# Manual of computer control system of Mai Hong Flatknit machine

#### Preface

#### Company profile:

Shanghai Mai Hong electronic technology limited company was born in 2004 in Shanghai Yangpu high tech enterprise incubator (Fudan Science Park), is a professional engaged in knitting equipment automation control system and software development of high-tech enterprises, with a number of industry-leading R & D engineers, through the industrial control technology, industry leading design and rigorous the first-class quality management system for textile equipment manufacturing enterprises, R & D and production of high-end computer knitting machine control system and provide a complete solution. Process and applications with core technology in knitting system architecture design, software and hardware design, textile equipment, various products are patented and obtained independent intellectual property rights.

The company began to enter the field of knitting equipment automation from 2005, 2006 successfully developed computer knitting machine control system, in 2007 the successful launch of computer flat knitting machine (the software version of the system to fill a blank in China) since more than 10 years has been focused on automatic flat knitting machine control technology, continuous innovation, high quality control system to provide for the majority of domestic equipment manufacturers the application of the majority of customers and experts, and input materials by Tianjin University of Technology.

In line with the concept of application centric system requirements, we will work with machinery manufacturing enterprises continue to development the products and provide solutions to optimize and fine products, improve equipment efficiency, reduce the cost and complexity, to control the most professional technology, become the industry experts and customers to grow partner.

## Manual of computer control system of Mai Hong Flatknit machine

## Contents

Chapter 1 Operation system master menu	3
Chapter 2 File Management	4
Chapter 3 Head Test	
Chapter 4 Rack Test	
Chapter 5 System Run	
Chapter 6 System Parameters	19
Chapter 7 Work parameter	
Chapter 8 Software	

# Chapter 1 Operation system master menu

After the system power is turned on, the system displays the main menu, as shown in Figure 1-1.



Figure 1-1

This menu is the master menu of the control system. From this menu, you can click the interface button directly to enter the next menu. This system supports touch screen, standard keyboard. All buttons can be operated by corresponding keyboard. The bottom number is the system version.

# **Chapter 2 File Management**



Click on the button "Filmag F4" to enter the File Manage menu, as shown in Figure 2-1:

Figure 2-1

#### 2-1 Hard Disk

It is to weave or copy the type of flower that is needed in the existing pattern file of the system hard disk. The pattern file is selected directly by clicking the name of the file, and then operated through the control button in the middle.

#### 2-2 USB drive

It is from the U disk to select and copy the pattern files to the system hard disk, and there are also intermediate control keys to operate.

#### 2-3 Load Pattern(F1)

That is to load the currently selected file in the hard disk to knit.

#### 2-4 Pattern Input(F2)

Copy the files selected from the U disk to the hard disk.

## 2-5 Pattern Output(F3)

Copy the files selected from the hard disk to the U disk.

#### 2-6 **Delete**(**F4**)

That is to delete the currently selected file from the hard disk, and the loaded pattern cannot be deleted.

#### 2-7 Delete all(F5)

Remove all patterns in the machine's memory.

## 2-8 Copy parameter(F6)

Copy the parameters of the system hard disk to the right U disk.

## 2-8 Copy parameter(F7)

Copy the parameters of the system U disk selection pattern to the selected pattern on the left hard disk.

## 2-10 Parameters copy each other(F8)

That is, the pattern parameters in the hard disk are copied, the left and right selection needs to be interlocked, the F1 left pattern parameters are copied to the right pattern, and F2 can copy the figure parameters on the right to the left pattern. The lower level directory can enter the folder and choose the desired pattern. The superior directory will return to the next level (Figure 2-2).



Figure 2-2

#### 2-11 POP Udisk

Secure out of the U disk.

## 2-12 Copy pattern operation steps

Mount  $Udisk \rightarrow file$  management (F4) int the main menu  $\rightarrow$  file management menu on the right side of the file list box on the right side of the file list box to select the required pattern files (click after the pattern file is covered by the gray cursor)  $\rightarrow$  click the middle of the file list "F2" button (the selected flower like file will be copied to the system hard disk)  $\rightarrow$  File management menu on the left side of the hard disk file list box to select the required pattern files (click after the pattern file is covered by the gray cursor)  $\rightarrow$  click "load the hard disk pattern (F1)" button (the pattern is selected as the current execution file).

# **Chapter 3 Carriage Test**

Press the main menu "Machine Test F7" as Figure 3-1.



Figure 3-1

Then enter the submenu F1, as in Figure 3-2.

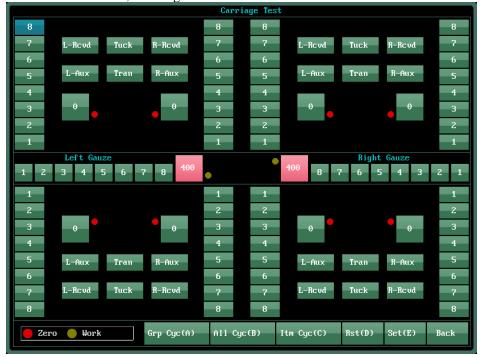


Figure 3-2

#### 3-1 Gauze Test

The movement of all gauze electromagnets on the head is right.

#### 3-2 Cam Test

Testing all cam is right.

