

Painting_Manual.docx

2016-4-21

Operation Manual

ABB Painting Shop FlexUI Operation Manual

ABI	Flex FlexLine User	r Interface	000 浸大X AW-VV) •	Primer In	terior 1	*	2015-10 16:13:		None 0	Shift	1
View	Control	Setting	Dia	gnose	Program	Report	Help					
												Alarm
Status:F	Robot R11			Station								
Control	l Unit				,]							
Status		Init State					0 Program 0 0 Material 0		Atom	0.00 Program 1: 0.00 Material	0 0	IX
Operatio	ng	Auto				Shape2: 0.0	Pump In: 0.0 Pump Out: 0.0		Shape. Fhuid:	2: 0.00 Pump In: 0.00 Pump Ou	0.0 t 0.0	
Motor Main Pr		OFF Stopped	J		Ų	À 🗸	<u></u>	No Master	No Master	ስ 🥢	À	_
Master		Undefined	÷					Gripper Unknown G	upper Unknown			
			-		\mathbf{I}						*	
Job Sta	ıtus				1.2	Undef	lo Master	<u> </u>	<u>~</u>	No Master Undefined Position		
Status		Stopped					L	Program 0 Pr	ogram 0			
	Program	0	-									
Current Material		0	-						w	Vork Position -	>	
	bot Cycle Tim		1				Prog	ram 0 Program	m 0]		Pro	gram 0
Last Sta	ation Cycle Tin	ne 0 (S)	1		1	No M				No Master	M	H22
					17					Indefined Position		
						<u></u>	R21	lo Master No	Master	R22	No N	daster
					İ		Gripp	ined Position Undefine er Unknown Gripper	ad Position Unknown		Undefined Gripper V	Position Unknown
					1	Atom 0.00 P Shape1: 0.00 N			Atom Shape1:	0.00 Program 0.00 Material	0	
					1	Shape2: 0.00 P			Shape2: Fluid:	0.00 Pump In: 0.00 Pump Out:	0.0	
					_							
R11	=E Hide			R11 R21	D11 [D21 [12 22 H22	🕼 Interior 1	🕼 Int	terior 2		e Enter 🔘 e Getout 🔘
	<u>, 7</u>			<u>ما</u> ۲		0. le					2 -	4 2
OFF	v 📲		26	L L	- Comm	ϑ∥⊡∞	2				-	pass ResetPP

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Operation Manual

1 Introduction

ABB painting station include primer, base coat, clean coat

- -- A panel with buttons and operation keys
- -- Some operating status indicator
- -- Some station running status indicator
- -- FlexUI control software of the computer

The HMI will monitor two devices: PLC and robot. The IP address of the site to see the factory is given.

Each station HMI including menu in shown in the table below:

- ♦ View
 - ▹ Zone
 - > Station
 - > Production
 - Lubrication

♦ Control

- > Robot
 - Position
 - Function
 - New Start
 - Backup
 - Opener Control
 - Fluid System
- > FIFO
- ➢ Ghost
- > Bypass
- Setting

 \triangleright

- > Type Setting
- Color Setting
 - Color Table
 - Line FIFO
- Parameter Setting
- ➢ Alarm Setting
- ➢ Security
- Miscellaneous Setting
- Diagnose
 - ➤ Alarm
 - ► IO

- > Network
- > Profibus
- Program
 - > SHOP Floor
 - > Robot Studio
 - ➢ RobView
 - > Process Manage

Report

- > Production
- ➢ Consumption
- > Operation
- ➤ Alarm
- > Air and solvent consumption

♦ Help

- ► Robot
- ➢ FlexUI

2 Bar

This chapter will introduce the FlexUI interface of the title bar and status bar

2.1 Title

The title bar of the FlexUI, including ABB's logo, user identification, station information, language switch, time and login information

		面涂内喷1	*: 2015/10/29	用户 abb 权限 9	班次 1	
Thexcale oser allerade	1400-000		17.14.00			2110-02

2.1.1 ABB Logo



2.1.2 Station Information

Station information introduced FlexUI, language selection and date information are also included in the title bar



2.1.3 User Login

Local user login and the user level

用户	ABB
权限	10

2.1.4 login/logout

FlexUI is restricted to some windows of the login, to limit the irrelevant personnel for important parameter changes, such as: spraying parameters, data....If current access level is lower than the request will not be able to open the high authority, must log in to the high authority of account to open the can and do change. Click ON

the image at the top right of the screen, in the pop-up the login window, fill in the user name and password, after enter into the corresponding modify permissions

2.2 Status bar

This section will introduce the FlexUI of the status bar.Spraying systems commonly used information will be displayed in the status bar on the left side of the information will be display in real time. Some commonly used shortcut button is on the right side of the status bar

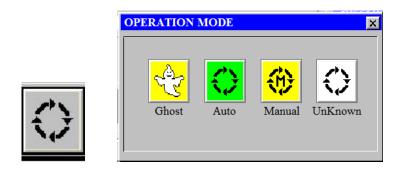
开	07	∞ 🔬	m	K	Comm	0	(~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	■■ 旁通	くしていた。 指計复位
---	----	-----	---	---	------	---	----------	--	--	--	--	--	--	--	--	----------	----------------

2.2.1 State

Power State: the status bar represent the power state of the PLC control cabinet

	CONTROL POWER	×
	Available States	
FF	OFF Power Off	ON Power On

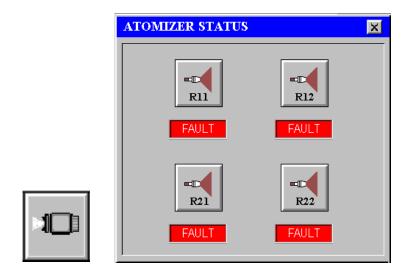
Operation Mode: the status bar represent the current operation mode of the station



Robot Status: this status bar indicates that the current state

	ROBOT STATUS	5			×
	CK	D11 OK	D12	R12 OK	
T	R21	0K	D22	R22	H22 OK

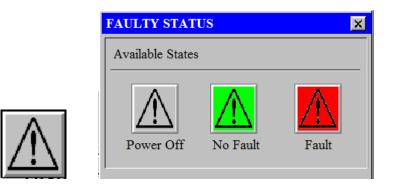
Atomizer: this status bar indicates that the current atomizer state



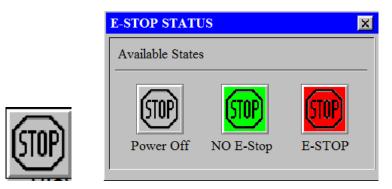
Safety Status: the status bar represent the security state of the station now

	PERSONNEL SAFETY STATUS	X
	Emergency Stop From Conveyor	Swing Door Inlet Left
	Emergency Stop From Station	Swing Door Inlet Right
	Emergency Stop Robot 11	Swing Door Outlet Left
	Emergency Stop Robot 21	Swing Door Outlet Right
\triangle		Light Curtain Entrance
	Emergency Stop Robot 12	Light Curtain Exit

Faulty Status: the status bar, said the current station of fault condition



E-Stop Status: the status bar, said the current station of scram



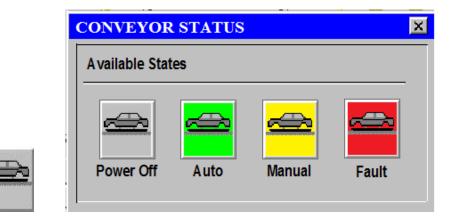
Communication Status: the status bar, said the HMI with robots and PLC communication

	COMMUNICATION STATUS	X
	OPC OPC OPC	
	R21 D21 D22 OPC OPC OPC	OPC
Comm	CCR TCP PLC DA	

Fire Status: the status bar, said the current fire station



Conveyor Status: the status bar said the current state



Green:	Conveyor auto mode
Red:	Conveyor fault
Yellow:	Conveyor manual mode
Grey:	Power off

Alarm

2.2.2 shortcut button



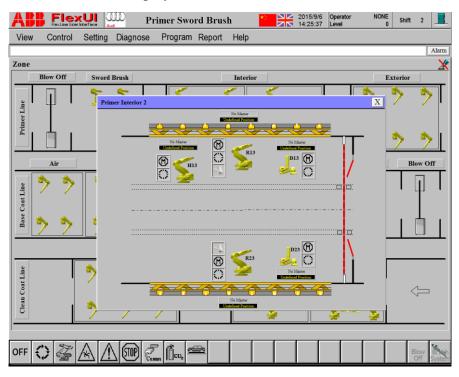
2.3 Alarm Bar

Click the button will jump to the alarm view

3 View

3.1 Zone

Area to check the spray can display the basic information of all stations, click on the location area, can display the selected location detail information



