



ng and efficient polyester yarn dyeing machine HTHP cone yarn dyeing machine Nylon dyeing machine Full-automatic YARN Sample dyeing machine Semi automatic sample dyeing machine Infrared HTHP cup sample dyeing machine

#### INDUSTRY HYDRO-EXTRACTOR Autor

matic frequency fabric dewa Frequency loose hair dewa matic frequency hank dewat common (Heavy) hank dewa Three colu Common (light) hank de ) hank d ewaterer/common (Heavy) hank dewaterer Automatic cone yarn dehydrator Dryer for both polyester & cotton Automatic Hydro-Ext ractor for Packages

#### WINDING MACHINE

Automatic Extractor for Packag eapple winder for high elastic ya Hank making machii irally controlled for super fine ya Pineapport ----Hank making metamor machine-Electronically controlled for super fine yarn Cone to cone winding machine-for all type of yarn Doubling, Spray network winding machine Soft/hard Cone Winding Machine Auto-changing doubling machine Accessories Staple fiber pineapple winding ma



YARN DYEING MACHINE Energy-saving and efficient polyester yarn dyeing machine

#### INTRODUCTION

High temperature and high pressure 13 low bath ratio energy-saving bobbin dyeing machine, this machine is the most advanced, the most energy saving, the most environmentally friendly new dyeing machine, com-pletely break the traditional dyeing machine dyeing way. Under the condition of not charging the original dyeing formula, can let the user in the electricity, water, steam, availaires and man-hours to achieve a full range of reduction, and can basically eliminate the color and greatly reduce the cylinder difference. It can bring externely rapid return for the original investment, recover the investment cost quickly, and achieve higher returns.

#### PRODUCT ADVANTAGE



#### NOTICES

This machine is not suitable for dyeing pure cotton and blended fabric containing cotton components, because the bath ratio is small and is built in the heating tube, dyeing cotton is generally 60°C reactive dye, easy to produce the temperature difference between the upper and lower cylinder, so that cotton fabric easy to produce cottor difference between the upper and lower layers (cottor difference due to temperature difference between the upper and lower layers) (cottor layers).







#### PRODUCT INTRODUCTION

The type of dyeing machine is dual-purpose both carrange wave and dyeing. The type of dyeing, a fair of the type and the type and the type of the type of the type of the type and type and the type and type and the type and ty



#### CONTAIN

- Master cylinder Iset (see the cylinder configuration)
   Creel Iset (details see the creel config-optiona)
   Creel Iset (details see the creel config-optiona)
   Master pump tets (self-made pipeline mixed flow centrifugal pump, the performance is better than most import pump with same powe()
   Dye liquor circulation reverser Iset (including the connected pipe)
   Electric control system Iset (see the electric control system Iset (see the electric context configuration)
   Stainless steel pneumatic valve





#### Main configuration

#### The device consists of the following parts (Manual opening for QXB-50 or below)

One set of main cylinder body.
 Zone set of yam frame.
 Sone electric control box.
 Frequency converter
 fully and that that the converter of the converter of the converter (motor over 224% with frequency converter), fully functional PLC independently developed.
 Yadeks solenaid valve.
 Due to the high humidity and high temperature in the working environment of the converter on the dyeing
 machine, the electrical components are easy to be damaged, which requires the support of after-sales
 service.

service. The frequency converter supplied by our company is a special frequency converter for dyeing machine. It has been specially designed for dust proof and moisture proof. The warranty period is 18 months. However, due to different requirements of customers, the frequency converter can be provided by customers is independently and the price of special frequency converter for dyeing machine can be deducted from

The values below DgS0 are stainless steel pneumatic right Angle values, and the values above DgS0 are stainless prevail values. The values of the values of

#### Technical Specifications

Dyeing machine master material is stainless steel, pressure vessel contact with dye liquor use quality anti-corrosion stainless steel, design and manufacture according to the pressure vessel standard; maximum working temperature 140°C, and maximum working pressure 0.45MPa, configuration of dyeing machine as below

Cylinder: All the part contact with dye liquor use quality anti-corrosion stainless steel (SUS316L) Thickness
according to the dyeing machine size 3mm-10mm
Mater cylinder vales
Dyeing Cylinder safety device
Circulatory system
Feeding barrel
Concereel
Concereel

Cone creel
 Single cage creel made by quality anti-corrosion stainless steel material (SUS30408)
 Electric control box and pneumatic box

#### PRODUCT DETAILS



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#### Automatic feeding device

Dye can be automatically added into the master cylinder after homogenization in the chemical barrel to reduce labor intensity and improve work efficiency. And flexible feeding. Yams such as dyed cotton need to be fed several intres, with automatic feeding device. The combination of bucket water level pressure sensor and PLC can realize the full automatic control of bucket water level.

