FH-JM Straight Precision Winder Instructions

Zhejiang Tongyou Machinery Technology Co., Ltd.

Foreword

Thanks for using the FH-JM straight precision winder in the series of winders produced by Zhejiang Tongyou Machinery Technology Co., Ltd.

Our company has long been committed to the development and research of yarn forming equipment. With more than ten years of market demand, new products are constantly ahead of market development, closely combined with the user's reactions and suggestions in use, attracting a long list of customers, introducing new products, and winning extensive customer approval. .

In order to fully grasp the performance of the machine and ensure safe production, please read this manual carefully before using.

As the technology is constantly updated and improved, each client device configuration is different, so the machine used and the contents of the manual will be different, please understand! Please contact us if

you have any questions.

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First the machine performance characteristics

FH-JM straight precision winder is a series of winder series produced by our company. It is suitable for all kinds of raw materials such as silk, hemp, yarn, and thread, etc. cylinder. The model has a single spindle single control of the basic functions of the external use of a positive winding yarn winding bobbin clamp; 2 winding constant line speed; 3 oil-immersed shuttle box; 4 oil stick refueling speed 5 - 20 rev / min adjustable; 5 with a soft edge device and edge function; 6 yarn tension dynamic adjustment; 7 drum yarn and friction stick constant pressure contact; 8 main motor speed and roller motor speed stepless adjustable; 9 Controlled color screen control and other characteristics and technologies, the appearance of the package is beautiful and the texture is delicate. This model is an ideal choice for high-quality manufacturer of packaged yarn.

Second, the main technical parameters of the machine

1. Model form: single-sided;

2. Number of spindles: 4 spindles/section, users need to increase or decrease by 4 spindles, standard 24 spindles/set;

3. Tube type: flat tube or helium tube, specifications are selected as required;

4. Winding line speed: ≤600 m/min (process speed depends on process parameters);

5. Power supply: 380V 50HZ three-phase five-wire system

6. Power consumption per spindle: 130W

7. Each section size (length X width X height): 1620X730X (packing height) 1300

(Working high) 1800

8. Dimensions of the headstock (length X width X height): 160X440X1270

9. Weight per section: about 270KG

Third, safety precautions

1. The power supply of the machine adopts AC380V±10%, 50HZ, three-phase five-wire system; the machine must be strictly grounded correctly.

2. The motor and electrical equipment of this machine have dangerous voltage values and high current intensity. Improper operation and maintenance, ignoring safety regulations or operation by non-professionals can cause loss of life and property.

3. Due to the use of the machine, the machine is running at a high speed and the long-winding is in danger of winding; the yarn touching the high-speed running around the stroke may be cut.

4. Each bobbin should be installed with a bobbin to keep it from rising, so as to avoid friction between the spring and friction roller in the boot bobbin and damage the friction roller.

Fourth, the appearance of the machine and site configuration scene map

Fifth, the installation and wiring of the machine

1. Installation environment

(1) Installed at ambient temperature -10° C to 40° C.

(2) Avoid installation in direct sunlight, moisture, condensation or water droplets.

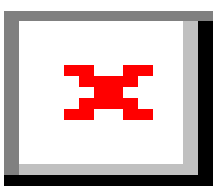
(3) Avoid installation in the presence of flammable gases, corrosive gases, or other harmful gases.

(4) Ensure that the machine has sufficient operating space (about 1 meter) and repair space (0.5 meters) on the back of the machine.

2. Installation of the machine

(1) The equipment is folded in boxes, and the blocks at the bottom of each section are filled with equal height blocks. The four corners are screwed into the machine adjusting feet to the middle position of the threads. (When the adjustment of the whole machine is completed, adjust the foot nut again.)

Adjust the foot ti~~ght nut~~



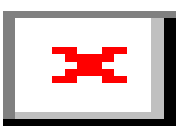
Adjust the feet

(2) Each section is arranged in the order of factory number, and the M10X25 external hexagon bolts, flat washers, spring washers and nuts attached to the back of the machine bed are folded off the upper and lower cover plates behind the machine table; the headstock is connected to the corresponding wallboard.