3.2 Station

		1
查看 控制 参数 诊断 利	呈序 报表 帮助	
10/29/2015 03:52:19 下午 PLC abb	Auto mode stop(DB931,X3.4)	Alarm
 机器人状态 R11 皮別単元		
	H22 R22 D21 R21 R12 D12 D11 R11 Print Ander	
🌁 🗘 🌄 📼 <u>A</u> (🖻 🚶 📶 📀 🛍 🚔 👘 🖉 📲	通 指针复位

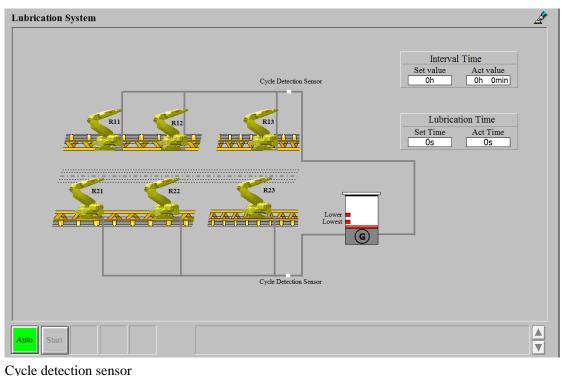
This page allows the user to view the details of a robot

3.3 **Production**

This page shows the current shift/day production, long by two seconds data can be reset

ABI	Flex	ILI C	ID PI	imer Swo	rd Brusl		2015/9/6 13:44:56	Operator Level	ABB 9	Shift 2	· 🗍
View	Control	Setting	Diagnose	Program	Report	Help					
Product	ion										Alarm
	Foday	8	8	8		Shift	8	8	8	8	
00:0	0-01:00	0	06:0	0-07:00	0	12:00-13:00	0] 18:0	0-19:0	0	0
01:0	00-02:00	0)-08:00	0	13:00-14:00	0] 19:0	0-20:0	0	0
02:0	0-03:00	0	08:00	0-09:00	0	14:00-15:00	0] 20:0	0-21:0	0	0
03:0	00-04:00	0	09:00)-10:00	0	15:00-16:00	0] 21:0	0-22:0	0	0
04:0	0-05:00	0] 10:00)-11:00	0	16:00-17:00	0] 22:0	0-23:0	0	0
05:0	0-06:00	0] 11:00	0-12:00	0	17:00-18:00	0] 23:0	0-24:0	0	0
OFF	3 4				<u>⇒</u>					Blow	v Brugh System

3.4 Lubrication



Interval time: (Set value: act value:) Lubricantion time: (Set value: act value:)

Auto Start

: Lubrication system mode switch button and start button

4 Control

4.1 Robot

4.1.1 Robot position move

Robot control and position control page description HMI software system mobile robot to a defined position

When this page is open, can be obtained by manual control of the robot Each mobile robot position to the Home position of Pos, the starting point must be the Home position Pos

Automatic mode, the Master of the robot in the PLC, collective run for the realization of the robot, the operation must be control to FlexUI, will stand mode 12/60

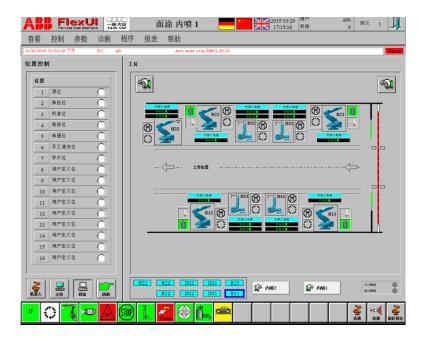
switch to manual mode, to release the Master PLC

Note 1: because of data exchange time, choose to perform after a time interval between the robot starts moving, generally between 2 s to 5 s

Note 2: if a robot system is restarted before, will not be able to move through the this picture the implementation of the robot, you must first through the use of teaching device to control the robot move to the Home position again

Note 3: the robot's movement unless it is to control the robot from another location to move to the Home position, other cases the starting position of the robot to the Home position

Note: some special place or before the program execution need to check whether the robot is to meet the execution conditions



4.1.2 Robot function

Robot function have 4 sub menu

1.1 clean and fill

控制:程序	控制:程序
<u>清洗</u>	清洗
杯外清洗 启动	杯外清洗
开门器清洗	杯内清洗
杯内清洗 启动	<u>清洗管路</u>
<u>清洗管路</u>	全部 开始
清洗 开始	混合器 开始
<u>填充</u>	颜色管路 开始
填充 开始	<u>填充</u>
特殊清洗与填充	填充 开始
填充空气 启动	特殊清洗与填充
填充溶剂 启动	填充溶剂 启动
清洗油漆管路]
填充油漆管路 启动	
▲ 机器人 主控 和器	▲ 机器人 主控

1.1.1 Clean include bell clean, tool clean, hub clean and pip clean —robot must at auto mode

select robot	
—click start button	启动

-click OK button

WARNING	X
是否进	行杯外清洗
Do you war	t to do bell clean
	ОК

1.1.2 fill function include fill material, fill air, fill solvent, fill material supply. —robot must at auto mode



—Select fill color and click OK button

WARNING	X
颜色号 1	
请在颜色框中输入颜色号	
是否进行填充程序	
Do you want to do Fill Function?	
ОК	
WARNING	X
是否填充空气	
Do you want to fill air	
ОК	

1. Material change, Test, Calibration

Х

换色(需要授	叔)			
取消	/~) 信动			
使能	启动			
び祀 	启动			
恢复				
	启动			
高压测试				
动态高压测试	[启动			
静态高压测试	自动			
雾化器测试				
杯内流量	开始			
静态刷子	开始			
动态刷子	开始			
流量测试	开始			
校准(需要授	权)			
IPS曲线	开始			
	l 💷 🔼			

- 1.2.1 Material change include cancel, enable, suspend and resume
- 1.2.1.1 Cancle
- —robot must at auto mode
- ----station must at manual mode

—select robot
—select master
—click start button
—click OK button
WARNING
是否终止换色程序 Do you want to abort ongoing material change
ОК

- 1.2.1.2 Enable
- —robot must at auto mode
- ----station must at manual mode

—select robot

—select master				
—click start button				
—click OK button				
WARNING				
是否启用换色程序				
Do you want to enable the material change				
ОК				
1. 2. 1. 3 Suspend —robot must at auto mode				
—station must at manual mode				
—select robot				
—select master				
-click start button				
—click OK button				

WARNING	X
是否暂停换色程序	
Do you want suspend ongoing material change	
ОК	

1.2.1.4 Resume

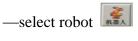
-robot must at auto mode

---station must at manual mode

—select robot					
—select master					
—click start button 信动					
—click OK button					
WARNING X					
是否继续换色程序					
Do you want to resume material change					
OK					
UK					
 2. 2 HV Test 2. 2. 1 Dynamic HV Test —robot must at auto mode —station must at manual mode 					
—select robot					
—click start button					
click OK button					
动态高压测试 X					
○ 測试正常 ○ 測试正常 ○ 測试正常 ○ 測试正常 ○ 測试失敗 ○ 測试失敗 ○ 測试失敗					
○測试正常 ○測试正常 ○測试正常 ○測试正常 ○測试正常 ○測试失敗 ○測试失敗 ○測试失敗 ○測试失敗					
· · · · · · · · · · · · · · · · · · ·					
If test finish, it will be shown as below					
动态高压测试					
 ● 测试正常 ○ 测试正常 ○ 测试正常 ○ 测试正常 R13 					
▲ ▲					
○ 測试正常 ○ 測试正常 ○ 測试正常 R21 ○ 測试正常 R23 ○ 測试正常 R23 ○ 測试正常 R23 ○ 測试正常					
<u>动态测试</u> 关闭 关闭					

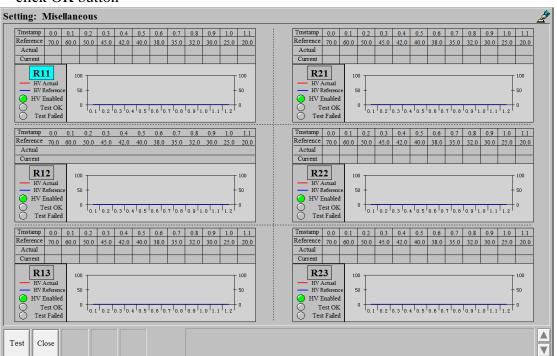
1.2.2.2 Static HV Test

- -robot must at auto mode
- ---station must at manual mode

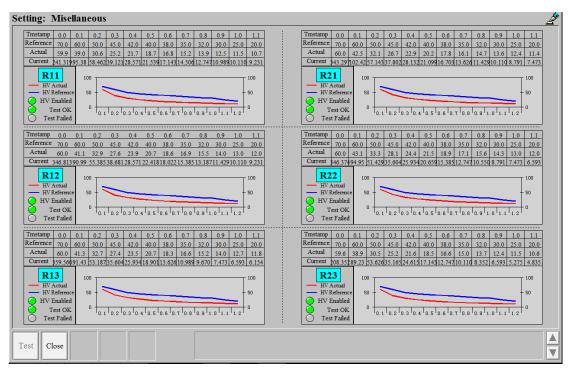


—click start button

-click OK button



If test finish, it will be shown as below



1.2.3 Application Test

1.2.3.1 Bell Fluid Test

-Remove bell

-robot must at auto mode

----station must at manual mode

—select robot						
click start button						
杯内流量测试		X				
时间(s) R11 2	时间(s) R12 2	时间(s) R13 2				
时间(s) R21 2	时间(s) R22 2	时间(s) R23 2				
测试位置 🏊 测试开始	关闭					