1: feeding barrel barrel body. 2: feeding pump. 3: stirring motor, (QX860 below the non-stirring motor, dye stirring feed pump recoil mixing function mixing).







P5=P6

















Polyester sewing thread, polyester and poly amide bundy thread, polyester low elastic yarn, polyester single yarn, polyester and poly amide high elastic yarn, acrylic fiber, wool (cashmere) bobbin yarn

#### Main configuration

Full-automatic YARN Sample dyeing machine

Cylinder body material 316L, cylinder body diameter φ 150.
Equipped with automatic drainage system.
Equipped with automatic drainage system.
Open cover safety protection system, there is micro pressure in the cylinder, can not open the cover.
Attached with dosing tank
automatic water level control system.
SUS304 stainless steel rack.

#### Technical data

Hermical date
 Max, working temperature:145°C
 Max, pressure: 0.45Mpa
 Cylinder size for 1 cone of 1.25kg. Φ180xH400
 Cylinder size for 2-3 cones of each 500g cone of 1.25kg. Φ150xH600
 Cylinder size for 2-3 cones of each 500g cone of 1.25kg. Φ150xH600
 More Pomp roj 555.55M
 More Pomp roj 555.55M
 Dianeter of mixe: Φ1084xH200
 Heating methos: Electricity or stem: (lectric heating power 4kw)





#### Technical performance and standard configuration

1. The cylinder body and surface are made of SUS304L mirror stainless steel plate, with beautiful appearance

2. The grande body and solution are the face of document in the state of the sta

C







#### Sample dyeing machine

Sample dyeing machine INTRODUCTION This series low bath ratio sample dyeing machine suitable to polyester, cotton, nylon, wool, liber and all kinds of blended fabric cone dyeing, boling, bleaching and washing process. Its auxiliary product for QX series dyeing machine and GR2UAA series dyeing machine, sample dyeing 1000g cone, and the ratio can be same with normal machine, sample formula color reproducibility accuracy can be reached above 95% compare with the normal dyeing machine. And the bobbins are the same with big machine, no need to punchase special bobbin or special soft-Crone winder. This low bath ratio sample dyeing machine also can dye small amount fabrics. We can customize the models to match customer's request







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#### Features and Configuration

Infrared high temperature dyeing sample machine completely simulate and reproduce the field production mode. The machine with features of safe, efficient, friendly-environment, consumption reduction, reergy-saving two Standard capacity available: \* 12 cups \* 24 cups

#### TECHNICAL DETAILS





#### Characteristics

1. Applicable for yarn woven fabrics, knitted fabrics, garments ow and dehydrated in the textile industry.

2. High quality stainless steel inner, outer cage, beautiful and strong, long service life.

3. Ultra hydrostatic equilibrium, first class working environment. This machine adopts the sliding bearings (ball type) structure. Motor specially designed inn dewatering machine center. So even at a high speed when no noise or vibration.

Adopts advanced frequency conversion technology, adjustable speed, energy saving this machine from the start, speed slowly automatically from the 1 or PM.to the high-speed energy consumption will remain in the lowest level.

5. Adopts frequency automatic brake abandon the mechanical brake. Thus greatly reduce mechanical repair rate. The other option: pneumatic open cover (open cover automatically closing cover parking, automatic operation, free debugging), make the operation more safe and convenient.

6. The other option: can be matched for weaving knitting cloth dewatering and design of full stainless steel important falling frame, operation more convenient

#### Technical parameters

Model	Rotating cage inner Dia. (mm)	Volume /kg (wet-weight)	Height of rotating cage (mm)	Power (kw)	Rotate speed (r/min)	Dimension (mm)
800	800	80	380	4	750-960 adjustable	1380 x 1400 x 960
1000	1000	100	380	5.5	750-960 adjustable	1560 x 1600 x 1000
1200	1200	150	450	7.5	750adjustable	1700 x 1750 x 1000
1260	1260	200	550	11	750adjustable	1800 x 1850 x 1100
1500	1500	500	700	11	600-750adjustable	2100 x 2150 x 1300
1800	1800	800	850	15	550-600adjustable	2300 x 2350 x 1550
2000	2000	1000	900	18.5	550adjustable	2400 x 2450 x 1600
2200	2200	1100	900	22	550adjustable	2500 x 2550 x 1600
2400	2400	1200	900	30	550adiustable	2650 x 2700 x 1600



#### Three column automatic frequency hank dewatering

#### Characteristics

Compared with the ordinary handbrake dewatering machine, frequency drift in frequency with dehydration advantages of automatic control free of mechanical brake, greatly reduce the mechanical repair rate. Auto-matic control system within meter is advanced and reliable control, automatic timing, automatic braking speed can be set according to the need to choose, more power.