(3) Adjust the machine platform to ensure the machine's level (level gauge) and straight line (visual inspection). If the adjustment is not smooth, the amount of oil stored in the oil sump of each ingot can even spill.

(4) Tighten the screws between the wallboards and check that each adjustment foot lands and tighten the adjusting foot nuts.

(5) As shown in the figure, install the scaffold column and beam on the upper part of the machine table and tighten all the screws.



M8X14 hex screws, flat washers, spring washers

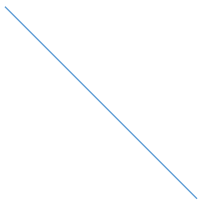
Shelf beams (M8X65 hex screws, flat washer

s, spring washers, nuts)

Scaffolding columns (M6X65 hex screws, flat washers, spring washers)

(6) The latter group is connected with the front group, the first group and the nose box to connect the tubing to hold the hoop, connect the signal line, and connect the three-phase + zero line power line (the zero line connects the neutral line, the phase line presses the color connection), connect Oil groove motor power cord, tighten screw, reliable connection, cover transparent protective plate;

(7) Turn off the circuit breaker on the nose box to the off state, and match the power supply to the ground.



Earth pile

8) Open the upper cover of the head box, refuel, drain the air in the pipe, adjust the oil level control device of the head box, check the oil level of each piece (recommended oil level is controlled at about 10mm from the surface of the oil tank) and whether the whole machine is leaking oil;

(9) The complete machine inspection (circuit, oil, oil tank, oil storage, timing belt, etc.) is completed, switch on the circuit breaker, start the machine by spindle, check the start and stop, indicator, oil roller rotation; If the control is effective, install the back guard cover after normal operation.

Sixth, Names, Principles and Commissioning of the Main Parts of the Machine

1. Machine transmission control is composed of circuit breaker, central control color screen, button, drive control box, main motor, roller motor, switching power supply, setting operation panel, and prober on the front of the nose box. (single-spindle panel settings see the instructions below)

Countdown button

Start stop button

Single spindle operation panel

Central control color screen

Breaker

Oil tank motor speed control knob

2. The oil stick refueling speed regulating system is composed of an oil tank motor, an oil stick, an oil tank body, an oil stick gear, a fuel pipe, a speed-variable frequency converter inside the head box, a speed control knob and the like. Twist

clockwise to rotate the stick to speed up and reverse to slow down

Fiber Finder

Doors open increase

Integral tension controller

fiber hook

Oil roller

Oil tank body

3. The tension controller follows the change in the closing force of the front door weight with the increase of the diameter of the bobbin in the forming, so that the diameter of the winding drum is increased and the yarn tension is reduced to achieve the purpose of the bobbin. The weight plate in the tension controller can be increased or reduced by the process to adjust.

4. Handle and constant pressure Pakistani hand, the handle is used to control when the bobbin tube is clamped and shrinks, when it rises inside, gently pulls it out, and the bobbin moves and compresses the compression spring and the bobbin expands and contracts inside the bobbin. The handle stops to move the outer sleeve of the bobbin, and the action of the sleeve compression spring is expanded in the bobbin and tightly grips the bobbin. When it is necessary to swing the bobbin holder, rotate your hand to grip the bar with constant pressure and press hard against the palm of your hand. You can swing the bobbin holder left or right.

Constant pressure hand **Constant pressure arc**

Handle **Bobbin frame**

5. The principle of the constant pressure device: In order to achieve the constant pressure between the bobbin and the friction roller during forming does not increase with the diameter of the bobbin, the friction force increases due to the

increase of the pressure of the friction roller due to gravity, and the wear yarn affects the yarn. Forming quality. The detents in the device can only smoothly slide from left to right in the constant pressure element arc groove due to the eccentric design, but the bobbin frame rotating to the right will not increase due to the increase in weight. The pressure on the friction stick can be turned to the left by the bobbin holder only when the constant pressure handle is forced to release the pawl from the arc.

6. The bobbin tube bobbin rises, the shuttle box refuels, the oil mark: The bobbin rises by the handle to move the bobbin to move the bobbin inside the big collet, the bobbin sleeve and the small collet between the position and changes the size bobbin tensioning spring The radial size expands or contracts. The shuttle box shall be provided with 32# oil from the oiling screw to the middle position of the oil gauge, and the oil shall be changed after 10,000 hours of operation.