#### 3-3 Selectors Test

Testing all selectors is right.

#### 3-4 Stitch motor Test

Testing all stitch motor is right, the red dot indicates the zero position of the sensor, yellow represents the pressure needle position in the machine triangle.

#### 3-5 Sinker Motor

As the same as stitch motor.

All of the above movements are shown in the zero position when the corresponding button is red, and yellow indicates the needle position.

## 3-6 Group cycle

Select the cam electromagnet, the selector electromagnet, the gauze electromagnet, the stitch motor, the Sink motor, and the set of electromagnets or motors that are selected according to the whole group cycle.

#### 3-7 All cycle

Select the cam electromagnet, the selector electromagnet, the gauze electromagnet, the stitch motor, the Sink motor, and the set of electromagnets or motors that are selected according to the whole cycle.

## 3-8 Single cycle

Any electromagnet or motor is selected to act according to the electromagnet or motor selected by a single cycle.

#### **3-9 Reset**

Press the reset button to restore all electromagnets and motors to zero.

#### 3-10 Set

Press this button to jump out the following dialog box and set the test value. As Figure 3-3:

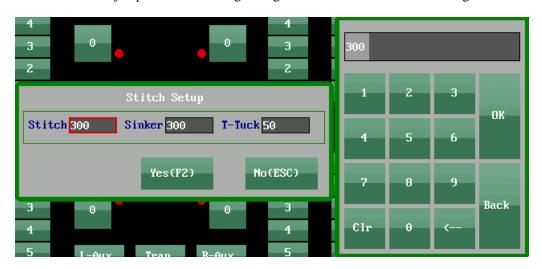


Figure 3-3

# Chapter 4 Rack Test

Press the sub menu F2 Rack Test to enter the test menu, as shown in Figure 4-1.



Figure 4-1

- 4-1 The test section at the top of the interface is to test whether all kinds of alarms are normal. When the sensor signals are detected, the base frame of the inductor is yellow, and the bottom frame is gray when the sensor signals are not detected.
- 4-2 Main motor test: Test whether the main motor is normal or not.
- 4-3 Test of the shaking table motor: Test whether the action of the shaking machine is correct, whether the left swing, right shake and zero action are correct.
- 4-4 Roll, rab, opening and closing, left and right yarn feeder: check whether the motor works normally or not.

# Chapter 5 System Run



Click the button "System Run F1" goes to the interface as shown in Figure 5-1.

Figure 5-1

#### **5-1 Reset F1**

Press "Reset F1" to enter the dialog box, as shown in Figure 5-2.



Figre 5-2

Reset: That is, the system returns to zero. If there is no alarm, it can twist the handle to start the machine running, and execute the current loading flower plate action.

Reset & Lock: The system is zeroed and automatically executes row locking;

Rest & Continue: That is when the system returns to zero, it will continue to perform the current weaving line before returning to zero.

Unload: That is to say, after the system is zeroed, the 1X1 knitting action will be carried on the cloth piece falling on the needle bed. According to the maximum width of the pattern, unload the piece and note that the yarn is pushed to the outside of the drawing area.

#### 5-2 Lock line F2

Choose whether or not to run the braiding instruction set in the row set. The setting of the system is detailed in the following system parameters setting: row interval and row number. The fixed lock state is red, and the unlocking state is green.

#### 5-3 High Speed F3

High speed and low speed toggle button, switching the speed of the head, as shown in Figure 5-3:



Figure 5-3

#### 5-4 Lock Cloth F4

Single lock function key, click this key button when the red chip is locked into effect, the single chip automatically stops after the end of the operation; the system will automatically cancel the lock after the completion of the lock.

#### 5-5 Comb F5

Start the Comb operation button, click this button to jump out the dialog box to indicate the operation related to the comb, as shown in Figure 5-4.



Figure 5-4

### 5-6 Gauze F6

Press this button in the running interface to choose to put down or close the gauze electromagnet, when the button becomes red icon gauze closed, button recovery gauze down.

## **5-7 Stop F7**

A line that is designated to be knitted to the flower plate is automatically stopped, and click this key to jump out of the dialog box (like Figure 5-5). The input needs the number of parking lines, and the icon will turn red at this time.

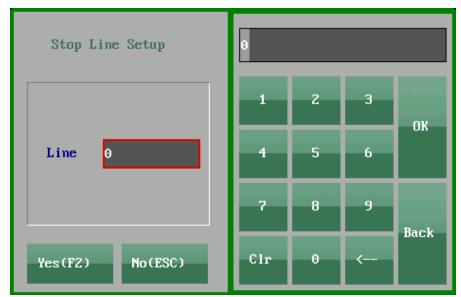


Figure 5-5

#### 5-8 Cloth Number

Set the number of processing items, click this button to jump out the following dialog box (Figure 5-6). Modify the value of the total number of the following parts, click OK(F2) to set the total number.