#### Technical parameters





#### Characteristics

Type BC hair dewatering for the company development and create a new generation of dewatering machine. This machine is suitable for loose wool, cotton, textile, fiber shaped objects, dehydration, the machine adopts frequency control, and dynamic balance technology for the manufacture of direct, drive motor.

2 Loose wool dewatering machine is the biggest advantage of compact structure, large capacity, small energy consumption, disposable cage type dewatering, greatly saves the manual loading and unloading and other costs of human resources, full automatic, timing, save manpower electricity and repair costs to the users.

3. The size of manufacturing hair dryer is customized according to customer VAT actual size.

Contraction of the second



PII=PI2



Common (light) hank dewaterer/common (Heavy) hank dewaterer

#### Characteristics

Characteristic The main structure of the three foot type dewatering machine is basically the same, namely the chassis exter-nal main shaft shell and is arranged on the chassis assembly and drum were suspended by the three booms. In the spherical start only three foot above the set of the buffer spingt the kind of support method can make the drum in the non-uniform charging and in an unbalanced state can automatically adjust the power load, reduce the spindle and beerings develoring machine by the motor through a centrifugal clutch (the inflat round of V-beit drivel dynamic. Due to the use of a centrifugal clutch, so that the smooth starting and the overload protection of the motor.



Technical parameters

Model	Rotating cage inner Dia. (mm)	Volume /kg (wet-weight)	Power (kw)	Rotate speed (r/min)	Dimension (mm)
300	300	10	3.7	1500	450 x 550 x 450
450	450	20	1.5	1300	600 x 700 x 550
600	600	50	3	1100	800 x 900 x 650
800	800	80	5.5	960	1450 x 1500 x 800
1000	1000	100	7.5	900	1600 x 1700 x 900
1200	1200	150	7.5	720	1700 x 1800 x 950
1200(weight)	1200	160	11	800	1750 x 1850 x 950

P130P14





#### Characteristics

1. High-quality stainless steel inn and out cage, long

- 2. Large capacity, high dehydration rate, low-power.
- Reliable automated system using advanced frequen-cy control, automatic time count, automatic brake, rotating speed could be set in advance.
- Machine lamp switch protection device to ensure the safe operation of the body and the body life.
- Automatic frequency control avoidance of mechanical rail brakes, greatly reducing the rate of mechanical maintenance.

6. Super quiet balancing, the first class working environ-



Model	Rotating cage inner Dia. (mm)	Cage number (pcs)	Power (kw)	Rotate spectrum (r/min)		
800	800	10-20	4	750-960 adjus		
1000	1000	24-36	5.5	750-960 adjus		
1200	1200	51-72 (double row)	7.5	750 adjusta		
1260	1260	54-72-108 (double row)	7.5-11	750 adjusta		
1380	1380	80-120 (double row)	15	750 adjusta		
1500	1500	88-132 (double row)	15	750 adjusta		



Dimension (mm) 1450 x 1500 x 950

1500 × 1600 × 1000 1700 × 1850 × 1200 1750 x 1850 x 1200



#### Characteristics

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The machine lifting and whiring system adopts the hydraulic control for automatic orientation with precise safety.
 The trading basket is equipped with housings for the accommodation of packages during hydro extraction while the spinoles of the package carrier are adopted according to the needs of the client. And the speed of hydro extractor can be adjusted. Thus assure a mild treatment to the yarn and avoid the deformation of pack-ages further to breakage of the internal tubes.
 The inner basket and the body of the machine are constructed in high quality stainless steel for long serve time.

#### Advantages of this machine

Available to this interfactor
 Polynemial of the length is large, and the four-stage motor is 1455 RPM, the speed is fast, the dehydration is more dry, and the drying time can be shortened.
 Single motor 7.5%, energy saving.
 a dehydration of 60 botbin yarn, continuous dehydration, high output
 doading and unolading core operation is convenient, reduce the labor intensity of dehydration workers, save time and labor given efficiency, dehydration vorkers specially like to use
 S can be equipped with manipulator operation high thin the era of intelligence.