Bobbin rise

Bobbin frame

Friction roller

Shuttle box

Refueling screw

Oil standard

7. Yarn forming process and corresponding mechanical device adjustment:

1Shuttle box drain screw

2Crank arm

3Adjust the drawbars and the edge-adjusting frame (the length and length can be changed and the winding position can be changed by adjusting the length and position)

4Door adjuster

5Cam mandrel adjustment ring (slightly loose screw, rotating adjustment ring clockwise soft edge reduction, reverse soft edge increase)

6Edge guide (changing position affects the edge)

7Pressure adjustment lever (change coil contact pressure)

8Bobbin swing damping (Adjusting the top spring force can change the damping force.)

8Transmission timing belt and tension adjustment:

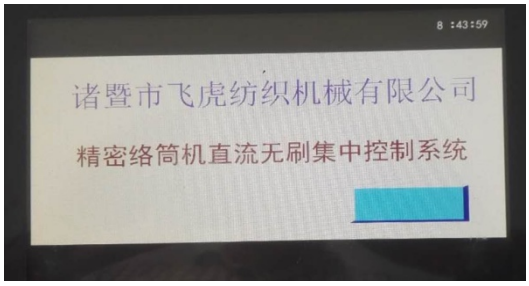
Winding belt (640 5M)

Forming belt (535 5M)

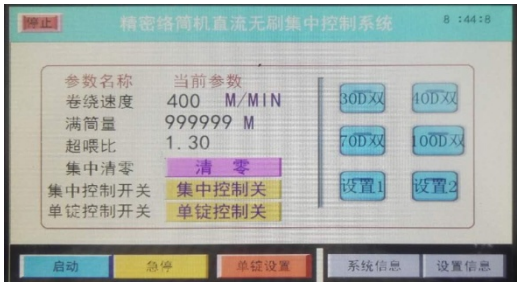
Tension adjustment wheel

Seven in the control of color settings

1. Power display interface

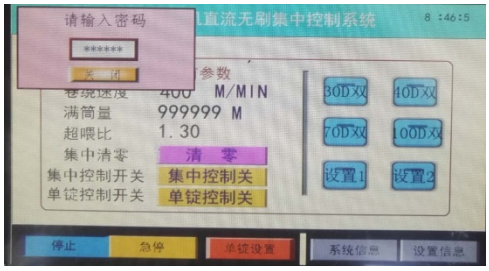


2. Click on "Enter System" at the bottom of the screen to display the interface



3. Click "Setting Information" in the lower right corner to display the left interface, enter the factory password "123456", and display the right interface

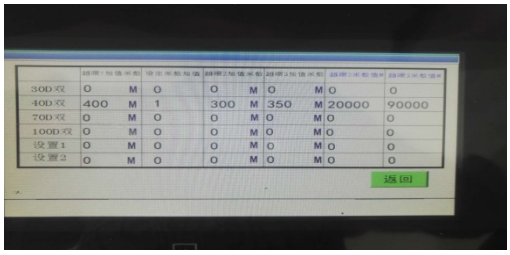
4.



5. Click Quick Setup, the interface appears, enter the parameters

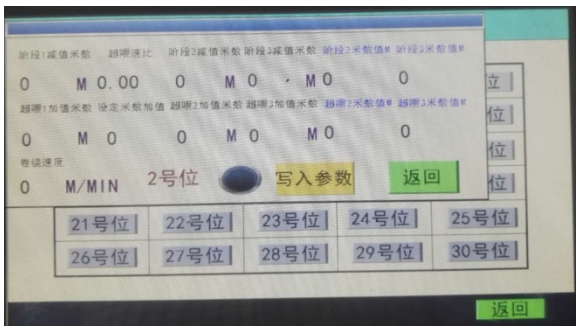
6.

