

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

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To keep up with advancement technology, we reserve the right to change the specifications without prior notice.



山东日发纺织机械有限公司是由浙江日发纺织机械有限公司控股、 聊城市昌润投资发展有限责任公司和部分员工共同出资组建的具有独立法人的 有限责任公司。公司拥有自营进出口权,通过了IS09001: 2000 质量管理体 系认证,是"国家高新技术企业"。企业技术中心为"山东省剑杆织机 工程技术研究中心"。

山东日发致力于研发、制造具有国际水准的各类无梭织机,主 要产品为系列剑杆织机、毛巾织机、喷气织机、喷气毛巾织机、 喷水织机。公司是有近二十年专业生产高档无梭织机的历史, 已有几万台织机销往欧洲、亚洲、非洲等十几个国家及全国 INDONG RIFA TEXT LE MACHINERY COLUD 20多个省市区。目前织机可适于各种纤维,如棉、毛、 丝、麻、以及特种纱: 涉及多个领域, 如毛巾、棉、 毛、丝的时装面料和家纺装饰布、工业用布等,多 数填补了国内织造行业的空白。

公司以成为"敏捷化的国际性公司"为愿 景,以"在机电产品制造领域向客户提供工 业加工过程的单台设备、工段、车间、组 合生产线, 协助客户实现数字化工厂 的梦想"为使命,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



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THE REAL PROPERTY AND PERSONS ASSESSED.

Shandong Rifa Textile Machinery Co., Ltd is controlled and founded by Zhejiang Rifa Textile Machinery Co., Ltd, Liaocheng Changrun Investment Development Co., Ltd. as well as some managerial persons and staff. The company has got ISO9001:2000 Quality System Certificate; it is Shandong Province High-technology Enterprise and Investigation & Research Center, also is Shandong Province Rapier Loom Engineering Technology Investigation Center.

Shandong Rifa is the main base of shuttleless loom manufacture and investigation; the company is devoting herself into manufacturing all kinds of shuttleless looms with the leading main products of air jet looms, rapier looms, terry looms of rapier and air jet, water jet looms. The company is one of the earliest manufacturers for rapier looms in China, has more than 20-year professional experience of manufacturing rapier looms, more than thirty thousand looms were sold in Europe, Asia, Africa, etc. At present the machines we manufacture includes cotton loom, worsted loom, slub wool loom, linen loom, ramie loom, jute loom, denim loom, silk loom, terry loom, jacquard loom, label loom, wide width upholster fabric loom, industrial & percolation fabric loom, special net fabric loom, etc.

三 日发纺机

"Become a quick response international enterprise" is our target, and supply to the customers with single equipment, workshop section, workshop, combined product line in the area of machinery-electronic industry, assisting our customers realize their dreams of digital factory which is also the mission of RIFA. Shandong Rifa Textile Machinery Co., Ltd. devoting itself to create a whole new theory of digital technology, establishing the interactive platform for people flow, material flow and information flow, realizing harmony & unify for science and technology, environment and manufacturing.





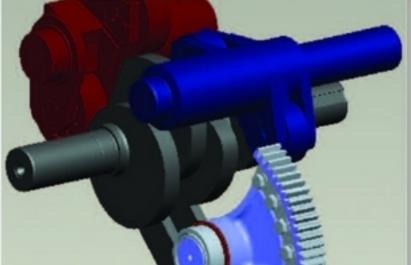


【直接驱动:节能经济】

电磁制动主电机配变頻器调速,升速快且升速时间可设定,调速方便,效率高,优于传统的换皮带轮调速。电磁制动主电机代替离合器,制动精确、平稳、噪声低,启动状态好。当织机发生断经或断纬停车时,电磁制动主电机停转,减少了电力消耗。尤其变頻器的应用,可降低无功功率传递而引起的有功损耗,总计省电最高达20-35%左右,是全世界唯一一款具备此节能功能的机型。

[Direct Drive: Less power-consumption]

Adopts electromagnetic motor with inverter, the speed can be programmed. The electromagnetic braking system ensures loom brake accurately, stable and low noise. The inverter device can save power consumption up to 20%~35%, it is the one and only terry loom with this function in the world.