#### Technical data

Model	HP-9005		
Nos. of spindles	12 pcs		
Max. Dia. of package	Φ170mm or according to the customer's requirements		
Nos. of packages per spindle	5 pcs		
(Height of package 120mm)	5 per		
Nos. of packages per batch	60 pcs		
Speed of hydro extractor	1200-1500rpm		
Power installed	7.5kw		
Dimensions	Machine closed: 2930*1680*2290mm		
Dimensions	Machine working: 2930*2720*3260mm		



Characteristics

This drying machine is energy saving hot air dryer, cold air preheated first from roof hot wet air and heating, saving steam. The basic machine contains below configuration: Designed drying time: 1–15 hours. Cotton bobbin 4.5–5 hours: Note: the temperature of polyester bobbin can be set to 110°C, the temperature of cotton bobbin can only be set to 80°C–90°C.

be set to 80°C-90°C 1 Box, far; 2 Each set of drivers equipped with a set of stainless-steel cone dolly. consider of our poutput it will be two sets cone dolly equipted 3 Equipped with HG310A Chinese-English microcomputer, stainless steel case automatic control box. 4 Pipeline, steam heating value. (Dg32 membrane valve)

#### Technical parameters







#### Pineapple winder for high elastic yarn

Due to the different types of yams and the actual needs of customers, certain oil or was agents should be applied to the yam during the winding process. The purpose is to eliminate the static electricity caused by friction and other factors in the process of the unwinding and wind-ing, and to prevent the generation of filaments. Simmers, Fyling defects make the yam smooth and increase the holding power of the fiber Accurate winding and tension control wind influxe. Justice the yam smooth meet the requirements of the subsequent process. The process are precisely matched with fedding roller to control and adjust yam tension on line all the timeThe tension since are precisely matched with the ding roller to control and adjust yam tension on line all the timeThe tension is not bobbin tension, so that the yam tension is the most accurate control within the set range.

TECHNICAL PARAMETERS



PIS=PI6



Total controlling panel	computer digital processing terminal
Winding type	precision winding/digital winding
Machine speed	1200/min (technology speed depend on technological parameter)
Winding form	vertical/bevel edge,The amplitude can be adjusted at will
Traverse length	25-260mm, stepless arbitrary setting
Packaging dia.	Max.280mm
Packaging weight	max. 6kgs(depend on the yarns type)
Packaging weightFeeding yarn packaging dia.	Max. 340mm
Application yarns	acrylic fibers,polyester, staple fiber,single filament yarn, filament yarn, cotton, linen,stretch yarn and elastic yarn
Layout	single side machine
Spindle/section	5 spindles
Min./max. Spindles	5/60 heads
Spindle pitch	360mm
Driving	single spindle dependent driving
Power consumption	100W/spindle
Oil/waxing device	single spindle stepper motor, speed can adjustable
Auxiliary device	Electronic yarn clearer, Spray network
Overall dimensions	(L*W*H)mm 1820*710*1430

#### WINDING MACHINE Machine

Hanking machine/Cone to hank winding New hanking technology will replace the old hanking tech-nology. High efficiency, low con-sumption, easily dyed, continu-ously unwinding, no cottory. New type hanking maching solve all problems which caused by old nethrology.



#### TECHNICAL PARAMETERS

Type of winding	Precision winding/electronic winding			
Speed	Max.1500 m/min (process speed depends on process parameter)			
Package shape	Tubular or skein shape hank yarn			
Traverse length	30-260mm			
Package diameter	220-450mm			
Package weight	Max.2kg (depends on the thickness of the yarn)			
Supply package diameter	Up to 300mm			
Yarn	High and low flexibility polyester or nylon.Staple yarn, processed filament yarn, monofilament			
Layout	Single side			
No. of Each section	4 spindles			
Min/max no. of spindles	4/28 spindles 500mm			
Gauge				
Drive	Individual			
Install power	500w			
Power consumption	200w			
Size (L*H*W)	2050*800*1700mm			



#### Upper unwinding digital winding machine

The machine is mounted on the active unwinding mechanism, and the telescopic yam stand is equipped with pneumatic lifting device, which is convenient for operators to operate and relieve the labor intensity of operators greatly improves production efficiency. This machine also has the function of winding polyesters, so it is a machine can wind both nylon and polyes-ter

