

# Automatic High-precision Nozzle Inspection Machine Use's Manual

# Model:S-6200C





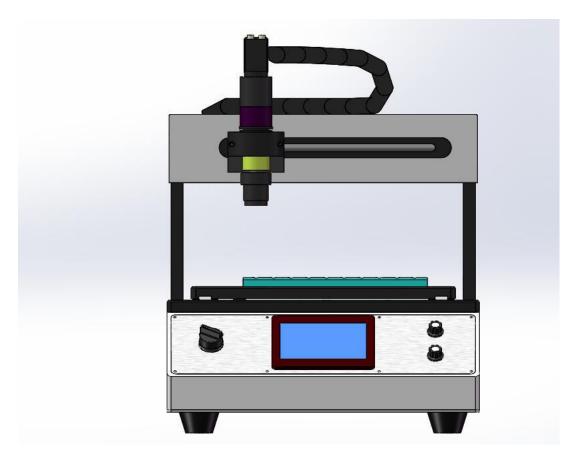
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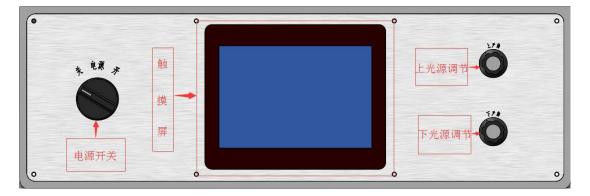
#### summary

The automatic high-precision nozzle inspection machine can clearly observe the clogging of the nozzles. By directly installing the cleaning tray, it can easily perform inspections, take pictures and save, and analyze failures. Optical magnification and physical magnification can meet different types of models. Inspection after nozzle cleaning. Special backlight, adjustable backlight brightness, corresponding to different suction nozzles, unique mechanical positioning card holder design, each movement is the position of a suction nozzle, easy to locate when checking the suction nozzle, reducing the complicated manual positioning operation.



#### **Positive introduction**



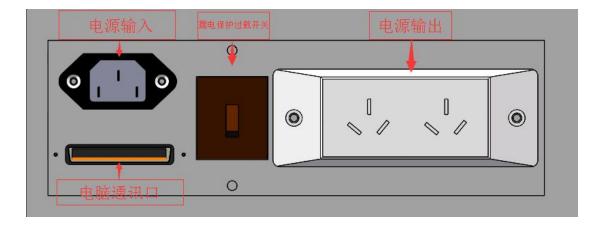


Power switch: When working, turn on the rotary switch first, and then turn on the host computer. After the work is finished, turn off the host computer first, and then turn off the power switch.

Touch screen: soft key start/reset/number of rows and columns setting/manual left and right movement/cycle detection and repeat operation and other setting functions

Upper light source adjustment: Put the suction nozzle first, and adjust the upper light source above the suction nozzle to achieve a clear effect and facilitate lens focusing.

Lower light source adjustment: After the lens is focused, turn off the upper light source. Adjust the lower light source until the real-time shooting of the lens is clear.



## Introduction on the back

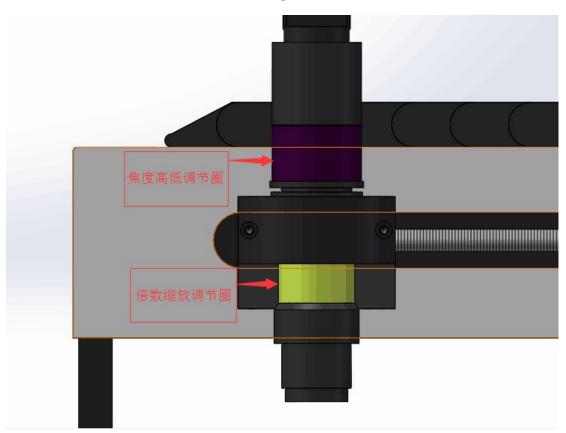
Power input: AC220V/50HZ

Leakage protection overload switch: AC220V/50HZ, 10A, leakage current 0.03A

Power output: AC220V/50HZ, 10A

Computer communication port: connect to the host computer





### Focus adjustment

Focus height adjustment ring: according to different sizes of nozzles, adjust the height and low focus until the surface of the nozzle is clear.

Multiplier zoom adjustment ring: adjust to the zoom multiplier according to the size of the nozzle diameter.

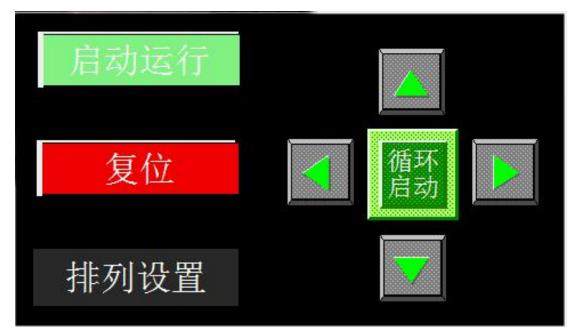
# Switching between Chinese and English





Choose Chinese/English on the homepage to enter the operation interface

#### **Start operation**



Start operation: After confirming that it is running on the origin and the computer software, it can start operation.