【强劲打纬】

打纬由双侧共轭凸轮驱动,采用改进优化的高速凸轮曲线,减小了高速运转时打纬机构产生的振动和冲击。整体式凸轮,精度高、强度大; 箝座抗扭强度高,中间支座使钢筘的直线度更好,高速织造时能进行强有力的稳定打纬,满足大级档大张力等厚重巾被类织物的织造要求。

[Powerful Beating-up System]

Beating-up motion is driven by double side conjugate cams. The optimal cam curve decreases much quiver. The unitary cam design ensures its tightness and precision. The sley with middle supporter ensure the reed keep straight and beating stably during the high speed weaving process. It can meet the requirement of various heavy fabrics weaving.



【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]

Controlled by servo-system, the loop can be woven by different styles, such as long-short loops, concave-convex loops, waving loops etc. Loops can be changed and switched freely from 3~7picks, the loop setting can be operated easily through display screen.



【先进引纬系统】

[Weft Insertion]

Small gripper head makes the weft insertion system is more stable and high efficiency and less attrition. It is especially suitable for highdensity towel weaving.



【直观的可操作显示屏】

采用高速PLC控制,通过10.4时显示屏对程序进行操作。简单方便。 用图形实行功能循环,大大缩短故障分析时间。电子开口、电子送 经、电子卷取、电子选纬、自动寻纬、故障检测、整机测试等功能 完美地实现同步。

[Operating Display]

Adopts high-speed PLC control, interactive figures 10.4LCD, with the function of electronic shedding, electronic let-off, electronic take-up, electronic weft selection, auto pick finding, error detection, etc.

项目 Item	RF50N	注解 Marks
福宽 Width	190cm、220cm、240cm、260cm、280cm、320cm	
最高车速	370转/分	随幅宽变化而变化
Max.speed	370rpm	Depending on specs and machine width
引纬 Insertion	共轭凸轮驱动、左右剑带传送、中央交接的方式 Conjugated Cams Drive、Left&right Rapier Tape Transfer、 Handing Over In The Central	悬浮导钩、高效引纬 Levitation Hooks,High Efficent Filling
打纬	共轭凸轮驱动	强劲打纬力
Beating	Conjugated Cams Drive	Powerful Beating
地经送经 Ground Warp Let- off	张力传感装置+伺服电机驱动 Tension Sensor+Servo Motor Drive	织轴直径Φ800mm Warp Beam Diameter:Φ800mm
毛经送经 Pile Warp Let-off	张力检测装置+伺服电机驱动 Tension Sensor+Servo Motor Drive	织轴直径Φ800mm可选Φ1000mm Warp Beam Diameter: Φ800mm,Φ1000mm(Optional)
开口	电子多臂机、电子提花机	多臂最多可驱动20片综框
Shedding	Electronic Dobby、Electronic Jacquard	Electronic Dobby With Max. 20 Shafts
卷取	Etu伺服控制系统	最大卷布直径Φ550mm
Take-up	Etu Servo Control System	Roller Diameter Max.Φ550mm
起圈	伺服式,可做波浪毛	毛图长度0~20mm
Loop	Servo Control,Wavy Looped Pile	Loop Length: 0~20mm
显示屏	10.4吋大液晶屏	互动式图形-图标动态显示
Display	10.4inch Big Lcd	Interactive Figure And Dynamic Display



RFTL60型高速毛巾剑杆织机的终极目标是成为 任何人都可以利用专业织造技术织造高品位织物的织 机。领先的驱动和控制技术与成熟的毛圈织造技术相 结合,使其成为毛巾织机的领跑者。除织造普通毛圈

The target of RFTL60 high speed terry looms is to weave top grade towels by anyone who exert professional weaving knowledge. Advanced driving control and perfect terry weaving technic make it become a industry leader. This model loom not only can weave common towels, but also system, makes it reach international advanced level.