#### TECHNICAL PARAMETERS

Total controlling	panel computer digital processing terminal
Winding type	precision winding/digital winding
Machine speed	1200/min (technology speed depend on technological parameter)
Winding form	vertical/bevel edge, The amplitude can be adjusted at will
Traverse length	25-260mm,step-less arbitrary setting
Packaging dia.	Max.280mm
Packaging weight	max. 6kgs(depend on the yarns type)
Feeding yarn packaging dia.	Max. 240mm
Application yarns	acrylic fibers,polyester, staple fiber,single filament yarn, filament yarn cotton, linen,stretch yarn and elastic yarn
Layout	single side machine
Spindle	section 5 spindles
Min./max.	Spindles 5/60 heads
Spindle pitch	360mm
Driving single	spindle dependent driving
Power consumption	140W/spindle
Tension device	mechanical and electronic tension
Suitable for	unwinding hank telescopic frame, fixed wire frame
Winding bobbin	bobbin / cone
The way place the yarn	stand upper horizontal type
Overall dimensions	(L*W*H)mm 1900*710*1600

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#### Cone to cone winding machine-for all type of yarn

Conc UC concerving machine in the set of the

#### TECHNOLOGY PARAMETERS

Total controlling panel	computer digital processing terminal			
Winding type	precision winding/digital winding			
Machine speed	1200/min (technology speed depend on technological parameter)			
Winding form	vertical/bevel edge,The amplitude can be adjusted at will			
Traverse length	25-260mm,stepless arbitrary setting			
Packaging dia.	Max.280mm			
Packaging weight	max. 6kgs(depend on the yarns type)			
Feeding yarn packaging dia.	Max. 340mm			
Application yarns	acrylic fibers, polyester, staple fiber, single filament yarn, filament yarn, cotton, linen, stretch yarn and elastic yarn			
Layout	single side machine			
Spindle/section	5 spindles			
Min./max. Spindles	5/60 heads			
Spindle pitch	360mm			
Driving single spindle	spindle dependent driving			
Power consumption	100W/spindle			
Oil/waxing device	single spindle stepper motor, speed can adjustable			
Auxiliary device	Electronic yarn clearer, Spray network			
Overall dimensions (L*W*H)mm	1820*710*1430			





WINDING MACHINE

This machine breaks through the traditional yarn doubling process, each single yarn is equipped with independent tension control device, through network nozzle, electron The tension device and the yarn breaking cutter combine the fiber yarnswith different charac-teristics.

TECHNOLOGY PARAMETERS

Total controlling panel	computer digital processing terminal		
Winding type	precision winding/digital winding		
Machine speed	1200/min (technology speed depend on technological parameter)		
Winding form	vertical/bevel edge, The amplitude can be adjusted at will		
Traverse length	25-260mm,stepless arbitrary setting		
Packaging dia.	Max.280mm		
Packaging weight	max. 6kgs(depend on the yarns type)		
Feeding yarn packaging dia.	Max. 240mm		
Application yarns	acrylic fibers,polyster, staple fiber,single filament yarn, filament yarn,cotton, linen,stretch yarn and elastic yarn		
Layout single	single side machine		
Spindle/section	5 spindles		
Min./max. Spindles	5/60 heads		
Spindle pitch	360mm		
Driving single spindle	dependent driving		
Power consumption	100W/spindle		
Doubling yarns	max. 3 yarns		
Tension device	mechanical and electronic tension		
Winding bobbin	bobbin or cone		
verall dimensions (L*W*H)mm	1820*710*1430		

651°655







igh speed drum winding machine is used for productio fhard bobbin and soft (kyed) bobbin for knihting machine uittle loom, wanging machine, hosiery machine, war vittling machine and circular machine. The winding speed introlled by the computer, up to 100km/min. The radiu introlled by the computer, up to 100km/min. The radiu tritstack device is easy to install and control. Advance am cleaning and tension mechanism with sensitive photodiscrete the sensitive photoinding length (weight) the electric rotating wang device to device be ensure uniform inding length (weight) the electric rotating wang device the tension electer minimize e yam friction and satisfy the waxing amount and thin filtomit or dwas.

