

# 浙江盛驰机械科技有限公司

## Zhejiang Shengchi Machinery Technology Co., Ltd

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2.1 Work interface description:

### 一：目录：

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### 2.1 工作界面说明：





### 1. Meters

Display meter count: displays the current meter count of the finished product. Click on this display box to reset the meter count to zero.

Target meter count: Set the required meter count for the current product.

Advance meter count: Set the speed of the host to slow down in advance when reaching the target meter count, slow down to the waiting speed for operation, until the host slows down to 0 after reaching the target meter count, and then stop the machine (in the winding tension mode, the stop button needs to be pressed again to stop the machine).

### 2. Unwinding

Display diameter: Display the current unwinding diameter. Click this display box to reset the unwinding diameter. After resetting, it will be displayed (under detection). After re feeding, the host will automatically detect the unwinding diameter after running.

Tension output: displays the percentage of current tension output.

Initial tension: Set the initial tension of the material. The tension setting is manually set based on the material width and diameter. Click on the display box to turn off the tension output.

Minimum tension: Set the minimum tension of the material and the tension when unwinding the minimum paper tube diameter.

### 3. A winding

Display diameter: Display the current winding diameter. Click this display box to reset the winding diameter. The initial paper tube diameter is the diameter of the winding paper tube in the winding parameters.

Tension output: displays the current value of tension output.

Initial tension: Set the initial tension of the material, and click the display box to turn off the tension output.

### 3. B winding

Display diameter: Display the current winding diameter. Click this display box to reset the winding diameter. The initial paper tube diameter is the diameter of the winding paper tube

in the winding parameters.

Tension output: displays the current value of tension output

Initial tension: Set the initial tension of the material, and click the display box to turn off the tension output.

#### 4. Touch buttons

Packaging closed: In the shutdown state, click to turn on the low-speed winding film function for winding.

Big arm closing: The winding shaft's big arm is lifted and opened, disabled during operation, and can only be operated during shutdown.

Meter shutdown: The target meter shutdown function is enabled.

Surplus material shutdown: Stop according to the shutdown diameter set in the unwinding parameters.

Main pressure roller: Control the separation and closing of traction pressure rollers.

Unloading reversal button: When the host is in a stopped state, the unloading reversal will be displayed. When winding and unloading, click to reverse the winding shaft.

#### 1. 计米

**显示米数：**显示当前已制成品的米数，单击该显示框可使计米数清零。

**目标米数：**设定当前产品所需的米数。

**提前米数：**设定到达目标米数主机提前减速，减速至等待速度运行，直到到达目标米数后主机减速至 0 然后停机状态，（收卷绷紧模式下需要再按下停止按钮才会停止状态）。

#### 2. 放卷

**显示直径：**显示当前放卷的直径，单击该显示框可使放卷直径复位，复位后显示（检测中），重新上料后主机运行后自动检测出放卷直径。

**张力输出：**显示当前张力输出的百分比。

**初始张力：**设定材料的初始张力，张力设定根据材料宽度和直径自己手动设定，单击该显示框可关闭张力输出，。

**最小张力：**设定材料的最小张力，放卷最小纸管直径时的张力。

#### 3.A 收卷

**显示直径：**显示当前收卷的直径，单击该显示框可使收卷直径复位，初始纸管直径是在收卷参数里的收卷纸管直径。

**张力输出：**显示张力输出的当前值。

**初始张力：**设定材料的初始张力，单击该显示框可关闭张力输出。

#### 3.B 收卷

**显示直径：**显示当前收卷的直径，单击该显示框可使收卷直径复位，初始纸管直径是在收卷参数里的收卷纸管直径。

**张力输出：**显示张力输出的当前值

**初始张力：**设定材料的初始张力，单击该显示框可关闭张力输出。

#### 4. 触控按钮

**打包关闭中：**停机状态，点击开启收卷低速缠绕膜功能。

**大臂合上中：**收卷轴大臂托起和打开，运行状态下禁用，停机状态下才可操作。

**米数停机：**目标米数停机功能开启。

**余料停机：**按放卷参数里设定的停机直径停机。

**主压辊：**控制牵引压辊分开和合上。

**卸料反转按钮：**当主机在停止的状态下，卸料反转会显示出来，收卷卸卷时点击使收卷轴反

转。

5.仪表按钮



设定自动加速到的速度



点击该图标可自动加速到设定的速度。



此图标显示触摸屏和 PLC 的通讯状态，断开状态表示通讯失败。

5. Instrument buttons

Set the speed for automatic acceleration

Click on this icon to automatically accelerate to the set speed.