高车速,完美织物品质。

筘座运动的动态毛圈成型,保证了超级的品质,

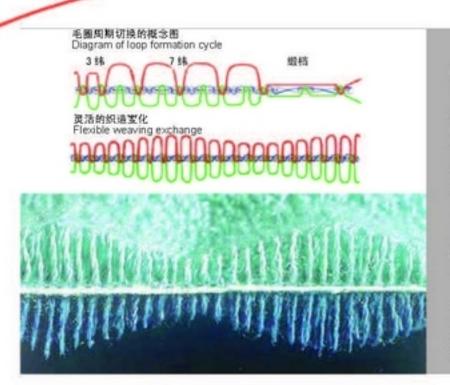
也同时成为毛圈花型的最高标准。

High speed, perfect performance.

Dynamic loop formation controlled by sley movement can ensure weaving super quality terry towels, and

it becomes the superstandard of loop foramtion.





【筘动起毛圈织造技术】

RFTL60采用的动态毛圈控制,是由筘座运动形成毛圈,减少了纱线 的二次摩擦,降低了纱线的织造要求,这是毛巾织机目前最柔和的 经纱处理方式。低消耗低运行成本确保您实现最佳的经济效益。 RFTL60的电子毛圈控制,可以对毛圈进行自由选择比例的编程,以 织出独一无二的毛圈花样。拥有24mm的最大送纬距离,再加上自由 编程的毛圈高度,最高精度可达0.01mm,可以在织物上产生丰富特 效,比如波浪状的效果。

[Reed Movement Loop Motion]

RFTL60 adopts dynamic looping control system, loops are piled by the motion of dynamic sley, yarn attrition is greatly reduced, it reduces the weaving requirement of yarn.Low cost and high efficiency create great economic benefits.

Electronic control for RFTL60 terry motion can be programmed as per a proportion freely to weave perfect terry pattern. Loop length can be up to 24mm and height of loom can be programmed, the loop height adjustment precision can be up to 0.01mm, thus it can weave special towers such as weave piles.



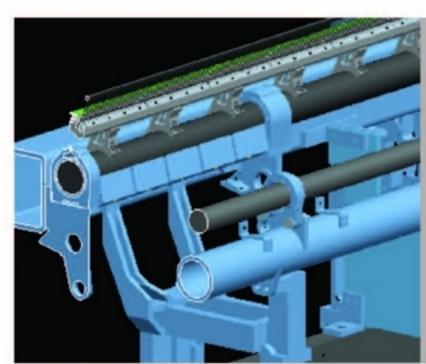
【先进入纬系统】

电子选纬器由独立的模块驱动,全程电子控制,可实现2-4-6-8色 模块化扩展,纬纱具有低而稳定的最佳张力。储纬器采用电子定鼓 式,质量轻、体积小、具有补纬功能,退解张力均匀,能满足高速 引纬要求。

[Weft Insertion System]

Electronic weft selector is driven by independent module and totally electronically controlled 2-4-6-8 colours are optional.

Weft accumulator adopts electronic drum weft feeder, it's small and light, with the function of auto tension adjustment, ensure the weft keep suitable tension all the time.



【钢筘驱动稳定】

新型坚固的机架,采用两侧强韧的铸造墙板和高强度支撑横梁,钢 性大、强度高、抗震性好,满足织机高速化生产,保证了高级织物 安全可靠的生产织造。

简洁的驱动系统,平衡的筘座和剑杆驱动机构,确保打纬均匀又精 确,织机震动减至最低,消除了开车痕。

[Stable Reed Driving]

The new designed frame adopts extra strong wallboard and beams, it shows great stability and aseismicity. It ensures weaving process safe

Laconic driving system with balanced sley and rapier driving mechanism ensure beating -up motion accurately, the tremble is reduced to lowest and starting mark is avoided.



