PVC 辅料全自动混配系统

PVC material automatic batching

system

使用说明书

Operating manual

V2.0

1. 系统上电前请严格按照《PVC 辅料混配系统控制柜电气系统接线图》接好系统电缆。

Connect the system cables before the system power on. Please strictly follow the electrical system drawings of the system control cabinet.

注:为了最大限度地防止干扰,控制柜主电源和电机电缆应与控制电缆和称重 传感器电缆分开敷设。

Note: In order to minimize interference, the control cabinet main power and motor cables shall be laid separately from the control cable and the weighing sensor cable.

接通系统电源前,请仔细检查机械设备的情况,并检查控制柜内电缆是否连接 牢固。

Before switching on the system, please check the mechanical equipment carefully and check whether the cable in the control cabinet is connect firmly.

以上问题确认无误后,请将控制柜前端的电源开关合闸,并将柜体内部的空气 断路器从左到右依次合闸,最后按下"系统上电"按钮接通系统电源。

After confirmed above problem, please close the power switch in front of the control cabinet, and close the air circuit breakers inside cabinet from left to right in turn, finally press the "system power on" button to switch the system on.

此时,系统操作面板上的西门子触摸屏显示开机起始画面,控制柜内部西门子 PLC的运行灯(RUN)常亮,表示系统已正常开启。

At this point, the Siemens touch screen on operation panel displays the boot screen, and the Siemens PLC running light (RUN) in the control cabinet is always bright, indicating that the system has been opened normally.

2. 控制柜面板操作。

Control cabinet panel operation.

控制柜面板上从左到右分别设有人机界面(西门子触摸屏),电源电压指示表, 以及操作按钮。操作按钮的定义如下:

On the control cabinet panel are the man-machine interface (Siemens touch screen), the power supply and voltage indicator and the operation buttons from left to right. The

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operation buttons are defined as follows:

"系统上电"按钮,可以给系统上电,触摸屏会显示开机画面;

"System power on" button: switch the system on, display the boot screen.

"紧急停止"按钮, 会终止正在执行的动作, 并切断控制电源;

"E-stop" button: stop the action being performed and cut off the control power.

"状态提示"蜂鸣器,会根据用户的不同操作,发出不同的提示音;

"Status reminder buzzer": make different warning tone according to the user's operation.

"工作/暂停"按钮,和脚踏开关的功能一样,能切换系统的工作状态,根据按压时 间长短的不同,给配料系统发出不同的指令。

"Work/pause" button: same as the foot switch function, can switch the system working status, and issue different instructions to the batching system according to the different pressing time.

注: 面板操作详细说明,请参考触摸屏"系统操作简介"画面的内容。

Note: for detailed panel operation instructions, please refer to the "Operating Profile Screen".

3. 检查各料斗电机、搅拌电机的转动方向。

Check the rotation direction of each hopper motor and stirring (mixing) motor

①通过面板上的"手动调试画面"可使各料斗电机依次运转,观察电机的转动方向是 否正确。(需要先设置手动调试功能为有效)

(1)Through the "Manual Debugging Screen" on the panel, each hopper motor can be operated successively. Observe whether the motor rotation direction is correct. (you need to set the manual debugging function first)

如果转动方向错误,请将相应料斗电机的*M1、*M2、*M3 之中的任意两根电缆对调,并重新接好。

If the rotation direction is wrong, please exchange and reconnect any two cables in *M1, *M2 and *M3 of the corresponding hopper motor.

②请分别打开"系统监控画面"右侧的"#号搅拌"至"#号搅拌"电机,检查电机的转动

方向。

② Please turn on the "# stir" to "# stir" motor on the right of "Process Monitoring Screen" respectively, and check the motor rotation direction.

如果转动方向错误,请将相应搅拌电机的*M1、*M2、*M3 中的任意两根电缆 对调,并重新接好。

If the rotation direction is wrong, please exchange and reconnect any two cables in *M1, *M2 and *M3 of the corresponding stirring (mixing) motor.

4. 系统触摸屏界面监视与操作。

System touch screen interface monitor and operation

1) 系统开机起始画面,系统上电时首先显示的画面。

System boot screen: the first screen display when the system power on.



- 轻轻触控触摸屏的任何部分,即可进入"系统监控画面"。
- Touch any part of the screen lightly to enter the "Process Monitoring Screen".
- 2) 系统监控画面,当用户初次进入系统,或者从其他画面按下"系统生产监控画面"跳转按钮时,显示的画面。

Process Monitoring Screen: The screen displayed when user enters the system for the first time, or when user presses the "Process Monitoring Screen" jump button from the other screen of the system.