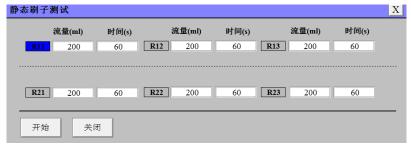
Input time and click Test Positon, after robot move to test position. Click Start button

杯内流量测	试	is a la A		X
RII	时间(s) 2	时间(s) R12 2	R13	时间(s) 2
R21	时间(s) 2	时间(s) R22 2	R23	时间(s) 2
测试位置	▶ 测试开始	关闭		

- 1.2.3.2 Static brush test
- -robot must at auto mode
- ---station must at manual mode

—select robot

-after set volume and time, click start button



1.2.3.3 Dynamic brush test

- —robot must at auto mode



- 1.2.3.4 Fluid Test
- —robot must at auto mode
- ---station must at manual mode

—select robot

-click start button

l/min)	时间(s)		流量(ml/mi	n) 时间(s)		流量(ml/min)	时间(s)
	0	R12	0	0	R13	0	0
	0	R22	0	0	R23	0	0
			1				
			0 R12	0 R12 0	0 R12 0 0 0 R22 0 0		0 R12 0 0 R13 0 0 R22 0 0 R23 0

Input time and click Test Positon, after robot move to test position. Click Start button

时间(s)						X
流量(ml/min) R11 200	时间(s) 60	流量(ml/min) R12 200	时间(s) 60	流量(ml/min) R13 200	时间(s) 60	
	00	K12 200		KI 3 200	00	
R21 200	60	R22 200	60	R23 200	60	
〔量测试位〕 <mark>▶▶</mark> 流量	测试	关闭				

- 1.2.4 Calibration
- 1.2.4.1 IPS curve
- -robot must at auto mode
- ---station must at manual mode
- -select robot

—select master
—click start button 启动
-Select atom option and set parameters
WARNING X
转速 空气1 空气2 选项 最小値 最大値 时间 相对値 绝对値 20 50 5 0 13
开始校准

- 1. 2. 4. 2 IPS Curve (Shape 1) —robot must at auto mode
- --select robot

select master	主控
---------------	----

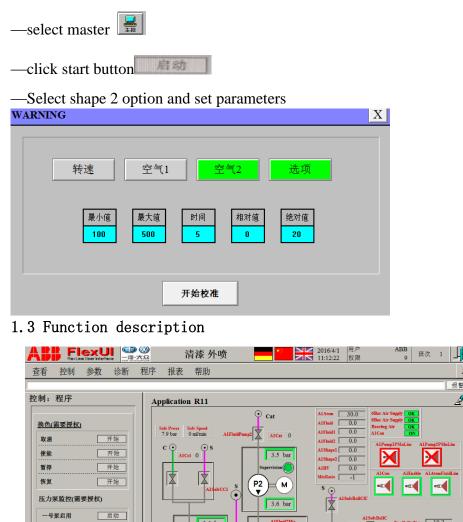
-click start button

-Select shape 1 option and set parameters

WARNING	Χ
转速 空气1 空气2	
最小值 最大值 时间 相对值 绝对值 100 500 5 0 20	
开始校准	

- 1.2.4.3 IPS Curve (Shape 2)
- -robot must at auto mode
- ---station must at manual mode

-select robot



X 3.4 bar Fluid2N 一号泵禁用 启动 启动 二号泵启用 (м) **P1** 启动 二号泵禁用 3.5 bar 刷子比例(需要授权) 设定刷子比例 启动 A (• \odot EmyClean Left: 0 (s) U ×. R23 R22 R21 R13 R12 R11 选择第三页 ð Ð ĥ 4 (h) L 开 STOP

1.3.1 Pump supervise, Brush factor, RCC operation, Paint Push

控制:程序	
换色(需要授权)	
取消	开始
使能	开始
暂停	开始
恢复	开始
压力泵监控(需要	要授权)
一号泵启用	启动
一号泵禁用	启动
二号泵启用	启动
二号泵禁用	
一可求奈用	启动
刷子比例(需要打	受权)
设定刷子比例	启动
🛛 🖸 🖓	
i i i i i i i i i i i i i i i i i i i	
机器人 主控	释放 位置

空制:程序	
<u>RCC(需要授权)</u>	
Dock	启动
UnDock	启动
校准	启动
校准位置	启动
Move RCC	启动
<u>刷子比例(需要授权)</u> 设定刷子比例	自动
Paint Push	
Status R13	R23
Enable	启动
Disable	启动
V 🔏 🗄)
▲ 机器人 主控 和	→ 総 位置

1.3.2 Pump supervise

- 1.3.2.1 Pump 1 enable
- —robot must at auto mode
- ----station must at manual mode
- -select robot

—select master

WARNING X
是否启用一号泵 Do you want to enable pump 1
ОК
 1.3.2.2 Pump 1 disable —robot must at auto mode —station must at manual mode —select robot —select master —click start button
WARNING
是否禁用一号泵 Do you want to disable pump 1
ОК
 1.3.2.3 Pump 2 enable —robot must at auto mode —station must at manual mode —select robot

WARNING
是否启用二号泵
Do you want to enable pump 2
ОК
1.3.2.4 Pump 2 disable —robot must at auto mode
station must at manual mode
—select robot
—select master
-click start button
WARNING
是否禁用二号泵
Do you want to disable pump 2
ок

- 1.3.3 Set brush Factor 1.3.3.1 set brush facotr
- ——robot must at auto mode

—select robot
—select master
—click start button 启动

R	23	Co	l No.	0	F	222	Co	ol No.	0	l l	21	Co	ol Na 🔋	
	Actual	Set				Actual	Set				Actual	Set		
Fluid	100	0	Set	Get	Fluid	100	0	Set	Get	Fluid	100	0	Set	Get
Atom	100	0	Set	Get	Atom	100	0	Set	Get	Atom	100	0	Set	Get
Shape1	100	0	Set	Get	Shape1	100	0	Set	Get	Shape1	100	0	Set	Get
Shape2	100	0	Set	Get	Shape2	100	0	Set	Get	Shape2	100	0	Set	Get
HV	100	0	Set	Get	HV	100	0	Set	Get	HV	100	0	Set	Get
	213	Co	l No.	0		R12	Co	ol No.	0		811	Ce	ol No.	0
	C13 Actual		l No.	0				ol No.	0		R11 Actual		ol No.	0
	Actual	Co Set 0	l No.	0 Get	Fluid	R12 Actual	Co Set	ol No.	0 Get	Fluid	C11 Actual	Co Set 0	ol No.	
F	Actual	Set				Actual	Set				Actual	Set		0 Get
Fluid Atom	Actual	Set 0	Set	Get	Fluid	Actual	Set 0	Set	Get	Fluid	Actual	Set 0	Set	Get
Fluid	Actual 100 100	Set 0 0	Set Set	Get Get	Fluid Atom	Actual 100 100 100	Set 0 0	Set Set	Get Get	Fluid Atom	Actual 100 100	Set 0 0	Set Set	Get

—intput color number Col Ne

"0" present globle

- -Click Set button can update brush factor to robot system
- -Click Get button can read brush factor from robot system

F	21	Co	l No.	1
	Actual	Set		
Fluid	80	80	Set	Get
Atom	100	0	Set	Get
Shape1	100	0	Set	Get
Shape2	100	0	Set	Get
HV	100	0	Set	Get

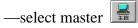
- 1.3.4 RCC control
- 1.3.4.1 Dock
- —robot must at auto mode
- ---station must at manual mode

-select robot

—select master



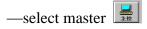
- 1.3.4.2 UnDock
- -robot must at auto mode
- --station must at manual mode
- -select robot