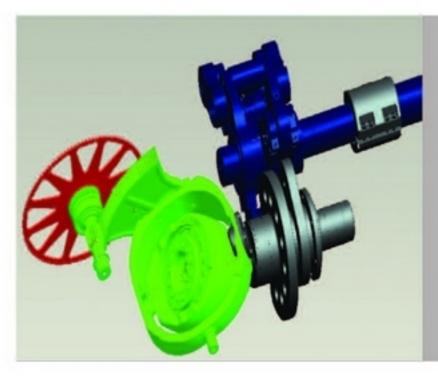
【高车速驱动系统: 节能经济】

主驱动系统 采用三相异步电机驱动高性能电磁离合器,高速启动 力大、制动性好,运行稳定,从终端可变频调节速度和编程,在获 得最高产能的同时能耗最低。

直接驱动织机还可选用超启动电机直接驱动, 无离合器和皮带盘, 并能在开车过程中自动变速。同时能节约10%-30%的电力消耗。

【High Speed Drive System: Power Saving】
Main Motor: adopts Triple-phase asynchronous motor, Ezquipped with electromagnetic clutch with advantage of powerful start and stable brake. Speed can be programmed. The power consumption can be

Directly driving system: RFTL60 also can be equipped with super start direct motor without clutch, and loom can change speed automatically during weaving as per programme setting, the energy consumption can be saved up to 10%~30%.



【先进引纬系统】

剑杆控制通过"空间曲柄连杆"驱动,优化加速度和速度曲线。即 使在高速运转中,剑杆运动及交接纬纱也能准确平稳,引纬效率 高。尤其无导钩引纬,使整体结构设计更趋合理。紧凑,安装、维 修方便可避免导钩对纱线的损伤保证了织造高效率。同时降低了剑 带的磨损,提高经济效益。

[Advanced Weft Insertion]

Rapiers are driven by "spacel crank linkage" with optimizing acceleration and speed curve. The gripper performance keeps stable and high efficiency during high speed weaving. Especially the free flight system can avoid guide hooks damage yarn, this can greatly improve efficiency and the life of tapes.



【先进引纬剑头】

先进引纱剑头的设计使用,能够为最纤细柔和的毛圈织物用纱,做 出最合适的开口架构。新型夹持器:它的外型及缩小的截面符合经 纱开口的形状架构,对张力很小的毛圈用纱非常有利,提高织造工 作效率。

[Advanced Gripper Head]

The advanced design of grippers can ensure high efficiency insertion of even finest yarn.



【电子送经和电子卷取控制】

送经/卷取系统均采用最先进的电子伺服控制。通过张力传感器存储并感应经纱张力,根据设定纬密和张力,CPU综合处理,由于开口、打纬、经纱和布卷轴径变化等因素引起的经纱张力改变,指令送经/卷取伺服系统工作,确保经纱张力从满轴到空轴都保持恒定、织物纬密精确,使送经/卷取与织机保持精确同步,完全消除稀密档,保证织物均匀平整。

[ELO&ETU System]

Electronic let-off and Electronic take-up adopt advanced electronic servo control system, CPU can programe the weft tension signal which transmitted by tension sensor. The tension undulation caused by shedding, beating-up and weft beam diameter change can be perfectly controlled. The let-off and take-up motion accurately accompany the other motions. The fabric quality keeps stable without any weaving mark.



【电子绞边器】

电子绞边器,可在电控操作界面上对绞合时间进行逐纬编程,使与 织口的闭合时间分开。在织造过程中可以完成微调快速适应各种纬 纱,尤其高档毛巾的断档,控制效率最高。

[Electronic Leno Selvage]

The motion of electronic leno selvage can be programmed. It makes the leno selvage cooperate with shedding motion accurately. Electronic leno selvage is suitable all types of weft yarn, with high efficiency.



【精确起圈系统】

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GPU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 Looped Pile System]

Loop pile motion is accurately controlled by servo motor, CPU programme all the tension signal transmitted by tension sensor and control the loop tension stable. The accurate tension system ensures the pile warp yarn woven into regular terry with uniform height and style.



