

#### **Branches**

Shandong Tongda Textile Machinery Co., Ltd Qingdao Tongda Textile Machinery Co., Ltd Qingdao Kaishuo Water jet loom Co., Ltd Qingdao Tongda Nonwoven Machinery Co., Ltd Shandong Tongda Nickel screen Co., Ltd Shandong Tongda synthetic leather Co., Ltd

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# THE PROFESSIONAL SPINNING SYSTEM ——GUARANTEE YOUR YARN SPINNING SUCCESS!

# TONGDA SPINNING since 1952





Tongda Group specializes in design, manufacturing, and marketing of a wide range of Textile machinery, it has five branch companies, mainly produces blow room, cotton carding machine, draw frame, Roving frame, rotor spinning machine, ring spinning machine, water jet loom, nonwoven machinery etc. The company has built a complete infrastructure to support a full effort for product research and development to satisfy the needs of the marketplace. Production capability for cotton machinery and spinning machinery products sustains an annual quantity of 20,000 units of various models.

Tongda has been growing steadily since 1952 when the spinning machine were developed. Tongda places its focus on becoming a professional supplier of Textile machinery and new materials with continuous development of modern ergonomic designs, a reliable service support network, and an efficient global network of logistics. Today, Tongda machines are being widely used by thousands of cotton and yarn, textile manufacturers.

Along with product development, Tongda has been awarded technology patents. Special techniques in design and manufacturing have also been perfected.

Tongda is an ISO9001, ISO14001, and ISO13485 company. The products are designed to meet the technical standards of 3C and CE. All the products are certified by the Industry Administration Authority.

Tongda will continue to strive to be a stronger leader in the global market of Cotton machinery and Spinning machinery.

### TEST ROOM FOR BLOWING-CARAING UNIT





### FA017 RECIPROCATING BALE PLUCKE



### **Application**

The machine is the carriage reciprocating type automatic bale plucker, applicable to raw cotton of various grades and man-made fibers below 76mm. This machine is also the first process of the combined opening and scutching machine or the blow room unit, and its intermittent dropping plucking beater can reciprocate with the revolving tower and the carriage, pluck bales in sequence, and then convey materials to the next machine through transport fan and pipes.

#### Characteristics

- Adopt Plc control and multi-motor transmission with inverters (7 motors) for whole machine. According to the technology requirements, the machine can be adjusted freely within certain range, and can be tested automatically to realize complete automatic plucking.
- ◆ Bales can be placed on both sides. The machine can pluck less than 3 groups of bales with different height and density. The pluck arm can revolve 180° automatically or manually, thus to meet the requirement of varieties for one unit two lines.
- Adopt double saw-toothed beaters to meet the requirement of complete, even and fine plucking.

Main technical parameters		
parameters beater width 1720 (special)		beater width 2300(normal)
prodution	1000kg/h	1500kg/h
basic pile weight	6000kg	7500kg
length of floor space	basic type 22.03m( 8 sections of airducts) co	an be increased or decreased by 2.5m×n
bales arrangement length	basic type 15.9m(8 sections of airducts) co	an be increased or decreased by 2.5m×n
beater dia., speed	double beater saw-toothed blades Φ250mm	Mechanical Ф130~1161 Passive Ф105~1437 Inverter 800~1500rpm
distance from beater knife point to the floor	1600mmmax. position 1600mm;	30mmmin. position 30mm
intermittent dropping of beater	0.5~10mm/time frequency control	usually 1~3mm/time
distance of blade out from rib	(-6~+3) mm adjustable	generally -2mm
calender roller dia.	Ф130mmboth sides	middle Φ116mm
carriage reciprocatingspeed	14.6m/min (max)	generally 10m/min
installed power	8.6kw(excluding fan, winding)	10.6kw(excluding fan, thermo motor)
overall size (mm)	22030*5212*3082	22030*6648*3082
net weight (kg)	6000	6500

### **FA126 WEIGHT SEPARATOR**

### **FA002D DISK PLUCKER**



### **Application**

This machine is the first process in the whole blowing-carding line. It's applicable to pluck various kinds of raw cotton and polyester of the length≤76mm, and then convey them to the next process through airflow.

#### **Characteristics**

Adopt saw-toothed beaters, which are divided into 3 groups, and fixed from inside to outside according to the tooth setting from thin to thick so as to get fibers minor and uniform, thus it's advantageous to the blending and cleaning of next process.