-click start button

WARNING	X
是否解锁旋转换色阀	
Do you want to undock the rotation color changer	
Do you want to undock the rotation coror changer	
ОК	

- 1.3.4.3 calibration RCC
- —robot must at auto mode
- ---station must at manual mode
- --select robot

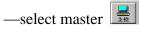


WARNING		Χ
	是否校准旋转换色阀	
Do you v	vant to calibrate the rotation color changer	
	ОК	

- 1.3.4.4 Move to calibration position
- -robot must at auto mode
- ---station must at manual mode
- -select robot
- —select master 📕
- -click start button

WARNING	ζ
是否移动到校准位置	
Do you want to move to calibration position	
ОК	

- 1.3.4.5 move position
- —robot must at auto mode
- -----station must at manual mode
- -select robot



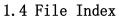
	X
[颜色号] [1]	
请在颜色框中输入颜色号	
是否移动到特殊颜色位置	
Do you want to move to special Material position	
ОК	
	原 色号 请在颜色框中输入颜色号 是否移动到特殊颜色位置 Do you want to move to special Material position

- 1.3.5 Paint Push
- 1.3.5.1 Paint Push Enable
- -robot must at auto mode
- ---station must at manual mode
- -select robot
- -click start button

WARNING X
是否启用油漆吞吐
Do you want to enable paint push
ОК

- 1.3.5.2 Paint Push Disable
- -robot must at auto mode
- ---station must at manual mode
- -select robot
- -click start button

WARNING		Χ
	日本林田油冰夫司	
	是否禁用油漆吞吐	
	Do you want to disable paint push	
	ОК	



控制:程序	控制:程序
<u>素引文件</u>	<u>文件索引</u>
紧急清洗 编辑	紧急清洗 编辑
杯内清洗 编辑	杯内清洗
工具清洗 编辑	工具清洗 编辑
杯外清洗 编辑	Paint Push 编辑
混合比 编辑	杯外清洗 编辑
······ 等级 编辑	

User can use this function to update some index file from robot system, include bell clean, hub clean, tool clean, mix ratio, paint push

1.4.1 clean

Robot in manual mode or auto mode, pipe is filled, when the setting time is zero then do dump fill.

-robot must at manual mode

—select robot and click 修改素引文件]

紧急清洗		X
	R13 修改索引文件	
	R23 修改索引文件	
关闭		

Pot Life	Index		Χ
	Material	Time	
	0	0	
	1	0	
	2	0	
	3	0	
	4	0	
	5	0	
	6	0	
	7	0	
	8	0	
	9	0	
	L	<u> </u>	>

-click, save index file

1.4.2 Hub Clean —robot must at manual mode —select robot and click Modify

Hub Clean	X
	R13 Modify
	R23 Modify
Close	

Hub Clean Index		X
Material	Clean Interval	Clean Time
1	0	1.5
2	0	1.5
3	0	1.5
4	0	1.5
5	0	1.5
6	0	1.5
7	0	1.5
8	0	1.5
9	0	1.5
10	0	1.5



1.4.3 Tool Clean

-robot must at manual mode -select robot and click Modify

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工具清洗	X
	H13 修改
工具清洗 关闭	

Tool Clean Index	:	X
Material	Clean Interval	Clean Time
1	0	3

-click, save index file

1.4.4 paint push

—robot must at manual mode
—select robot and click Modify method File or Modify volume File

Paint Push-1k	C			Modify m Modify ve Modify m	X 213 ethod File olume File 223 ethod File olume File	
Close						
int Push Index		Χ	Paint Pus	sh Index		Χ
Material	Method			Material	Factor	
1	2			1	0.6	
2	2			2	0.6	
3	2			3	0.6	
4	2			4	0.6	
5	2			5	0.6	
6	2			6	0.6	
7	2	-		7	0.6	
8	2			8	0.6	
9	2			9	0.6	
10	2			10	0.6	
	<u> </u>	>	Ē	L	_ < 1	>
lick , save index file						

- 1.4.5 bell clean
 - —robot must at manual mode
 - —select robot and click **修改素引文件**

杯外清洗	ì			X
			R13 修改索引文	4
			R23 修改索引文	件
	_			
关闭				1
-	Bell Clean Index		X	
	Material	No MC Interval	MC Interval	
	1	1	0	
	2	1	0	
	3	1	0	
	4	1	0	
	5	1	0	
	6	1	0	
	7	1	0	
	8	1	0	
	9	1	0	
	10	0	0	
—click , s	ave index fi	.le		
1.4.6 fill				
—robot must				
—select rob	ot and click	遂武C1Clea	n文件 _{or} 修改	CIFill文件
or 修改C2Clean	文件 or 修己	位C2Fill文件		

	清洗			X
				R13 次C1Clean文件 次C2Clean文件 次C2Clean文件 次C2Clean文件 次C2Clean文件 次C1Clean文件 次C1Clean文件 次C1Clean文件 次C2Clean文件 次C2Clean文件 次C2Clean文件
	关闭			
	C2 Index			X
		ColorNo.	Clean Grade	
		1	1	
		2	1	-
		3	1	-
		4	1	
		5	1	
		6	1	
		7	1	
		8	1	
		9	1	
		10	1	
		↓	<u> </u>	>
-click] , save	e index file		

1.4.7 Mix ratio —robot must at manual mode —select robot and click 修改素引文件

Fluid Mix Ratio				X
R11 修改索引文件	R12 修改索引文作	ŧ		
R21 修改索引文件				
Close				
Fluid Mix I	ndex		Χ	
Γ	Material	Mix Value		
	0	3.333		
[1	3.333		
	2	3.333		
	3	3.333		
	4	3.333		
	5	3.333		
	<u>6</u> 7	3.333		
	8	3.333		
	9	3.333		
	ſ	_ 1		
-click II , save	index fi	le		

4.1.3 Opener Control

User can manual control opener in this page

AB	FI RexLin	exU e User Interfa			面	「涂 内喷 1		*	2015/10/29) 用户 权限	abb 9	班次	1
查看	控制	参数	诊断	程序	报表	帮助							
10/29/2018	5 03:52:19]	7年	PLC :	ibb		Auto mode :	top (DB931, X3. 4)						Alarm
机器人:	开门器打	空制		_ 工位									
开门器包	立置			l F	N								- -
1	全开位置		0										84
2	半开位置		0 0 0 0		秋 勝 / 新 (約 (11)		R22	代表人主要	● 机器人和 制造器 和常常	_ (1)	R21		Ţ
3	压紧位置		0			H22	20	<u>۲</u> D22	(f) [721	0	🏊 🖪		
4	松开位置		0		Ō	2	抗發人主權 (1993年)	2	ं 🚣	0	机器人车推制的公司		
5	关门位置		0										
						I	作位置					-	
							.移人来姓 	° D12) [7-1 D11)	5人高盛 1972	<mark>-</mark>	
							R12 (M)	ᆋ 👸	š 🚣 Č				
						A	> ŏ	机器人高速 部部编制	机器人高速 可能供量	ŏ			
								618 C. 1					-
					H22	R22 D22	D21	R21			1	入口縣放	
机器人	「「「」」	授权	释放			R12 D12		R11	》内喷2	i @ 14	喷1	8口释放	•
开	\bigcirc	<u>,</u> 10		Imp			Č, 👄					▲ 通	▲ 日本

4.1.4 New Start

When a sudden situation, need to work on car, can control station in this page to start again

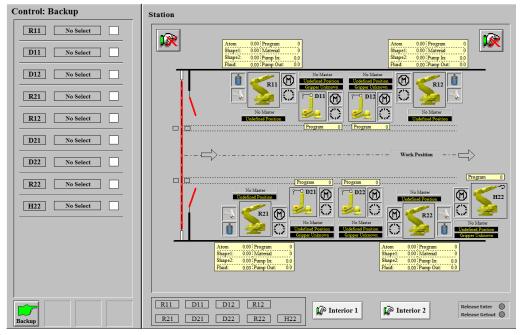
		面涂内喷1		用户 abb 权限 9	班次 1
查看 控制 参数	诊断 程序	报表 帮助			
10/29/2015 03:52:19 下午	PLC abb	Auto mode stop(DB931,X3.4)			Alarm
机器人:重新喷涂	工位				
重新响涂. 			■ ■		
2000 自动		R12 D12 D11 R	/ / / / / / / / / / / / / / / /	🕼 Path1	λ052 2052
# 🗘 🏹 💵	Þ 🔼 🞯 !	k 📶 🕙 🖍 👄			A A A A A A

4.1.5 Backup

Backup robot program and copy to pc disk.