This icon displays the communication status between the touch screen and PLC, and the disconnected status indicates communication failure.

2.2 主机参数说明：

2.2 Host parameter description:



停机中

线速度0 m/min

2023-08-02

16:42:05

中文

English

主机参数

点动速度10 M/min

等待速度50 M/min

加速时间50 s

减速时间25 s

累计计米0 m

主画面

放卷参数

主机参数

PLC I/O监视

收卷参数

Jog speed: Press the external jog button to set the jog speed of the host in meters per minute. External jog button, which is the main engine jog function in the shutdown state and the constant speed function in the running state.

Waiting speed: The waiting speed for the host to slow down and run after the number of meters in advance and the alarm diameter arrive, in meters per minute.

Acceleration time: The time required for the host to accelerate from 0 speed to the maximum speed, in seconds.

Deceleration time: The time required for the host to decelerate from its maximum speed to 0 speed, in seconds.

Accumulated Meter Count: displays the total output of the machine in meters, and clicking Accumulated Meter Count can reset it to zero.

**点动速度**：按外部点动按钮主机的点动速度，米/分钟。外部点动按钮，停机状态下是主机点动功能，运行状态下是定速功能。

**等待速度**：提前米数和报警直径到达后主机减速后运行的等待停机速度，米/分钟。

**加速时间**：主机 0 速到最高速度的加速所需时间，单位秒。

**减速时间**：主机最高速度到 0 速的减速所需时间，单位秒。


**累计计米**：显示机器总的产量米数，点击累计计米可清零。

## 2.3 收卷参数说明：

### 2.3 Description of winding parameters:

Stopping

Speed0m/min



2023-08-02

16:42:24

中文

English

Winder Parameter

MAN.Reset

Axis-A  
clockwise rotation

Axis-B  
clockwise rotation

Paper Core  
Winder A

95mm

Paper Core  
Winder B

95mm

0 speed  
T. ratio

60%

Material  
thickness

0.025mm

Unloading  
pressure

8%

Stop and  
loosen

Slip Mode

Speed  
Mode

HOME

Unwinder  
parameters

Main  
Parameter

PLC I/O  
monitor

Taper tension  
curve

B Paper Tube Diameter: Set the diameter of the paper tube used for the B winding shaft.

Material thickness: The current production material thickness is set based on the actual material thickness. Setting the material thickness to be smaller than the actual material thickness will cause the winding shaft to tighten, and vice versa.

Unloading air pressure: Click on the unloading reverse on the main operation interface to give the air pressure when the winding shaft is reversed.

Shutdown material loosening: The display shows the shutdown material loosening. After pressing the stop button, the material is not in a tight state when the host is at 0 speed.

Clicking this button will display the shutdown tension. At this time, pressing the first stop

button will cause the material between the winding shaft and the traction shaft to remain tight when the host slows down to 0 speed. Pressing the second stop button will cause the winding shaft to completely stop and the material will not be tight.

In the slip axis mode, switch to the working mode of the winding axis. Currently, it is the slip axis mode. Click to switch to the inflatable axis mode. The inflatable axis mode is not standard and does not support the inflatable axis mode. Please do not click.

Speed mode: The slip shaft mode supports the winding shaft with torque function, which is not standard. Please contact the equipment manufacturer if this function is supported.

Manual zero reset: Click to enable the automatic zero reset function. After the winding shaft support arm is lowered and lifted, the meter count and winding diameter are automatically reset.

A-axis forward rotation: Click to switch the running direction of the winding A-axis.

B-axis forward rotation: Click to switch the running direction of the winding B-axis.