TECHNICAL PARAMETERS

Туре	double side machine			
Machine speed	1100m/min(technology speed depend on technological parameter)			
Packaging dia.	Max. 290mm			
Suitable for yarns	cotton,wool,ramie, silk and chemical fibre yarn			
Spindle/section	12heads			
Min./max. Spindles	12/120heads			
Spindle pitch	331mm(different cone different pitch)			
Drive	single spindle independent drive			
Power	40W/head			
Winding cone	bobbin or cone			
Motor type	AC or DC motor			
Overall dimension	2100*950*1500mm			

This machine breaks through the traditional yam blending process, and each single yam isequipped with an independent tension could device, which rotates through a network nozzlethe self-cleaning yam tension device and the yam breaking cutter combine the fibers withdifferent characteristics.





#### TECHNOLOGY PARAMETERS

Туре	double side machine				
Machine speed	1000m/min(technology speed depend on technological parameter)				
Packaging dia.	Max. 290mm				
Feeding yarn cone	max.280mm				
Suitable for yarns	Acrylic fiber, polyester, staple fiber, single filament, filament, cotton, hemp, elastic yarn and elastic yarn				
Spindle/section	12heads				
Min./max. Spindles 12/108heads	12/108heads				
Spindle pitch	331mm(different cone different pitch)				
Drive single	spindle independent drive				
Power	60W/head				
Winding cone	bobbin or cone				
Doubling yarns	max. 3 yarn				
Motor type	DC motor				
Tension device	mechanical tension				
Overall dimension mm	1858*1150*1600mm				

P23-P24

















High quality stainless steel, use 304 or 316 stainless stell size accordingly to customer's needful, shape, thickness can be customized.

P25=P26







# **Compact spinning transformation**

#### **Compact spinning principle**

The purpose of compact spinning is to arrange the fibers in a completely parallel and close position thus eliminate the spinning triangle. So this close and parallel arrangement of fibers before twisting can improve yarn structure, mechanical & physical properties and yarn strength. In short, compact spinning is to compact the yarn fibers from front top roller output point.

Our compact device is to make the fibers close arrangement from yarn nip point (front top roller) to twisting end by erecting device like negative pressure tube, mesh apron and gearbox, which can eliminate the spinning triangle.

#### Compact Spinning Advantages

- Dramatically reduced hairiness: Uster H value up to 30% Zweigle S3 up to 80%
- Greatly improved strength: 10-20% higher
- Lower yarn unevenness and lower IPI values: up to 35%
- Higher elongation: by 10 to 15%
- With lower twist ( up to 10% ) for same yarn strength productivity is increased
   End breakage rate reduced by up to 60% improving machine efficiency ( same speed & twist )
- Lesser fly generation assists in better working condition Increased winding speeds
- Description of the second se

- Dye liquor absorption improved due to low yarn twist, less dye liquor ( up to 5%) required
- Raw material saving lesser comber noil up to 6%



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 Image: Contacts: Cont









#### Cotton spinning frame single spindle monitoring system

#### Industry background

The spinning process is the key process of spinning factory, with many management details, the real-time management is effective or not, the main intuitionistic data from human statistics, therefore, how to find and reduce the problems in time is an important solution to spinning management.25% ~ 35% of breaks in spinning are caused by a certain proportion of backward spindles. The traditional way to solve the problem is to find the fault spindle position by means of worker traveling inspection, mechanic's inspection and tester's random check, therefore, the yarn break monitoring and roving stop system can solve the details described above.

In recent years, rising labor costs and a shortage of human resources to be one of the most important painful point in textile enterprise development, the application of automation, intelligent spinning equipment can effectively help textile enterprises to solve labor, low production efficiency and product quality instability, has become the new trend of the development of textile industry.

Single spindle photoelectric LED indication: Provide Quick Guide for workers and mechanics to find breaks/weak twist spindle position and avoid invalid traveling;

2. Digital display: convenient for worker and mechanic to find the number of breaks and weak-twist spindles (B for breaks/E for weak twist, rolling display)

**3**. Roving stop feeding system: stop roving supply when breaks are found, stop feeding devices work within 2 -3 seconds after breaks, convenient for yarn piecing and reset, short time roving re-feeding.

#### Advantage

- Reduce useless patrolling, improve working efficiency, reduce labor intensity.
- Reduce roving waste and recycle rate.
- Reduce roller winding and reduce equipment consumption.
- Reduce empty spinning spindles and improve machine output.
- Reduce weak twist spindles and ensure yarn strength.
- Reduce fluff pollution and yarn breaking hairiness.