Situation:

- Station must be at manual mode
- Robot must switch to auto mode



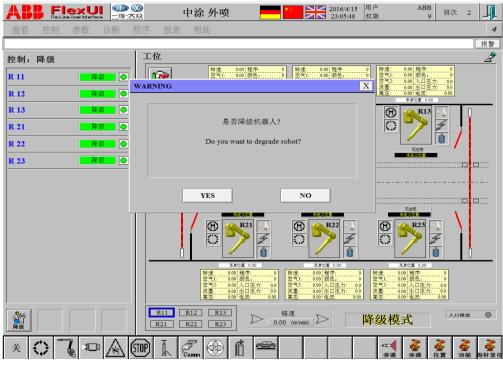
4.1.6 Degrade Mode

Only exterior station has degard mode. And one station only one robot can be degrade

	● 中涂外喷 2016/4/15 相户 ABB 班次 2	I
查看 控制 参数 诊断	程序 报表 帮助	4
控制:降级	工位	报警
R 11 降级		
R 12 降级 🤇	空気 0001 日田方/1 000 日日方/1 000 日日方/1 000 日日方/1 000 日日 100 </td <td></td>	
R 13 降级 0		
R 21 降級 R 22 降級		
R 22 降级 C R 23 降级 C		
]
	事業世 0:00 事業世 0:00 事業世 0:00 事業世 0:00 事業世 0:00 竹油 0:001程序: 0 日本 0:001程序: 0 空气: 0:0012日本: 0:0012日本: 0:0012日本: 0:0012日本: 0:0012日本: 空气: 0:0012日本: 0:0012日本: 0:0012日本: 0:0012日本: 0:00121日本: 憲正: 0:0012日本: 0:00121日本: 0:00121日本: 0:00121日本: 0:001211日本: 憲正: 0:00121日本: 0:001211日本: 0:0012111111111111111111111111111111111	
	R11 R12 R13 <th< th=""> <th< th=""> <th< th=""><th>٢</th></th<></th<></th<>	٢
* 🗘 🔽 📼 🛕		公 指针复位

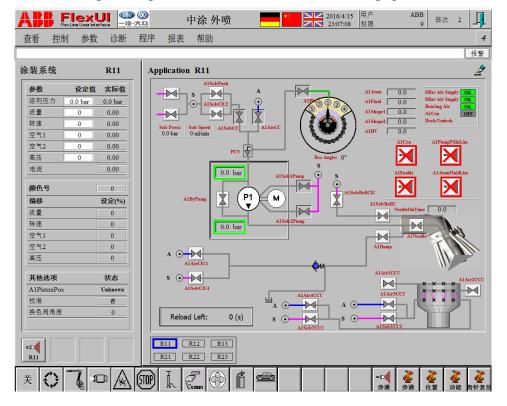
Click degrade button 降级 Next 降级。

Select robot which you want to degrade ${\scriptstyle \circ}$



确定。

4.2 Fluid System



User can set process parameter and control valve in this page

4.3 FIFO

This page you can view/modify the current operation vehicle information and station vehicle information

序列	喷涂	车型名称	车型代号	程序号	颜色名称	颜色代号	滑橋	删除
内喷-1]		0			0	删除
内喷-2				0			0	
		- -	ن د د	, 1 1 , 1 1	S I			

If user want to add the vehicle information, click on the input box will pop up a window for your input.

	ABB	Flex RexLine User		1 00 I	Primer Sw	ord Brus	h 🣔		2015/9/6 16:28:05	Operator Level	ABB 9	Shift	2
	View	Control	Setting	Diagnose	Program	Report	Help						
													Alarm
C	Control:]	FIFO											1
	Seria	1	Seal Enable	е Тур	e Name	Type Code	Program	Ski	iđ				
	Before B	lo Body S	elector		Х	Type Selec	tor				х		
	Blow Of	í m	0										
	Before S	w Type Vinc	• Option			22	22						
	Sword B	ru —	Number		0	40							
			Code	_	8888								
			Name	车型1									
		Prog	gram Index		1								
		Seal	Enable		\bigcirc								
										, NUL	>		
I								<<	<	1 >	>>		
I						2~			,	•			
I				/					/				
					1				L				
I									_				
	Entry	e Exit											
C	off	}	\mathbb{A}			<u></u>						Bi	low Dff System

4.4 Ghost

This page allows the user to modify the value of the information and start simulation.Users can input analog data, the maximum six car body can be simulated.The necessary condition to simulated experiment is as follows:

- the robot in the automatic state.
- stand in the automatic state.
- the robot motor is in ON state.
- robot CycleOn signal in the On state.

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- the PLC in the Master state.
- no any alarm.
- the current program number is 0.



Click the first button to start the simulation mode, enter the vehicle information.

Upon the input, click on "start" start simulation, click "Cancel" to Cancel. Click on the "Station" button, then back to the main interface.

ABB	Flex RexLine User Inte	U 一達大泉 FAW-VW	面涂	内喷1		2015/10/29 用户 17:17:25 权师		abb 9 班次	1
查看	控制 参数	诊断 程	亨 报表 帮	助					
10/29/2015 03	3:52:19 下午	PLC abb		Auto mode stop(D	B931, X3. 4)				Alarm
控制:模拟									1
序列	启用模拟	车型名称	车型代号	程序号	顏色名称	颜色代号	滑橋	喷涂使能	
G1		33	555	5	green	00T9	88		
G2				0			0		
G3				0			0		
G4				0			0		
G5				0	[0	\bigcirc	
G6				0			0		
模拟参数 模拟数量	È		1						
模拟次表	2		1						
重复									
模拟完成	\$		\Box						
<mark>\$</mark>	✓ 成業								
开 🗧) 况 🛛		0 👢 🐔	<u>ک</u> (آر					□ ☆通 単計算位

4.5 Bypass

This page provides a robot, Home and application bypass, click on the corresponding button to bypass.White to bypass status.

AB	FiexLi	l <mark>exU</mark> ne User Interfa	-15		面	除 内喷1			2015/10/29 17:17:37	用户 权限	abb 9	班次 1	
查看	控制	参数	诊断	程序	报表	帮助							
10/29/20	15 03:52:19	下午	PLC	abb		Auto mode stop	(DB931, X3. 4)						Alarm
旁通:	机器人			工位									
R 11	旁通 模拟原位	自用 自用) 旁通) 旁通		N								-21
R 21	旁通 模拟原位	信用 信用) 旁通) 旁通		11.祭 / 5783		R22	机器人主控制物给体量	机器人主控制的检查	- 0	R21	1	-
R 12	旁通 模拟原位	信用 信用) _{旁通}) _{旁通}			H22				<u>p</u>			
R 22 ·	旁通 模拟原位	信用 信用) 旁通) 旁通		<u> </u>		初始位置				<u>材始做量</u>		
D 11	旁通 模拟原位	自用 同日 信用) 旁通) 旁通				置					F	
D 21	旁通 模拟原位	信用 信用) 旁通) 旁通			机器/ 机器/	<u>*#</u>	^{1 D12} 💮	р <u>11</u> (С)	机器人	<u>羊控</u>		
D 12	旁通 模拟原位	に 信用 信用) 旁通) 旁通				R12			05	R11		
D 22	旁通 模拟原位	に 信用 信用) 旁通) 旁通				- KZ	1784 I	初始性重				-
H22	旁通 模拟原位) 旁通) 旁通										
「「「「」」の「「」」の「「」」の「「」」の「「」」の「」」の「「」」の「」」。」。」。」。	□□ 素化器	() 传感器	夏位指针			R22 D22 [R12 D12 [D21 R D11 R	— L@ F	内喷2	🕼 内喷	1	入口等这 出口等放	0
开	\bigcirc	<u> </u> =0		(TOP)	L &	. O					*	2 □ 3 □ <td> 🍰</td>	🍰

5 Setting

5.1 Type Setting

This is a model parameter Settings.Each line represents a model parameter, is offered up to 50 kinds of models.

		ting Diagnos		Report		 			A
tup: Ty	уре								
Serial	Type Name	Type Code	Progarm No.						
01	车型1		0						
02	车型2		0						
03	AUDI Q3		0						
04	audi A3		0						
05	golf		0						
06	777		0						
07	678		0						
08	999		0						
09	10		0						
10	11		0						
11	12		0						
12	13		0						
13	14		0						
14	15		0						
15	16		0						
						<<	< 1	>) >>>
	n 🎹								

- Type Name: This column to fill in the names of the models, can be arbitrarily defined by the customer.
- Type Code: This column is controlled to fill in the Code of a model has been defined.
- Program Number: This column number fill in the application of PLC is sent to the robot.