		Process N	<u>1onitorii</u>	ng Screen	2000-00-00	0 00:00:00		
	Current weig	nt: +00.00	0 Kg _{Fr}	equency: 00.	00 Hz	1#		
Status	Target; fime:consump	+00.00 tion 000.0	0 Kg S	Current: 00.	00 A	9#		
Running Status: System Normal Stop status, press button to work 3# stir								
Cu	rrent Recipe:	000 Set	Recipe:	000 Change	e Recipe	4# stir		
Working Hopper	01# 02	# 03# 04	# 05# 0	6# 07# 08	# 09#	Restart		
This Clas	This Class: 0000 Reset Correction Data Reset Cumulative: 00000 Reset Correction							
Manual Debugging	Parameter Settings	Recipe Settings	Deviation Query	Material Statistic	Operating Profile	Alarm List		

- 在"系统监控画面",用户可以实时监视系统的运行参数和运行状态,并执行相关的操作,最大限度地方便用户对系统的使用。
- In the "Process Monitoring Screen", users can monitor the system running parameters and running status in real time, and perform relevant operations to maximize the users' convenience to use the system.
- (1) 画面左上部是"生产状态"栏,显示了秤上物品的当前重量、本次配料的工作计时 情况。用户可根据该信息判断*配料精度和工作效率*。

The upper left of the screen is the "**work status**" column, which displays the **current weight** on the scale and the **time consumption** of this batching. Users can judge the batching accuracy and efficiency according to this information.

(2) 画面右上部是"变频监控"栏,显示了当前料斗电机的输出频率、电机电流。用户可依据这些信息分别判断料斗电机的当前转速和负载情况,及时排除电机超负荷运转可能带来的隐患。

The upper right of the screen is the "**frequency conversion monitoring**" column, which displays the **output frequency** and **motor current** of the current hopper motor. According to this information, users can judge the current speed and load of the hopper motor, and timely eliminate the hidden danger caused by the overload operation of the motor.

(3) "系统运行状态"栏,显示了系统的当前健康状况和当前工作状况,用户可根据显

示信息了解系统的当前运行状态,执行相关操作。

"Running status" column displays the system current health status and current working status. Users can perform relevant operations according to the display information.

(4) 画面中部是当前配方编号显示及配方设置。

In the middle of the screen is the current recipe number and set recipe.

"当前配方"----显示了当前所选的配方编号。

"Current recipe"---- displays the recipe number currently selected

"设置配方"----用于设置(选择)所需的配方。

"Set recipe"---- set (or select) the required recipe

将需要的配方编号输入后,按住后面的**"更换配方"**按钮一秒钟,所选配方编号就 会显示在前面的"当前配方"里面,配方选择完成。

Input the required recipe number, press the **"change recipe"** button for one second, then the input recipe number will be displayed in the previous "current recipe". The recipe selection is complete.

(5) 画面右侧是"一号搅拌"至"四号搅拌"四个搅拌电机的强制开启开关。

On the right side of the screen is the forced open switch of the four stirring (mixing) motors from "1# stir" to "4# stir ".

当一号料斗至四号料斗里面存放的配料需要经常搅拌(以防结块)时,可使用 这四个开关来强制开启搅拌功能。

When the batching material stored in hopper 1 to hopper 4 need to be constantly stirred (to prevent agglomeration), these four switches can be used to force the stirring (mixing) function on.

当不需要经常搅拌时,可关闭这四个开关。这样搅拌电机的运行由系统参数的 设置决定。

Turn off these four switches when you don't need to stir frequently. Thus, the stirring (mixing) motor operation is determined by the system parameters setting.

当相应料斗的搅拌功能设置为打开时,搅拌电机会伴随相应的料斗电机的运行而启动。

When the stirring (mixing) function of the corresponding hopper set open, the stirring motor starts with the operation of the corresponding hopper motor.

注:由于设备的出厂配置不同,具体有几个搅拌料斗,要根据设备订货时的实际情况而定。

Note: Due to the system different ex-factory configuration, the stirring (mixing) hopper quantity shall be determined according to the actual order.

(6) "料斗监控"栏, 直观地显示了当前工作的料斗信息。

"Working hopper monitoring" column displays the current working hopper information directly.

当料斗工作时,相应的料斗编号会变绿,指示运行;

When the hopper is working, the corresponding hopper number will turn to green, indicating its operation.

当料斗停止时,相应的料斗编号会变红,指示停止。

When the hopper stops working, the corresponding hopper number will turn to red, indicating its stop.

(7) 画面的下面是本班产量和自动纠偏数据清零按钮。

Below the screen displays this class output and correction data reset.