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## We are specializes in the professional

Production of dust removal equipment, air washers, and ventilating devices for textile mills. Texauto automatic control system is a smart software package by us for the textile air-conditioner system, which reaches the advanced international level. The Texauto system is able to control the humidity extremely accurately and conserve energy effectively at the same time. we boasts its rich experience in the dust removing for the textile air-conditioner, a brilliant research and development team, and efficient equipment, all of which have made us a veteran in processing large air conditioning system. we provides clients with textile air-conditioner system, refrigeration system, duct system, and installation as a turn-key project. We stands out in the field of textile air-conditioner dust removing, has always devoted itself in pushing the

We stands out in the field of textile air-conditioner dust removing, has always devoted itself in pushing the skill development in the textile air-conditioner industry. Till now, we have been one of the most remarkable Chinese companies in this industry with core competitiveness, providing products with international standard and competitive price.



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Warpping



# INTELLIGENT BEAM STACKER AND MATERIAL HANDLING SYSTEM





We specialize in providing all kinds of raw material handling tools and weaving/warp shaft storage for textile mills

#### Application

The equipment mainly used to storage various warp beam, ball warp beam and fabric roll. Suitable for various textile factories, convenient storage, easy operation, effectively saving time and space

#### **Product superiority**

- 1. Professional and high-level design team, designing as per customer's site, more practical and economical. 2. Adopt German advanced technology, easy operation, improve work efficiency.
- 3. Synchronous motor drive, improves storage capacity, stress uniform, and ensure service life.
- 4. Variable frequency speed control, reduce inertia, stable running.
- 5. Network remote management, easy to read storage information, efficiently manage factory storage data, simply scan code backup, change manual operation, reduce errors, improve efficiency(optional)
- 6. Use high quality steel as structure material, sturdy and durable;
- 7. Surface spraying plastics treatment, nice and environment-friendly;
- 8. Guard bar design and touch sensor, humanization and safe;
- 9. New type lift platform, stabilize and easy operate;
- 10. Customized chain sturdy and durable.



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Accordingly



# FULL CNC HEAD-STOCK TRANSFORMATION & AUTOMATIC COLLECTIVE DOFFING DEVICE







SHANGHAI SINGULARITY IMP & EXP CO., LTD.



## Full CNC head-stock transformation & Automatic collective doffing device

#### **Product Features**

The whole CNC head-stock is the front, middle and rear rollers, the steel collar plate lifting with a servo direct drive, the main motor with frequency converter drive, modify the process as long as the touch screen setting modification can, no longer need to replace the gear. It is an intelligent spinning system integrating slub yarn, colored yarn, variable count and variable twist and electronic lifting. All process changes are operated on the display screen without changing any process gear. Simple and convenient operation, high efficiency and energy saving.

And the automatic collective doffing device solves the problem of automatic doffing, automatic managing and automatic full tube conveying in spinning process. Reduce labor, reduce labor intensity, improve the degree of spinning automation, improve labor productivity, reduce product costs.



#### Product Advantage of CNC head-stock transformation

The system can realize computer network control, real-time monitoring of spinning machine working status, real-time statistics of output, process parameters and other management data, automatically generate production reports and analysis, convenient for enterprise management, and can be connected with mobile phone APP software, convenient for production workers to deal with faults and management personnel real-time monitoring Product Advantage of automatic collective doffing device

Doffing indicators: doffing time for 3 minutes, managing time for 25 minutes, intubation rate 98%, Decannulation rate 98%, rate of yarn reserve≥98%.

Investment return: to spin 6-12s yarn for example, after installing collective doffer device, it only takes 2 years to pay for itself.

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indigo rope dyeing range is the top choice for top-quality denim production, packed with the latest and best technology.



#### Principles for Indigo Rope Dyeing Range

**1**.Yarn is first prepared (by ball warping machine for rope dyeing, by direct warping machine for slasher dyeing) and start from the beam creels.

2. Pre-treatment boxes prepare (by cleaning & wetting) the yarn for dyeing.

3. Dye boxes dye the yarn with indigo (or other types of dye, such as sulfur).

**4**. Indigo is reduced (as opposed to oxidation) and dissolved in the dye bath in the form of leuco-indigo in an alkalic environment, with hydrosulfite being the reduction agent.

**5**. Leuco-indigo bonds with yarn in the dye bath, and then brought into contact with oxygen on the airing frame, leuco-indigo reacts with oxygen (oxidation) and turns blue.