From function buttons (from left) :

- \succ button 1: to save values to the PLC.
- \succ button 2: to keep the value of the local.
- ➢ button 3: cancel button.
- \succ button 4: according to the value of the PLC.
- \succ button 5: according to the value of the local.
- > button 6: save all values (from PLC to local; or from the local to the PLC)

5.2 Color Setting

This is a model parameter Settings.Each line represents a model parameter, is offered up to 50 kinds of colors

- Color enable:
- Mixroom:
- Color Name:
- Color Code:
- Supplier:
- Color:
- Ring pipe:
- Level:
- Max day: if color not paint max day later, it will be alarm
- Manual paint: user open color valve to paint the color

BB	FlexUI RexLine User Interface		中涂 外喷			2016/4 23:10		A	3B 9 班次 2
查看	控制 参数 诊断	程序 报表	帮助						
									报
置: 彦	颜色								2
序号	颜色使能 调漆间状	态 颜色名称	颜色代号	供应商	颜色	管路号	等级	最大天数	手动挤漆
01	是 否	ibiswhite	104	Hemmelrath		1	0	2	۱
02	<u> 是 否 </u>	darkgrey	171	Hemmelrath		2	0	2	۸
03	是 否 🥚	anthrazit	172	Hemmelrath		3	0	2	0
04	是 否 🥚	brilliantred	137	Hemmelrath		4	0	2	0
05	是 (否) 🥚					0	0	0	
06	是 (否) 🥚					0	0	0	
07	是 否 🥚					0	0	0	
08	是 否 🥚					0	0	0	0
09	是 否 🥚					0	0	0	0
10	是否					0	0	0	0
11	是否					0	0	0	0
12	是否					0	0	0	۸
13	是否					0	0	0	
14	是 (音) 🥚					0	0	0	
15	是 (音) 🥚					0	0	0	
							<<		1 > »
) 7 💷 🔬		T Comm	ń 🛥				·····································	▲ ▲ ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

5.3 Parameter Setting

This page allows the user to set the parameter value of the PLC

/iew	Control Setting Diagno	ose Program	Report	Help			Ala
etup: R	tegister						Ala
Serial	Comment	Value				 	
01	Booth body quantity	0					
02	Robot Number	0					
03	Degrade int	0					
04	Conveyor real Speed	0					
05	Simulation speed	0					
06	Zone_length	0					
07	Skid_length	0					
08	Min_pitch_length	0					
09	Skid_detect_distance	0					
10	Manual_encod_distance	0					
11	changing_color_distance	0					
12	Car start position in booth	0					
13	ColorBoardDisplayPos	0					
14	ColorBoardDisplayLen	0					
29	Spare	0					
					<<	>	>>>
	n 🏢 📘 📰						

5.4 Alarm Setting

This page is the handling of fault from the robot Settings.

"Alarm" column is selected, said the bank's failure happens, three color column light red light flashing, until the fault is excluded

"Buzz" column is selected, said the bank's failure happens, three color column light buzzer buzzer, until the operating platform of fault reset button is pressed

"Stop chain" column is selected, said the bank's failure happens, it will stop the running conveyor chain, after failure is ruled out, need to restart the conveyor chain

"Unconfirmed" column is selected, said the bank's failure happens, only in the alarm picture on the FlexUI query that does not affect other processes

_			_		_			_	Al
tur	: PLC Alarm Setting								4
Nb.	Comment	Fault	Stop	Unack	Nb.	Comment	Fault	Stop	Unack
1	Booth fire alarm(DB931,X0.0)	Г		Г	17	EMERGENCY STOP From Conveyor(DB931,X2.0)	Г	Г	
2	Emergency Stop Operating Desk(DB931,X0.1)	Г		Г	18	Spare(DB931,X2.1)		Г	П
3	Swing Door Entrance left 1(DB931,X0.2)	П		Г	19	Spare(DB931,X2.2)	Г		
4	Swing Door Entrance right 1(DB931,X0.3)			Г	20	Spare(DB931,X2.3)	Г		
5	Swing Door Exit right 1(DB931,X0.4)	п		Г	21	Spare(DB931,X2.4)	-	П	
6	Swing Door Exit left 1(DB931,X0.5)	П		Г	22	Spare(DB931,X2.5)	Г	П	
7	Entrance light curtain intrusion(DB931,X0.6)	П		Г	23	Spare(DB931,X2.6)		П	•
8	Exit light curtain intrusion(DB931,X0.7)			Г	24	Spare(DB931,X2.7)	П	П	
9	Entrance light curtain Fault (DB931,X1.0)	Г	П	Г	25	Spare(DB931,X3.0)	П	П	Г
10	Exit light curtain Fault (DB931,X1.1)	Г		Г	26	Line compressed air valve(DB931,X3.1)	Г	Г	П
11	Bypass Light curtain(DB931,X1.2)	п		Г	27	Fire alarm control valve (DB931,X3.2)	-	П	
12	Bypass Safety Door(DB931,X1.3)	Г		Г	28	General mode stop(DB931,X3.3)	Г	П	
13	Swing Door Entrance left 2(DB931,X1.4)	Г		Г	29	Auto mode stop(DB931,X3.4)		П	
14	Swing Door Entrance right 2(DB931,X1.5)	Г		Г	30	Emergency mode stop(DB931,X3.5)		П	
15	Swing Door Exit right 2(DB931,X1.6)	Г			31	Station maintainance mode(DB931,X3.6)		П	
16	Swing Door Exit left 2(DB931,X1.7)	Г		Г	32	Station cleaning mode(DB931,X3.7)	Г	Г	
		ALL	ALL	ALL			ALL	ALL	ALL
		-				<u> </u>	1	>	>

5.5 Security

This page set the authorization level operation.Only with the highest authority level 10 operator can be set.10 operators have all permissions.

Permissions setup steps:

- Click on the menu corresponding to certain needs, set up the page, the level of use is shown in the figure below the permissions of the operators can operate this picture permissions, divided into can modify, read only does not change, and could not enter the operation of the page.

- Click the Numbers in the access to the following drop-down menu and choose

modify finished click screen ICON in the lower left corner after completed the modification

ABB		Interface	B P	rimer Swo	rd Brus	h	2015/9/6	Operator Level	ABB 9	Shift	2
View	Control	Setting	Diagnose	Program	Report	Help					
											Alarm
Setup: Secu	irity										2
View	Control	Setting	Diagnose	Program	Report	Help					
	Robot		1								
	Brush Sy	stem	2								
	Blow Off		3								
	FIFO Ghost		4 5								
	Bypass		6								
	[D)pubb										
Access Lev	vel										
	10					7					
	1 2	34	1 5	6 7	8 9						
1 2 1 4	5 • 2 •	2 - 2	• • 2 • 4	? • _? • _	9 - 2	1					
						_					
	_			Draw EPO To	End Passalt -	dillos					A
				Press ESC To	End security E	uung					×
						1 1	 				low Brosh

Click on the images after the ICON in the lower left corner will jump out of a dialog box, can increase the account, account level of permissions set.

The increase of account:

In the field "User Name" enter new account Name and then click the "Add" button to complete the account of the increase.Input is selected in the "Password"

The deletion of the account:

Want to Delete the account name of selected, make its color to blue, the mouse to click "Delete" button to complete the deletion of the account

Use <u>r</u> Name:		OK
ABB		_
ABB Administrator leadersoft		Cancel
level1 level2 level3	~	Add
Password:		Update

5.6 Miscellaneous Setting

This page can be within the 24 hours a day on shift time setting. Can be set to delete and backup database functionality. Robot suto backup function.

Manual Cut Robot backup to local PC.

ABB !	FlexU		● ③ -大尕	F	卜涂 外	喷	*		2016/4/15 23:30:18	用户 权限	administrator 10	班次	2	
查看 控制	削 参数	诊断	程序	报表	帮助									4
A 451 ETT H	\H III												报	
设置:综合	伐 置												<u>.</u>	2
班次设定	起始問	时间	结	束时间										
班次1	8:	0	16	: 0										
班次 2	16 :	0	23	: 59										
班次 3	23 :	59	8	: 0										
□ 手动挤 □ Paint S ☑ 开启自 Reset Syste	月份 数 自动备份 》Leadersoft/DBI 漆报警 eep Mode 启动工位	3ackup\ ys		备份 Refresh	· •	Freuency Time		Pays P'clock	al PC	Cut				
美 🗘	7. 10		T	I E	7		<u></u>							アテレクション

6 Diagnose

6.1 Online alarm page displays all the alarm Alarm

content in real time.