"本班产量"显示了当前班次的成功配料次数,按后面的**"清零"**按钮可执行"本班 产量"的清零操作;

This class output displays the successful batching times. Press "correction data reset" button, "this class output" become zero.

"自动纠偏数据清零"按钮,用于执行自动纠偏数据的清零操作。当用户更换配方, 或者发现配料误差较大时,可按下此按钮,系统会重新计算自动纠偏数据,保 障配料的精度。

"Correction data reset" button is used for automatic correction and reset data. When user changes the recipe or finds the batching error is large, press this button, and the system will recalculate the data, automatic correction to ensure the batching accuracy.

(8) 每个画面的最下面都是画面跳转按钮,用户可根据需要跳转到相应的画面,执

行想要的操作。下面对其他画面的介绍,不再作此说明。

At the bottom of each screen is the screen jump button. Users can jump to the corresponding required screen and perform the desired operation. It will not be explained again in the following other screens' explanation.

手动调试画面,当用户从系统其他画面按下"手动调试操作画面"跳转按钮时,显示的画面。

Manual Debugging Screen: The screen displayed when the user presses the "Manual debugging switch" jump button from the other screen of the system.



在该画面,用户可以手动控制每个料斗的运行和关闭,方便用户调试和检查机器,排除设备故障。

In this screen, the user can manually control the running and closing of each hopper to facilitate user to debug and check the machine and troubleshooting.

执行手动调试前,请先把画面左上角的"**手动调试功能选择**"开关置于"**有效**"位置。这样就可以轻松地控制各个料斗了。

Before manual debugging operation, please open the upper left corner "Manual debugging switch" to make it in the "effective" position. This makes it easy to control each hopper.

注:手动调试时各料斗电机的运行频率,由"系统参数设置"画面里面的"手动进 料频率"来决定。

Note: during manual debugging the **operating frequency** of each hopper motor is determined by the "**Manual feed speed**" in the "**system parameter setting**" screen.

"手动调试功能选择"开关,会在用户**触控该开关、点击"暂停/工作"按钮**或者脚 踏开关闭合时自动关闭。

The "manual debugging function switch" will automatically close when user touches the switch, clicks the "pause/work" button or when the foot pedal switch closed

4) 系统参数设置画面,当用户从系统其他画面按下"系统参数设置画面"跳转按钮时,显示的画面。

System Parameter Settings: The screen displayed when the user presses the "System parameter settings" jump button from the other screen of the system.



在"系统参数设置画面",用户可以详细地设置设备的各种系统参数。

In this screen, user can set various system parameters in detail

系统参数分为如下两部分:

System parameters are divided into the following two parts:

(1) 进料速度相关设定

Feed speed setting

手动进料频率,用来输入手动调试时各个料斗电机的运行速度,单位 Hz。 (注: 50.00Hz 对应电机的额定转速。)

Manual feed speed: used to input the running speed of each hopper motor during

manual debugging, unit Hz (note: 50.00Hz corresponds to the rated speed of the motor.)

统一自动进料频率,用来输入自动配料时各个料斗的高速进料速度。

Unified automatic feed speed: input the feeding speed of each hopper when automatic batching at high-speed.

统一自动低速重量,用于输入各个料斗执行末端低速的配料重量。

Unified automatic slow speed weight: input the material batching weight of each hopper at low speed.

统一自动低速频率,用于输入各个料斗执行到末端重量时的速度。

Unified automatic slow speed frequency: input the speed for the end period of batching.

统一自动低速重量和统一自动低速频率两个参数的设定值,直接关系到配料的精度。在不影响配料精度的情况下,自动低速重量可尽可能地小,以便提高生产效率。 自动低速频率需要根据实际情况来进行设定,一般以料斗电机执行末端低速频率 时,减速过程非常明显为宜。

The setting values of *unified automatic slow speed weight* and *unified automatic slow speed frequency* are directly relevant to the batching precision. In order to improve the production efficiency, **the automatic slow speed weight** can be as small as possible without affecting the batching precision. **The automatic slow speed frequency** needs to be set according to the actual situation. Generally better when the hopper motor performs the terminal low speed frequency, the deceleration is very obvious.

进料速度来源选择,用于选择各料斗的进料速度,是选用统一的配料速度参数,还是选用彼此独立的单调配料速度参数。

Source of Feed Speed is used to select the feeding speed of each hopper, whether to choose the unified batching speed parameter or to choose the separate batching speed parameter.