Main technical parameters		
Output	800kg/h	
Loading capacity	2000kg	
Beater width	1680mm	
Beater speed	740 or 900rpm	
Revolving speed of carriage	1.4, 2.16rpm	
Blade extension from rib	2.5-7.5mm	
Total power	4.1kw	
Rail diameter	Ф5132mm	
Total height	4125mm	
Total weight	about 2000kg	



### **Application**

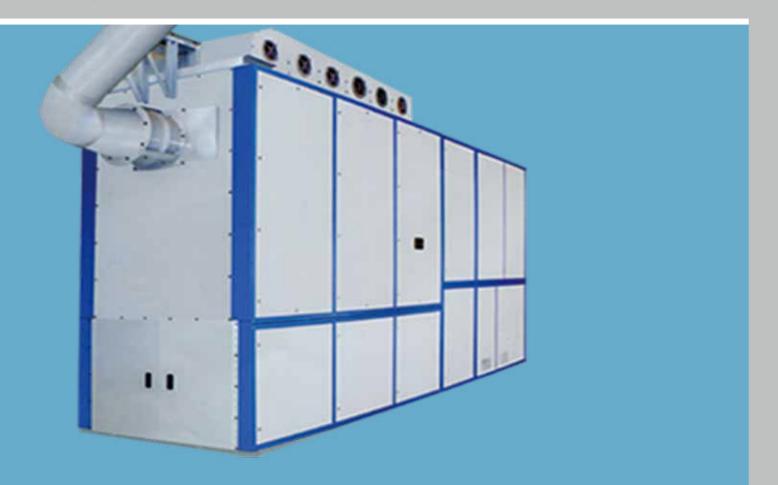
Mode FA126 Weight Separator is used to remove heavier trashes and foreign matters in fiber tufts through centrifugal forces under the function of air currents. When iron matters pass through the bridge magnet, these matters are sucked and removed (with the function of semicircle grid bar, trashes are separated from fiber tufts). Then fibers are conveyed to the next process through suction pipes.

#### **Characteristics**

- The trash in fiber will be removed through centrifugal force without damage to fiber when they pass through the semicircle arid bar channel.
- The anale of arid bars can be adjusted flexibly.
- The transport fan and the bridge magnet are connected with the machine directly, in compact structure, and occupying less floor space.
- The machine is equipped with continuous dust suction device, so the impurities can be collected to the dust filtering ystem.

Main technical parameters		
Applicable fiber	below 76mm	
The working width	500mm	
Overall size	1850*860*2800	

### **FA027 MULTI-MIXER**



### **Application**

The machine is applicable to various grades of basically opened raw cotton, cotton type man-made fiber and medium staple fiber below 76mm, which can be carried to the mixers by transport fan and evenly mixed three times in each mixer, and then conveyed to the next machine by air currents.

#### **Characteristics**

- ◆ Adopt 3 scientific and efficient mixing ways:
- (1) airflow instant mixing
- (2) lamination mixing
- (3) close mixing (feeder type)
- Adopt two directly-linked transport fans, and frequency control for the conveying fans.
- ◆ Adopt micro pressure difference control, and the feeding start and stop of the previous machine can be interlocked to realize automatic feeding when the

pressure of 6 mixers varies to certain setting value.

- Adopt 3-unit frame work structure, which can be dismantled for convenient transportation. Mostly adopt fixed doors sealed with inserted strips for the whole reserve box so as to obtain stable air pressure control.
- Adopt several infrared photoelectric auto stop motions:
- the reserve box (adjacent to the feeder box in front), one pair
- (2) The feeder blending hopper, one pair
- (3) At the joint of droppings and suction mouth, one pair
- (4) When the door is open during operation, an auto stop switch is fixed.
- Adopt mesh plate for the reserve box, which can let the conveying currents out smoothly to separate materials from currents and to remove short fibers.
- Bigger trashes can be removed at the under casing of inclined lattice.

Main technical parameters		
Mixer No.	6pcs (6-mixer full amount 300kg), machine width 1200mm production 150~600kg/h	
Installed power	1. Feed fan: 5.5kw ( or 4kw ) 2. Transport fan: 4kw 3. Horizontal lattice motor: 0.55kw 4. Evener motor: 0.55kw 5. Stripping motor: 0.55kw 6. Inclined lattice motor: 2.2kw	
Air consumption	Feed fan, frequency control, generally 4320m3/h, air speed 13m/sec.; output 4320m3/h, fan 8~13m/sec. Backpressure inside the air exhaust tube: (0~100) Pa, (-50~-100) Pa generally. Air amount of dust exhaust outlet: 1800m3/h	
Net weight	about 4800kg, overall size (mm): 6250×1624×4145 (L×W×H)	

### FA036 BLENDING OPENER



### **Application**

With the suction of condenser, the machine can blends, opens and cleans the materials fed by the automatic bale plucker. As a high-efficient blending machine, it can process various kinds of raw cotton ro polyester.

### **Characteristics**

- ◆ This machine embodies not only blending function, but also high opening and dust extraction efficiency. Its dust extraction rate is superior to those of the similar machines.
- ◆ Adopt integrated steel frame type, good shockproof and stability.

