

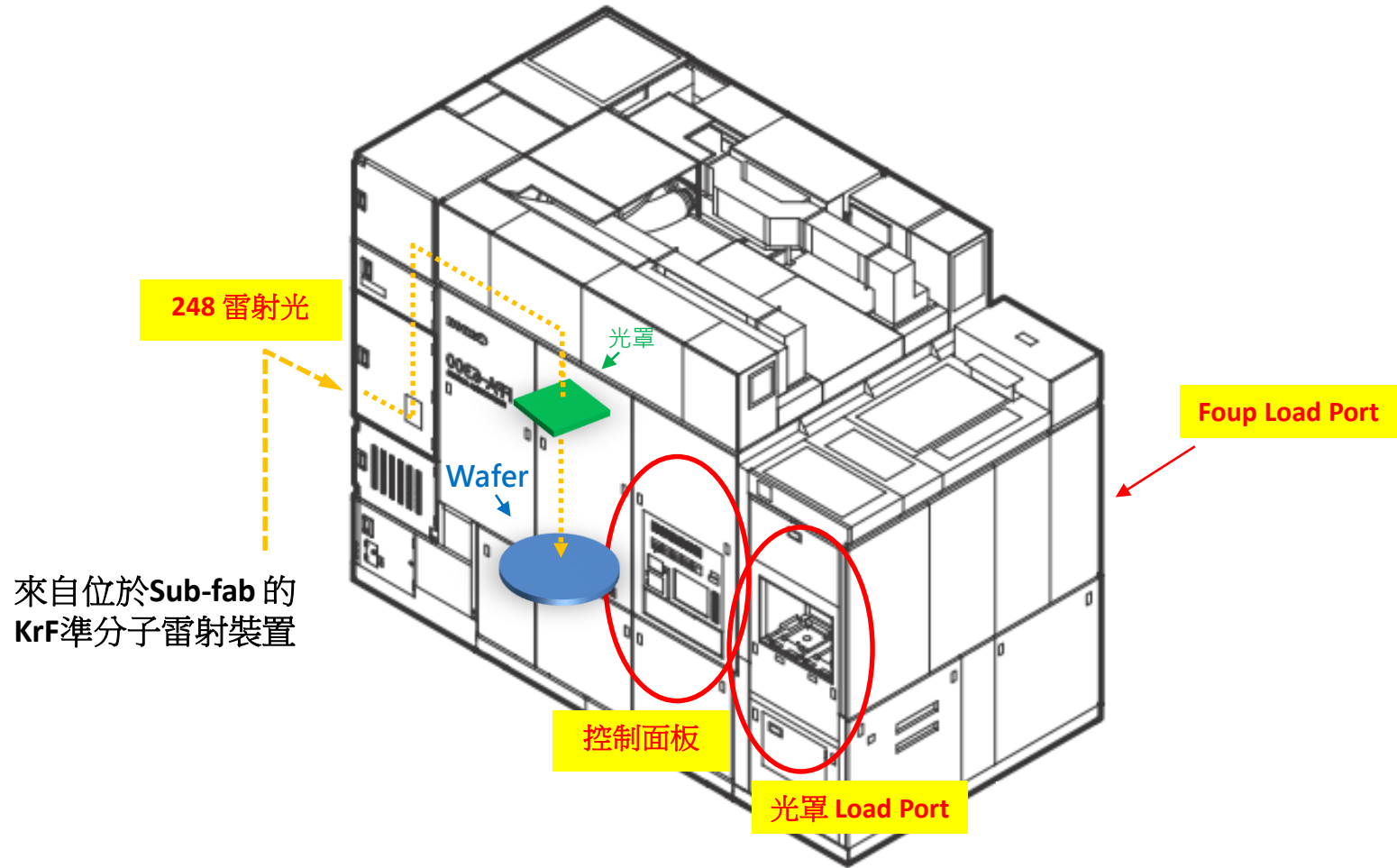


NAR Labs National Applied Research Laboratories
Taiwan Semiconductor Research Institute

L22 高速量產型光學曝光系統 設備作業標準

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248 Scanner (L22) 外觀簡介



TSRI-248 操作面板介紹 (下JOB頁面)

The screenshot shows the 'e-Console' interface for a Canon FPA-6300 ES6a lithography machine. The interface is divided into several sections:

- Top Left:** Machine identification (Canon FPA-6300 ES6a), date (2021/05/20), and user information (User ID: super).
- Top Center:** Job details including Lot ID (LELE2ndFEM), Queue (IDLE), Lock (UNLOCKED), Block (FREE), and Sequence (001E: Start Awaiting).
- Top Right:** Control panel showing Main, Reticle, and Wafer status (all Idle). A red 'ERROR' indicator is present, labeled as 'Error/Alarm List'.
- Left Panel:** A circular grid representing the wafer, with a red circle highlighting the 'Shot 曝光的進度' (Exposure progress). A '正在執行的步驟' (Step being executed) label points to the 'User' button.
- Center Panel:** Job List table showing Lot ID, Lot Status, and Job Name. A 'Job List' label points to this table. Below it are buttons for 'Add', 'Copy & Add', 'Clear All', 'Link', 'View', and 'Delete'. Labels '加Job' (Add Job), 'Copy Job', and 'View/Edit Job' point to these buttons.
- Right Panel:** Execution control buttons: 'Start', 'Pause', 'Resume', 'Stop', and 'Command'. Labels '開始執行 Job' (Start Job) and '停止執行 Job' (Stop Job) point to the 'Resume' and 'Stop' buttons respectively.
- Bottom Panel:** 'Assist Command' section with buttons for 'Reticle Alignment', 'Joystick RA', and 'Joystick PRA'. A 'Job 內容摘要' (Job Summary) label points to a text box containing job details like Patch No., Layer No., Lot ID, Recipe Name, Reticle ID, Seq Mode, SlotMap, and Wafer Diameter.
- Bottom Bar:** Navigation tabs for Job, Recipe, Machine, Log History, Illumination, C-Launcher, Configuration, and Function.

TSRI-248 操作面板介紹 (光罩相關頁面)

140.126.249.71 - e-Console

FPA-6300 ES6a
2021/05/04 13:54

User ID: **super**

Level: **SuperUser**

Machine: **10.126.249.71**

Lot ID: **LELE2ndFEM**

Queue: **IDLE** Lock UNLOCKED Block FREE

Sequence: **001E: Start Awaiting**

Equipment State: **Product** OPENF OFF

Control Terminal Inline Carrier

Main Idle

Reticle Idle

Wafer Idle

V84.21C_P1

ERROR

Product & Maintenance

Reticle

No.	RSV	ID	Position	Particle
15	None	/canon/568_Reticle.rf	STK	
14	None	/canon/840_SP.rf	RS	
13	None	/canon/480_SP.rf	STK	
12	None	/TSRI01/TSRI_SIP_L3.rf	STK	
11	None	/TSRI01/TSRI_SIP_L5.rf	STK	
10	None	/TSRI_Production/248-C0_20210107.rf	STK	
9	None	/TSRI01/TSRI_SIP_L1.rf	STK	
8	None		None	
7	None		None	
6	None	/TSRI01/TSRI_SIP_L6.rf	STK	
5	None	/TSRI01/TSRI_SIP_L4.rf	STK	
4	None	/TSRI_Production/EBEAM_248-C0_20210107.rf	STK	
3	None	/TSRI_Production/OPENMARK_20210107.rf	STK	
2	None	/canon/875_SP.rf	STK	
1	None	/canon/756_SP.rf	STK	
16	None		None	
5	None		None	
4	None		None	
3	None		None	

Wafer

Online

光罩位置示意圖

Reticle Changer State:

Reticle Transfer State:

Pod Transfer State:

POD1

POD2

Type:

Status:

Change Recipe

Change ID

Particle

Job

Recipe

Machine

Log History

Illumination

C-Launcher

Configuration

Function

光罩所在的 slot 編號

現有光罩的列表

光罩的位置

Load 光罩

Unload 光罩

TSRI-248 操作面板介紹 (Wafer相關頁面)

The screenshot displays the e-Console interface for a Canon TSRI-248 system. The top status bar includes the Canon logo, user information (User ID: super, Level: SuperUser, Machine: 140.126 240 71), and system parameters (Lot ID: LELE2ndFEM, Queue: IDLE, Lock: UNLOCKED, Block: FREE, Equipment State: Product, OPENF, OFF). A red 'ERROR' indicator is visible in the top right corner.