统一的配料速度参数,就是选择旋钮上面的三个参数; Unified batching speed parameter is the three parameters above the selection knob

单调配料速度参数,需要在"进料速度单调画面"进行设定。

Separate batching speed parameter needs to be set in the "separate feed speed screen"

料斗工作间隔,用于输入上个料斗停止到下个料斗启动的间隔时间。此参数的 设置与进料料斗变频器的减速时间设置有关,不宜过小,以免造成料斗间切换时变 频器报警。一般以 0.5 秒--1.5 秒为宜。

Hopper Working Intervals is the interval between **the last hopper stop** and **the next hopper start.** This parameter setting is relevant to the feed hopper inverter deceleration time setting, which should not be too small, so as to avoid causing the inverter alarm when switching the hopper. Generally, 0.5 -1.5 seconds is appropriate.

(2) 功能开关相关参数

Function switch relevant parameters

一号搅拌功能选择,用于设定一号料斗搅拌电机是否随着一号料斗电机的 启动而运行。

The 1# hopper stirring (mixing) function selection is used to determine whether the 1# hopper stirring (mixing) motor operates with the 1# hopper motor start.

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四号搅拌功能选择,用于设定四号料斗搅拌电机是否随着四号料斗电机的 启动而运行。

The 4# hopper stirring (mixing) function selection is used to determine whether the 4# hopper stirring (mixing) motor operates with the 4# hopper motor start.

系统时钟矫正,用于矫正系统的显示时间。当需要执行时钟矫正时,请先 输入当前日期、时间,然后点击"时钟更新"按钮一秒钟,系统显示时间就更新 为设定的时间了。

System clock correction is for correcting system display time. When clock correction, enter the current date and time, then click the "clock update" button for one second, and the system display time will be updated to the set time.

屏幕校准操作,用于校准屏幕。如果发现触摸屏按键不好用,请校准屏幕。 点击后面的"屏幕校准",可开始校准屏幕的操作。按照提示,先校准中心点, 再校准四个角,最后点击屏幕任何部位,确认校准完成。

Touch screen calibration operation is used to calibrate the touch screen. If you find the touch screen button is not working very well, please calibrate the touch screen. Click "calibration" behind to begin the screen calibration operation. According to the prompt, first calibrate the center point, then calibrate the four corners, and finally click any part of the screen to confirm the completion of calibration.

注:需要具有操作权限的用户,登录后才能打开此画面和修改画面内的数据。

Note: only users **with operation permission** can open this screen and modify the data in the screen after **login in**.

按下该页面最下面中间位置的"进料速度单调画面"按钮,可进入进料速度 单调画面。

Press the "Separate Feed Speed" button at the bottom center of the page to enter the Separate Feed Speed screen.

单调进料速度参数的设定方法,与统一进料速度参数的设定方法是一样的。

The Separate Feed Speed parameters setting method is the same as Unified Feed Speed parameters setting.

		<u>Separate</u>	e Feed	Spe	ed Dat	<u>a</u> 2	000	-00-0	0 00	00:0
Норре	er No.	Feed Speed			Slow Weight			Slow Speed		
01# H	opper	000.00	Hz		00.000	Kg		0	00.00	Hz
02# H	lopper	000.00	Hz		00.000	Kg		0	00.00	Hz
03# H	lopper	000.00	Hz		00.000	Kg		0	00.00	Hz
04# H	lopper	000.00	Hz		00.000	Kg		0	00.00	Hz
05# H	lopper	000.00	Hz	· · · · · · · · · · · · · · · · · · ·	00.000	Kg		0	00.00	Hz
06# H	lopper	000.00	Hz		00.000	Kg		0	00.00	Hz
07# H	lopper	000.00	Hz		00.000	Kg		0	00.00	Hz
08# H	lopper	000.00	Hz		00.000	Kg		0	00.00	Hz
09# H	lopper	000.00	Hz		00.000	Kg	· · · · · · ·	0	00.00	Hz
Process Monitoring	Parameter Settings	Recipe Settings	Devia Que	ation ery	Page D Rese	ata t	Op P	erating rofile	Δ	larm List

当配方数据里各料斗之间的重量差别非常大时(例如 1#料斗 10Kg,而 2# 料斗只有 100g),使用统一的配料速度参数很难达到期望的精度和速度,这时 候可以考虑选用单调配料速度参数。

When the recipe data of each hopper's weight has a large difference (e.g. 1 # hopper 10 kg, 2# hopper only 100 g), use unified feed speed parameters are difficult to achieve the desired accuracy and speed, can consider to choose separate feed speed parameters in this case.

点击画面最下面中心部位"本页数据全部清零"按钮,进料速度单独调整的 全部参数将归零。

Click the "Page Data Reset" button at the bottom center of the screen, and all separate feed speed parameters will become zero.

5) 配方设定画面,当用户从系统其他画面按下"配方设定操作画面"跳转按钮时,显示的画面。

Recipe settings screen: The screen displayed when the user presses the "Recipe settings" jump button from the other screen of the system.