Main technical parameters		
Width	1060mm	
Power	2.05kw	
Output	600-800kg/h	
Overall size	4088*1585*2696mm	
Machine weight	about 3.6T	



#### **FA117 FINE OPENER**

### **Application**

The machine is a kind of new and high-efficiency fine opener, which is generally located behind the multi-mixer and before the chute feeder for the purpose of further trash extraction and material conveying control. With the conveying of transport fan, raw materials are fed through inlet to the stepped passage, then transferred to the feed roller, beaters and mote knife components through the dust cage and the flat roller, and finally conveyed to the next process by air currents after being opened and cleaned.

### **Characteristics**

- ◆ Adopt through shaft type beater, including two kinds, gill pin type and saw-toothed type, generally saw-toothed type.
- Adopt combined beater mote knife and arc dust shield type, low fiber damage and high trash extraction efficiency.
- The beater is equipped with an anti-rolling device, which can efficiently prevent machine jams.

	Main technical parameters
Production	400kg/h, width 1200mm
Beater	Φ400
mechanical speed	regulation 445, 615, 689, 950rpm, frequency control generally 400~1000 rpm
The main motor	Y112m-4-4kw(beater)
Feed roller motor	XWD-99-0.55KW
The feed roller	Φ60mm,Φ78mm
Net weight	2000kg
overall size	1881×1718×3931mm(L×W×H)

#### **FA117A FINE OPENER**

### **Application**

This machine is applicable to process various grades of raw cotton or polyester of the length≤76mm, and it's the last process in the blow room line. The unpowered condenser sucks raw cotton into the conveying passage. After being opened and carded by the beater, the smaller nubby materials get further opened. trashy and short fibers are removed through mote knife and dust cage, and then material will be conveyed by airflow to the next process.

#### **Characteristics**

- Adopt new technology-unpowered condenser to increase the production, upgrade the running reliability of the whole line, and improve the extraction efficiency of dusts and short fibers.
- ◆ Adopt dust cage cyliner device to further reinforce the disposal function of micro dusts.
- Adopt graf wires for the beaters to strengthen the scientific opening, and to get fine opening efficiency, less fiber damage and neps.
- Adopt bow-shaped assembled adjustable mote knife device, whose gauge can be adjusted eccentrically and conveniently while on-line running with high dust extraction rate.
- Adopt photoelectric control, with anti-rolling device and inverter control transmission, airflow dusts and noil extraction, high level of automation.

Main technical parameters		
Working width	1200mm	
Output	600kg/h	
Beater type	two kinds, gill pin type or saw-toothed type, Ф400mm	
beater speed	445, 615, 689, 950rpm or speed control by inverter	
Feed roller diameter	Ф60mm, Ф78mm	
Total power	8.55kw	
Total net weight	3000kg	
Overall size (L*W*H)	1881*1781*3965mm	



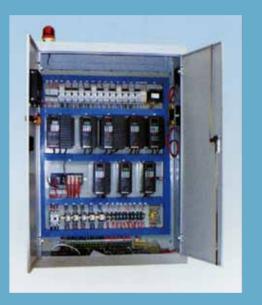
FA179F CHUTE FEEDER DJ2006 AUTOMATIC CONTROL SYSTE



### **Application**

This machine is the connecting unit between carding machine and blow room line. It is used to process the evenly opened and blended fibers into uniform cotton layers, feed them to carding machine and ensure the continuous and even cotton supply of carding machine to guarantee the continuity of blow-carding line.

Main technical parameters		
working widty	920mm	
output	20-60kg/h	
feed roller diameter	Ф95mm	
opening roller diameter	Ф240mm	
delivery roller diameter	Ф98mm	
fan speed	2840rpm	
installed power	1.22kw	
overall size (mm)	1330*515*3625	





PLC central control, with good stability and reliablity; The big touch screen setting and display of all technological parameters.

Adopt continuous feeding control system and ratio tracking, to realize continuous and uniform feeding.

# MODEL FA204C CARDING MACHINE



Main echnical parameters		
This machine is used for	processing cotton and man-made fibre or blends in length 22~76mm	
Delivery speed	Max. 140m/min	
Output	up to 45kg/h(max.)	
Sliver count	3.5~6.5g	
Layer weight	400~800g/m	
Working width	1000mm	
Total draft	68.7~152.8	
Taker-in diameter	Ф250mm	
Taker-in speed	823, 938, 1039rpm	
Doffer diameter	Ф706mm	
Cylinder diameter	Ф1289mm	
Cylinder speed	323, 360, 403r/min	
No. of revoling flats(working/total)	39/104	
Auxiliary carding parts	Taker-in carding segment,front 3 rear 2 stationary flats or front 4 rear 2 stationary flats with 1 web purifier.	
Can size(mm)	Φ600*900, Φ600*1100	
Total install power	5.72kw	
The main motor	3.3kw	
Doffer motor	1.5kw	
Motor for cleaning roller	0.37kw	
Motor for feeding roller	0.55kw	
Floor area(LxW)	3732*2033(mm)	
Net weight	approx.5500kg	
Optional		
Blowing-carding-drawing unit	Without cotton wastes, suitable for high speed and high production	
Continuous suction	air exhaust amount 2800-3500m3/h for continuous suction.	