**A 纸管直径：**设定 A 收卷轴使用的纸管直径。

**B 纸管直径：**设定 B 收卷轴使用的纸管直径。

**0 速时张力折扣：**主机启动在 0 速状态下，按收卷设定的初始张力折扣输出张力。

**材料厚度：**当前生产的材料厚度，按实际材料厚度设定。设定材料厚度比实际材料厚度小收卷轴会收的紧，反之相反。

**卸料气压：**主操作界面点击卸料反转，给定收卷轴反转时的气压。

**停机松料：**显示停机松料，按停止按钮后主机 0 速时材料不在绷紧状态。点击该按钮会显示停机绷紧，此时按第一次停止按钮，主机减速至 0 速时收卷轴和牵引轴之间材料会一直绷紧，按第二次停止按钮，收卷轴完全停止材料也不会绷紧。

**滑差轴模式中：**切换收卷轴工作模式，当前是滑差轴模式，点击可以切换成气胀轴模式，气胀轴模式非标配，不支持气胀轴模式，请勿点击。

**速度模式：**滑差轴模式支持收卷轴带转矩功能，非标配，是否支持该功能联系设备商。

**手动清零复位：**点击开启自动清零复位功能，收卷轴托臂落下和抬起后，自动清零米数和收卷直径。

**A 轴正转：**点击切换收卷 A 轴的运行方向。

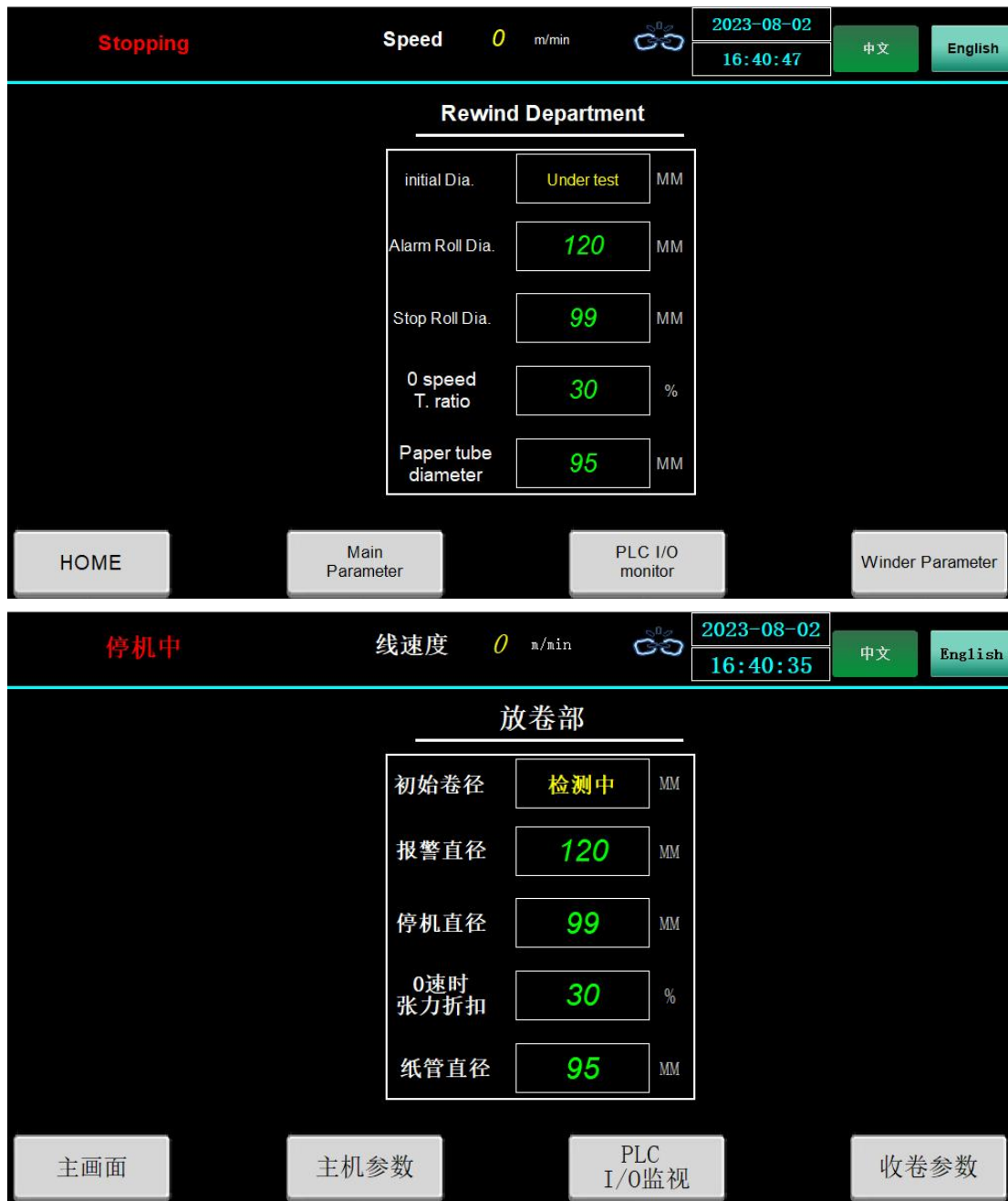
**B 轴正转：**点击切换收卷 B 轴的运行方向。

## 2.4 放卷参数说明：

### 2.4 Explanation of unwinding parameters:

— — — —





**Initial coil diameter:** Display the automatically detected diameter of the unwinding coil, which will only be detected after the main machine is running with materials.

**Alarm diameter:** Set the diameter of the unwinding shaft alarm. When the remaining material is stopped and turned on, the main machine starts to slow down to the waiting speed when the unwinding reaches the set diameter.

**Stopping diameter:** Set the diameter at which the winding shaft host stops.

**Tension discount at 0 speed:** When the host is started at 0 speed, the winding shaft operates at the discount of the set initial tension.

**Paper tube diameter:** Set the actual diameter of the unwinding material paper tube.

## 2.5 Explanation of taper tension parameters:

**A taper process number:** The winding shaft has 20 process curves for storage and



selection, and different materials can be designed with different process number curves;

**B taper process number:** The winding shaft also has 20 process curves for storage and selection, and different materials can be designed with different process number curves;

**Edit curve:**

1. The output force (tension) of the winding motor is determined based on the size of the winding diameter and the diameter tension curve. Generally, the diameter tension curve is suitable when the process is good. If the outer layer of the winding coil is loose than the inner layer, move the process number 1 curve in the diameter tension curve screen upwards;

Press the up arrow, the blue taper line will rise and become larger, and the outer layer of the rolled coil will become tighter. Press the down arrow, the curve will decrease, the taper will also decrease, and the outer layer tension will loosen. Generally, each change is around 5%, and a 1% change will not have any significant changes; You can also edit the curve and select process number 1 to modify the slope of the blue curve. After modification, it is automatically saved.