	Recipe Sett	ing Screen 2000	0-00-00 00:00:00
01# Recipe	06# Recipe	11# Recipe	16# Recipe
02# Recipe	07# Recipe	12# Recipe	17# Recipe
03# Recipe	08# Recipe	13# Recipe	18# Recipe
04# Recipe	09# Recipe	14# Recipe	19# Recipe
05# Recipe	10# Recipe	15# Recipe	20# Recipe
Process Manual Monitoring Debuggir	g Parameter Devia Settings Que	ation ery Display Mode	ht ^{Open} Secret

该画面所显示的内容,实际上就是配方一览表,由 20 个配方的跳转按钮组成。 The content shown in this screen is actually a list of recipes, which consists of 20 recipes jump buttons.

用户想要设定哪个配方,就点击相应编号的配方设定按钮,进入相应的配方详情设 定画面。

Click the corresponding number recipe setting button to set recipe, and enter the corresponding recipe setting details screen.

如下所示。

As follows:

			<u>Reci</u> p	e Se	tting S	creen 2	000-	00-00 00	:00:0)(
	<u>01# </u>	Recipe Se	tting De	<u>tails</u>		05# Hoppe	r ı	000.000	Kg	
	01# H	lopper:	000.000	Kg		06# Hoppe	r i	000.000	Kg	
	02# H	lopper:	000.000	Kg		07# Hoppe	r:	000.000	Kg	
	03# H	lopper:	000.000	Kg		08# Hoppe	r:	000.000	Kg	
	04# H	lopper:	000.000	Kg		09# Hopper	r:	000.000	Kg	
[A	pply	Res	et		lain List		Next		
Pro Mon	ocess itoring	Manual Debugging	Paramete Settings	r F S	Recipe ettings	Deviation Query	Mat Sta	erial tistic	Alarm List	

			<u>Reci</u>	e Setting	Screen 20)00_(00-00 00);00;01
	<u>02# </u>	Recipe S	etting De	<u>tails</u>	05# Hopper	•	000.000	Kg
	01# H	lopper:	000.000	Kg	06# Hopper	•	000.000	Kg
	02# H	lopper:	000.000	Kg	07# Hopper	•	000.000	Kg
	03# H	lopper:	000.000	Kg	08# Hopper	•	000.000	Kg
	04# H	lopper:	000.000	Kg	09# Hopper	•	000.000	Kg
	A	oply	Res	et	Previous		Next	
Pr Mor	ocess hitoring	Manual Debugging	Paramete Settings	r Recipe Settings	Deviation Query	Mat Stat	erial tistic	Alarm List

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		<u>Recip</u>	e Setting S	Screen 20	000-00-0	0:00:0	0:0
<u>20#</u>	Recipe Se	tting De	<u>tails</u>	05# Hopper	. 000	.000 K	g
01# F	lopper:	000.000	Kg	06# Hopper	. 000	.000 K	g
02# F	lopper:	000.000	Kg	07# Hopper	: 000	.000 K	g
03# H	lopper:	000.000	Kg	08# Hopper	. 000	.000 K	g
04# H	lopper:	000.000	Kg	09# Hopper	. 000	.000 K	g
A	pply	Res	et F	Previous	Mai	n List	
Process Ionitoring	Manual Debugging	Paramete Settings	r Recipe Settings	Deviation Query	Material Statistic	Ala	rm st

在每个配方详情设定画面,用户可依次设置各个料斗的配料重量。

In each recipe setting details screen, users can set each hopper batching weight in turn. 配方的下方有四个按钮,功能如下:

There are four buttons at the bottom of the recipe, the function as follows:

选用本配方按钮,点击该按钮可将当前配方设定为选中的配方。

Apply: Click the button to set the current recipe to the selected one.

配方数据清零按钮,点击该按钮可将当前配方的数据内容全部清零。

Reset: Click the button to reset all the data of the current recipe to zero.

上一个配方/下一个配方按钮,点击可在各个配方详情画面之间跳转。

Previous/Next: Click to jump between each recipe details screen.

配方总览表按钮,点击该按钮可跳转到配方一览表画面。

Main List: Click the button to jump to the recipe menu screen.

注:需要具有管理权限的用户,登录后才能打开配方设定画面和修改画面内的数据。 Note: only users with **management permission** can open this screen and modify the data in the screen after **login in**.

6) 配料误差画面,当用户从系统其他画面按下"配料误差查询画面"跳转按钮时,显示的画面。

Deviation Query Screen: The screen displayed when the user presses the "Deviation Query Screen" jump button from the other screen of the system.