# **FA204K CARDING MACHINE**



Main echnical parameters		
This machine is used for	processing cotton and man-made fibre or blends in length 22~76mm	
Delivery speed	Max. 140m/min	
Output	up to 45kg/h(max.)	
Sliver count	3.5~6.5g	
Layer weight	400~800g/m	
Working width	1000mm	
Total draft	68.7~152.8	
Taker-in diameter	Ф250mm	
Taker-in speed	823, 938, 1039rpm	
Doffer diameter	Ф706mm	
Cylinder diameter	Φ1289mm	
Cylinder speed	323, 360, 403r/min	
No. of revoling flats(working/total)	39/104	
Auxiliary carding parts	Taker-in carding segment, front 3 rear 2 stationary flats or front 4 rear 2 stationary flats with 1 web purifier, or front 3 rear 2 stationary flats.	
Can size(mm)	Φ600*900, Φ600*1100	
Total install power	5.72kw	
The main motor	3.3kw	
Doffer motor	1.5kw	
Motor for cleaning roller	0.37kw	
Motor for feeding roller	0.55kw	
Floor area(LxW)	3732*2033(mm)	
Net weight	approx.5500kg	
Optional		
Blowing-carding-drawing unit	Without cotton wastes, suitable for high speed and high production	
Continuous suction	air exhaust amount 2800-3500m3/h for continuous suction.	

### **FA206B CARDING MACHINE**



### **Intelligent Control**

- ◆ Advanced Control System Monitors.
- ◆ The Working Status and Running Efficeency.
- ◆ Safety Protections and Self-Diagnosis System

## High quality & high efficiency

- ◆ Sophistcated Suction System Provide Better Opening and Cleaning.
- ◆ Independent Transmission Motors Adjusted by Inverters For Highc Efficiency

### Easy poeration & maintenance

- ◆ User Friendly Graphical Interface
- ◆ Easy access to control Parameters.
- ◆ Smart Mechanical Design Mskes Maintenance An Easy Take

Main technical parameters		
Width	1020mm	
Delivery speed	20-220m/min	
Output	25-80kg/h	
Sliver weight	3.5-6.5g/m	
Air amount for continuous dust suction	3500m³/h, air pressure-850~950Pa	
Compressed air	0.4-0.7MPa	
Air consumption	0.01m³/h, if the machine is equipped with closed-loop autoleveller,the air consumption is 0.03m³/h	
Floor space	3132*1974mm (L*W) (without coiler)	
Total power	6.88kw	
Machine net weight	5500kg	

#### MODEL FA206C CARDING MACHINE

FA206C carding machine is a newly-designed product on the basic of mature productive technology of FA206B series carding machine for improving its quality and producion, at the same time, the superior technology and the technical performances are maintained and opeimized, thus it has been developed into a generation-changing product which integrated the practical function with aesthetic design.



#### **Characteristics**

It embodies stable high-production base Integrated side frames are designed for ensuring its strong stability.

High-efficient transmission system. Adopt individual motor transmission controlled by inverters for cylinder, Doffer and feed roller. Synchronous belt transmission, Stable, accurate and low noise.

High-efficient carding and cleaning system. Adopt front 4 rear 7 aluminium alloy stationary flats, front 1 rear 2 web purifiers.

Optimized sliver delivery system. Adopt reversing type condenser and cross apron web-collecting system combination to reduce accidental broken ends, which guarantees the machine's high-speed and high production.

High-efficient dust suction system. Central waste moulding structure for the dust box. No flyings and convenient observation and maintenance.

High science technology electrical control system. With multiple stop motions, PLC control for the whole machine, technological parameters adjustment by touch screen and all kinds of trouble display.

Main technical parameters		
Width	1020mm	
Delivery speed	20-260m/min	
Output	30-95kg/m	
Sliver weight	3.5-6.5g/m	
Air amount for continuous dust suction	3500m³/h, air pressure-850~-950pa	
Compressed air	0.4-0.7MPa	
Air consumption	0.01m³/h, if the machine is equipped with closed-loop autoleveller, the air consumption is 0.03m³/h	
Floor space	3192*1974mm (L*W)	
Total power	7.58kw	
Machine net weight	5800kg	

### A186H CARDING MACHINE



### **Application**

The preceding process of the machine is combined opening and scutching machine and the following process is drawing frame.