5. Click Overfeed Settings, the interface appears, enter the parameters



6. Single spindle control, in the "enter the system" in the closed leisure control, click on the single spindle control, the next screen appears

7. Select the second ingot, click on the 2nd position, the interface appears, enter the parameters



8. Click 〖Back〗 to return to interface 2 and click 〖Invoice Control Open〗

9. If the number of yarns per spindle is the same on the machine, press the 〖◀〗 key on the control panel of each spindle for 3 seconds. Change the value of P2-00 to 1 and confirm with the 〖display〗 key, and so on.

10. After the full cylinder, press the clear button, and then press the start and stop button to start a new tube winding.

Eight, panel parameter setting table (only for single spindle setting)

panel parameter setting table (only for single spindle setting)				
Parameter	Name	range	Factory value	Instructions
P0-00	Line speed	100～600	400	Line speed per minute in constant speed mode.
P0-01	Full cylinder	10～999999	999999	The length of the set line will automatically stop when this set value is reached. The indicator will flash with 1HZ; 999999 will not stop.
P0-02	Bobbin circumference	0.1～0.5	0.14	This parameter is used to calculate the length of the line. You can fine-tune this parameter to make the length of the gauge more accurate.
P0-03	Overfeed ratio	0.5～2	1	This parameter is the ratio of overfeed speed to winding speed
P0-04	Overfeed start time	0.1～25.5	8	This parameter is the time for overfeeding the motor from stop to full speed.
P0-05	Winding meters devaluation	0～10	1	Set the number of meters after the line speed minus the set value of the number of devaluations, set 0 off function
P0-06	Stage 1 impaired meters	50～8000	100	How many meters minus one speed
P0-07	Lowest speed	100～400	100	Lowest speed
P0-	Overfeed 1	50～8000	100	How many meters increase once

08	Plus meter			
P0-09	Overfeed meter plus	0～80	0	Set the number of meters after the overfeed speed increases to set the number of meters to decrement, set 0 off function
P1-00	Stage 2 impaired meters	50～8000	100	How many meters after stage 2 is subtracted once
P1-01	Stage 3 impaired meters	50～8000	100	How many meters after stage 2 is subtracted once
P1-02	Stage 1 meter value	0～200000	0	Set stage 1 meter value
P1-03	Stage 2 meter value	0～200000	0	Set stage 2 meter value
P1-04	Steady speed time		10	Operating time fluctuates to a stable time
P1-05	Motor start time	2.0～25.5	10	The time from the stop status of the motor to the full speed status.
P1-06	Motor stop time	2.0～25.5	2	The time when the motor travels to the stop state.
P1-07	Yarn breakage detection	0.5～25.5	8	The yarn break delay detection time after the motor starts.
P1-08	Breakage response time	0.01～25.5	0.05	The yarn break delay detection time after the motor starts.
P1-09	The definition of yarn exploration	1～4	1	The parameter is set to 1 for probing 1. The default is to connect 1 probing device.。

P1-10	Full cylinder clear method	0～2	2	The parameter "0" is automatically cleared when the full cylinder is full, the parameter "1" is cleared after the full cylinder is cleared by the "clear key", and the parameter "2" is cleared directly by pressing the "clear key".
P1-11	Does the full cylinder output cutter	0～1	0	When set to "0", the full cylinder does not output the cutter.
P1-12	Does the yarn break output knife	0～1	0	When set to "0", the full cylinder does not output the cutter.
P1-13	Full stop differential	10～300	50	This parameter setting means that the motor deceleration differential at the same time immediately.
P1-14	Overfeed 2 Plus Value	50～8000	100	How many meters after stage 2 increase
P1-15	Overfeed 23Plus Value	50～8000	100	How many meters after stage 3increase
P1-16	Overfeed 2 meters	0～200000	0	Set stage 2 meter value
P1-17	Overfeed 3 meters	0～200000	0	Set stage 2 meter value
P1-18	Local station number	88	1～30	Central control single spindle control station number
P2-00	Selecting station	1～30		Consistent with the setting parameters of a station number

	number			
Alarm code		ERR0		Alarm information generated after yarn break
		ERR1		After pressing the start button, it is detected that the motor is not running, or the maximum load and alarm information generated after the stall is exceeded during the operation.。

Nine, electrical connection diagram