺服电机驱动与角位移传感器相结合的控制技术能恒定的控制卷布张力使卷布更加精确。采用机上大卷装机构,最大卷布直径可达800mm,实现较大卷布长度的同时大大减少了设备的占地面积。快速落布机构使落布过程变得简单快速。

#### Take-Up Mechanism

The control technology in combination of AC servo motor drive and angular displacement sensor can control the winding tension constantly and realize more accurate winding. Adopt large winding mechanism on the machine, with the maximum winding diameter can reach 800mm, which not only realizes large winding length, but also significantly reduces the floor area of equipment. The quick doffing mechanism makes doffing simple and fast.



#### 专用剪刀边撑机构

针对玻纤硬度高,难于剪切的特点,专门设计了砍切式剪刀,把多余的纱头切掉,成本低、效果好、寿命长。

#### Special Scissors Temple Mechanism

Based on the characteristics of high hardness and being difficult to cut of glass fiber, it specially designs cutting scissors to cut off the excess yarn head, featured at low cost, good effect and long service life.

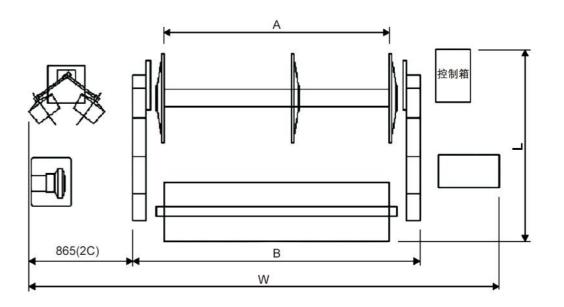
# RFJA30

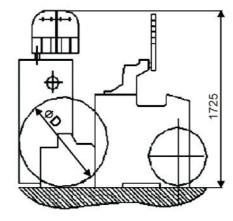
## 技术规格 SPECIFICATION

	项目 Item	规格 Specification	选配件 Optional
	新幅	公称筘幅 Nominal:150、170、190、210、230、260、280、340、360cm	
	Reed Space	有效筘幅 Useful range: 公称筘幅减 reduction from nominal 0~60cm (150-260cm) 公称筘幅减 reduction from nominal 0~80cm (280cm以上)	
	<b>加</b> 类芬围	短纤 Spun: Ne100~Ne2.5	
	织造范围 Yarn Range	长丝 Filament: 22dtex~1350dtex	
	纬纱选择 Weft Selection	双色、四色、六色并有继续扩展的功能 2-color、4-color、6-color with extension function	
	vveit Selection	通过电磁制动器直接控制定位停车 Magnetic brake control position stop directly	
	动力 Drive	超启动马达 Direct drive main motor 2.2kW (曲柄开口 crank shedding)、3.0kW (凸轮开口 cam shedding)、3.7kW(多臂开口Dobby shedding)、6.5kW(提花开口Jacquard shedding)	
		按钮开关双手操作 Push button operated by both hands	
		最高入纬率: 2300米/分钟 Insertion rate: max 2300 m/min	
	71/+	主喷嘴、辅喷嘴并用式 Main nozzle and sub nozzle combined system	延伸喷嘴Stretch nozzle
	引纬 Weft Insertion	使用异形筘 Profile reed	ABS纬纱制动器
		辅助主喷嘴 Auxiliary main nozzle	ABSweft break
		曲枘式连杆开口: 4页综框或6页综框 Crank shedding: 4&6 shafts	
	_	积极式凸轮开口:最多 10 页综框 Positive cam shedding: 10 shafts max	
	开口 Shedding	多臂开口:最多 16页综框 Dobby shedding: 16 shafts max	
	Ü	大提花开口 Jacquard shedding	
		消极松经或积极松经 Negative or positive let-off	
	ガロ Shedding 送经 Let Off 巻取 Take-Up	双辊电子送经、带自动反转功能 Double roller electronic let-off with automatic reverse function	双经轴 Double beam
		经轴边盘直径 Flange diameter Φ800mm	Ф914mm Ф1000mm
	<b>券</b> 取	电子卷取 Electronic take-up	
		标准密度Pick density: 25~300根/英寸picks/inch、special 疏密度15~300根/英寸picks/inch ゆ520mm/曲柄开口crank shedding)	Ф914mm、 Ф1000mm
		最大卷布直径 Max take-up diameter:	
		曲柄式多筘座脚打纬机构 Crank type beating, multiple sley sword beating	