The machine is mainly used for the processing of cotton (chemical fibre) laps and cotton (chemical fibre) layers. The machine combs

the curly cotton (chemical) lumps moving from the preceding process or feeding hopper to straight single fibres. Meanwhile the impurities

will be removed. Then it spins them into standard slivers and stored in a sliver can for next process.

Main specification and technical characteristics		
Model Right-handed (standing in front of the machine, facing to the doffer		
Breadth	1020mm	
Applicable lap	Maximum diametre Φ550mm Width 980mm	
Cylinder working diametre	Φ1289mm	
Cylinder speed (selective)  330rpm(for chemical fibre) 360rpm(for cotton)		
Doffer working diametre $\Phi$ 707mm		
Doffer speed	19-35.7rpm	
Total draft 67.3-120.2		
Main motor: 3.3kw  Motor Doffer motor: 0.75/0.34kw  Fan motor Model F: 0.06kw		
Floor area(L*W)	3684*2009.5mm (L*W)	
Net weight	4500kg	
Output	15-30kg/h	



### **Application:**

This machine is applicable to preliminarily open, blend and extract trashes from all kinds of cleaned wool and man-made fiber with an amount of emulsified oil(i.e. Wool oil) added in order to make fibers fluff and evenly blended for the carding and slivering process of woolen and worsted spinning line.

### Design features:

- 1. Adopt two blower fans and cyclone dust cage feeding, blower fan airflow conveying, "\$" blow head output.
- 2. Dust cage and oiling can are both made of stainless steel.

### Main specifications and parameters:

- 1. Width: 1200mm
- 2. Cylinder diameter Ø1064mm; Doffer diameter Ø590mm; Working roller diameter Ø178mm; Stripping roller diameter Ø158mm.
- 3. Cylinder speed: 201rpm, 227rpm; Doffer speed: 888rpm
- 4. Output: 1000~1500kg/h per set.
- 5. Total power: 23.6kw
- 6. Floor area:

The main frame: 3920mm×2610mm; Oiling motion: (L×W)2380mm×1100mm; Blower fan: (L×W)1095mm×1400mm;



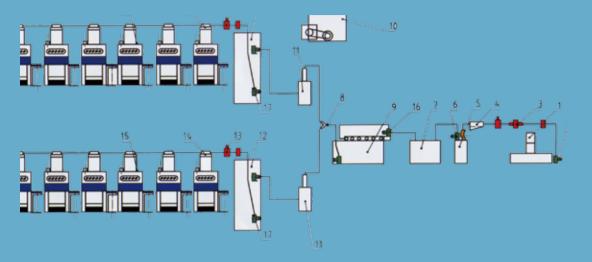
### **Application**

The function of the machine is to open, purge, mix and comb the cleaned, mixed, primarily opened and oiled wool, and the chemical fibre of certain length into siliver for the following process.

Main specifications and technical parameters		
Туре	upstriker half-circular type	
Model	right-handed	
Applicable material	assorted domestic wool foreign wool: 48-70s (within 200mm length)	
Breadth	cylinder width: 1550mm	
Feed form	automatic	
Feed frequency	3.1-3.5times/min	
Output	45-62kg/h	
Sliver weight	15-20g/m	
Cylinder speed	161.7 rpm cylinder linear speed: 654m/min	
Doffer speed	16-26rpm	
Burr removing points	3pcs, with a droppings conveyer	
Stripping form	chopper, 1463, 1730 times/min	
Slivering form	can coiler	
Electric motor	total power 6.85kw	
Overall size (mm)	(L*W*H) 9500*3500*2500	
Machine weight	about 10 tons	

### THE MAIN PROCESS FLOW OF DJ2006 BLOWING-CARDING UNIT

(100% cotton ring spinning, 20000 spindles two varieties)



	FA017-230	Reciprocating bale plucker
2	DF245	Transport fan
3	AMP-2000	Spark and metal detector (purchased part)
ļ	DJ001	Dust cleaner
5	FA126	Weight separator
,	DF240	Transpot fan
7	FA107	Single roll opener
3	DJ002	Two-way distributor
)	FA027-160	Multi-mixer

10	LF108	Dust filter
-11	FA117	Fine opener
12	FA157	Dust remover
13	119A	Spark detector (purchased)
14	FA179D/FA179S	Chute feeder
15	FA206B	Carding machine (with autoleveller)
16	DF220	Transport fan
17	DF210	Transport fan

### THE MAIN PROCESS FLOW OF DJ2006 BLOWING-CARDING UNIT

(100% cotton ring spinning, 10000 spindles two varieties)