			<u>Deviat</u>	ion Query S	Screen 20	00-00-00	00:00:00			
	Last	Deviatio	<u>n Data Lis</u>	±	05# Hopper	: +00.0	000 Kg			
	01# F	lopper:	+00.000	Kg	06# Hopper	: +00.0	000 Kg			
	02# F	lopper:	+00.000	Kg	07# Hopper	; +00.0	000 Kg			
	03# F	lopper:	+00.000	Kg	08# Hopper	; +00.0	000 Kg			
	04# ⊦	lopper:	+00.000	Kg	09# Hopper	: +00.0	000 Kg			
	Target: +00.000 Kg Actual: +00.000 Kg Deviation: +00.000 Kg									
P Mo	rocess nitoring	Manual Debugging	Parameter Settings	Recipe Settings	Material Statistic	Operating Profile	Alarm List			

该画面显示的是上次配料的误差情况。

This screen displays the last batching deviation data list.

用户可以查询到上次配料各个料斗的实际重量与设定重量之间的误差。

Users can query the **deviation between the actual weight and the set weight of each hopper**'s last batching.

也可以查询到目标总重量,实际总重量和误差合计等数据。

Users can also query the target total weight, the actual total weight and the total deviation.

用户可参照这些数据,判定配料的精度,并以此为依据对设备进行调整。

Users can refer to these data to determine the batching accuracy and adjust the batching system accordingly.

7) 用料统计画面,当用户从系统其他画面按下"用料统计查询画面"跳转按钮时,显示的画面。

Material Statistic Screen: The screen displayed when the user presses the "Material Statistic Screen" jump button from the other screen of the system.

·		Materi	al Statistic	Screen 20	00-00-00 00):00:
	Material Sta	itistic List		05# Hopper:	+000000	Kg
	01# Hopper:	+000000	Kg	06# Hopper:	+000000	Kg
	02# Hopper:	+000000	Kg	07# Hopper:	+000000	Kg
	03# Hopper:	+000000	Kg	08# Hopper:	+000000	Kg
	04# Hopper:	+000000	Kg	09# Hopper:	+000000	Kg
	,	Material Stat	istic Data Res	et: Reset		
Pro	ocess Manual	Paramete	r Recipe	Deviation	Operating	Alarm

该画面显示的是各个料斗的用料统计数据,供用户参考。

This screen displays the material statistic data used in each hopper for users' reference.

用户可以点击下面的"用料统计数据清零"按钮,执行清零操作。

The user can click the below "material statistics data reset" button to make data become zero.

8) 系统操作简介画面,当用户从系统其他画面按下"系统操作简介画面"跳转按钮时, 显示的画面。

Operating Profile Screen: The screen displayed when the user presses the "Operating Profile Screen" jump button from the other screen of the system.



该画面显示了系统的使用操作方法及日常注意事项,供用户参考。

This screen displays the system operation method and daily attention for users'

reference.

9) 系统报警列表画面,当用户从系统其他画面按下"系统报警列表画面"跳转按钮时,显示的画面。

System Alarm List Screen: The screen displayed when the user presses the "System Alarm List Screen" jump button from the other screen of the system.



该画面显示了系统当前产生的报警信息的列表,供用户参考,用作排除系统产 生的故障。

This screen displays a list of current alarm information generated for the user's troubleshooting reference

当系统不能正常工作时,用户可以打开本画面,查询产生的故障报警信息,并 依照这些信息处理系统产生的问题。

When the system cannot work normally, the user can open this screen, query the generated fault alarm information, and deal with the problems according to the information.

10) 误差纠正设置画面,当用户从系统其他画面按下"误差纠正设置画面"跳转按钮时,显示的画面。

Deviation Correction Screen: The screen displayed when the user presses the "Deviation

		<u>Deviatio</u>	n Correctio	n Screen <mark>2</mark>	000-00-00	00:00:0			
Devi	ation Cori	ection D	ata	05# Hopper	r: +00.0	000 Kg			
01#	Hopper:	+00.000	Kg	06# Hopper	-: +00.0)00 Kg			
02#	Hopper:	+00.000	Kg	07# Hopper	r: +00.0)00 Kg			
03#	Hopper:	+00.000	Kg	08# Hopper	r: +00.0	000 Kg			
04#	Hopper:	+00.000	Kg	09# Hopper	r: +00.0	000 Kg			
Correction Close Open Data Reset The data can be read only,non-modifyable.									
Process Monitoring	Manual Debugging	Parameter Settings	Recipe Settings	Material Statistic	Operating Profile	Alarm List			

Correction Screen" jump button from the other screen of the system.

本系统具有配料误差自动纠正功能,用户可以通过该画面进行设置。

This system has the function of **automatic correction of batching deviation**, which can be set by the user through this screen.