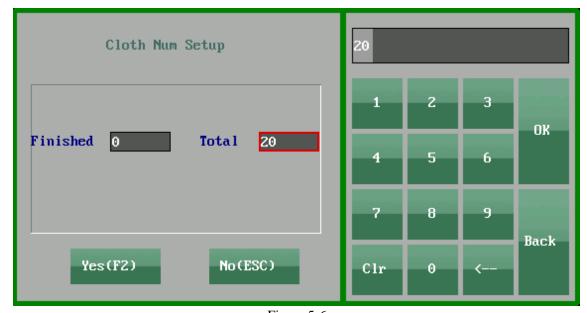


Figure 5-6

## 5-9 Current Line

Displays the current row number information and clicks into the specified knitting interface (Figure 5-7). Enter the number of rows, System will return to zero after cilcking OK(F2), then jump to the specified number of lines to start weaving.

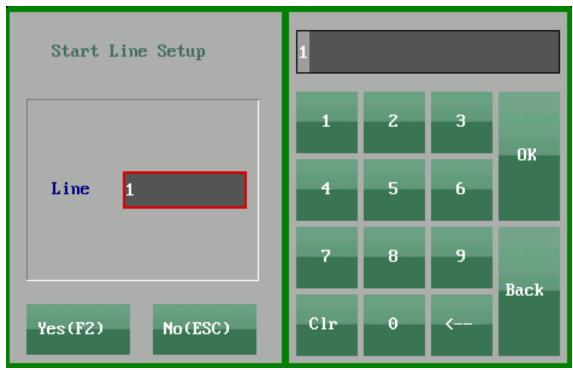


Figure 5-7

## 5-10 Economy

Click this button to pop-up dialog box an shown in figure 5-8.



Figure 5-8

Start line: start line of economy (Odd number line).

End line: end line of economy (Even row).

Times: cycle times.

For example, such as "start behavior 1, end behavior 2, 7" indicates that when the machine runs to the third line, it starts to run 1, 2 lines repeatedly, and runs seven times repeatedly. Before saving, the first and second rows are not included in the seven time. In normal weaving, the system supports economy modification, economy start and end position changes, economy times change, will be executed in the next cycle.

The number of repetitive rows that display the system running settings will be displayed on the screen only when the system runs to economy, and "0" will be displayed after economy over.

#### 5-11 File Name

Display the current running file, file name support Chinese and English (Note: Chinese characters can not exceed 5 characters, characters can not exceed 10).

#### 5-12 Start Needle

Show the position of the start needle, click on the interface of the machine to jump to the working parameter setting interface in the state of the machine stop running, and modify the needle point on the needle plate. After the modification, it can be directly returned to the running interface.

## 5-13 Gauze Change

YF Rp1 Org YF(L) Aux YF Org YF(R) New YF Aux YF 0 0 0 0 0 0 0 0 8 0 0 0 0 0 0 0 Apply(F2) Back SHANGHAI MAIHUNG ELECTRUNIC TECHNULUGY CU.LTU

Click this button to pop up the following dialog box like figure 5-9

Figure 5-9

The original gauze is the blue number, showing the current yarn mouth. If you want to replace the yarn, the gauze will be replaced after clicking "Apply(F2)", the replacement range of all lines, the replacement of the original yarn will be gray, the new yarn will become yellow in the new yarn mouth dialog box. This function is convenient for querying the gauze number used before replacement. When using wide yarn mouth, fill in the number of gauze that you want to use in the dialog box.

## 5-14 STI. Setup

Press the key entry stitch setup interface, as in figure 5-10:



Figure 5-10

The larger the stitch value, the larger the aperture; the smaller the stitch value, the smaller the aperture. At the "All" position, the values of all values are set at all ports, and the values of other ports are invalid. When the total number is zero, the machine performs each corresponding degree value respectively. The number of segments is divided into 32 segments, and the "page" view can be clicked on the range of "0-800". The number of segments red represents the number of segments used in the current pattern, and the value of yellow represents the number of segments used in the current pattern.

5-14-1 horizontal copy: If the edit box focus stays on the front plate, the horizontal copy will copy the four dimensions of the front plate into the value in the edit box; if the edit box focus is stopped in the back plate, the horizontal copy will copy the four order of the back plate into the value in the edit box; if the front and back plate eight degrees are needed to make the same value, it only needs to be The corresponding values are written on the top of the mouth, and the rest of the window values are not effective without copying. If you want to adjust the values separately, the whole mouth must be adjusted to 0.

5-14-2 Copy All: When the function of dynamic dimension sequel is turned on, the dimension value of original film can be copied to other sequels, playing a convenient and quick function.

5-14-3 Peer increase: Integral numerical synchronization increase.

5-14-4 Peer reduction: The overall numerical synchronization decreases.