Reset: The machine cannot be started because it is not at the origin, please reset.

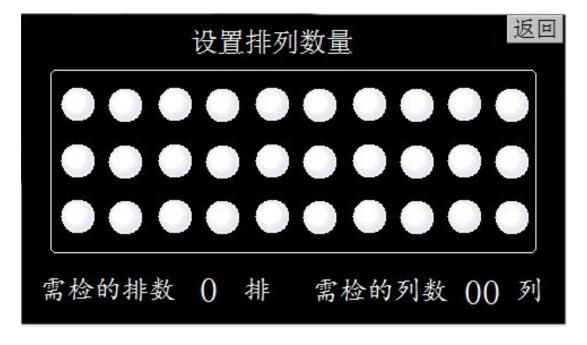
Arrangement setting: Set the number of rows or columns according to the number of inspections you need.

Cycle start: repeat the test run.

Manually move up, down, left, and right single point detection



### **Detection quantity setting**



Set the arrangement quantity input interface

		1.1.1			25
	MAX:000003		MIN:	000001	返回
		0			
	7	8	9	-	
	4	5	6	CLR	
	1	2	3	ESC	
		0	BS	ENT	
需检的排	非数 🚺	排	需检的	的列数(	)() 列

Set the number of rows: hand point 0 position, when the digital meter pops up, enter the number of rows to be detected and then press the ENT key.





Set the number of columns: hand point 00 position, when the digital meter pops up,

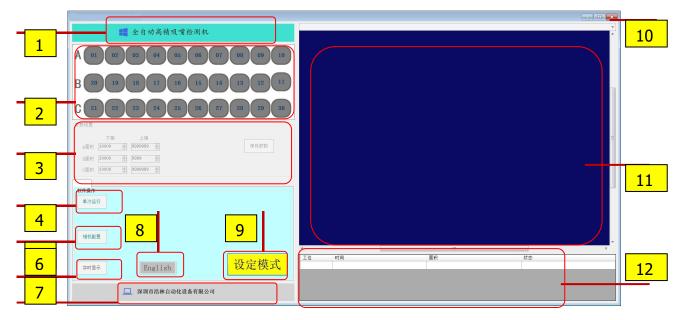
enter the number of columns to be detected and then press the ENT key.

		-
📰 全自动高精吸嘴检测机		
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B 20 19 18 17 16 15 14 13 12 11		
C 21 22 23 24 25 26 27 28 29 30		
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□ 国府 10000 (計) 9999 (計) ○ 面积 10000 (計) 999999 (計)		
<b>软件操作</b> 単次运行		
相称政策		
		Þ
AttBA   English	工位   时间   西祝   状态	
深圳市浩林自动化设备有限公司		

### **Computer Software Manual V3.0**

#### Interface introduction





1. Device name and model display area: used to display the device name and model.

2. Detection status display area: used to display the product status of the current detection, green is good product, red is defective product, click on the corresponding station to display the current effect picture on the right (11).

3. Detection parameter setting area: The upper and lower limits of the area corresponding to the three rows of ABC can be set separately. The area between the upper and lower limits is a good product, otherwise it is a defective product. After setting, click to save the parameters.

4. Single run: a simulation test can be performed on the current product.

5. Camera configuration: the parameters of the camera and the detection area and parameters can be set.

6. Real-time display: Continuously update the display.

7. Manufacturer information: Double click to display the manufacturer's contact number.

8. Switching between Chinese and English: One-click in English may switch to Chinese, and one-click in Chinese can switch to English. The next time the software is opened, the certificate will be the state of the last exit.

9. Mode switch button: It can be switched to setting mode and running mode respectively, and the parameters can be modified only in setting mode.

10. Exit the software: Click the X button to exit the entire software.

11. Image display area: it can display the current processed image and result display.

12. Data display area: 50 test results data can be displayed.



#### **Operation mode**

1. Operating mode: The product can only be tested when it is switched to the operating mode, otherwise the test will not be updated, and the interface cannot be modified in this mode

- 软件操作 单次运行		
相机配置		
实时显示	English	设定模式

Setting mode: When switching to setting mode, all parameters can be modified.