The main interface is divided into several sections:

- Status Section:** Contains various status indicators such as Feeder Status (Idle), Door Status (Locked/Closed), Carrier Status (Set), MC Status (Set), Exposure Status (Unexposure), and Continue Mode (New).
- Wafer Departure Spot:** Shows the current departure spot as 'Carrier'.
- Manual Feeding Mode:** Includes buttons for Feeding Mode (Auto), Manual Mode, Wafer Set, Endless Feed, and Test Wafer.
- Diagram Section:** A schematic diagram of the wafer handling system is shown, enclosed in a red box. It features components like Hand3, RCV Station, MC, Hand1, Hand2, PA Stage, Carrier, XY Stage, Inline In, and Inline Out. A yellow callout 'Wafer 位置示意圖' points to this diagram.


Yellow callouts provide additional context:

- 'Foup 內Wafer 資訊' (Wafer information in Foup) points to the 'Clear' button in the Carrier Status section.
- '清除Wafer 資訊' (Clear wafer information) points to the 'Clear' button.
- 'Load/Unload Foup' (Load/Unload Foup) points to the 'CarSlotMap' and 'SlotMap Information' buttons.

At the bottom, a navigation bar includes buttons for Job, Recipe, Machine, Log History, Illumination, C-Launcher, Configuration, and Function.

TSRI-248 操作面板介紹 (Recipe/相關頁面)

140.126.249.71 - e-Console



FPA-6300 ES6a
2021/05/07 08:37

User ID: **super** [Lock]

Level: **SuperUser**

Machine: **140.126 249 71** [Regular User]

Lot ID: **LELE2nd**

Queue: **IDLE** Lock UNLOCKED Block FREE

Sequence: **001E: Start Awaiting**

Equipment State: **Product** OPENF OFF

Control Terminal Inline Carrier: **V84.21C_P1**

Main Idle

Reticle Idle

ERROR

Device: **TSRI01** Layer: ****** / 39**

Comment:

Path: **/TSRI01/*** Created: Updated:

Common Parameter

Reticle Editor | Shot Layout Template | Die Layout Template | Alignment Template | Layer Manager

L	Recipe	Reticle ID	Seq. Mode	Layout		Alignment	Recipe	Machine	Comment
				Step	Count				
1	480_1st	/canon/480_R...	1st	6	2				
2	Reticle_test1211_noFRA	/TSRI01/TSRI...	1st	2	1	1	1 Single	6300ES6a	
3	Reticle_test1211_FRA	/TSRI01/TSRI...	1st	2	1	1	1 Single	6300ES6a	
4	Reticle_test1217_FRA	/TSRI01/TSRI...	1st	2	1	1	1 Single	6300ES6a	
5	Reticle840_test1214	/canon/840_SP	OAS-AGA	3	1	2	1 Single	6300ES6a	
6	Reticle840_test1214_E460	/canon/840_SP	1st	2	1	1	1 Single	6300ES6a	
7	Reticle840_Annular1_Hole	/canon/840_SP	1st	2	1	1	1 Single	6300ES6a	
8	Reticle840_Annular1_LS	/canon/840_SP	1st	2	1	1	4 Single	6300ES6a	
9	Reticle840_PM_FEM	/canon/840_SP	1st	2	1	1	1 Single	6300ES6a	
10	Reticle840_20x20_Annular1	/canon/840_SP	1st	3	1	1	4 Single	6300ES6a	
11	TSRI_lline_PA_Correction	/canon/840_SP	OAS-AGA	3	1	2	3 Single	6300ES6a	
12	TSRI_LO	/TSRI01/ZER...	1st	3	1	1	9 Single	6300ES6a	
13	TSRI_LO_SMO	/TSRI01/ZER...	OAS-AGA	9	1	4	13 Single	6300ES6a	
14	TSRI_LO_SMO Old...en	/TSRI01/ZER...	OAS-AGA	9	1	4	12 Single	6300ES6a	

Job | Recipe | Machine | Log History | Illumination | C-Launcher | Configuration | Function

Shot Layout Template

Reticle Editor | Shot Layout Template | Die Layout Template | Alignment Template | Layer Manager

每張Mask 的設定

Alignment Template

Job 設定列表



TSRI-248 操作順序

1. 確認有無Error Alarm

The screenshot shows the Canon e-Console interface for a wafer processing job. The top status bar indicates the machine is in a state with an error. A red circle highlights the word "ERROR" in the status bar. The main area displays a wafer map and a list of processing steps. A red box with the number "1." points to the "ERROR" label.

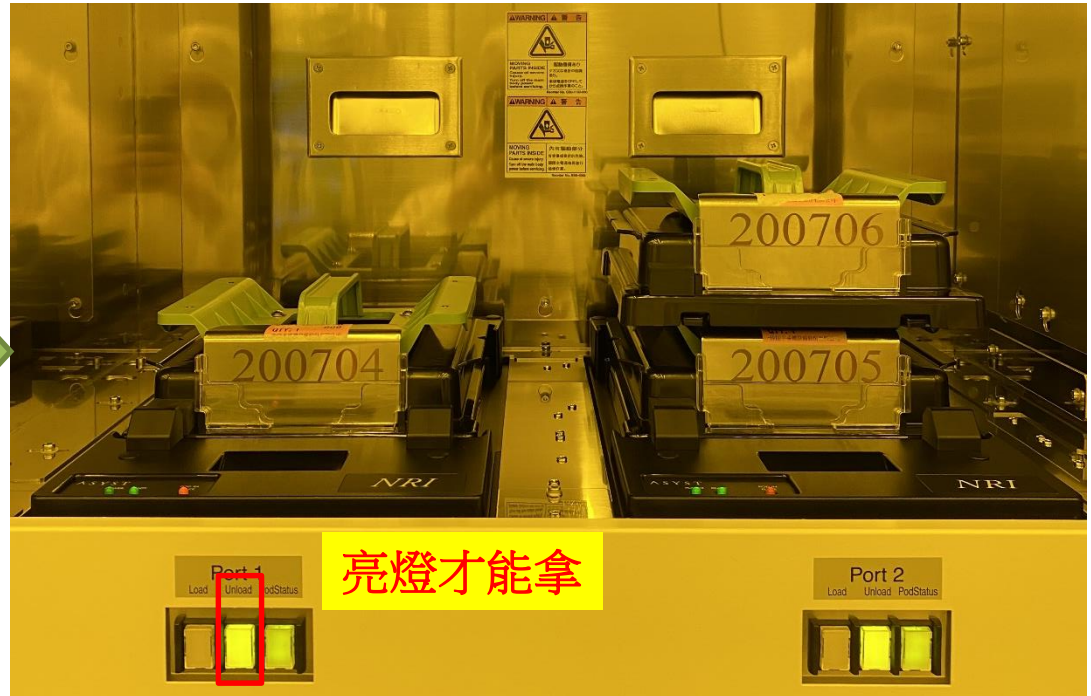
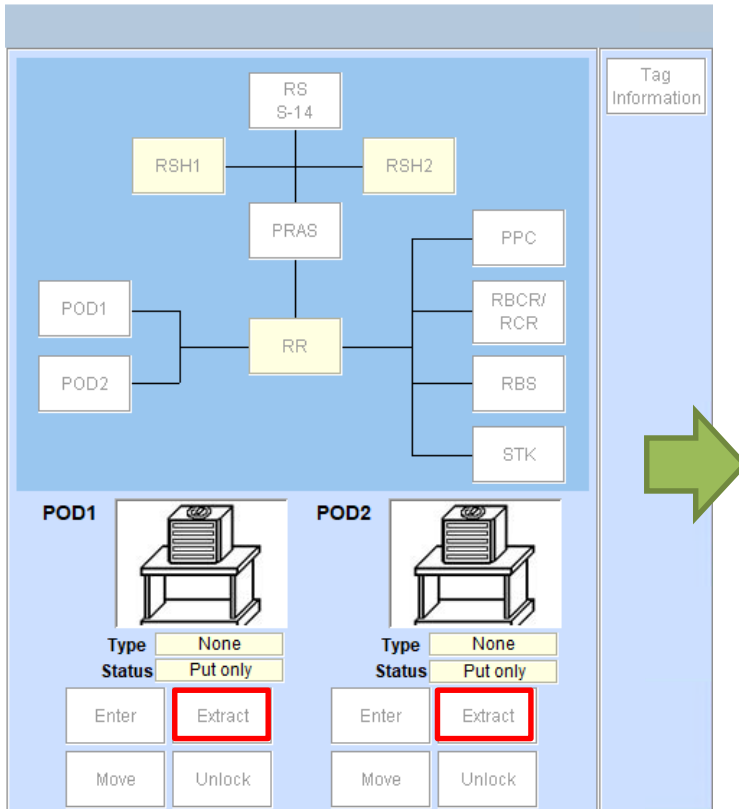
The screenshot shows the "Unit Monitor" window. It features a table with columns for No., Type, Date, Code, and Title. A yellow box highlights the code "7020-0-0-3946" in the table. Two yellow callout boxes with red text ask "是否有亮紅燈?" (Is the red light on?). A red box highlights the "Unit Monitor" title bar and the table area.