【全方位控制】

所有的织机功能都由微处理器控制。通过大屏幕液晶显示,能实现 双向通讯,可即时设定、调整各种工艺参数,进行工艺编程,减少 了工作量。独立放置,隔绝振动。开放式USB接口,方便将各种设 定参数和程序输入/输出,轻松实现数据的存储转移复制。能快速 采集、监测织机状况,及时进行自动控制和调整,适时做出故障显 示和诊断。

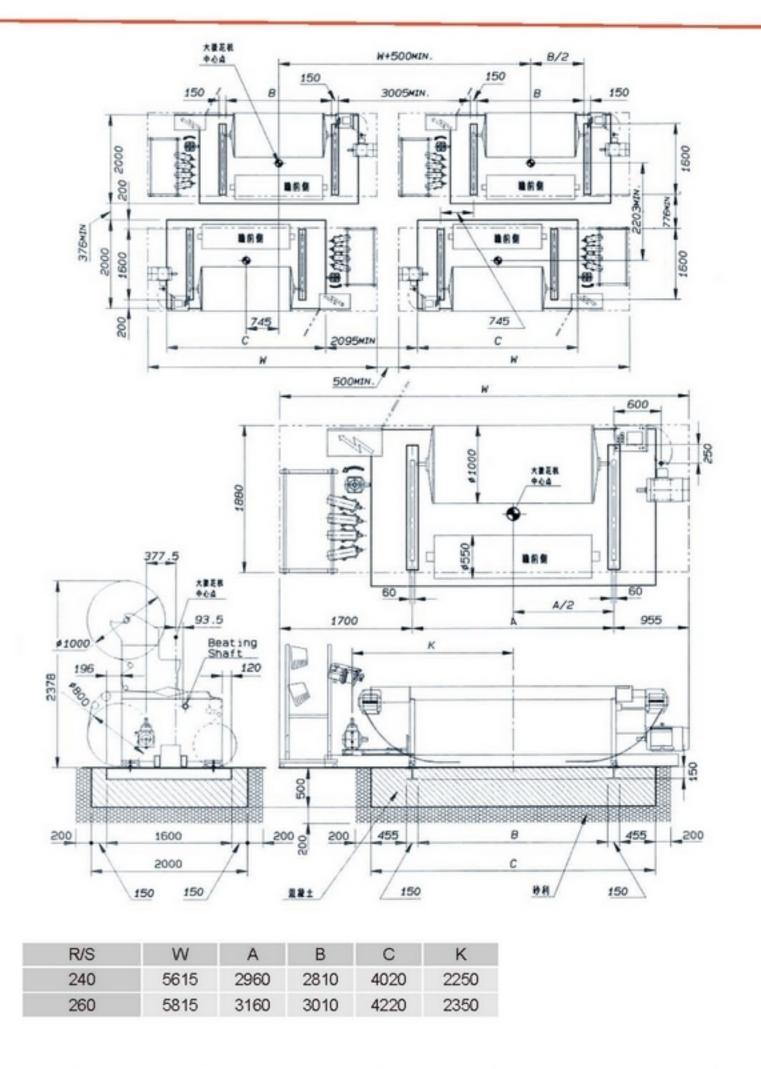
[Comprehensive Command]

All loom functions are controlled by microprocessor. Displayed through big LCD screen, with function of bidirectional communication, fabric structure designing& amend. USB interface makes data transmission easy, the loom running performance is monitored, any error will be detected and display in time and improve the weaving efficiency.