画面的上面部分是**各料斗的自动纠偏数据**。这些数据都是配料过程中系统自动 计算的结果,只可显示/清零,不可随意修改。

The upper part of the screen is the **Deviation Correction Data** of each hopper. These data are automatically calculated during the batching process. They can only be read or reset, non-modifiable at will.

画面的下面部分是"误差纠偏功能选择"开关和"自动纠偏数据清零"按钮。

The lower parts of the screen are deviation "**Correction Function Switch**" and automatic deviation "**Data Rese**t" button.

当用户需要误差纠偏功能时,可将选择开关设置为打开。

When user needs deviation correction function, set the selection switch to be on.

按住"自动纠偏数据清零"按钮一秒钟,可将自动纠偏数据清零。

Press and hold the automatic deviation "**Data Reset**" button for one second to reset the deviation correction data.

当用户切换配方或者配料过程中出现意外的较大误差时,可执行此清零操作, 使系统重新计算纠偏数据。

When large deviation occurs when use switching recipe or in the batching process, "Data Reset" operation can make the system recalculate the deviation correction data.

注:需要具有操作权限的用户,登录后才能打开此画面和修改画面内的数据。

Note: only users **with operation permission** can open this screen and modify the data in the screen **after login**.

11) 触屏校秤操作画面,当用户从系统参数设置画面按下"触屏校秤操作画面"跳转按钮时,显示的画面。

Scale Calibration Screen: The screen displayed when the user presses the "Scale Calibration Screen" jump button from the system parameter settings screen.

		Scale Ca	alibrati	ion Screen	2000-00-00	00:00:
Calibrat	ion Data			Data Transn	nission	
· · · · · · · · · · · · · · · · · · ·	Adj. Weight:	00000		Data 🕎 D	ata 📈 s	cale 🎼
Charact	teristic Value:	1 mV/V		Send R	ead T	eset
Lim	it Frequency:	5.00Hz		Calibration (Operation	
Dept	th of Average Value Filter:	000		Current weig	ht: +00.0	00 Kg
Weig	ghing Range:	00000		Adj. Zero Vali	d 🛛 🛛 Adj. We	eight Valid
C	ecimal Point:	0		00000	0	0000
Calibratio	n Data Reset:			Adj. Zero Vali	d Adj. We	eight Valid
Process Ionitoring	Manual Debugging	Parameter Settings	Recip Settin	e User gs Managemen	Operating t Profile	Deviatio Correctio

触屏校秤操作分三步,用户可以通过该画面进行操作。

Scale Calibration operation needs three steps, and users can operate from this screen.

(1) 设置触屏校秤相关数据

Scale Calibration Data Set

触屏校秤参考重量,用于输入校秤砝码的重量。此重量值应不小于配料最大重量的 20%,并以较大数值为宜。

Adj. Weight (Reference weight): Used to input the weight of the scale weight.

This weight value shall not be less than 20% of the maximum batching weight, and

it is advisable to take a larger value.

称重传感器特征值,用于选择输入称重传感器的特征值。

Characteristic Value: select input the weighing sensor' characteristic value

该特征值一般都标注在称重传感器上面。设备出厂时用的是 2mV/V 的,所以默认为 2mV/V。

This characteristic value is usually marked on the weighing sensor. The original setting is 2mV/V ex-factory, so the default value is 2mV/V.

除非用户更换了不一样特征值的称重传感器,否则不允许修改此参数。 This parameter is not allowed to be modified unless the user has replaced the weighing sensor with a different characteristic value.

重量采集极限频率,用于选择输入称重模块对重量采集的极限频率。

Limit frequency: select input weighing module limit frequency of weight collecting. 选择默认的"5.00Hz"为宜,一般不作修改。

Select the default value "5.00Hz", generally do not modify.

平均值滤波器深度,用于输入称重模块处理重量数据时的平均值滤波器深度。

Depth of Average Value Filter: input depth of average value filter while weighing module processing weight data.

例如输入 10,代表系统将最近采集到的 10 个重量数据值的平均值,作为当前 重量值,输出给 CPU。一般设置为 10 为宜,最大不超过 15。

E.g. input 10, which means output the average value of the 10 recently collected weight data values to the CPU as the current weight value. Generally set 10, the maximum is no more than 15.

配料最大重量设置,用于输入系统的称重量程。

Weighing Range: input the system weighing range

一般设置为"32767"(最大值)或小于此数值。

Generally set to be 32767(maximum value) or values less than 32767

小数点后位数精度,用于输入称重模块重量数据的小数点后位数。

Decimal Point: input decimal numbers of weight data of weighing module.