No.	Type	Date	Code	Title
1	W	2021/05/04 11:59:47.373	7020-0-0-3946	Chamber/Flow tolerance warning/...
2	W	2021/05/04 11:53:00.877	7020-0-0-3946	Chamber/Flow tolerance warning/...
3	M	2021/05/04 11:36:53.376	4200-1100-32-0	Main seq. / Excimer laser / Message...
4	W	2021/05/04 11:36:13.173	4200-1100-31-0	Main seq. / Excimer laser / Message...

確認Error → Load 光罩 → Load Wafer → 下Job → Unload Wafer

TSRI-248 操作順序 (Load 光罩)

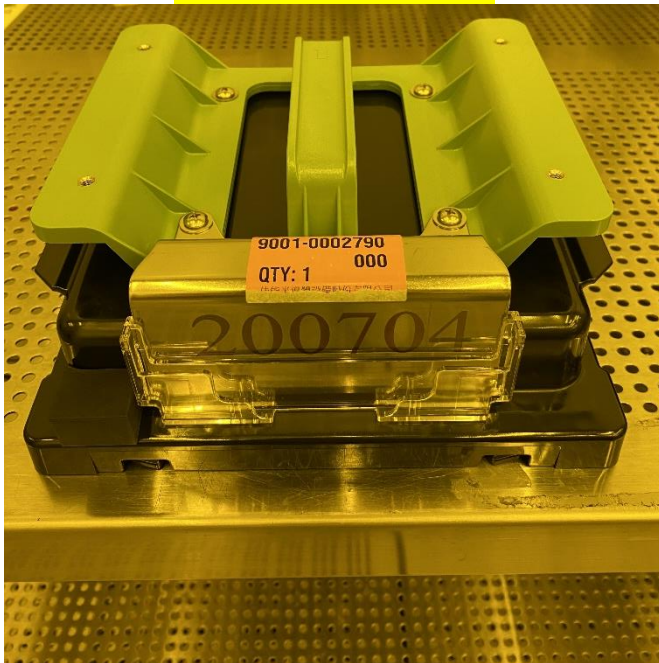
1. 將光罩盒退出機台。點選Extract將Pod 退出機台。確認Unload 燈亮起後，拿起Pod。



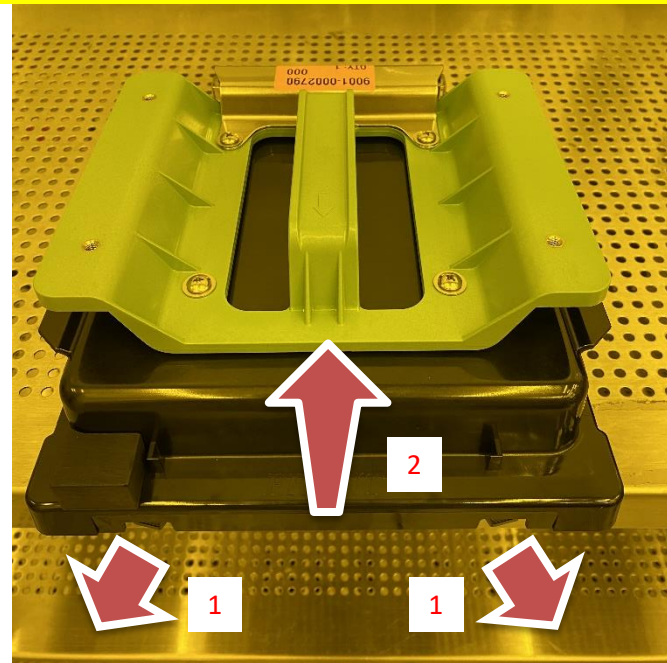
TSRI-248 操作順序 (Load 光罩)

1. 將Pod 放置桌上，Pod 數字朝後，由Pod後下方外拉卡榫，然後向上拿起盒子。

Pod 放置桌上

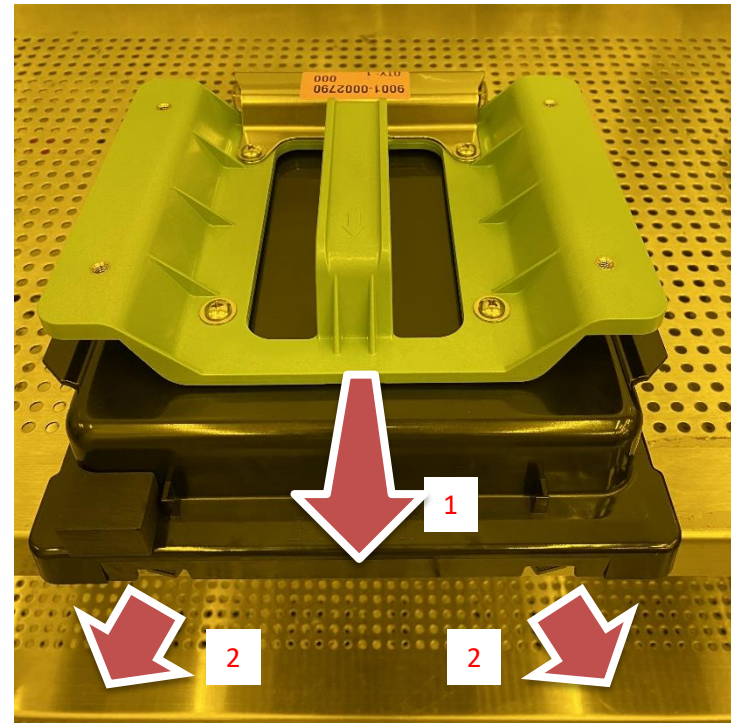
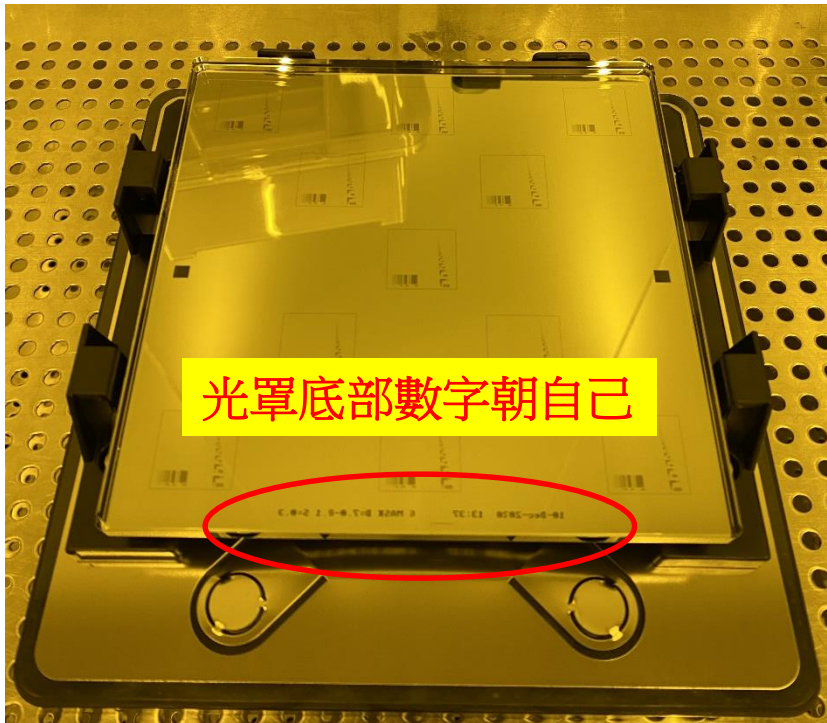