	Beating	四连杆打纬(窄幅) 4 links (narrow width)、六连杆打纬(宽幅) 6 links(wide width)	
	测长储纬 Length Measuring	振动式储纬器Vibratory weft accumulator	
	纬纱架 Accumulator	落地式Floor type: 4只筒纱(2喷) 4 bobbins(2-color), 8只筒纱(4喷) 8 bobbins(4-color)	
	布边 Bobbin Frame 纱端处理 Selvage	行星齿轮式绞边装置Planetary gear leno selvage	
		弃边卷取2只滚筒式、弃边卷取齿轮方式 2 rollers take-up; gear take up	
	剪纬 Waste Selvage	机械式剪刀Mechanical weft cutter、电子式剪刀 Electronic weft cutter	
	润滑 Weft Cutter	主传动部分油浴式,手动集中供油 Oil bath system for main driving parts, centralize lubrication system(Manual grease)	自动集中供油 Automatic lubrication system
		纬纱:光电式探纬器、双探头 Weft: photoelectric double weft sensor	
	停车装置	经纱:电气接触式6列停经片 Warp: Electronic 6-row contact bar system	
	Auto-Stop Motion	其它:绞边纱、弃边纱断头自停 Others: Automatic stop for leno yarn and waste salvage yarn break	
	Modell	停车原因显示:在人机界面上显示信息,多功能4色灯停车显示 Stop reason Indication: Indication on control panel and 4 color indicating lamp	
	自动化 Automatic	控制:多功能微机控制系统,具有参数设定/控制/监控/自我诊断/人工智能界面 Control:Multiple function computer control system with data setting/control/ monitor/self diagnose/artificial intelligence interface	
		找断纬装置:自动找梭口 Pick finding: automatic pick finding	
		通过变频器作慢点动(正反转) Slow motion(corotation and reverse) by inverter	
		其它:监控器输出端子 Others: Monitor output terminal	
		记忆卡系统 Memorycard system	
		喷射自动控制 Jet automatic control	



## 尺寸图 DIMENSIONS





边盘直径 Flange dia	Ф800
L	1958

注: 1) L为Φ800边盘的概略尺寸,至于其他详细尺寸,请直接向我司咨询。 2) 边盘直径为Φ914或Φ1000时,图示L尺寸相同。

公称領	<b>笛幅(</b> 英寸)	150 (60)	170 (67)	190 (75)	210 (83)	230 (91)	260 (102)	280 (110)	340 (134)	360 (142)
	曲柄开口	3700	3900	4100	4300	4500	4800	5000	5600	5800
W(2C)	积极式 凸轮开口	4100	4300	4500	4700	4900	5200	5400	6000	6200
	下置式 积极多臂	4100	4300	4500	4700	4900	5200	5400	6000	6200
	Α	1500	1700	1900	2100	2300	2600	2800	3400	3600
	В	2110	2310	2510	2710	2910	3210	3410	4010	4210

注: W为双喷时的概略尺寸,其他规格的详细尺寸,请直接向我司咨询。

## **RFJA33 RFJAT28**

织造解决方案

喷气毛巾织机

AIR JET TERRY LOOMS





#### 高速高效

RFJA系列喷气毛巾织机机架构造刚度、韧度 优化加强,引纬、打纬更加稳定,使高速性 能表现卓越。

#### High Speed & High Efficiency

Rigidity & tenacity of machine frame has been strengthened, insertion and beating is more stable, which can ensure a perfect performance with high speed.

#### 操作简便

RFJA系列喷气毛巾织机充分考虑人机工程, 力求操作舒适简便,降低经位置线,提高操 作工的舒适度,通过高清彩色触摸屏的人机 对话界面,基本实现全部设定的简便化,发 挥出卓越的操作性能。

#### **Easy Operation**

Fully considering man-machine engineering on RFJA series looms to make the operating comfortable and simple. Lower position of warp ends also can comfort the operators. Through i-board high definition touching screen, all the data can be set easily.