## 5-15 Speed Roll-High

Click the key to **Speed、Roll-High** interface as 5-11:



Figure 5-11

- 5-15-1 Speed : The speed of the head can be filled, and the number between the " $0\sim100$ " can be filled. The larger the value, the faster the weaving speed.
- 5-15-2 Rab: That is the speed of the rab motor, the greater the value, the greater the pulling force, and can fill in the number between "0~100".
- 5-15-3 Rab2: When the work mode of the coil motor is selected 3 (high rollers on both sides), the number of the high rollers 2 is to adjust the outer roller rotation of the braiding area.
- 5-15-4 AuxCam: The AuxCam parameter can relax or tighten the density of the side pin coil, and the number of segments follows the number of high rollers. (Note: this value is an incremental value. For example, the eighth section needs to increase the value of 100 on both sides and fill in 100 directly in the left change value and right change value; if the 100 degree values are reduced on both sides, the left change value and the right change value fill in the -100).
- 5-15-5 Roller : That is to say, the low rollers running speed can fill in the figures between "0~100". At present, most machines do not install this device.
- 5-15-6 Speed, Rab, Roller, Comb PL: It is divided into 32 sections. You can click on the next page button to check. Click the "copy" button to copy the parameters vertically. The number of segments indicates the number of segments used in the current pattern, and the Yellow value represents the value of the number of segments used in the current pattern.
- 5-15-7 AuxCam advanced setup: Click the Advanced Set button on a yellowish background to enter the Advanced Set Interface for Bilateral Dimensions as shown in Figure 5-12. This interface is an updated version of Bilateral Dimensions. When the advanced settings of the two-sided items are enabled, the advanced functions of the two-sided items are executed; when the enabled is not enabled, the ordinary two-sided items are executed.



Figure 5-12

## 5-16 YarnStop

Display the number of use segments for yarnstop, as in Figure 5-13.



Figure 5-13

5-13-1: YarnStop Setup:By modifying the parameters to adjust the position of the tip in the left and right going of the head, the greater the value of the spout stop point, the farther away from the knitting area, and vice versa, the numerical range: 0~100. There are 8 sections for the adjustment of the parked position of the spun, which is used by the machine that is used to the floor, that is, the stop point after the end of the yarn is used. The user can switch at any time by clicking on the top page and the next key.

5-13-2: Yarn Before: The advance of the gauze inlet can fine tune the distance between the ends of the yarn, and achieve the purpose of precise parking.

Advance quantity setting of yarn (mm): The normal setting of the parking place is to fine tune the parking points on both sides as Figure 5-14:

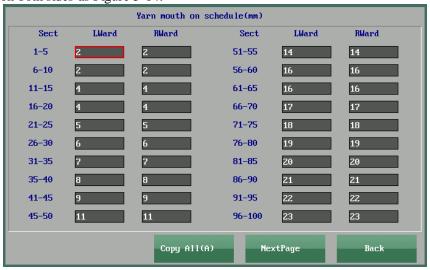


Figure 5-14

Click pagedown to Advance quantity setting of Intsia yarn (mm): When partial, V collar, continuous piece and other parts of the middle part of the yarn mouth stop point adjustment.

#### 5-15 ST. ADV.

Click button to pop out the dialog as Figure 5-15:



Figure 5-15

This function can be effectively solved when weave loosely weaved structures or if the Siping weave is not easy to strip. If this function is enabled, the front and back plate edit box of the number of corresponding segments is filled with the need to increase or reduce the value of the degree (the value is the increment value, the number of follower segments), and the following "ST. ADV." is selected.

#### **5-16 Comb PL**

Click on the Comb PL button, open the following dialog (like figure 5-16), and fill in the number between "0~100". The larger the number, the faster the speed, the number of segments used in red.



Figure 5-16

## 5-17 The other parts of the system run interface explain

- 5-17-1 Piece Time: The time needed to process one piece.
- 5-17-2 Knit Time: Display the cumulative working time of the current pattern.
- 5-17-3 Cycle Times: The running times of economy o
- 5-17-4 Arrows and words: The arrow indicates the direction of the head running, and the text represents the running state.
- 5-17-5 Interface central pattern information: The A and H pos represent the position of the current needle, and the weaving and knitting instructions indicate the working state of the triangle. Behind the action command is the color code, which is displayed as the front and rear stitch values. The floral line indicates that the system now executes the flower plate instructions for the first few rows.
- 5-17-6 The subsidence sheet under the running interface pattern shows the number of current segments; the rocking bed, such as the "Rock L2", indicates that the rock moves to the left 2 needles when the system executes the secondary instruction, and the number of needles shows the current position of the head.
- 5-18 The current time and date are displayed in the lower right corner of the operation interface, and the clock settings can be modified in system maintenance.

# Chapter 6 System Parameters

Press the main menu "system parameter F5" key to enter the system parameter interface, as shown in Figure 6-1.



Figure 6-1

Important note: system parameters are important parameters for equipment operation. Modify the password: 6688

## 6-1 Needle Type

The number of needle plate knitting needles per inch width of this machine.

## 6-2 Needle length

The width of the needle plate used for this machine is in inches.

#### 6-3 Total Pluse

Displays the number of pulses of the encoder, that is, the number of pins, for the position of the computer head and the setting of the needle. When you debug the read needle, you enter this operation as follows:

Take a 12 pin and 52 Inch model example, enter the system run click Reset to let the head return to zero; enter the system parameter setting to move the cursor to the total pulse value frame (as shown in Figure 6-2);



Figure 6-2

Click the edit box to pop out the synchronization belt pitch correction dialog box, as shown in Figure 6-3:

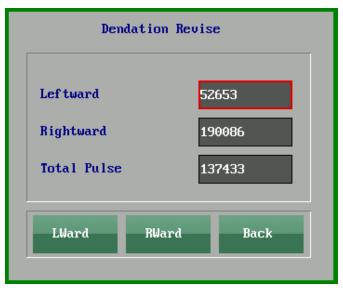


Figure 6-3

Method: Push the edge of the left aluminum cover on the left of the carriage to the left of the first selected pin on the left of the needle plate. Then click the "left" corresponding edit box, and the system will automatically count; then push the head to the right side of the needle plate to the last pin, so that the edge of the left side of the head is aligned with the right side of the rear pin, clicking "right" Corresponding to the edit box, the system automatically completes the count, click the "total number of pulses" corresponding to the edit box to complete the count or return directly can also automatically complete the count. At this time the system read the needle set successfully, push the head to see the number of the number of needle sensors can change, the head to the left when the number decreases in turn, the number in turn increases when the right moves, here the number is just a form of pulse counting, if you want to see whether the test is accurate, enter the machine test F7→ Rack Test F2 inside. The number of needles reading from the first needle to the end of the last needle is 624, which proves that the needle setting is successful.

## 6-4 S1 YF ZeroPos(Rightward)

The system reset to zero, click this option parameter box, move a normal width of the seat, so that the bottom of the bottom of the mouth of the yarn is aligned with the first needle on the left side of the front needle plate, and then the color changing top rod (color changing electromagnet) of the left system and the mouth of the yarn is bounced to push the right of the color change top to the right of the pitch. The right side of the slot is firm, at this point the lower left corner will show the value of the zero position on the right side of the left system yarn mouth, click the corresponding edit box, pop up the dialog box (Figure 6-5).

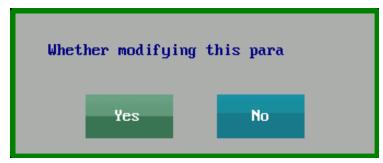


Figure 6-5

## 6-5 S1 YF ZeroPos(Leftward)

The system reset to zero, click this option parameter box, move a normal width of the seat, so that the bottom of the bottom of the mouth of the yarn is aligned with the first needle on the left side

of the front needle plate, and then the color changing top bar (color changing electromagnet) of the left system and the mouth of the yarn is bounced to push the head to the left of the color changing top and the recess of the US. The left side of the slot is firm, at this point the lower left corner will show the left zero value of the left system yarn mouth, click the corresponding edit box, pop-up dialog box (Figure 6-5).

## 6-6 S2 YF ZeroPos(Rightward)

System reset to zero, click this option parameter box, move a normal width of the seat of us, so that the bottom of the bottom of the mouth of the yarn is aligned with the first needle on the left side of the front needle plate, and then the right system and the yarn opposite the color change top rod (color changing electromagnet) bounce, push the head, so that the right of the color change top rod and the right of the OOS concave The right side of the slot is firm, at this point the lower left corner of the instructions will display the right system yarn mouth zero value, click the corresponding edit box, pop-up dialog box (Figure 6-5).

#### 6-7 S2 YF ZeroPos(Leftward)

System reset to zero, click this option parameter box, move a normal width of the seat of us, so that the bottom of the bottom of the mouth of the yarn is aligned with the first needle on the left side of the front needle plate, and then the right system and the yarn opposite the color change top rod (color changing electromagnet) bounce, push the head, so that the left of the color change top bar and the OOS concave The left side of the slot is firm, at this time the lower left corner will show the value of the left zero of the right system yarn mouth, click the corresponding edit box, pop-up dialog box (Figure 6-5).

#### 6-8 S3 YF ZeroPos

The system reset to zero, click this option parameter box, move a normal width of the seat of us, so that the bottom of the bottom of the mouth of the yarn is aligned with the first needle on the left side of the front needle plate, and then the 3 system and the color change top (color changing electromagnet) that corresponds to the mouth of the yarn, push the head, so that the right (left) and the right (left) of the color change top rod is with us. On the right (left) of the seat, the bottom left corner shows the value of the right zero position of the 3 system yarn, clicking the corresponding edit box and pop-up dialog box (Figure 6-5).

## 6-9 Motor Work Speed

The speed is 1-10, the smaller the value, the faster the speed, the smaller the torque.

## 6-10 Motor Reset Speed

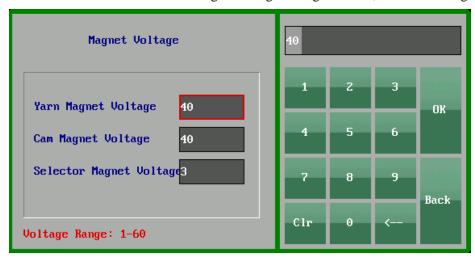
Motor pin or zero speed. The smaller the value, the faster the speed, the smaller the torque.

#### 6-11 S/N

Fill in the machine number for backup machine parameters.

#### 6-12 Electromagnet voltage setting

Click the edit box to enter the electromagnet voltage setting interface, as shown in Figure 6-6.



#### 6-12-1 Yarn Magnet Voltage

#### 6-12-2 Cam Magnet Voltage

The default value of 40, the time unit of electromagnetic iron electrified, the longer the value of the longer the time, the corresponding strength of the electromagnet should be larger, but the temperature will increase.

#### 6-12-3 Selector Magnet Voltage

The default value of 3, the time unit of electromagnetic iron electrified, the longer the value of the longer the time, the corresponding strength of the electromagnet should be larger, but the temperature will increase.