Pod數字朝後，由Pod後下方開啟盒子



TSRI-248 操作順序 (Load 光罩)

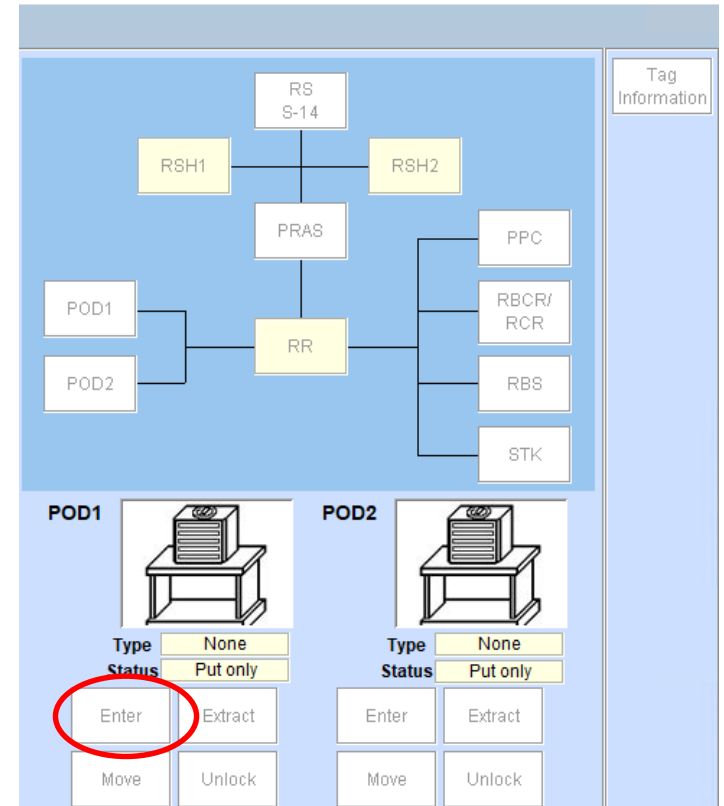
1. 光罩Cr 朝下，光罩底部數字朝自己，此時兩側的 FRA mark 應該位於中間偏下的位置。蓋上光罩盒，拉後下方卡榫，扣上光罩盒。



TSRI-248 操作順序 (Load 光罩)

1. 將光罩盒上的數字朝向自己，放上光罩port。到控制面板中，點選Enter。

光罩盒上的數字朝向自己，放上光罩port



TSRI-248 操作順序 (Load 光罩)

1. 到左側List中，選擇Position 在 POD1/POD2 的光罩，點選兩下，指定光罩名稱。

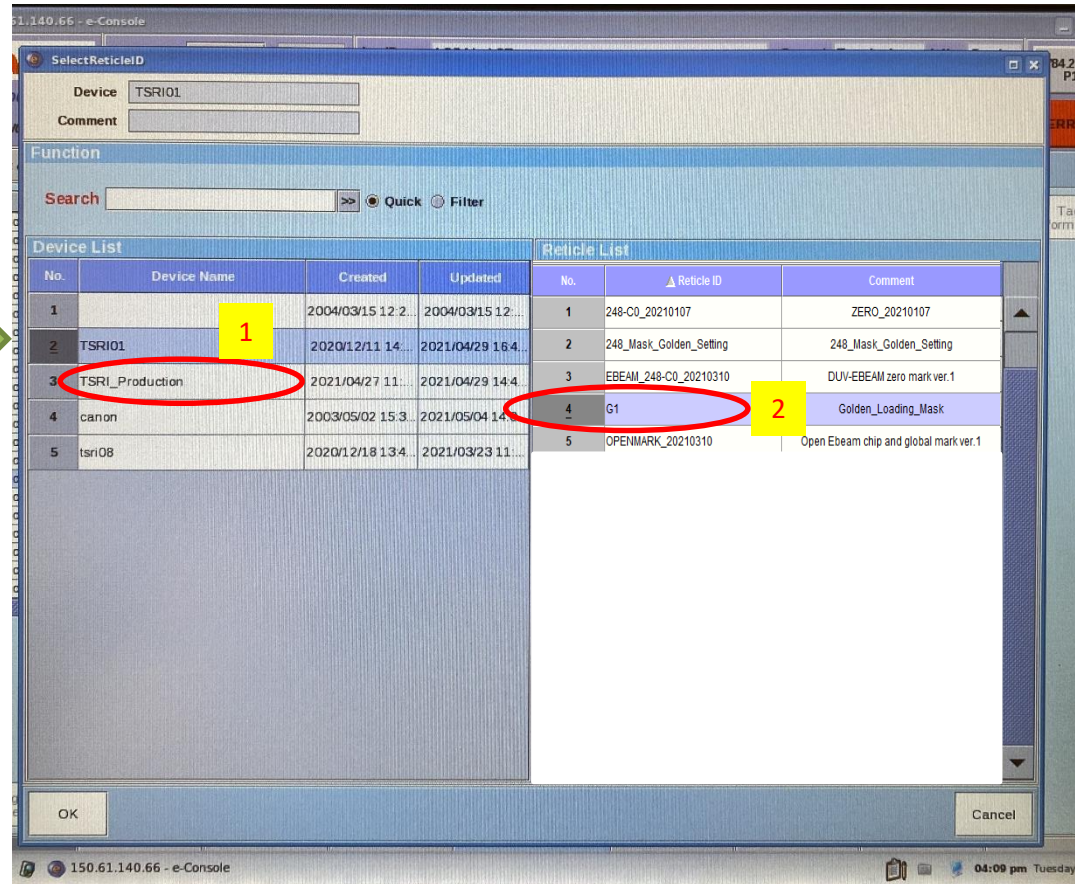
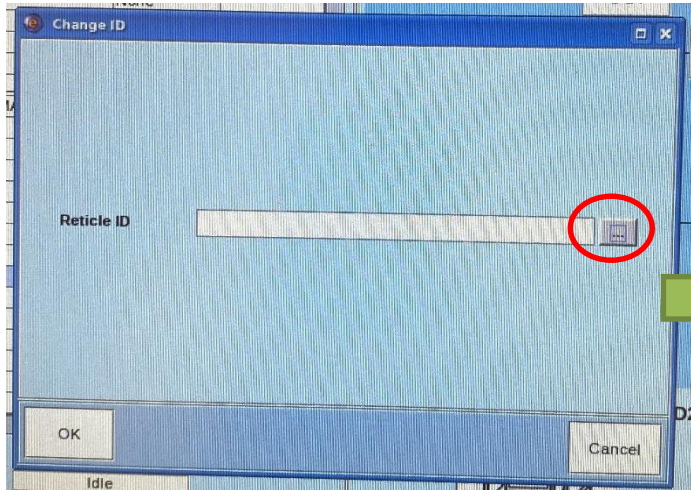
The screenshot shows the Canon e-Console interface for a TSRI-248 machine. The top section displays system information including the Canon logo, machine model (FPA-6300 ES6a), date (2021/05/04 16:08), and user details (User ID: super, Level: SuperUser, Machine: 150.61.140.66). The 'Equipment State' is 'Product', and the 'Control' is 'Product'. The 'Terminal' and 'Inline Carrier' are both 'Idle'. Below this is a navigation bar with 'Product & Maintenance', 'Reticle', 'Wafer', and 'Online' tabs. The main area is divided into a table on the left and a schematic diagram on the right.