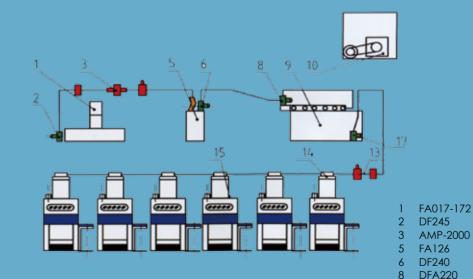
9 FA027A-120

10 LF108

13 119A

15 FA206B

17 DF210



FA017-172 Reciprocating bale plucker

Transport fan

Spark and metal detector (purchased part)

Weight separator

Transpot fan

Transpot fan

Multi-mixer

Dust filter

Spark detector (purchased part)

14 FA179D/FA179S Chute feeder

Carding machine (with autoleveller)

Transport fan(frequency control)

#### FA318A DOUBLE HOLES HIGN SPEED DRAW FRAME WITH AUTOLEVELLER

### **FA316B HIGH SPEED DRAW FRAME**







#### **FA318A**

This type machine can improve the sliver quality, which adopts Short fiber auto leveller system (Uster, Swizerland) and five patents (concentration lubricating device, interval sealing device, compelling lubricating device, auto-shaving cotton device, draft driving mechanism). So this could control the drafting quality of sliver. FA318A adopts 5 over 4 with pressure bar drafting style, which can advance the uneven condition of force. It is suitable for short firbe.

- Delivery number:2 holes
- Maxmium output speed:800m/min
- Total drafting mutiple:4-14 times
- Drafting style:5 over 4 with pressure bar
- Feeding sliver number: 6-8 pcs
- Suitable fiber lenath:15-76mm
- Input can dimension: Φ400,Φ500,Φ600,Φ800,Φ900,
- Ф1000 can height: 900,1100(1200)mm
- Output can dimension:Φ350,Φ400,Φ450,
- Φ500,Φ600,can height: 900,1100mm
- Mainframe OAD: 2490x1000x2110mm
- Weight:2400KG
- Motor power:5.5KW



### **Machinery Feature**

1.the machine is suitable for fiber variety and high output speed

2.adopt high quality four-up and four down guide roller.pressure stick style double-curve drafting structure.the sliver quality is good and stady

3.Can choice the frequency converter to dominate stepiess timing turning round at an average speed. favorable to the sliver quality

4.adopt PLC and test screen the manifestation holds the operation.making electric applicances control more stable dependable convenience

5.ideal photoelectricity self-ceasing unit.the photoelectricity self-ceasing unit is in front of the sliverflowing machine.coiling roller self-ceasing unit.so the malfunction self-ceasing is more dependable

6.the automatic can changer selected by customers.can decrease the labor intensity of workers.and improve work efficiency **FA471/FA472** Three-shaft Linkage Computerized Type High Speed Suspend Flyer Roving Frames adopt the advanced numerical controlling technique, get rid of the cone drum structure\mechanical forming and direction transposition structures of former flyer frames.

FA473/FA474 Four-shift Linkage Computerized Type High speed Suspend Flyer Roving Frames adopt the advanced computer numerical control technique getting rid of the cone drum structure\mechanical forming structure\quick lifting\direction changing configuration and different speed configuration [It makes four main drive parts run independently, and it is controlled by computer numerical control system and servo drive mode. Now it is the most advanced roving frames in mechanical-electrical integration of china [It is suitable for pure or blended processing of combed cotton fibre and artificial fibre.]



### **FB471 ROVING MACHINE TYPE**

FB471 roving frame is used types of three-axis computer-controlled high-speed linkage roving frame for worsted projects last procedure, the completion of 60~200mm less woll, hemp, chemical fiber, etc., or blends of pure spin. In the spinning process, the will and shall mature after the draft article, stretching, pulling small and processed into different count of foving, plus a certain twist, it has some strength, winding into a certain shape. The rolls, made of spun yarn for textile spinning frame.



1.Suitble for square fiber length:60-200mm

2.Drawing multiple:4-16

3. Viscosity range: 10-40 twist/m

4.The scope of Article:0.3-1g/m Feeding range:5-15g/m

5.Constant speed: The maximum mechanical speed 1200RPM Maximum process speed 900RPM



**FA538 RING SPINNING FRAME** 

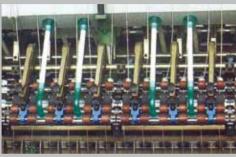
#### **FA538**

- 1. Suitable for spinning cotton, synthetic fibers and their blends to produce weaving and knitting yarns.
- 2. The spinning processes can be set by means of man-machine dialogues through a touch screen panels.
- 3. Adopt cooling system for inverter.
- 4. Optimized the suction channel with variable cross section, thus ensure the less difference of suction air from the head-end to tail-end.
- 5. The auto doffer system can be added to decrease the cost.