AB	FlexLi	ext ne User Interf		2:大兄 8:大兄 W-VW	Ī	面涂 内	喷 1	*)	201:		用户 权限	abb 9	班次	1	Ą
查看	控制	参数	诊断	程序	: 报表	帮助									
10/29/2015	03:52:19	下午	PLC	abb		Auto	mode stop(DB9	31, X3. 4)							lam
診断:报	警														à
时间人	5 03:52:19		设备 PLC	損	能员		报警注释	top (DB931, X3. 4)							
¥.	Displaying	1 to 1 of	1 alarms.			Default Q	uery			100 % Co	mplete				
л (0	<u>l</u> =		() I	en e) <mark>(</mark> ,	<u> </u>					2	2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	。 () 計計

6.2 IO

Input/output page shows all the PLC/robot/remote module input and output of information, only as a read-only information.Can be used to check for user input output state.

输送销	10				
序号	输入点内容	状态	序号	输出点内容	状态
1	Life_Bit		1	Diagnose Bit	
2	Data Ready		2	Lift Bit	
3	Send Done		3	Receive Done	
4	Send Act		4	Release Enter S1	
5	Skid Entering S1		5	Release Getout S1	
6	Skid Getting Out S1		6	Release Enable S1	
7	Skid Ready Position OK S1		7	No Fault S1	
8	Skid Work Position OK S1		8	No Estop S1	
9	Skid Next Position OK S1		9	Auto Mode \$1	
10	No Fault S1		10	Safe Pos S1	
11	No Estop S1		11	Release Enter S2	
12	Auto Mode S1		12	Release Getout S2	
13	Skid Entering S2		13	Release Enable S2	
14	Skid Getting Out S2		14	No Fault S2	
15	Skid Ready Position OK S2		15	No Estop 82	
16	Skid Work Position OK S2		16	Auto Mode S2	
				·	$\langle \rangle$

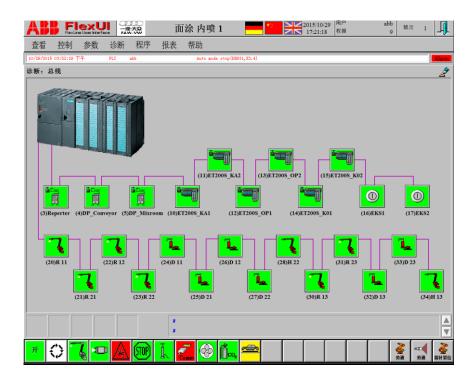
6.3 Network

Ethernet communication page shows all the Ethernet connection communication way and the man-machine interface.Note: green (connection)/red (failure)

AB					面	涂 内喷	1		*)	20	15/10/29 7:21:02	用户 权限		abb 9	班次	1	Ţ
查看	控制	参数	诊断	程序	报表	帮助											
10/29/20	15 03:52:19	F午	PLC	abb		Auto mod	e stop(DB9	31, X3. 4)									Alarm
诊断:	网络																4
	ABB	<u>地</u> : 72.27.63.11			CCR	IP地址: XXX.XX.XX.XX.	xx							PLC]	<u>位</u> 2.27.63.6		
	RII	P地址: 172.27.63.	60		IP地址: 172.27.	63.68	D12	IP地址: 172.27.	63.72	R		^{地址:} 172.27.6	3.64]	
	R21	IP地址: 172.27.63.	62	D21	IP地址: 172.27.	63.70	D22	IP地址: 172.27.	63.74	R		地址: 172.27.6	3.66	J			
												[P地址: 172.27.	63.76		
开	\bigcirc	<u>l</u>		1	<u>k</u>		(Åco,							4		1 1 1 1 1	職業

6.4 **Profibus**

Can profibus page shows all the PLC communication state.



7 Report

This chapter introduces the man-machine interface of the reporting system.

7.1 **Production**

The history of the production report page allows users to view this site in the production of statistical reports.

From the switch to the other picture, will be displayed in the default Settings on the day of the recent article 100 under the all models all color in descending order of production records.

On the right side of the production report will record every car of automatic spraying stops time, outbound time, whether spraying, car model, color, production shift, shift production quantity, the total consumption of paint on the local volume.

Column can be set to "time" to display the beginning and end of the production of statistical time Settings

To "filter" column can be set set need to statistical models

"Color" filter - need to color Settings

For "shift" column can be set to the divisions of the statistics need to be set

/29/2015 03:52:19	下午 PLC abl	>	λ.	ito mode stoj	p (DB931, X3. 4)					Al
eport: Produ	iction										
时间			1				产量报表			Last 10	00 Till 2015/10/3
Ж:	2015-10-29 00:00:00	-	车型:All 进站时间	班次:# ▲ VIN俗	1 4:40	颜色号:All	出站时间	日产量	班次	是否完成	Total: 12 Line
	2015-10-30 00:00:00		2015/10/26 17:28:33	0045	555	00T9	2015/10/27 11:12:53	1	1	1	
	2013-10-30 00:00:00		2015/10/25 18:03:29	0085	555	00T9	2015/10/25 18:08:26	1	2	1	
过滤			2015/10/24 16:39:08	0084	555	00T9	2015/10/24 16:39:08	1	1	1	
车型	All	٠	2015/10/24 15:37:02	0084	555	00T9	2015/10/24 15:40:28	2	1	1	
颜色号	All	•	2015/10/24 15:23:02	0088	555	0000	2015/10/24 15:24:41	1	1	1	
	All	•	2015/10/22 10:01:17	0088	555	Т9	2015/10/22 10:01:17	1	1	1	
Skid	0	_	2015/10/21 14:20:35	0088	555	Т9	2015/10/21 14:22:20	4	1	1	
		-	2015/10/21 10:49:00	0048	555	0000	2015/10/21 10:50:39	2	1	1	
Vincode		-	2015/10/21 10:21:06	0024	555	0000	2015/10/21 10:24:31	1	1	1	
Paint			2015/10/20 17:34:15	0056	555	0000	2015/10/20 17:34:15	1	1	1	
			2015/10/20 17:17:50	0056	0000	0000	2015/10/20 17:22:30	4	1	1	
			2015/10/20 16:37:40	0007	0000	0000	2015/10/20 16:43:42	3	1	1	
			Total								
排序											
Entertime	→ 升序 ○ 降戶	Ķ o									
						_					
捜索 导出	English		前一天 后一天	Э.,	近100	The Repor	t is Complete .				

Function button (from left) : Search: search capabilities Export: export to Excel file English: change to Chinese Records of the day: the day before Day 2: record the next day Today is: today's record Over the past 100, 100 records in the past

7.2 Consumption

The history of consumption log report page allows users to view this site consumption log statements.

From the switch to the other picture, will be displayed in the default Settings of the day's recent article 1000 of the most important operation record.

On the right side of the production report will record every important operation records, including time, operator, registration operation, divisions, and operating content page.

Column can be set to "time" to display the beginning and end of the production of statistical time Settings

"Column for" filter - operators can be set to statistical operator set

To "filter - shift" column can be set to the divisions of the statistics need to be set

To "filter - page" column can set need statistics page Settings

/29/2015 0	3:52:19 下午	PLC ab	ь		Auto node sto	op (DB931, X3. «	1)					Al
eport: (Consumption											
时间				1				消耗报表			Last	100 Till 2015/10/29
	201	5-10-29 00:00:00		车型:All	顏色号:		班次 : All	类型: All				Total: 23 Lines
				进站时间 2015/10/29 15:21:00	<u>车 VIN码</u> 0015	<u>车型</u> 555	颜色 00T9	出战时间 2015/10/29 15:22:46	日产量	班次	是否完成 0	材料消耗 626 -
33	201	5-10-30 00:00:00	•		0015			2015/10/29 15:22:46		1	0	626
过滤				2015/10/28 14:02:58 2015/10/28 13:55:13		555	00T9 00T9	2015/10/28 14:04:44	3	1	0	
车型		AI	•	2015/10/28 13:55:13	0087	555	0019	2015/10/28 13:57:00	2	1	0	626
颜色号		Al	•									
			_	2015/10/27 16:02:04	0012	555	00T9	2015/10/27 16:04:21	1	1	0	628
班次		AI		2015/10/27 11:12:53	0085	555		1900/1/1	1	1	0	0
Skid		0		2015/10/27 10:23:29	0085	555		1900/1/1	1	-		0
类型		AI	•	2015/10/26 18:38:25	0085	555	0000	1900/1/1	2	2	0	0
				2015/10/26 17:28:33	0045	555	00T9	2015/10/27 11:12:53	1	1	1	0
				2015/10/25 18:03:29	0085	555	00T9	2015/10/25 18:08:26	1	2	1	0
				2015/10/24 16:39:08	0084	555	00T9	2015/10/24 16:39:08	1	1	1	0
				2015/10/24 15:37:02	0084	555	00T9	2015/10/24 15:40:28	2	1	1	0
				2015/10/24 15:23:02	0058	555	0000	2015/10/24 15:24:41	1	1	1	0
				2015/10/22 10:01:17	0088	555	T9	2015/10/22 10:01:17	1	1	1	0
				2015/10/21 14:20:35	0088	555	T9	2015/10/21 14:22:20	4	1	1	0
排序				2015/10/21 14:04:24	0038	555	T9	1900/1/1	3	1	0	0
Entertime	٠	升序 🔘 隣	7 ●	2015/10/21 10:49:00	0048	555	0000	2015/10/21 10:50:39	2	1	1	0
) (***			'			· · · ·
被索	导出 English			前一天 后一3	5 当天	董100	The Repor	rt is Complete .				