## 6-13 Selector Left-Compensation

Set the compensation value when the selector is left going. The range is -79 - +79. Minimum setting: 0.1 (needle), this parameter sets the advance and lag amount (PIN) when the needle cutter head is knitted left, and all the needle selector that is woven in the left line is taken into effect. The positive number indicates the lag of the working head of the needle selector, and the negative number indicates that the working head of the needle selector works ahead of schedule.

## 6-14 Selector Right-Compensation

Set the compensation value of the right going of the selector, in the range of -79 - +79. Minimum setting: 0.1 (needle). This parameter sets the advance and lag (needle) of the right knife head of the needle selector when knitting, and takes effect on all the right knitting selectors.

## 6-15 Impact sensitivity

The sensitivity of setting the shock sensor ranges from 0 to 100. The more the value is, the more sensitive it is.

## 6-16 Carriage Max Speed

The speed of the control system is divided into 1-32 segments. When the output control speed of the system exceeds the rated speed of the main motor, the system control needs to be limited at the highest speed. The limit is 80-100.

## 6-17 Roller Type

According to the configuration of the machine, the selection of high roller work, or the high rollers and low rollers are selected at the same time. The operation mode of the coil motor group can be switched here according to the demand.

#### 6-18 Rab Delta

Increase or decrease the opening range of rollers, range: -10000 ~ + 10000.

#### 6-19 Precise Press

Two modes of current distribution in a machine.

#### 6-20 Comb Enable

0 is a prohibition, that is the comb function is not used; 1 means that comd works, that is using the comb function (Note: the default of the Comb function on the machine is always the default of 0).

#### 6-21 Sink Enable

## 6-22 Tight Tuck Motor En.

"0-close, 1-open" o

## 6-23 Pulse of Carriage Jog

Set the number of pulses in the execution speed, the range is 1-255; the default is 100.

#### 6-24 Sti-Cor

Enter the correction interface, as shown in Figure 6-7. The parameters range is from "-800 to 800".

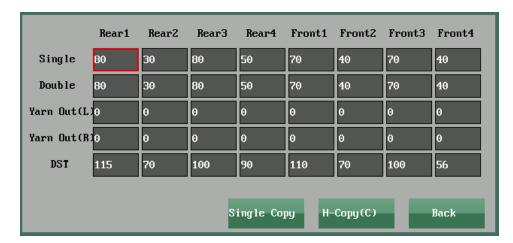


Figure 6-7

#### 6-25 Rock

Enter the rock test interface, as shown in Figure 6-8.



Figure 6-8

- 6-25-1 Transfer: The R0t position is zero position, and the R1t to R14t and L1t to L14t correspond to the right and left one to fourteen needles.
  - 6-25-2 \*: R0\* to R14\*, L1\* to L14\* is the needle position corresponding to the number of pins.
- 6-25-3 Knit: R1 to R14 and L1 to L14 correspond to the number of teeth corresponding to the number of pins.
- 6-25-4 R0: By modifying the parameter values, the mechanical zero position error is compensated to the right position.
  - 6-25-5 Gap: The reversing gap of the wire rod is compensated by this parameter
  - 6-25-6 ZERO (B): Reposition the rocking bed to the position of zero.
  - 6-25-7 Clear (C): Zero all the parameters in the edit box.
  - 6-25-8 Test Method: First, the rocking bed is zero, the needle plate can be adjusted manually

to the total needle position, and the zero position compensation of the rocking bed can be changed to adjust the total needle position of the rocking bed, the negative number is left compensation and the positive number is right compensation. Then adjust the parameters of the parameters R0t, R0\* and value of the first row of the rocking bed interface to calculate all the rocking parameters. After the adjustment, all the rocking beds need to be checked manually and finely tuned to the best position.

## Important hints:

Before running the system, you should manually check whether the position of each cradle is accurate, otherwise the needle will be damaged.

#### 6-26 TS Cal

1. When the system starts, the touch screen should be corrected first. If the error is large, you can use the keyboard to enter the interface (Figure 6-9), use the touch pen or finger to click the cross cursor, click the cross point of the cross cursor as much as possible, and the system will automatically save and correct it.

2. The touch screen can be displayed on the main screen for three seconds or more with touching on the touch screen.



Figure 6-9

## 6-27 Mac Setup

Carriage-Selector1(mm) Carriage Width(mm) 353 38 Carriage-Selector2(mm) 156 Language Carriage-Selector3(mm) Rack Type 197 Carriage-Selector4(mm) Rock Zero Dir 315 Carriage-Selector5(mm) 0 Selector Arranage Carriage-Selector6(mm) Selector Pitch 0 00000000 Carriage-Probe(mm) Selector Section -20 Carriage-Stitch1(mm) 68 Start Section 8 Carriage-Stitch2(mm) 1 131 Servo Type Carriage-Stitch3(mm) YC Type 0 225 Carriage-Stitch4(mm) Red Light Flash Time 0 288 Carriage-Stitch5(mm) Add Oil Interval(m) 60 0 Carriage-Stitch6(mm) Add Oil Time(s) 0 Sink1 Distance BSink Dir 0 75 Sink2 Distance FSink Dir 122 Note: Distance Range 0-1000

Click the button to pop out dialog box as shown in figure 6-10.