Spindle gauge	70mm	
No. of spindles	1008	
Lift	200, 180mm (aluminum type spindle) 205, 180 (bare blade type spindle)	
Ring diameter	Ø35, Ø38, Ø40, Ø42, Ø45	
Yarn count	4.86-97.2tex (120-6 Ne)	
Twist	230-1740 T/M	
Spindle speed	12000-22000 mp	
Draft Ratio	total draft: 10-50 rear zone draft: 1.06-1.53	
Twist direction	Z or S	
Draft system	3 line rollers, double aprons(long and short), pendulum arm weighting	
Spindle	aluminium type or bare type with knee brake	
Type of creel	one tier hanger, four or sixrows optional	

### FA506 RING SPINNING FRAME





spindle gauge: 70mm lifting: 205, 180, 155(mm)

ring diameter: Ф45, Ф42, Ф38 (mm) number of spindle: 384, 396, 408, 420, 432, 444, 456, 468, 480, 492, 504, 516 yarn count: 97.2-4.9tex (6-120Ne)

twist: 300-1600 (T/m) draft ratio: 10-50

spindle speed: 12000-18000(rpm)

spindle drive: single tension pulley, Z or S twist optional creel: one tier hanger, four or six rows optional

spindle wharve dia.  $\Phi$ 22,  $\Phi$ 24,  $\Phi$ 20.5mm spindle wharce sia. Φ 152\*406mm

main motor: 15/7kw, 17/9kw, 18.5/11kw, 22/11kw (380v) suction motor: 1.5kw (for No. of spindle below 444); 2.2kw (for No. of spindle below 456)

lifting motor: 370w distance between spindles of left and right side: 700mm

total heiht of the machine: 2300mm

total length of the machine: L=2380+(N/2-1)\*70 (mm) (N: No. of spindle)



# **RS30, RS35 ROTOR SPINNING MACHINE**

With the based on digestion and absorption of the modern spinning technology and integrated the most advanced scientific and technological achievements, subdivide market requirement, which is especially ordered equipment for wool spinning, flax yarn, gloves yarn and so on particular yarn market.





### Technical data:

Item	Unit	RS30	RS35
Yarn count range	tex(Ne)	120-16(5~36)	200-30(3~21)
Range of rotor speed	r/min	40000-110000	30000-80000
Rotor dia	mm	33, 38, 42, 50	42, 50, 54
Range of fiber length	mm	<40	<60
Opening roller speed	r/min	5000-10000	
Sliver count range	tex(g/5m)	5000-3000(15-25)	
Maximum winding speed	m/min	170	
Draft range		32-220	
Twist range	t/min	200-2250	
Pitch of spin boxes	mm	216	
Max. spin boxes	spindle	352	
Per spin boxes	spindle	16	
Dimension of cylinder tube	mm	Ø54×170	
Cone		4°20', 2°	
Maximum	mm	Ø300×150	
Maximum weight of yarn package	kg	≈4.5	
Can dimension	mm	Ø400×900, Ø350×914	
Pressure	Pa	5000-9000	
Noise	dB	<85	
Total motor power rating	kw	108	
Total exhausted air	m³/h	6210	







# **Higher production**

The speed of rotor is up to 150,000 RPM
The actual speed of guiding yarn reaches 230 m/ min
360 spin boxes and 4pcs piecing devices are available.

## Higher yarn quality

Spinning components in high-quality and piecing Devices in excellent-performance which guarantee To obtain high-quality yarn.



### HJF1603 ROTOR SPINNING FRAME

Based on fererring advance technology of other domestic totor spinning frame, HJF1603 rotor spinning frame is a sort of high speed, efficient, large package and self-exhausting open-end spinning frame.



#### Main Features:

- 1. Machine can spin the yarn Nm 10-68 ( $100\sim14.7$ tex) directly from two passages drawing sliver Nm 0.2-0.45(5000-2200tex)
- 2. The machine can be pre-assembled packed and delivered section by section.
- 3. The machine is controlled by the programmable controller (PC), the machine has a display for monitoring the spinning processing parameters.
- 4. The machine can take up the taper package.
- 5. The machine adopts inverter to control motor speed and adjust spinning parameters.