7.3 Operation

The history of operation log report page allows users to view this site operation log statements.

From the switch to the other picture, will be displayed in the default Settings of the day's recent article 1000 of the most important operation record.

On the right side of the production report will record every important operation records, including time, operator, registration operation, divisions, and operating content page.

Column can be set to "time" to display the beginning and end of the production of statistical time Settings

"Column for" filter - operators can be set to statistical operator set

To "filter - shift" column can be set to the divisions of the statistics need to be set

To "filter - page" column can set need statistics page Settings

/29/2015 03:52:19)下午 PLC	abb	A	uto mode st	op (DE931, X	3, 4)		Ala
eport: Oper	ation							4
时间			1				日志报表	近 1000 2015/10/29
<u>"</u> "	2015-10-29 00:0	0:00	授作者:All 記录时间	班次:A 操作员	川 旧作等级	雅次	- 福作	息计:1000行
	2015-10-30 00:0		2015/10/29 15:26:28	abb	9	1	Control R11: Send command 421	
	2015-10-50 00:0	0:00	2015/10/29 15:26:28	abb	9	1	Control R12: Send command 421	
过滤			2015/10/29 15:26:28	abb	9	1	Control R21: Send command 421	
操作者	All	٠	2015/10/29 15:26:28	abb	9	1	Control R22: Send command 421	
班次	Al	•	2015/10/29 15:25:27	abb	9	1	Control R11: Send command 421	
Operation	Al		2015/10/29 15:25:27	abb	9	1	Control R12: Send command 421	
			2015/10/29 15:25:27	abb	9	1	Control R21: Send command 421	
			2015/10/29 15:25:27	abb	9	1	Control R22: Send command 421	
			2015/10/29 15:20:57	abb	9	1	Station: User open the station entrance	
			2015/10/29 15:20:27	abb	9	1	Control R12: Send command 421	
排序			2015/10/29 15:19:55	abb	9	1	Control R12: Send command 421	
1#/JP			2015/10/29 15:19:40	abb	9	1	Control R12: Send command 400	
Time	• 升序 〇	· 時序 •	2015/10/29 15:18:53	abb	9	1	Station: User close the station entrance	
			2015/10/29 15:18:42	abb	9	1	Station: User open the station entrance	
			2015/10/29 15:10:39	abb	9	1	FIFO: Skid changed, from 0 to 15	
			2015/10/29 15:10:39	abb	9	1	FIFO: Option changed, from 0 to 65535	
			2015/10/29 15:10:39	abb	9	1	FIFO: The skid of 15 color code changed, from to 00T9	
			2015/10/29 15:10:39	abb	9	1	FIFO: The skid of 15 type code changed, from to 555	
捜索 导出	English		黄一天	<u>بة</u>	近100	完成。		

7.4 Alarm

Alarm log report page allows users to view this site by PLC read alarm log statements. From the switch to the other picture, will be displayed in the default Settings on the day of the recent article 100 alarm record.

On the right side of the production report will be recorded by PLC told police record, including time, equipment, type, number, duration, frequency, message.

Column can be set to "time" to display the beginning and end of the production of statistical time Settings

The "filter - equipment" column can set the set of equipment to be statistical

To filter - type "column" can set the type of alarm set need to statistics

To "filter - shift" column can be set to the divisions of the statistics need to be set To "filter - news" column can set need statistics message set

/29/2015 03:52:19 下午 PLC at eport: Alarm		A	uto node :	scopti	00001, 110.	4)		Ala
port. Marin						报警报表		
类型			班次: Al	JI	消		<u>近 100 20</u> 祭社	15/10/2! +: 100 行
		时间			寺续时间	消息		
普通	•	2015/10/6 10:54:30	R11	180	00:00:07	系统错误(DB931,X22.3)		
Top 10 频率	0	2015/10/11 17:50:29	R12	471	00:01:36	机器人紧急停止(DB931,X58.6)		
时间		2015/10/15 17:09:31	R12	440	01:48:47	喷雾器错误(DB931,X54.7)		
		2015/10/15 18:55:52	R11	199	00:02:26	空气提供压力过低(DB931,X24.6)		
∦: 2015-10-29 00:00:00	•	2015/10/17 18:51:11	R21	308	00:00:25	系统错误(DB931,X38.3)		
到: 2015-10-30 00:00:00	•	2015/10/18 10:06:04	H22	1200	00:09:07	仍在工作中(DB931,X149.7)		
VLVE		2015/10/18 13:19:59	H22	1204	00:00:06	系统错误(DB931,X150.3)		
过 滤		2015/10/18 14:19:41	PLC	4	01:04:15	右側入口摇摆门异常(DB931,X0.3)		
设备 All	-	2015/10/19 18:56:16	H22 :	1233	00:00:12	机器人电源异常(DB931,X154.0)		
班次 All	-	2015/10/20 12:07:58	PLC	7	00:02:19	入口侵入(DB931,X0.6)		
信息	_	2015/10/20 14:14:06	R11	180	00:04:53	系统错误(DB931,X22.3)		
ilara coda 0	_	2015/10/21 9:48:50	R11	161	00:28:33	心跳故障(DB931,X20.0)		
Alarn code U	_	2015/10/21 14:12:39	R11	180	00:00:09	系统错误(DB931,X22.3)		
排序		2015/10/22 15:22:48	D22	1076	00:00:10	系统错误(DB931,X134.3)		
		2015/10/22 16:10:48	R12	455	00:00:29	空气提供压力过低(DB931,X56.6)		
Time • 升序 · 降	序 🔍	2015/10/25 15:07:54	R11	166	00:00:42	RunChain未关闭(DB931,X20.5)		
		2015/10/25 18:53:02	R22	549	00:02:47	程序未执行(DB931,X68.4)		
		2015/10/26 18:38:46	R22	560	00:13:29	仍在工作中(DB931,X69.7)		
捜索 导出 English		前一天后一		街天	近10	完成。		

8 Tool

- 8.1 ShopFloor Editor
- 8.2 Robot Studio
- 8.3 RobView

8.4 Process Manage

Process Manage is the tools for update robot brush tables.

	Fluid	Atom	Shape 1	Shape 2	HV	Description
2						
3						
L						
5						
5						
7						
3						
•						
0						
1						
2						
3						
4						
5						

Choose Robot:用来选择要修改的机器人。 Choose Brush:选择将要修改机器人的刷子。 Create:用来创建新的刷子表。



: 用来修改完成后保存到机器里面的按钮。

9 Help

9.1 FlexUI

FlexUI help pages connected FlexUI man-machine interface of user manuals.

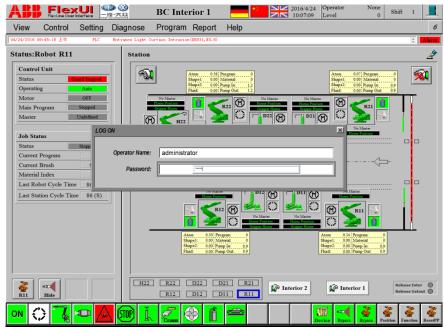
9.2 Robot

Robot help page link Robot user manuals.

10 EKS Setting

Administrator access is needed when you want to manage EKS.

1. First input administrator user name and password log on FlexUI.



2. Input EKS and window will pop up.

	BC Interior 1	2016/4/24 Operator administrator Level 10 Shift 1
View Control Setting I	Diagnose Program Report	Help 6
04/24/2016 09:45:18 上午 PLC 3	Entrance Light Curtain Intrusion(DB931, X0.6)	t Alarm
Status:Robot R11	Station	2
Control Unit Status Gaud Rispet Operating Aze Motor OFF Main Program Stopped Master Undefined Job Status Stopped Status Stopped Current Program 0	EKS Status EKS Status Ready Faut Present	X Nom 0.01 Porgram 0 Hard 0.00 Porgram 0 0 User Name Image: State and the state and
Current Program 0 Current Brush 901 Material Index 0 Last Robot Cycle Time 86 (S) Last Station Cycle Time 86 (S)	L	No Marry No Marry No Marry No Marry No Gram
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Input user name $_{\circ}$

Inputs user level.

Click save button and wait a moment.

Pull out EKS and finish setting.