**初始卷径:** 显示自动检测到放卷的直径, 需要主机带材料运转后才会检测出直径。

**报警直径:** 设定放卷轴报警的直径, 余料停机开启状态下, 放卷到达该设定的直径后主机开始减速至等待速度运行。

**停机直径:** 设定放卷轴主机停机的直径。

**0 速时张力折扣:** 主机启动在 0 速状态下, 放卷轴按设定初始张力的折扣运行。

**纸管直径:** 设定放卷材料纸管的实际直径。

## 2.5 锥度张力参数说明:

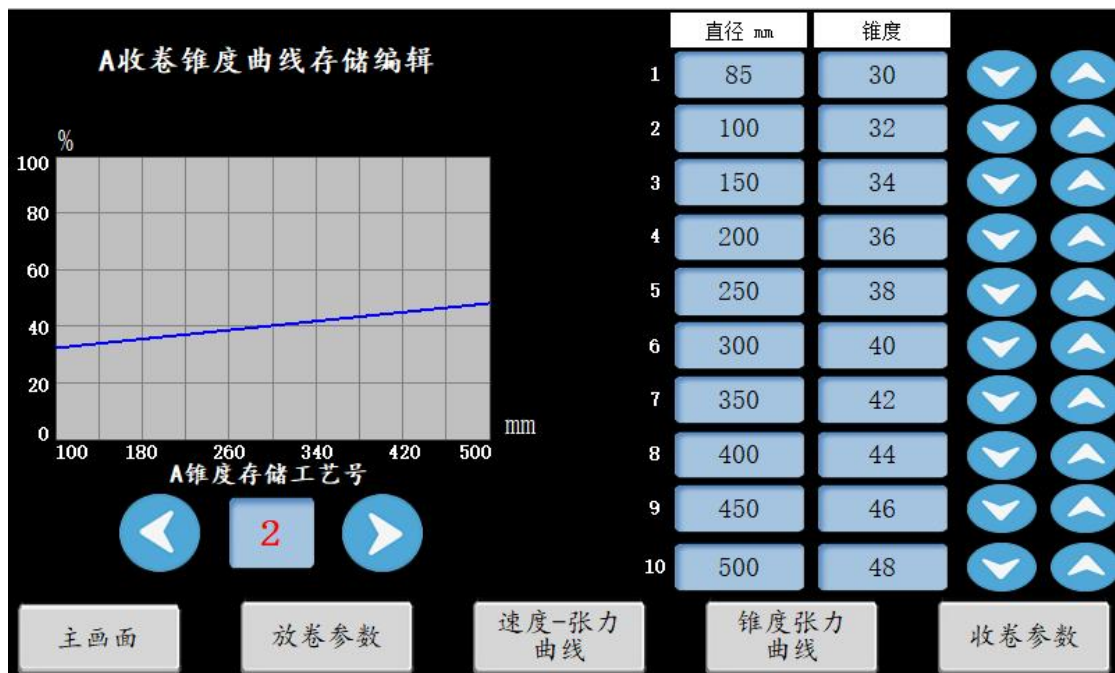
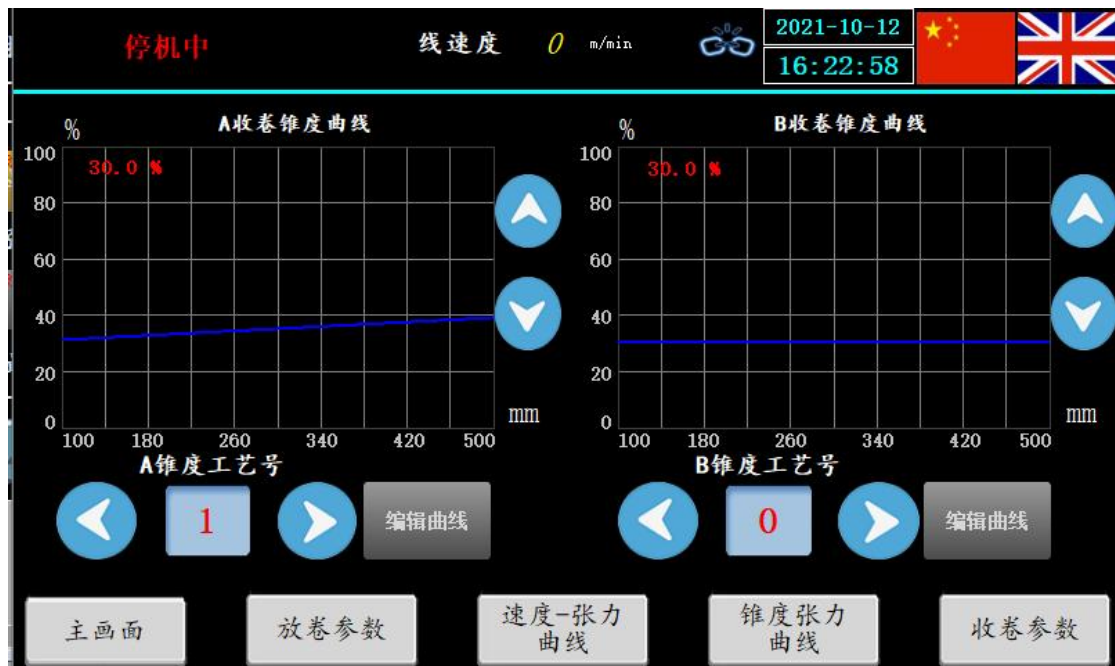
**A 锥度工艺号:** 收卷轴有 20 条工艺曲线存储和选用, 不同的材料可以设计不同的工艺号曲线;

**B 锥度工艺号:** 收卷轴也有 20 条工艺曲线存储和选用, 不同的材料可以设计不同的工艺号曲线;

**编辑曲线:**

- 1、收卷的电机输出力气(张力)是根据收卷直径大小和直径-张力曲线来决定的, 直径-张力曲线一般选择工艺好 1 为合适, 如果做下来的收卷卷盘外层比内层松, 就把直径-张力曲线画面里的工艺号 1 曲线向上移;

按向上箭头, 蓝色锥度线就会上升变大, 收卷出来的卷盘外层就会变紧点, 按向下箭头, 曲线下降, 锥度也变小, 外层张力就会松点, 一般每次改变在 5%左右, 1%的改变是不会有啥明显改变的; 也可以按曲线编辑后, 选到工艺号 1, 对蓝色曲线的斜度修改, 修改后都是自动保存的。



## 2.7 I/O 监视说明:

2.7 I/O monitoring instructions:



Monitor the input and output actions of the PLC, and the corresponding working lights will light up.