No.	RSV	ID	Position	Particle Cl
9	None	/TSRI01/TSRI_SIP_L1.rf	STK	
8	None		None	
7	None		None	
6	None	/TSRI01/TSRI_SIP_L6.rf	STK	
5	None	/TSRI01/TSRI_SIP_L4.rf	STK	
4	None	/TSRI_Production/EBEAM_248-CO_20...	STK	
3	None	/TSRI_Production/OPENMARK_20210...	STK	
2	None	/canon/875_SP.rf	STK	
1	None	/canon/756_SP.rf	STK	
1	None		None	
5	None		None	
4	None		None	
3	None		None	
2	None		None	
1	None		None	
2	None		None	
6	None		None	
5	None		None	
4	None		None	
3	None		None	
2	None		None	
1	None		None	

The schematic diagram on the right shows the machine layout with components: RS S-14, RSH1, RSH2, PRAS, RR, PPC, RBCR/RCR, RBS, and STK. The 'POD1' and 'POD2' positions are highlighted in the diagram. A red oval in the table highlights the row with 'None' in the ID column and 'POD1' in the Position column. A yellow box with the text '點選兩下' (Click twice) and an arrow points to this row.

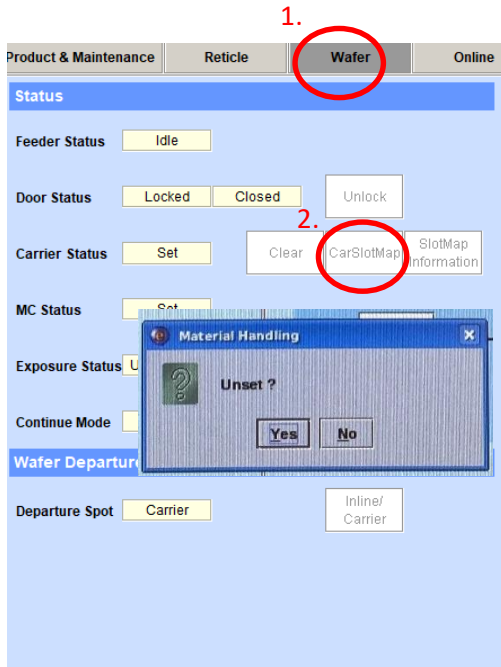
TSRI-248 操作順序 (Load 光罩)

1. 找到 TSRI_Production 內，選擇G1 光罩名稱。

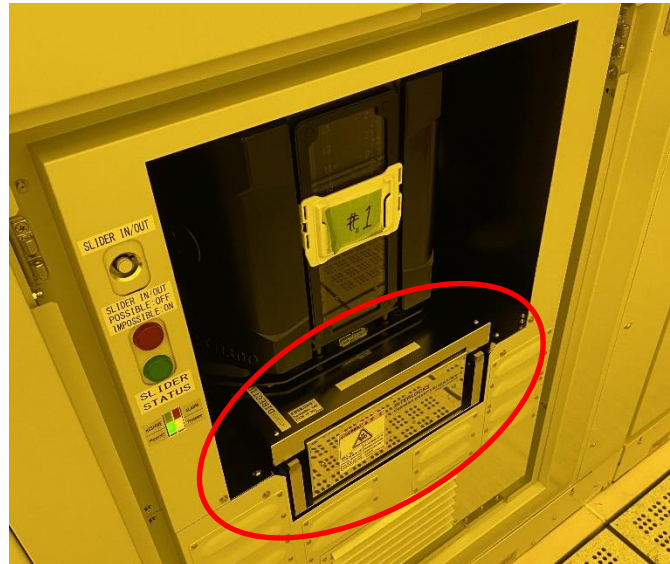


TSRI-248 操作順序 (Load Wafer)

1. Unset wafer: 點Wafer → CarSlotMap 來Unset wafer，並且確認stage 退出到外面。如果點了CarSlotMap，問你是否要Set，代表已經Unset 過了。



UnSet 的狀態



Set 的狀態



TSRI-248 操作順序 (Load Wafer)

1. 按下SLIDER IN/OUT，將stage 退出來，等綠燈恆亮後過2秒鐘，待stage 穩定後，才能拿foup。

UnSet 的狀態



Load port 退出來的狀態



TSRI-248 操作順序 (Load Wafer)

1. 將wafer 放入foup，**確認鎖緊**後，放上stage。
待綠燈亮起且沒有紅燈的時候，按SLIDER IN/OUT。

Foup 有放好

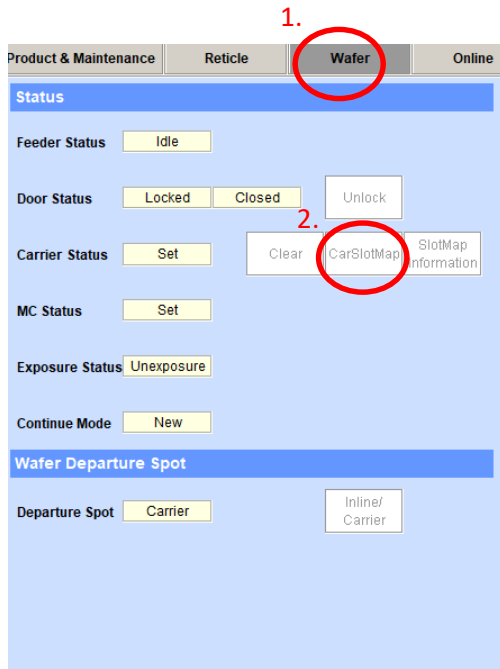


Foup 沒放好



TSRI-248 操作順序 (Load Wafer)

1. Set Wafer:點Wafer → CarSlotMap 來 set wafer，來掃 foup 裡面有幾片 wafer。



TSRI-248 操作順序 (下Job)

1. 按下Add 加Job (如果之前有run 過，也可以點Copy&Add)
2. 填寫 Lot ID: 命名規則請見下頁

The screenshot shows the Canon e-Console interface. At the top, the machine status is displayed as 'FPA-6300 ES6a' with a 'Regular User' profile. The 'Lot ID' is 'LELE2ndFEM'. A table of lot data is visible, with the 'Add' button circled in red. A red arrow points from this button to a 'Recipe Select' dialog box on the right.