#### 品质保障

RFJA系列喷气毛巾织机强化关键零部件,优选供应商,保证整机品质,并具有完善的全方位的售前、售中和售后服务体系。

#### Reliable Quality

All the important parts get strengthened, select the best suppliers to ensure the best quality; and offer perfect service of per-sale, in sale and after-sale.

RFJA系列喷气毛巾织机秉承日发纺机RFJA系列喷气织机的技术,以节能、低耗、高速、高效与广泛的品种适应性为设计理念而开发的高速喷气毛巾织机。该机通过全新立体设计和计算机解析组合,并利用虚拟样机技术设计了引纬、开口、打纬和起圈机构,为国内喷气毛巾的首创,同时在高速适应性与品种适应性上表现优异。

- ○优越的高速性能
- ○可靠的品质保障
- ○广泛的产品适应性
- ○优良的环境保护措施
- 良好的可操作性

○ High speed

manufacturer of air jet terry looms in China.

- O Wide weaveability
- Easy operating
- O Reliable quality
- OPerfect environmental protection

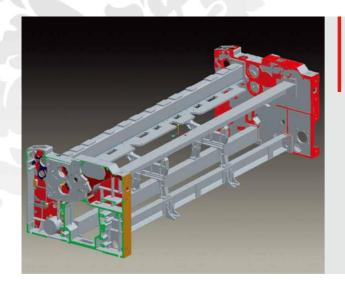
RFJA series air jet terry looms succeed the technology of RFJA series air jet looms, is a model of high speed air jet terry looms with the design concept of high speed, lower consumption and wide weaving range. This model

looms are designed through completely new three-dimension technology, computer analysis & assembly, and

utilized the virtual technology in designing of the insertion, shedding, beating and looping. It is the first

## 日发纺机

### 布动式喷气毛巾织机 AIR JET TERRY LOOM



#### 坚固的机架•超高的转速

采用强韧的两侧箱型墙板和扎实的横梁组合成坚固的机架,并增加了机架中间支撑,抗振性和可靠性好,确保了织机超高速化、宽幅化和低噪音。

#### Solid Frame • Super-High Speed

Adopts strong box-wall boards on both sides, and the middle support also has been strengthened, the anti-vibration and reliability is perfect to ensure the performance of high speed, wide width and low sounds.



#### 起圈装置

伺服式电机精确控制起圈、调节方便并提高了毛圈的品质,可以非常容易地织造出不同长短毛圈和凹凸毛圈、波浪毛等多样组织的织物。可实现3-7纬自动控制起毛及转换等功能,大幅度提高了毛巾图案设计的灵活性。可在显示屏上简单变更毛圈长度并切换毛圈形成周期,使式样的变换更为简便。

#### Terry Motion

Looping is controlled accurately by servo motor which can improve the terry quality, and it is easy to weave different length loops, concave-convex loops, wavy loops and so on. 3-7 picks at will; this can ensure weavability of various towels. Through parameter settings on screen it is easy to change loop length and terry formation cycle.



#### 摇轴中间支撑装置

摇轴采用实心轴带中支撑的装置,提高了打纬机构的刚性,在高速运转中准确有力的打纬是织造高密度织物的保证。

#### Middle Support Of Sley Shaft

Adopts solid sley shaft with middle support, rigidity of beating is improved; high quality beating motion ensures to weave high density fabrics.



#### 计算机控制系统

配有人机界面键盘,可以将织机运转状态、故障原因、织造工艺参数及织机设定条件等信息显示在显示屏中。通过功能键方便的输入各种数据,还可通过记忆卡将各种设定参数长期保存或随时输入到其织机中。

#### 人性化的界面

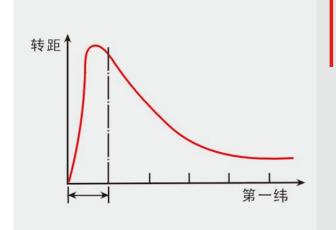
用户可根据需要选择中文或英文人工操作界面。

#### Computer Control System

Equipped with man-machine interface key-board, it is easy to input all kinds of data, and all the data of machine running condition, fault reason, towel design and machine setting can be showed on screen. All the data can be transferred to other machines by IC card.