項目Item	RFTL60 规格	RFTL60 Specification
筘幅	公称筘幅: 200、220、 240、260、290、360cm	Reed width:200、220、240、260、290、360cm
Reed width	有效筘幅: 公称筘幅减去0~80cm	Width reduction: up to 80cm
织造范围	棉及合成纤维纱: 500tex(1.2Ne)~5tex(120Ne)	Spun yarns:500tex(1.2Ne)~5tex(120Ne)
Yarn range	长丝: 10dte(9Td)~1650dte(1500Td)	Filament yarns: 10dte(9Td)~1650dte(1500Td)
	设计转速: 550转/分	Designed speed:550rpm
织机速度 Speed	工艺转速: 350~450转/分(依幅宽配置定)	Practical speed:350~450rpm(depending on machine width and specification)
	最大入纬率: 1350米/分(依福宽配置定)	Filling insertion rates: up to 1350m/min (depending or machine width and specification)
纬纱	纬纱选择: 8色高速电子选纬器	Colour selection:electric 8-colour-selector
Weft	储纬:定鼓存储式电子储纬器	Prewinders:FDP electronic accumulator
vvoic	纬剪:机械式剪刀	Weft cutter:mechanical cutter
动力	传动控制: 7.5kw三相异步电机主电机通过皮带、电 磁离合制动器控制起动和停车	Driving control:rated three-phase 7.5 kw motor, Electro- magnetic brake-clutch unit
Power	直接驱动: 反应快速低能耗永磁电机直接驱动	Direct drive:fast reactive permanent magnet motor with low power consumption
开口	高速电子多臂机,最多20片拉杆	High-speed electronic dobby with max 20 levers
Shedding motion	电子提花机	Electronic jacquard
起圈	伺服起圈:动态毛圈控制,由筘座运动形成毛圈。具 有3-7纬自动控制起毛及转换功能	Servo control:dynamic loop control,loop weaved by sley movement, automatic loop and switching from 3-7 picks
Loop	毛圈长度: 0-24mm之间任意任意设定, 间隔精度最高可为0.1mm	Loop height:0-24mm(at will),the maximum difference accuracy can be up to 0.1mm
打纬 Beat-up	双侧共轭凸轮带动筘座	Conjugated cams in two sides with cam followers
引纬 Filling insertion	空间曲柄连杆机构,托片式导钩	Spatial crank shaft linkage construction with guide hook
送经	连续式交流伺服电子送经	Continuous, electronically controlled let-off system
Let-off motion	地经边盘直径: φ800mm,毛经边盘直径:φ1000mm	Warp beam diameter:ground 800mm,pile 1000mm
	连续式交流伺服电子卷取	Continuous, electronically controlled take-up system
卷取 Cloth take-up	机内卷布直经φ600mm,机外卷布φ1200mm	Diameter of cloth roll: standard 600mm (on loom),1200mm(outside loom)
	纬密范围: 5~150根/厘米	Pick density range: 5-150 picks/cm
布边	绞边装置:高速电子绞边或普通电子绞边	Selvedge device:normal or high-speed electronic controlled
Selvedge	边剪:机械式,可选电子式	Selvage cutter: mechanical or electronic(optional)
formation	边撑: 左右独立边撑	Temple: LH & RH individual temple
润滑 Lubrication	集中压力供油喷淋润滑、油浴润滑	Pressurised oil circulation system with continuous filtration bath oil
停车装置 Stop motions	空)学: 从作291中飞船总式1党空步直	Warp yarn: separate electric warp stop motions with 2 rows.
	纬停: 电子式高灵敏压电检测装置	weft yarn: high-sensitivity piezo-electric detector
	其它: 绞边纱、废边纱断头自停	Others: stop motion for leno and false selvage yarn
	停车显示:控制面板显示停车原因,多功能4色灯停车显示	Stop display: the panel shows the stop reason, 4-color multi-function indication lamps
自动功能 Automatic	自列走过行牛/夜还守纬/织口料法/周室经约水刀,自	Automatic: pointing stop/ slow motion pick-fnding/cloth- fell compensation/adjusting warp tension/self-diagnosis function/ reset/fault indication
电气控制		Controlling: functional CUP control system, can control, scout, auto diagnose, information showing
电气控制 Electric	断、信息显示	Jour, auto diagnose, illionnation snowing