Figure 6-10

6-27-1 The distance between the left edge of the carriage and the needle selector 1/2/3/4/5/

Translate(F1)

Back

- 6: The actual measuring distance can be filled into the corresponding position, the unit is mm. The order of needle selector ranged from 1 to 2, 3, 4, 5 and 6 from left to right.
  - 6-27-2 Selector Arranage: 0-\\, 1-/.
  - 6-27-3 Rack Type: 0-FrontRack, 1-RearRack, 2-Double(DoubleServo), 3-Double(B), 4-Double(F)
  - 6-27-4 Carriage width: The actual width, the unit is mm (1 inches = 2.54cm = 25.4mm).
  - 6-27-5 Language: "0"Chinese, "2"English.
  - 6-27-6 Selector Pitch: Select the blade needed, shield without blade.
- 6-27-7 Carriage-Probe: The distance between the right side of the head and the probe, if the probe extends to the head of the machine, the parameters are negative. If the probe extends to the outside of the machine, the positive value (unit meter) is suitable for a new type of self restoring probe, and it is active to shield the useless probe alarm and improve the knitting efficiency.
- 6-27-8 Start Section: According to the number of the first needle on the left side of the needle plate, fill in this parameter (from top to bottom for 1-8 paragraphs).
  - 6-27-9 Sinker Dir: Fill in the direction of the sinker sensor installation.
  - 6-27-10 The distance between the left side of the carriage and the range 1, 2, 3, 4, 5, 6, Fill in

#### Manual of computer control system of Mai Hong Flatknit machine

the actual measurement value separately, and match the dynamic degree of use (unit: mm).

Important Note: This machine parameter has been debugged when the machine leaves the factory, non-professionals do not modify this parameter value without authorization, otherwise it will damage the machine parts!

#### 6-28 Driver Ratio

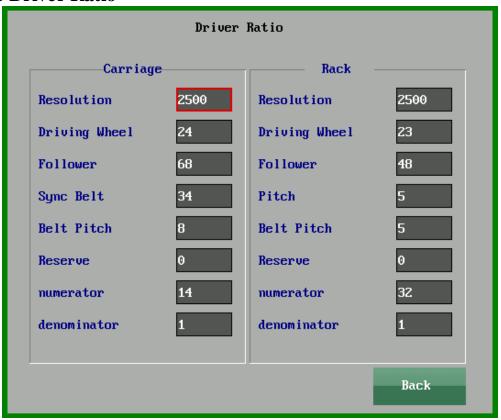


Figure 6-11

Important Note: This machine parameter has been debugged when the machine leaves the factory, non-professionals do not modify this parameter value without authorization, otherwise it will damage the machine parts!

# Chapter 7 Work parameter

Click the button "working parameter F6" to enter the working parameter setting interface, as shown in Figure 7-1.



Figure 7-1

#### 7-1 Start Pos

The starting point of the knitting pattern on the needle plate is from the position of the first needle on the left side.

## 7-2 Return Range

The larger the turning distance is, the larger the rotation distance is.

#### 7-3 Row Range

Set the fixed interval setting, for example, 1-2 is the first row and the second row.

## 7-4 Row Repeat

The number of intervals is repeated, for example, 60 is repeated 60 times for the first row and the second row.

#### 7-5 Screen Saver Time

Set screen protection startup time (no operation time). The 0 is to prohibit this function, and 1 to 60 is the starting time of screen protection, unit: minute.

## 7-6 Start-up Low Speed

Head speed setting at low speed.

## 7-7 Yarn Knot Low Speed

When the gauze is detected at low speed, the speed of the head running at low speed is detected.

## 7-8 Carriage Limit Speed

The slow speed setting of the head.

## 7-9 Knot Row for Low Speed

The speed at which the carriage is running at low speed after knot alarm.

#### 7-10 Auto Zero

The number of pieces is automatically returned to zero and set up automatically.

## 7-11 Roller Low Speed(%)

When the head is running at low speed, the pulling force is the percentage of setting the pull value at normal high speed running.

#### 7-12 Yarn Driver

Click the edit to display a dialog as shown figure 7-3:



Figure 7-3

## 7-13 Comb Set-up Mode

The comb elastic wire is the three ways of 1X1, 2X2 and 3X3.

## 7-14 Comb Set-up Gauze

The gauze number used for the comb yarn is specified.

## 7-15 Only One Work

Set up 2 system and above knitting system, locking left system or right system. System locking can shorten the torque of the head to improve the weaving efficiency. The lock system is woven and is not controlled when working on 2 or more systems.

## 7-16 When Knit + Tran, Sink choices

"0 - Knit ; 1 - Tran"

## 7-17 Mode of Rude When it's segment

 $\boldsymbol{0}$  - General ,  $\boldsymbol{1}$  - Left of first piece and right of last piece take effect

#### 7-18 Handle Mode

0 - General Mode , 1 - Safe Mode , 2 - CIXING Mode

#### 7-19 Stitch Addition When Slow(%)

Set the rating value to restart the percentage of the increase in the value of the row after stopping.