#### Humanized interface

Customer can choose Chinese or English operation interface.



#### 动力•超起动马达

采用当今先进的超起动马达,在织机起动时可以产生高输出转矩,以提高第一梭的打纬力量。 同时采用了大力矩的电磁刹车,提高了制动力,从而防止停车档的产生,提高了织物的产品质量。

#### Drive•Super Motor

Adopts most advanced super motor, this motor can output high torque to increase the beating strength of the 1st pick when the loom is started. The high torque electromagnetic brake can prevent stop mark to much improve the quality of towels.



#### 振动式永磁电动鼓筒储纬

新型电动鼓筒储纬器,具有出色的高速跟踪性能,配备积极 纱线分离送纱装置,可实现细支纱到粗支纱简单稳定的储纬 及解舒。

#### Vibration Type Permanent Magnetism FDP

New type FDP accumulator with perfect high speed tracking function, equipped with positive weft separating feeding device, can feed both fine yarn and thick yarn very well.

### 日发纺机

### 布动式喷气毛巾织机 AIR JET TERRY LOOM



#### 双探头探纬器

探纬器采用双探头方式,除了探知通常的短纬或弯纬外,还可探知纬纱被吹断或长纬的现象,从而做到万无一失。探头耐污性强,探测稳定可靠。

#### **Double Weft Sensors**

Adopts double weft sensors, not only can detect short and loose picks, but also can detect weft break and long pick, can ensure no fault in fabric.



#### 集成气路系统

在极小的空间里将整机气路所有元气件集成在一个操作面板上,即紧凑又不失协调。在使用过程中,操作起来方便且 节省空间。

#### Integrated System Of Air Circuit

All the components of air circuit are integrated on an operation panel in a very small space, it is easy to operate and also can save space.



#### ABS纬纱制动器

大幅减少引纬结束时发生的峰值张力,实现高速状态下强捻织物起皱均匀。有效防止加工丝织造过程中产生紧纬和松纬。

#### **ABS Weft Brake**

ABS can much reduce the peak tension when a insertion finishes, which can ensure high twist fabric crinkles uniformly, and prevent tight and loose picks.

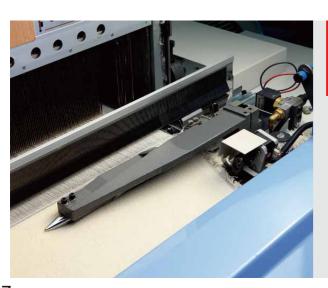


#### **-** 福起網系统

精确伺服控制起圈系统。终端设置张力值,并通过电子线性传感器时时感知毛经纱张力,实施反馈参数经高性能CPU微处理器管理和监控与卷取、送经参数完美同步织造。连续监控毛巾及缎档组织的长度以及各种纬纱的密度。高刚度与高精确度的张力系统,确保高规律的毛经送入。高灵敏的毛经张力控制机构摆动梁及其轻质支架设计,即使用最精细娇柔的纱线,也能有最小而且最规则的毛经张力与最一致的毛圈高度。

#### Accurate Terry Formation

Adopts accurate terry formation system controlled by servo device. Warp tension is set on panel, and the terry warp tension can be sensed all time though electric linear sensor, the data of tension is processed by CPU to manage and monitor the ELO & ETU to weave fabrics perfectly. Continue monitoring towels quality & the border length and various pick densities. High rigidity and precision tension system ensures high regular warp let-off. High sensitive of swing beam and its light support design can ensure a regular loop height even using finest yarn.