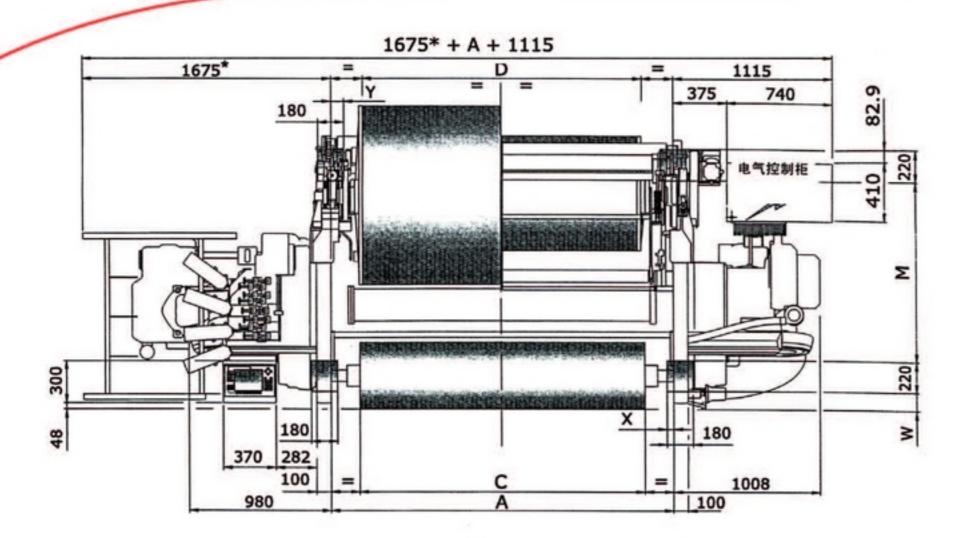


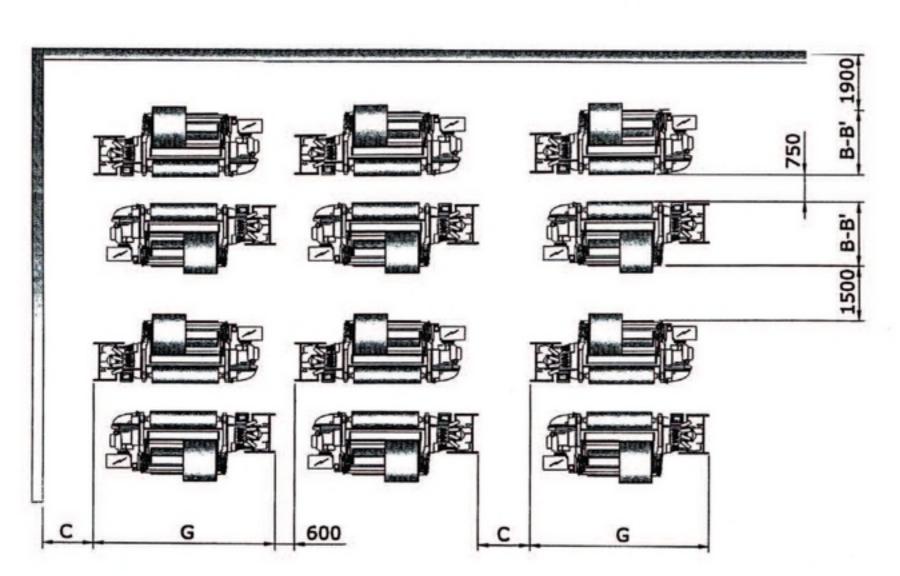
本图适用RF50N机型,图例为提花机时尺寸。该尺寸仅供参考,具体可根据客户厂房实际情况自行调整。至于其他规格的详细尺寸,请直接向我司咨询。

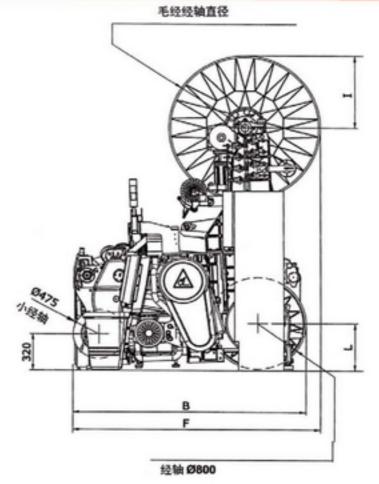
This dimension drawing is only reference for RF50N loom, above drawing is dimension of jacquard loom. It is only for your reference, you can adjust it by yourself according to factory building. Please contract us to get the dimensions of other looms.