此参数的设置,直接关系到系统的配料精度及量程设置。

This parameter setting is directly relevant to the system precision and range setting. 如果设定为"2",表示重量值数据的小数点后有 2 位。即精确到 10g,最大量程

为 327.67Kg;

If set to "2", it means that there are two decimal numbers of the weight value data, accurate to 10g, and the maximum range is 327.67Kg.

如果设定为"3",表示重量值数据的小数点后有 3 位。即精确到 1g,最大量程 为 32.767Kg。

If set to "3", it means that there are three decimal numbers of the weight value data, accurate to 1g, and the maximum range is 32.767Kg.

请根据量程和精度需求,合理设置该参数。

Please set this parameter according to the range and precision requirements.

(2) 校秤数据传输操作

Scale Calibration Data Transmission

数据写入,用于执行将触屏校秤相关数据写入称重模块的操作。

Date send: send the relevant touch screen scale calibration data to the weighing module

数据读取,用于执行读取称重模块内部的触屏校秤相关数据的操作。

Date read: Read the relevant touch screen scale calibration data in the weighing module

(3) 触屏校秤操作

Scale Calibration Operation

参考零点校准,用于校准参考零点(秤上无任何物品时的零重量)。

Adj. Zero Calibration: calibrate adj. (reference) zero (zero weight of nothing on the scale)

参考重量校准,用于校准参考重量。

Adj. Weight Calibration: calibrate adj. (reference) weight

正确的触屏校秤顺序为:

Correct Scale Calibration Operation Steps:

先设置好触屏校秤相关数据;

Firstly, set the relevant touch screen scale calibration data

接着执行校秤数据写入操作;

Secondly, send the scale calibration data

然后将秤台面清除干净,执行参考零点校准操作;

Thirdly, clean the scale table and operate adj. (reference) zero calibration 最后将砝码放上秤台面,执行参考重量校准操作。

Finally, place weight on the scale table and operate adj. (reference) weight calibration.

注:需要具有操作权限的用户,登录后才能打开此画面和修改画面内的数据。

Note: only users **with operation permission** can open this screen and modify the data in the screen **after login**.

12) 用户管理操作画面,当用户从系统参数设置画面按下"用户管理操作画面"跳转按钮

时,显示的画面。

User Management Screen: The screen displayed when the user presses the "User Management Screen" jump button from the system parameter settings screen.

	Hear M	nagement	Sereen 5	000 00 00	00.00.00
	USCI PIC	anayement		000-00-00	00.00.00
	••••••••••••••••••				
	Log On	7	Log Of	F	
	Use	r Manage	ment		
User name	_0 Group_0				
User name_	_1 Group_1				
User name	_2 Group_2	2			
User name	3 Group 3				
User name	4 Group_4	F			₹
User name_	_5 Group_5	5			
Process Manu Monitoring Debugg	al Parameter ging Settings	Recipe Settings	Material Statistic	Operating Profile	Alarm List

该画面用于管理能登录系统的用户的信息。

This screen is used to manage the users' information of who can log on the system *用户登录*,用户可通过点击该按钮,打开登录窗口,执行登录操作。 *Log On:* user can open the login window and click the button to log on. *注销登录*,用户可通过点击该按钮,注销已经登录的用户。

Log Off: user can click the button to log off.

用户管理操作,用户可修改下面显示的用户的属性,包括用户名称、密码、所在组 权限、注销时间等信息。具体说明如下:

User Management: the user can modify the properties of the user shown below, including user name, password, group permissions, logoff time, and so on. The details are as follows:

用户名,用户输入修改或创建的用户的名称;

User name: input the modified or created user name

密码,用于输入用户的密码;

Password: input user's password

组,用于输入所修改或创建的用户所在的组(即具有哪些权限);

Group: input the modified or created user group (different group with different permissions)

注销时间,用于输入自动注销登录的时间,一般不作修改。

Logoff time: input automatic logoff time, generally without modification.

注:

Notes:

属于组(1)的用户,具有有限的权限,只能执行监视、操作。

• User of **Group 1** with limited permissions, only monitoring and operations

属于**组(9)**的用户,即管理员用户,具有最高的权限,可执行监视、操作、 管理。

 User of Group 9 (Administrator user) with highest permissions of monitoring, operations and management

未授权的用户,具有最低的权限,只能执行监视,不可修改数据和执行管理功能。

 Unauthorized users, with minimal permissions, only monitoring, cannot modify data and management.

将所修改用户的所有信息清零,可以删除该用户。

• Delete the user by clearing all information about the user

注:需要具有管理权限的用户,登录后才能打开此画面和修改画面内的数据。

Note: only users with **management permission** can open this screen and modify the data in the screen after **login**.