Number of units	periods	Length
168	14	21185mm
192	16	23825mm

Main Technical Data:				
Gauge		200		
Number of uni	ts	168		
Rotor speed (r	pm)	30000-75000		
Rotor dia.		Ø43, Ø54, Ø66		
Combing rolle	r speed (rpm)	5200, 6200, 6700, 7200, 7700, 8200		
Drafting ratio		35-230.5		
Sliver count		0.2-0.45Nm (5000-2200tex)		
Take-up speed	d (m/min)	20-116.7		
Can dimension		Ø250×900, Ø300×900, Ø350×900		
Tube dimension		Ø68ר62×170 (3°30'taper tube) Ø56ר50×170 (cylinder tube)		
Package dimension		Ø300×150 (cylinder tube) Ø250×150(3°30' taper tube)		
Package weig	ht	Approx. 4 (cylinder tube)		
	Rotor driving	2×11		
	Combing roller driving	2×4.5		
Motor power Fan for third hand		1×3		
(kw) Fan for impurity discharge		1×4		
	Conveyer belt driving	1×0.4 (with reducer)		
	Gear box driving	2×1.5 (drawing)+2×0.75 (feeding)		

# **TQF268ROTOR SPINNING MACHINE**



Model		TQF268				
Rotor diameter (mm)		66	54	43	36	34
Rotor speed (*10000)	(r/min)	3.1-4.5	4.0-6.5	6.0-8.0	7.9-9.0	8.0-10.0
Fiber length (mm)		15-60	15-40			
Number of spinning u	units	32, 128, 160, 1	92, 224,	240		
Space between spin	ning units (mm)	210				
Yarn count (Tex)		10-250 (59-2.4	Ne)			
Sliver count	Cotton (Ktex)	3-7 (0.20-0.083	BNe)			
Sliver count	Synthetic fiber (Ktex)	2.5-5 (0.24-0.1	2Ne)			
Combing roller speed	d (r/min)	5000, 6000, 70	00, 8000	, 9000, 10	0000	
Manian was also and a sal	as the state and the trains	≤170 (Parallel	bobbin)			
Maximum mechanical	output speed (m/min)	≤150 (Taper bobbin)				
Machaniaal draft an	and range (m/min)	First grade speed: 0.16-9.30				
Mechanical draft speed range (m/min)		Second grade speed: 0.076-6.04				
Maximum cheese size (mm)		Parallel cheese: Ф300*150				
Maximum cheese weight (kg)		Parallel cheese: 4.2				
Cheese shape		Parallel cheese/ Taper cheese				
Tube size (mm)		Φ50/Φ56*170				
Cone core size (mm)		Ф33/Ф59*170				
Package density range (g/cm³)		0.32-0.42				
Max.dia.of the sliver can (mm)		Ф430				
Max. height of the sliver can (mm)		914				
Num. of spinning units of eache section		16				
Drive of the rotor and the combing roller		Tangential belt				
Installed power (kw)		72				

### MODEL GA016SF SOFT CONE WINDER

Model GA016SF soft cone winder is specially designed for winding copsincluding cotton, wool, artificial fiber and their blends into cone or cheese package for high temperature & high pressure dyeing processing.



### Overall dimension

Number of drums	Sampson gauge	Total length
40	5080	6155
60	7620	8695
80	10160	11235
100	12700	13775
120	15240	16315

# Specification

Туре	Grooved drum type
Tranversing gauge(mm)	2.2□3.2
tranversing time(t/min)	14.2
Number of drum	60   80   100   120   standard. 100s
Drum gauge(mm)	254
Yam traverse(mm)	147
Winding speed (m/min)	350□400
Size of full package(mm)	Basep 170×149
Drum	φ82mm2 2/1 turms
Cone density(g/cm3)	0.30-0.40
End-breakage automatic stop motion	Individual spindle control
Tension loose device	By change the tension weight, as cone diameter increased, the tension decrease to improve its evenness of the density.
Ribbon breaking	During running,make the motor tum on and off by means of Non-touching ribbon breaker switch at 32 times per minute
Drive:main motor	2 pcs.1.8kw 1440r/min
Pilot motor	1 pcs.0.37kw 960r/min

# GA014MD CONE WINDER GA014MD

The machine is used for winding cops into cones for warping doubling or knitting process.



### Overall dimension

drums	S	gauge	Total
40	4 5080	5080	5980
60	6 7620	7620	8520
80	8 10160	10160	11060
100	10 12700	12700	13600
120	12 15240	15240	16140

# Specification

Туре	Grooved drum type	
Number of drum	40/60/80/100/120(standard.100s)	
Drum gauge(mm)	254	
Yam traverse(mm)	152	
Winding speed (m/min)	510/575/643/713	
Size of full package(mm)	Base φ 200×152	
Drum	φ82mm2 2/1 turms	
End-breakage automatic stop motion	Individual spindle control	
Cone size	3°30""/5°57/9°15""paper bobbin(or6°wooden bobbin)	
Ribbon breaking device	Non-contact intermittent Swith device	
Form of supply	To suit spinning cops or thread bobins of twisting frame	
Cleaning device	Model GU013 cleaning blower	
Operatue carriage	Model GU012 operative carriage	
Yam clearer	Electrenic clrarer with multi-functions	
Bobbin holder	Single-arm holding type	
Drive:main motor	2 pcs.1.8kw 1440r/min	
Pilot motor	1 pcs.0.37kw 960r/min	