The traction motor speed display shows the actual operating speed of the current traction motor

Display the number of pulses on the meter wheel

## 2.8 Event Inquiry:

监视 PLC 输入和输出动作，对应的工作灯会亮。

牵引电机转度		显示当前牵引电机的实际运行转速
计米脉冲数		显示计米轮的脉冲数

## 2.8 事情查询：



This screen displays the operating status of the device

2.9 System parameter description:

此画面显示设备的运行状态

## 2.9 系统参数说明:



System administrator password: 1234

系统管理员密码：1234

Stopping

Speed0m/min

2023-08-0216:44:49

中文English

Transmission

Meter Diameter120.00mm

Meter Pulse1536.00

MAX Speed402

Limit Speed450

Stop Time

stop time(20.0)15s

Emerg. time(8.0)5s

winder Department

MIN.Dia.(85)85mm

stop Dia.(0)0mm

Winder Pulse2048

Speed coefficient1.00

Motor MAX Speed(1600)1600r/Min

Velocity coefficient1.0000

HOME

Unwinder parameters

Main Parameter

PLC I/O monitor

Winder Parameter

停机中

线速度0m/min

2023-08-0216:44:38

中文English

传动

计米轮直径(120.0)120.00mm

计米轮脉冲(1536)1536.00

最高线速度(402)402

限制线速度(400)450

停车时间

停车时间(20.0)15s

紧停时间(8.0)5s

收卷部

最小直径(85)85mm

停机直径(0)0mm

收卷脉冲(2048)2048

转速系数(1.00)1.00

牵引最高转速(1600)1600r/Min

线速度系数1.0000

主画面

放卷参数

主机参数

PLC I/O监视

收卷参数

Code Default Value Range Description

The diameter of the meter wheel is set from 120 0 to 1000 based on the actual diameter of the meter wheel

The meter wheel pulse 1536 0-99999 is set based on the number of pulses multiplied by the speed ratio of the traction motor encoder,

Code Default Value Range Description

Maximum line speed 402 0-1000 The maximum line speed that a host can operate

Limit the maximum line speed of the host by 400 0-1000

The maximum frequency for traction is 16000-9999, which is set according to the maximum frequency of the traction frequency converter

Parking time

Code Default Value Range Description

Parking time: 25 0-100. Press the time required for the engine to reach the maximum speed of 0 after stopping

Emergency stop time 100-100 according to the time of emergency stop after emergency stop

Winding department

Code Default Value Range Description

The minimum diameter of the paper tube for the winding shaft is 85 0-500

Set the maximum diameter of the winding material for shutdown diameter 0 0-1000

Winding pulse 16000-9999 according to actual setting

Adjusting the speed difference between the winding shaft and the main engine with a speed coefficient of 1

代码	默认值	取值范围	说明
计米轮直径	120	0-1000	根据计米轮的实际直径设定
计米轮脉冲	1536	0-99999	根据牵引电机编码器的脉冲数乘以速比设定,

代码	默认值	取值范围	说明
最高线速度	402	0-1000	主机可以运行的最高线速度
限制线速度	400	0-1000	限制主机的最高线速度
牵引最高频率	1600	0-9999	根据按牵引变频器的最高频率设定

### 停车时间

代码	默认值	取值范围	说明
停车时间	25	0-100	按停止后主机最高速度到 0 速所需的时间
急停时间	10	0-100	按急停后紧急停机的时间

### 收卷部

代码	默认值	取值范围	说明
最小直径	85	0-500	收卷轴的最小纸管直径
停机直径	0	0-1000	设定收卷材料的最大直径
收卷脉冲	1600	0-9999	按实际设定
转速系数	1		调整收卷轴和主机之间的速度差