软件操作 单次运行		
相机配置		
实时显示	English	运行模式

# Switching between Chinese and English



Chinese status: the entire interface is displayed in Chinese

			_ 0
📰 全自动高精吸嘴检测机 HL-F3			
A 01 02 03 04 05 06 07 08 09 10			
B 20 19 18 17 16 15 14 13 12 11			
C 21 22 23 24 25 26 27 28 29 30	-		
参数设置			
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3面积 10000 ◆ 9999 ◆ C面积 10000 ◆ 999999 ◆			
C面积 10000 💮 9999999 🚡			
软件操作			
单次运行			
相机配置			
			Þ
新版 Finglish 运行模式	工位 时间	面积	状态
xyLin English 区仃楔式			
🛄 深圳市浩林自动化设备有限公司			

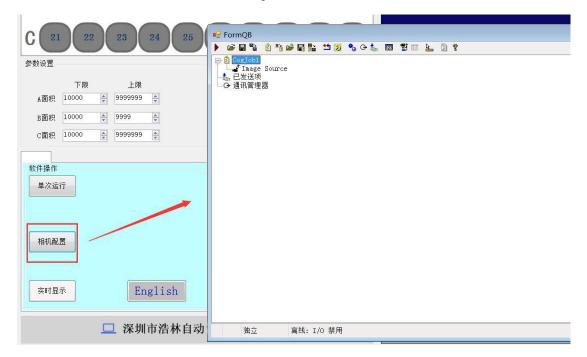
English status: the entire interface is displayed in English

				- D ×
Automatic High Precision Nozzle Testing Machine HL-F3				¥
A 01 02 03 04 05 00 07 08 09 10				
B 20 19 18 17 16 15 14 13 12 11				
C 21 22 23 24 25 26 27 28 29 30				
LowerLimit PpperLimit A_Area 10000 + 9999999 + SaveParam				E
C_Area 10000 🚖 9999999 😨				
SoftwareControl				
RunOne				
SetCamera				
	( (			
	WorkPlace Time	Area	Condition	
ContinueDi splay 中文 RunMode				
splay TX				
SHENZHEN HAOLIN AUTOMATION EQUIPMENT CO., LTD				
	<b>N</b>			

# **Camera configuration**

**1**. Click the camera configuration button: the setting interface pops up, double-click "CogJob1" to enter the next level setting interface





2.Enter the advanced settings interface: double-click "CogJob1" to pop up the advanced settings interface

🖳 FormQB	👔 VisionPro(R) QuickBuild 作业编辑器 - CogJob1	
E CogJob1		
→ Image Source ↓ 已发送项		LastRun. Image Source. OutputImage
	<ul> <li>◆ ToolGroup 输入&gt;</li> <li>◆ ToolGroup 输入&gt;</li> <li>◆ Solution</li> <li>◆ InputImage</li> <li>◆ InputImage()</li> <li>◆ Results.GetBlobs().Count</li> <li>◆ Results.GetBlobs().Item[0].Area</li> <li>○ 結果输出*</li> <li>◆ Result1</li> <li>◆ Result2</li> <li>◆ (ToolGroup 输出&gt;</li> </ul>	
	• Oms Oms	
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3. Tool setting: double-click "CogBlobTool1" to enter the tool setting interface



② VisionPro(R) QuickBuild 作业编辑器 - Coglob1 文件(E) 运行(E) 配置(E) 显示(E) 帮助(H) ● 回る 当 ● 』 ● ② 國 図 余 四 ఓ ? 工具 回影 ← CToolFroup 输入> 日本 Base Source*	CogBlobTool1      / □□ □ □ □ □ □ □ □ □ □ □ 2      设置   区域   测得尺寸 图形   结果      分段     横式	Current. InputInage
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• 0 ns 0 ns	•. 7379ms 4. 992ms	

Polarity: Choose whether the detection is white or black for you. The through-hole detection is generally a white dot on a black background.

Threshold: 0 is pure black, 255 is pure white, through-hole detection is generally very bright, so it is generally greater than 100.

Minimum area: set a lower limit, the one smaller than this value will not be used as the detection target, and it will be effective if it is larger than this value.

Area setting: Specify a detection area, the area is valid, select "inputImage" in the image list to set the area, click to run, you can see the effect picture in the "outputImage" option of the image list, and you can see all of them in the result data.

After the setting is completed, you can exit all the way. When prompted to save, select "Yes" to save the parameters.

<ul> <li>设置 区域 测得尺寸 图形 结果</li> <li>区域形状:</li> <li>CogRectangle</li> <li>所洗空间名称:</li> <li>. = 使用输入图像空间 ◆</li> <li>洗择種式</li> <li>原点</li> <li>中心</li> <li>原点</li> <li>中心</li> </ul>	Current. Input Image
原点 Y: 40.6874 宽度: 721.663 高度: 721.663 适应图像	
📵. 7379ms 4. 992ms	



#### Testing parameter setting

	下限		上限	
A面积	10000	9999	9999 🌔	保存参数
B面积	10000	9999	Э	
C面积	10000	9999	9999 🍝	

There are three rows for setting, each row can be set individually, just save the parameters after setting.

The detected area between the lower limit and the upper limit is a good product, otherwise it is a defective product (set according to the qualified value of the nozzle, and the set value is plus or minus 200 pixels).

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# View historical images

After the detection is completed, you can click the corresponding station to view the historical image.