## 7-20 Probe Alarm Ignore

A distance after a shield touches the tip of the yarn.

## 7-21 Segment Setup

Enter the segment setup. As shown in Figure 7-4:



Figure 7-4

The original sheet 0 is the original sheet; the sequel 1 to sequel 8 corresponds to the new nozzle to replace the original nozzle, and the enablement of the rear is set successfully. The yellow nozzle number on the back of the nozzle indicates the nozzle used by the original sheet, and the nozzle replaced by a sequel can be filled under the corresponding position.

## 7-22 Sinker Setup

Sinker reset and pressure needle setting, as shown figure 7-5:



Figure 7-5

According to the corresponding action to set the appropriate parameters, the former Sink zero, the latter Sink zero through parameter correction Sink to the appropriate zero. Copy is the copy of the longitudinal parameters. The reset can be used to test the simx zero compensation value.

#### 7-23 Yarn Driver

After setting the function of the yarn feeder to control the speed of the yarn feeder, the number of yarn feeding section and the number of random head speed, that is to say, the number of current use segments of the head speed is the same as the number of segments used by the yarn feeder, which can be controlled separately.

Start time of yarn feeder: When starting the handle, wait for the time to start the yarn feeder (1000ms=1s).

#### 7-24 Alarm Mask

According to different machine models and configurations, shielding signals are used. This parameter is set up when the machine is out of factory. Do not modify this parameter without authorization.

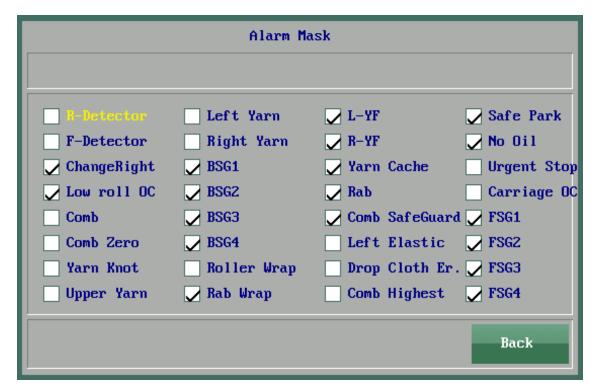


Figure 7-6

## 7-25 ADV. Setup

Click on the "Advance Settings" button, skip to the yarn nozzle, nose pre-setting interface, and enter the password 6688, as shown in Figure  $7-7\,^{\circ}$ 



Figure 7-7

The first page is Gauze Rightward down;

The second page is Gauze Rightward up;

The third page is Gauze Leftward down;

The forth page is Gauze leftward up;

The fifth page is Header Rightward;

The sixth page is Header Leftward;

The seventh page is Bilateral Stitch Adv(IN);

The eighth page is Bilateral Stitch Adv(OUT);

The ninth page is Dynamic Stitch Adv Rightward;

The tenth page is Dynamic Stitch Adv leftward;

The eleventh page is Intarsia Gauze Adv Rightward;

The twelfth page is Intarsia Gauze Adv Lfetward;

The thirteenth page is Left out yarn advance;

The fourteenth page is Right out yarn advance;

# Chapter 8 Software

#### 8-1 Information

(Figure 8-1) access to the interface can query the current system software version, the Carriage version, the Rack version number, the Kernel version, the Comb version, the shared library version, and the test library versio. Generally used for system maintenance and upgrade and convenient query.



Figure 8-1

## 8-2 Update

As shown in Figure 8-2, password 5599, non professionals should not act so as not to cause unforeseen consequences.

Update Method: 1. choose to the upgrade file, click the corresponding button to upgrade.
2. select the file to upgrade by clicking determine to grade.



Figure 8-2

## 8-3 Decrypt

As shown in Figure 8-3, system shutdown and decryption operations (Password: 5599).

Becrypt

Fassword(F1)

S/N to USB

Key fron USB(F3)

Init Locker(F4)

Back(ESC)

S/N: EABB 66E4 580F 4280 0C56 2E32 A9EF 796A

Renain Tine 27 Day 6 Hour 1 Min

Figure 8-3

- 8-4-1 enter the password: after the system is down, enter the password input dialog box and click confirm to unlock.
- 8-4-2 The system number is written to the U disk: after the system is down, it will copy the number to the U disk.
- 8-4-3 declassified from the U disk: insert the U disk into the USB interface, and the declassified file in the U disk will automatically unlock the machine.
- 8-4-4 system number: the system is numbered with 32 letters and numbers, which can be directly sent to a mobile phone to edit short messages or to be sent directly by a two-dimensional code acquisition number in the lower right corner of the smartphone by a smart phone.

There are two kinds of decryption methods:Method A is that send the system number in a mobile phone short message mode (which needs to be edited and fixed format) to the supplier. The automatic decryption system will automatically reply the decryption number and enter the decryption number to unlock; B, if multiple machines need to be unlocked, can be copied out of all system numbers, sent to the supplier by file format, supply to suppliers, supply The chamber of Commerce replies the relevant decryption documents by mail, and copies the decrypted files into the U disk, and then inserts the unlocked machines. The system will automatically find the relevant decryption documents automatically unlocked.

#### 8-4 Para Restore

Figure 8-4