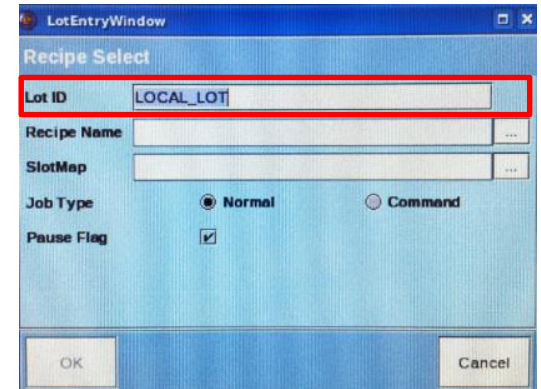
No.	Lot ID	Lot Status
991	248_SPC	NO STATE
992	AGA_CMAP	NO STATE
993	AGA_CMAP	
994	AGA_CMAP_IR	
995	SiPh_L1toL0_f	NO STATE
996	LELE2ndFEM	NO STATE
997	LELE2ndFEM	NO STATE
998	100nm-tgate-sructure	NO STATE
999	100nm-tgate-Si	NO STATE
1000	LELE2ndFEM	NO STATE

The 'Recipe Select' dialog box is shown with the 'Lot ID' field containing 'LOCAL_LOT' and highlighted with a red box. Other fields include 'Recipe Name', 'SlotMap', 'Job Type' (set to Normal), and 'Pause Flag' (checked).

Lot ID 命名規則：

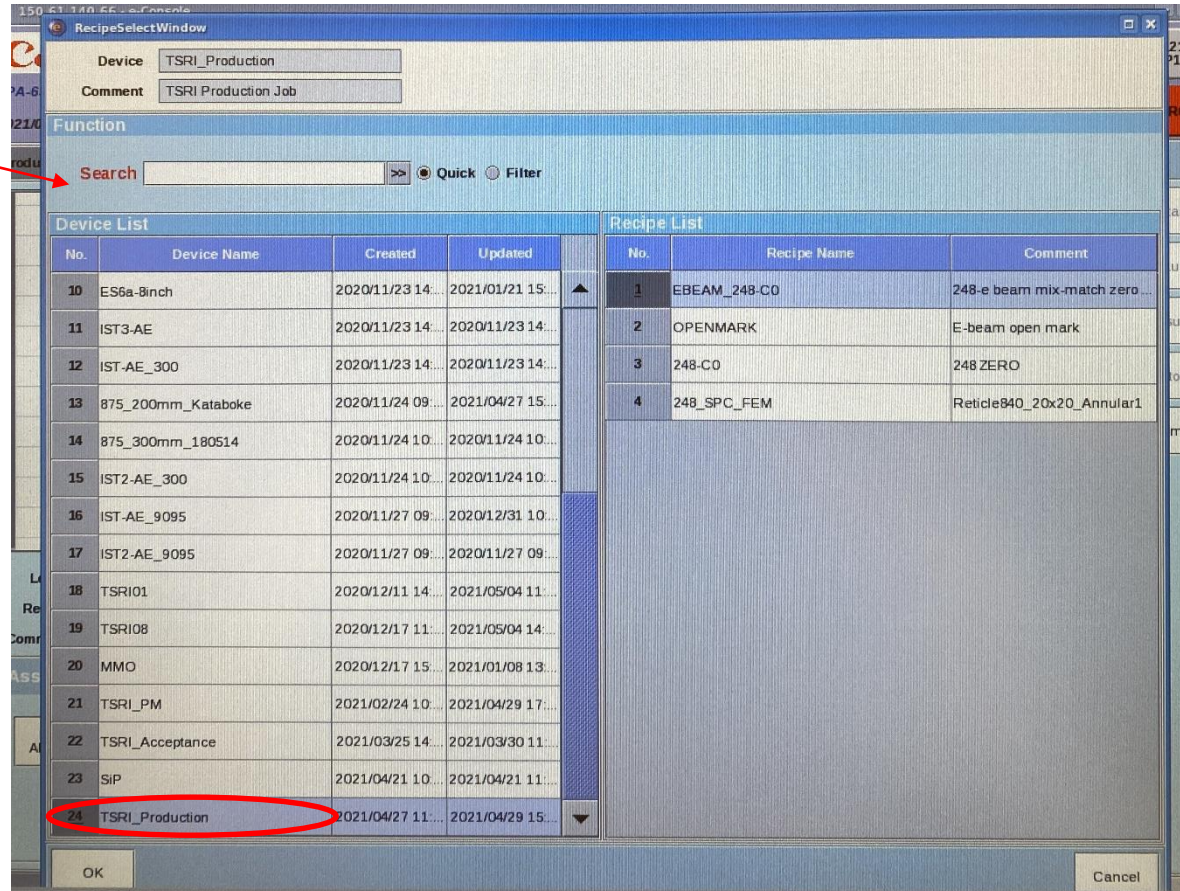
- 完整的Lot ID 命名有助於之後Job copy或紀錄追查時，能方便找尋。
- **Lot ID 建議命名規則：**
 - (1) **批號or計畫名稱:** 11007465、RDL、N65... etc
 - (2) **光罩名稱:** OD、Gate、Contact、M1、V1... etc
 - (3) **使用光阻組合:** BARC+3160A、BARC+8000A、P6159-8000A... etc
 - (4) **能量:** E250、E340... etc
 - (5) **Focus:** F-0.05、F0... etc (不寫就是按照預設值)
 - (6) **1ST or AGA:** 1ST、AGA、AGA_OD，如不是對零層須註明對哪層

→ Ex: 11007465_OD_BARC+3160A_E250_F0_1ST
→ Ex: N65_Contact_P6159-8000A_E340_AGA_OD



TSRI-248 操作順序 (選擇Recipe，如Copy Job則不用選)

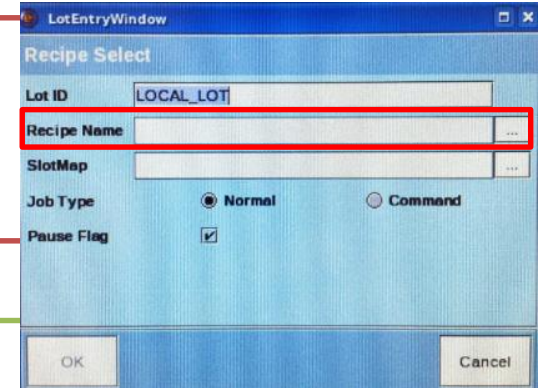
1. 按Recipe 選擇 Recipe: **TSRI_Production** → 選擇要run的recipe name，recipe 選擇請見下頁。



Recipe 選擇流程：

光阻Type

- GKR-5201A
- P6159-8000
- P6159-20000



圖案樣式

- **Dark Pattern:** 畫圖形的地方要留光阻，光罩大部分區域是透光的
例如: OD(Active)/ Gate/ Metal...
- **Clear Pattern:** 畫圖形的地方不留光阻，光罩大部分區域不透光的
例如: Implantation/ Contact/ Via...