#### 上置式边撑

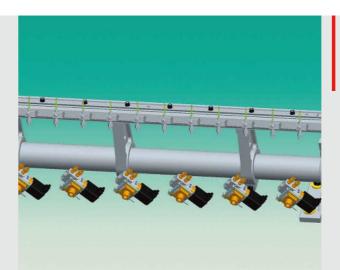
由于采用了上置式边撑,可以很容易地实现边撑的退出调整。从而还可以调整覆盖量。

- 滑板导杆:通过将支撑织口的导杆与毛圈运动机构相对准并前后移动滑板,可避免使布受到强烈的摩擦,从而提高了毛圈的品质。另外由于使导杆接近织口,因此可以很容易地织造特殊边纹和长毛圈。
- 边撑积极驱动:根据边撑与拉伸布的织口导杆连接,使边撑和布的漂移消失。从而实现高速度和高品质。

#### Up Mounted Temples

It is easy to adjust temples and temple covering.

- Sliding plate & guide shaft: Violent friction to towels can be avoided through making the guide shaft which supports the doth-fell to be synchronous with terry motion and the movement of the sliding plate; this can improve the quality of terry. On the other hand, because the guide shaft is close to doth-fell, special design of selvage and long loops towels can be woven.
- Positive driving of temples: Temples are connected with guide shaft to prevent shifting of temples and fabrics; this can ensure a high speed and high quality of fabrics.



#### 节省能源

此机在节省能源方面进行了全面的考虑。实现了有利于纬纱的低压引纬。另外,由于在每2个副喷嘴之间配置了气阀,并将空气的途径缩短至极限,从而降低了约10%的耗气量。

#### **Power Saving**

Power saving has been fully considered in the design of this model looms. Weft insertion can be made by low air pressure. And equipped with a valve between any two sub-nozzles; this can reduce the air route to minimum, so 10% air consumption can be saved.

## 筘动喷气毛巾织机

AIR JET TERRY LOOM



#### 上置式边撑

由于采用了上置式边撑,从而可以很容易地实现边撑的退出调整。从而还可以调整覆盖量。

#### Up Mounted Temples

It is easy to adjust temples and temple covering.



#### 地经•双弹簧可调整张力

采用双弹簧机构,可实现多种幅宽和不同品种纱线的张力需求,张力大小可任意调整,品种适应性大幅提升。

Ground beam•Double spring, adjustable tension Adopts double spring mechanism which can get the tension suitable for all different width and warp yarn. Warp tension can be adjusted freely.

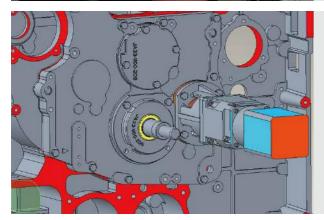


#### 新式毛经后梁装置

整合了纺织机械的结构优势,全新设计的毛经后梁机构,此机构对毛纱张力的感知更敏捷,对毛纱的控制更柔和,提高了毛圈起圈质量美观度。

#### New type terry motion roller device

Conform all the structure advantage of textile machines; completely design the new terry motion roller system which can sense the terry warp tension promptly, control terry warp gentler. The loop quality can be much improved.



#### 筘动起圈 • 六连杆机构

采用喷气织机一体钢筘和六连杆机构,打纬力大,在整个筘幅内打纬力均匀,有利于打紧纬纱和织造高密度织物,起圈高度无极调节,毛圈高度在一定范围内任意调节,起圈高度均匀。同时本机构采用了筘动起圈,降低了经纱的断头率,起圈周期任意设定,结构简单可靠。

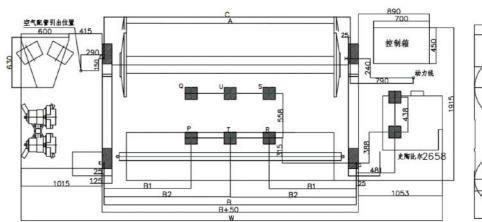
#### Reed movement terry motion and 6 bar linkage Adopts air jet loom integrated reed and 6 bar linkage mechanism. Beating strength is big and even in the whole reed width, it is good at weaving high density towels. Stepless terry looping motion, loop beingt can be adjusted freely in a certain range. It adopts

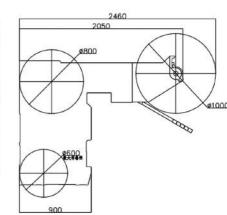
good at weaving high density towels. Stepless terry looping motion, loop height can be adjusted freely in a certain range. It adopts reed movement terry motion which can reduce weft breakage. Loop cycle can be set freely, structure is simple and reliable.