6. Repeated dipping and airing processes allow indigo to gradually develop into a darker shade.

7. Post-wash boxes remove the excessive chemicals on the yarn, additional chemical agents may also be used at this stage for different purposes.

**8**. dyed yarn (in the form of ropes) will need to undergo the process of rebeaming (on rebeaming machines, aka LCB / Long Chain Beamer) to break the rope and wind onto warp beams for sizing, before weaving. Or, in case of knitted denim, cone winding is done after rebeaming, to prepare cones for circular knitting

9. Rope dyeing is generally superior in terms of dyeing result (color fastness, higher indigo pickup, shade evenness, etc.).

**10**. Rope dyeing can also be used for knitting yarn, while slasher dyeing cannot (without major modification).

11. Rope dyeing requires bigger initial investment, and also requires extra machines (LCB, sizing) and space 12. Production capacity: About 60000 meters yarn by a 24 rope dyeing range, about 90000 meters yarn by a 36 rope dyeing machine

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### **Indigo Slasher Dyeing Range**

indigo slasher dyeing range is a time-proven machine that combines indigo dyeing and sizing into a single process.

	SPECIFICATIONS				FEATURES	
1	Machine Speed (Dyeing)	6 ~ 36 M/min		1	Dyeing + S	Sizing
2	Machine Speed (Sizing)	1 ~ 50 M/min		2	Efficient Proc	duction
3	Airing Length	32 M (Typical)		3	Minimum Yarn	Breakage
4	Accumulator Capacity	100 ~ 140 M		4	Multiple Product	ion Modes
				5	Highly Automated	d Production
Top	o sheet & ttom sheet	s+Hauset Flowme	eter		Sizing box	Beam brake

#### Principles for slasher indigo dyeing

1.Yarn is first prepared (by ball warping machine for rope dyeing, by direct warping machine for slasher dyeing) and start from the beam creels.

2. Pre-treatment boxes prepare (by cleaning & wetting) the yarn for dyeing.

3. Dye boxes dye the yarn with indigo (or other types of dye, such as sulfur).

4. Indigo is reduced (as opposed to oxidation) and dissolved in the dye bath in the form of leuco-indigo in an alkalic environment, with hydrosulfite being the reduction agent. 5. Leuco-indigo bonds with yarn in the dye bath, and then brought into contact with oxygen on the airing

frame, leuco-indigo reacts with oxygen (oxidation) and turns blue.

6. Repeated dipping and airing processes allow indigo to gradually develop into a darker shade.

7. Post-wash boxes remove the excessive chemicals on the yarn, additional chemical agents may also be used at this stage for different purposes.

8. sizing process is done right after dyeing on the same machine, final beams are ready for weaving.

9. Productivity-wise, a slasher dyeing range usually has about HALF the production capacity of 24 / 28 ropes dyeing range.

10. Production capacity: About 30000 meters yarn by a slasher dyeing range

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# THE PRODUCTION LINE FOR KNITTED DENIM FABRIC

Knitted denim is a kind of denim, but it is made by knitting method of denim, compared with woven more elastic, knitted denim using knitting weft knitting method, the use of rope dyeing, blue and black, sulphur black etc. knitting bobbin yarn in the circular knitting machine to implement a special process to produce clothing fabric with washing and fading effect. Its varieties are mainly small fish scale hair circle, large fish scale hair circle, coarse and fine twill hair circle, raised twill hair circle, plain jersey and so on.

#### Advantages of knitted denim

1. Soft texture and anti-wrinkle: Because denim fabric adopts the same knitting process as wool fabric, it has the characteristics of softness, folding resistance, anti-static, and can absorb sweat.

**2. Dirt resistance and washable:** general denim fabrics have the characteristics of dirt resistance and washable, as long as they are washed according to the washing instructions on the label, it will not cause fading and discoloration;

**3**. **Trendy and stylish:** denim fabric clothing has a great contemporary trend color, clothing to wear the trend and full of charm;

**4**. **Snug and comfortable:** Thin denim clothing is very light and comfortable to wear. Strong protective effect: denim fabric clothing has a good protective effect, can prevent the outside strong ultraviolet radiation, reduce the skin damage caused by sunburn or summer use.

5. Safe texture: Denim fabric is very soft, not easy to cause irritation, very friendly to skin and comfort;

6. Move freely: Wear thin denim fabrics to make your body move more smoothly.





# The production line for knitted denim fabric

Here we introduced the whole process of producing knitted fabrics and the equipments needed



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