是否要做
Alignment

- 1st
- AGA: 對哪一層? 預設對零層 L0

Recipe 列表：

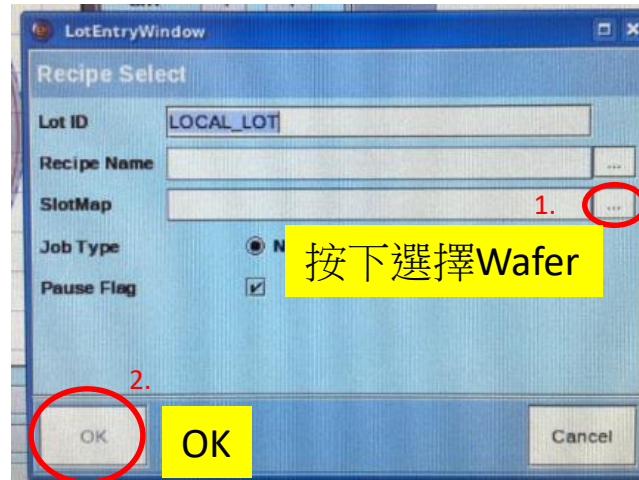
光阻Type 圖案樣式	GKR-5201A	P6159-8000	P6159-20000
Dark Pattern: 畫圖形的地方 要留 光阻， 光罩大部分區域是 透光的 例如: OD(Active)/ Gate/ Metal...	5201A_Dark_1st 5201A_Dark_AGA	P6159-8000_Dark_1st P6159-8000_Dark_AGA	P6159-20000_Dark_1st P6159-20000_Dark_AGA
Clear Pattern: 畫圖形的地方 不留 光阻， 光罩大部分區域 不透光的 例如: Implantation/ Contact/ Via...	5201A_Clear_1st 5201A_Clear_AGA	P6159-8000_Clear_1st P6159-8000_Clear_AGA	P6159-20000_Clear_1st P6159-20000_Clear_AGA

* AGA 預設: 對零層

圖案樣式	EBEAM+248 零層	248 零層
Zero Mark (零層)	EBEAM-248-C0*	248-C0*
Open Mark (開eBeam零層Mark)	OPENMARK-EBEAM	

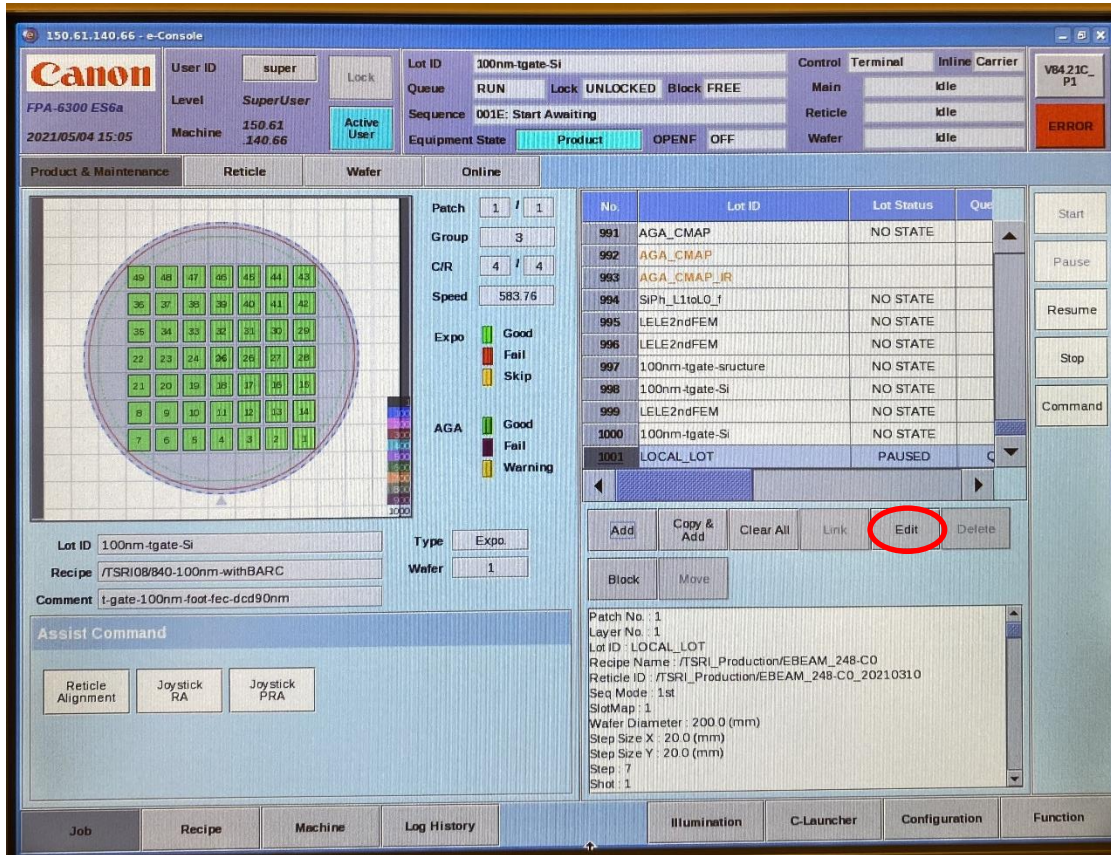
TSRI-248 操作順序 (選擇要Run的Wafer)

1.按 SlotMap 選擇Wafer，然後按OK。



TSRI-248 操作順序 (編輯Job)

1. 按下Edit，修改是否要做alignment/Energy/Focus



TSRI-248 操作順序 (編輯Job: 修改alignment 設定)

1. 如果不要 alignment , Sequence Mode= 1st ○
2. 要 alignment , Sequence Mode= OAS-AGA ○

Lot ID: DP016_8UM_E850_F0
 Product Name: _____
 Lot Usage: _____
 Process Name1: _____
 Recipe Name: /TSRI01/Reticle840_20x20_TOK_Conventional
 Process Name2: _____
 Lot Type: Normal
 Process Name3: _____
 Process Name4: _____

Job Parameter
 Wafer No. -1
 Comment: _____

No.	Reticle ID	Step X	Step Y	Column	Row
1	/TSRI01/TSRI_Test_Trench...	20.00000	20.00000	7	7

Buttons: Layout, Process, Alignment, Sample, Extra, Shot Information

Wafer: 200.0 mm
 Mag. 100.0 %

Buttons: Apply, Save to Recipe, Cancel



Device: TSRI01
 Recipe: Reticle840_20x20_TOK_Conventional

Recipe Name: Reticle840_20x20_TOK_Conventional
 Machine Type: 6300ES6a
 Recipe Type: Single
 Reticle Exchange Mode: Normal
 Comment: _____

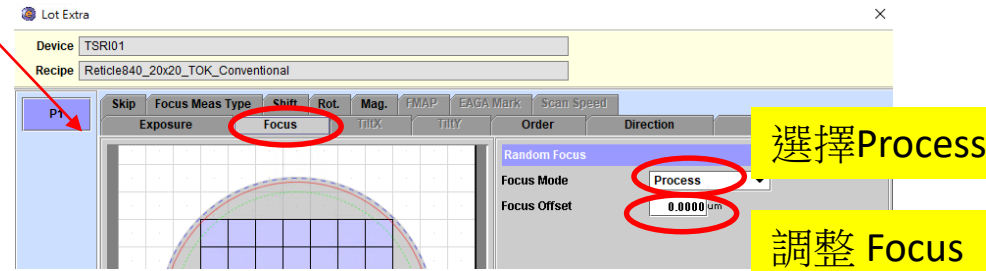
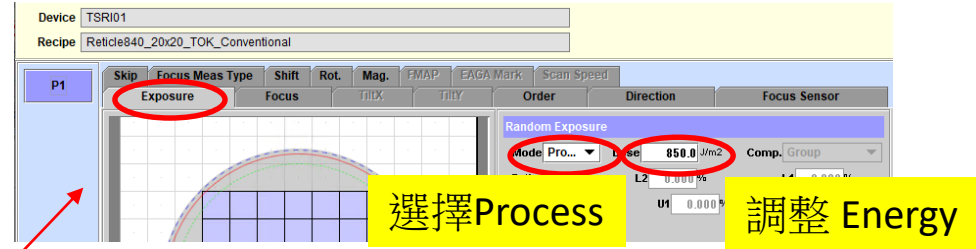
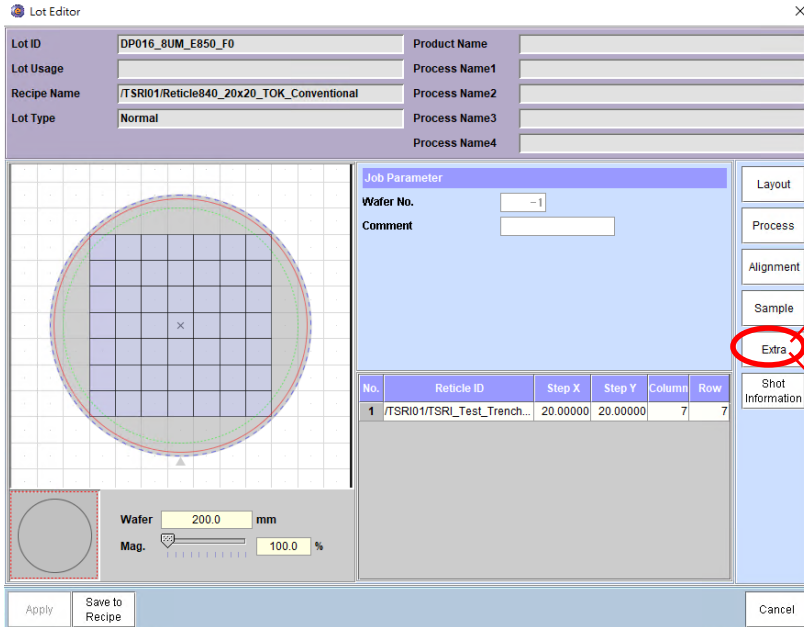
No.1
 Reticle ID: /TSRI_Production/G1
 Shot:Step & Shot Group ID: 2 1
 Die:Step & Shot Group ID: _____
 Sequence Mode: 1st
 Patch ID: _____