### **RFJA33 RFJAT28**

### 尺寸图 DIMENSIONS





R/S	Α	В	С	W	B1	B2
190	1900	2460	2385	4578	_	_
210	2100	2660	2585	4778	_	1330
230	2300	2860	2785	4978	_	1430
260	2600	3160	3085	5278	1090	_
280	2800	3360	3285	5478	1090	_
320	3200	3760	3685	5878	1090	_
340	3400	3960	3885	6078	1090	_

#### 注:

- 1. 用 表示的安装脚部位的记号E~U之间的高低差应在2mm以内。
- 2. 基础螺栓的记号P~U根据规格按需选择。
- 3. 边盘直径为914时,需要垫高织机,图中\*50为垫片厚度。
- 4. 最大纵深根据规格而有所不同,以边盘部或控制箱端部为准。

规格: 190~340cm 积极落地式多臂开口: 史陶比尔2658

#### Remark:

- 1. The height difference of installation feet marked by from E-U should be less than 2mm.
- 2. Ground bolts marked by P-U are decided by actual request.
- 3. If the flange dia of beam is 914mm, the looms should be blocked up. In the above Fig \*50 is the thickness of pad.
- 4. The widths from front to back side are different according to different specifications, the actual size is between edges of flange and control box.

Specifications: 190-340cm Positive floor mounted dobby: Staubli 2658

本图适用于RFJA33机型。该尺寸仅供参考,具体可根据客户厂房实际情况自行调整。至于其他规格的详细尺寸, 请直接向我司咨询。

This dimension drawing is only reference for RFJA33 loom. It is only for your reference, you can adjust it by yourself according to factory building. Please contract us to get the dimensions of other looms.

# **RFJA33 RFJAT28**

织造解决方案

### 技术规格 SPECIFICATION





Item		Specifications	Options
Reed Width Working Width		190cm, 210cm, 230cm, 260cm, 280cm, 320cm, 340cm Reed width minus 0-60cm (190-230cm) Reed width minus 0-60cm (above 260cm)	
Weft Selector		4 color or 6 color at will	
	Start Type	Super motor	
Power	ver Operation	Stop controlled by magnetic brake directly	
		Buttons on both sides	
Beating		link lever	
		Main nozzles and sub-nozzles	Stretch nozzles
Insertion		Profile double reed	ABS
		Relay main nozzle	
Ch a dalin a		Electronic dobby, max 20 shafts	
Shedding		Electronic jacquard	
		Electronic continuous positive let-off	
Let-off		Ground beam flange: dia 800mm Pile beam flange:dia 1000mm	Ground beam flange: dia 914mm,dia 1000mm Pile beam flange:dia 1250mm
		Electronic take-up	
Take-up		Weft density: 25-300/inch	
		Max cloth:dia 600mm	
Cone Stand Terry Motion		Console stand for 8 cones (4 colors) Console stand for 12 cones (6 colors) Servo terry motion: dynamic terry control Loop formation by fabric movement. Automatic loop formation from 3 to 7 picks at will. Loop length: 0-28mm at will, the accuracy of two neighboring loops height different can be 0.1mm max	
Selvage		Mechanical	
	Treatment	Waste selvage winding roller	
Weft Cutt	er	LH mechanical RH electronic	
Weft Fee	der	Vibration type	
Lubrication		Main transmission: oil bath,other components: automatic centralization greasing	
		Weft: photoelectric weft sensor, double sensors	
Stop Mot	ion	Warp: two rows and two lines electric stop motion	
Stop Motion		Other: auto stop motion for selvage yarn	
		Stop indicating: stop reason on panel, 4 color lamps	
		Control: multi-function microcomputer system, with parameter setting/control/monitor/ autodiagnosis/artificial intelligence interface	
Automatio	C	Inching by inverter (forward and reverse)	
		Others: monitor output terminal	
		Auto control air jet	