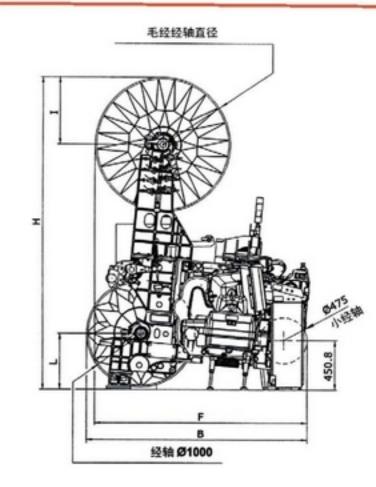
IB











	地 经 φ800 Ground Beam φ800	地 经 φ1000 Ground Beam φ1000	毛 经 φ800 Pile Beam φ800	毛 经 φ1000 Pile Beam φ1000
В	1955	2057		
L	414	514		
Н			2691.3	2791.3
F			1756.3	1856.3
1			400	500

LP	(*)G(ram)	А	C毛经 C Pile Beam		D地经 D Ground Beam		B(Ram) 经轴 Warp Beam	B(Mm) 经轴 Warp Beam	B'(Mm) 毛经 Pile Beam	B'(Mm) 毛经 Pile Beam	通道c(Mm) Aislec(Mm)
			最大max	最小min	最大max	最小min	Ф800	Ф1000	Ф1000	Ф1250	
2	5190	2400	2000	1400	2000	1410	1958	2058	2013	2138	3600-3900
2.2	5390	2600	2200	1600	2200	1610	1958	2058	2013	2138	3800-4100
2.4	5590	2800	2400	1800	2400	1810	1958	2058	2013	2138	4000-4300
2.6	5790	3000	2600	2000	2600	2010	1958	2058	2013	2138	4200-4500
2.9	6190	3400	2900	2300	2900	2310	1958	2058	2013	2138	4500-4800
3.6	6990	4200	3600	2800	3600	2810	1958	2058	2013	2138	5200-5500

本图适用RFTL60机型,图例为提花机时尺寸。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 RFTL60 loom, above drawing is dimension of jacquard 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.





山东日发纺机乘承"成功源自顾客满意的产品和服务"的理念和"为顾客提供全方位服务"的宗旨,为顾客提供完善的售前、售中和售后服务。

【咨询服务】为客户提供技术交流和产品咨询服务,提供性价比最优的产品配置方案,协助规划出最适合的车间布局草图。

"Succeed comes from products and service which customers satisfied" and "Supply excellence services for customers" are our belief and aim. We prepare to provide perfect per-marketing, service on sale, after sale services.

[Pre-marking services]

Communication and products counseling, help for matched groups with the best ratio of performance to price, assist the customer to plan the most suitable layout drawings.



【人员培训】资深技术人员提供设备的安装调试服务,同时为客户进行设备使用和保养的培训,确保织机在最佳状态下运行,为用户创造最大效益。

【技术支持】及时全面。根据需要参与织机初期的织造试验, 协助客户分析具体的织物特性、确定满足质量和产量要求的最 恰当的织机参数和配置、协助制定出最适当的工艺方案。

[Technician training]

Senior engineers provide the machine installation, and meantime, and supply training how to operate and maintain machines to ensure the looms working perfect.

[Technical support]

Technical support are comprehensive and in time. Our engineer can participate in the start weaving test if necessary, assist the customer to analyse the fabrics to set the best parameters and finalize the technical programme.



【售后服务】强大的销售服务网络可在24小时内及时做出反应,并利用尽可能快捷的交通工具抵达客户所在地,迅速可靠地提供备/配件,以缩短用户的等待时间,最大限度地保障用户利益。

[After-sale service]

We have large sale-service-net, and we can make response within 24 hours, and try to get to the customers location by quickest vehicle to shorten machines' downtime.



Choiceness/High ratio of performance to price + Perfect after-sale Service = Absolute Market Share.

优良/高性价比的产品+完善的售后服务=绝对的市场占有率

I7