Buttons: Add, Delete

Sequence Mode	OAS-AGA	← 不要alignment
Patch ID	1st	← 不要alignment
	OAS-AGA	← 要alignment

TSRI-248 操作順序 (編輯Job: 修改Energy/Focus)

1. 修改Energy/Focus: Extra → Exposure 和 Focus



TSRI-248 操作順序 (編輯Job: 撒Matrix)

1. 灑 Matrix: Exposure 和 Focus

→ 選擇 Extra，並於Dose 和 Focus Offset 設定中心數值

2. Extra Exposure → Center-Column，設定step

3. Extra Focus → Center-Row，設定step

變小 變大

Random Exposure
Mode Extra Dose 850.0 μm^2

Extra Exposure
Order Center-Column
Exposure Step 10.0 μm^2

Center-Column

Center-Column

Apply

變小 變大

Random Focus
Focus Mode Extra
Focus Offset 0.0000 μm

Extra Focus
Order Center-Row
Focus Step 0.0500 μm

Center-Row

Center-Row

Apply

TSRI-248 操作順序 (執行前最後檢查)

1. 上述參數設定完後，按下Apply，回到Job 摘要，做下貨前的最後確認：

The screenshot shows the Canon FPA-6300 ES6a software interface. At the top left, it displays the Canon logo and model information. The main area is divided into several sections:

- User Information:** User ID: super, Level: SuperUser, Machine: 140.126.249.71.
- Job Parameters:** Lot ID: LELE2nd, Queue: IDLE, Lock: UNLOCKED, Block: FREE, Control: Main, Terminal: Idle, Carrier: V84.21C_P1.
- Equipment Status:** Sequence: 001E: Start Awaiting, Equipment State: Product, OPEN, OFF.
- Wafer Map:** A circular grid showing the wafer layout with a central area highlighted in green.
- Job List Table:**

No.	Lot ID	Lot Status	Op
991	100nm-tgate-Si	NO STATE	
992	LOCAL_LOT	NO STATE	
993	DP016_8um_E850_F0	NO STATE	
994	DP016_8UM_E850_F0	NO STATE	
995	LELE2nd	NO STATE	
996	LELE2nd	NO STATE	
997	LELE2nd	NO STATE	
998	100nm-tgate-Si	NO STATE	
999	840_17x17_FEM370	NO STATE	
1000	LELE2nd	NO STATE	
- Assist Command:** Buttons for Reticle Alignment, Joystick RA, and Joystick PRA.

- ✓ Recipe Name
- ✓ Reticle ID
- ✓ Seq Mode: 是否要做alignment
- ✓ SlotMap: 片數是否選對
- ✓ Expo Dose: Energy
- ✓ Focus Offset: Focus
- ✓ Expo. Mode: Process 或是 Extra (撒matrix)
- ✓ Focus Mode: Process 或是 Extra (撒matrix)

如果為Matrix，要確認：

- ✓ Expo Step
 - ✓ Focus Step
- 是否為想要的energy/ focus step

- ◆ 如果有設定不對，Edit 修改
- ◆ 如果片數選錯，請點Clear All，重新加Job

Parameters displayed in the Assist Command window:

- Patch No.: 1
- Layer No.: 31
- Lot ID: DP016_8UM_E850_F0
- Recipe Name: /TSRI01/Reticle840_20x20_TOK_Conventional
- Reticle ID: /TSRI01/TSRI_Test_Trench_No_FRA
- Seq Mode: 1st
- SlotMap: 6
- Wafer Diameter: 200.0 (mm)
- Expo Dose: 850.0 (J/m2)
- IL Mode: TOK_P6159_DP016_Illumination
- Focus Offset: 0.0 (um)
- Focus Calibration: 0
- SPOC Calibration: Auto
- Expo. Mode: Process
- Focus Mode: Process
- Wafer Shift X (1st Seq.): 0.0 (um)

Parameters displayed in the bottom right window:

- Scan Speed: 620.0 (mm/Sec)
- Expo. Mode: Extra
- Expo. Order: Center-Column
- Expo. Step: 10.0 (J/m2)
- Focus Mode: Extra
- Focus Order: Center-Row
- Focus Step: 0.04 (um)
- Wafer Shift X (1st Seq.): 0.0 (um)

TSRI-248 操作順序 (執行Job)

1. 沒問題的話，按下 Resume，開始run。

The screenshot displays the Canon lithography control software interface. At the top, the Canon logo and machine model 'FPA-6300 ES6a' are visible. The interface is divided into several sections:

- System Information:** User ID (super), Level (SuperUser), Machine (140.126), and Date/Time (2021/05/07 10:45).
- Job Parameters:** Lot ID (LELE2nd), Queue (IDLE), Sequence (001E: Start Awaiting), and Equipment State (Product).
- Wafer Map:** A circular grid showing wafer positions with a color-coded legend on the right.
- Job List Table:**

No.	Lot ID	Lot Status
991	100nm-tgate-Si	NO STATE
992	LOCAL_LOT	NO STATE
993	DP016_8um_E850_F0	NO STATE
994	DP016_8UM_E850_F0	NO STATE
995	LELE2nd	NO STATE
996	LELE2nd	NO STATE
997	LELE2nd	NO STATE
998	100nm-tgate-Si	NO STATE
999	840_17x17_FEM370	NO STATE
1000	LELE2nd	NO STATE
- Control Buttons:** Start, Pause, Resume (circled in red), Stop, and Command.
- Assist Command:** Buttons for Reticle Alignment, Joystick RA, and Joystick PRA.

TSRI-248 操作順序 (執行Job)

1. Run完後，Job 的 Lot Status 顯示: **NO STATE**，Sequence 顯示: **Start Awaiting**

The screenshot displays the control interface for a Canon FPA-6300 ES6a. The top status bar shows the following information:

- User ID: super (Level: SuperUser)
- Machine: 140.126 (249 71)
- Lot ID: LELE2nd
- Queue: IDLE
- Lock: UNLOCKED
- Block: FREE
- Control: Main
- Terminal: Idle
- Carrier: V84.21C_P1
- Equipment State: Product
- Reticle: Idle
- Wafer: Idle
- Sequence: 001E: Start Awaiting (highlighted with a red circle)
- ERROR indicator: ERROR (red box)

The main interface includes a reticle alignment grid on the left, a central table of job sequences, and a right-hand control panel.

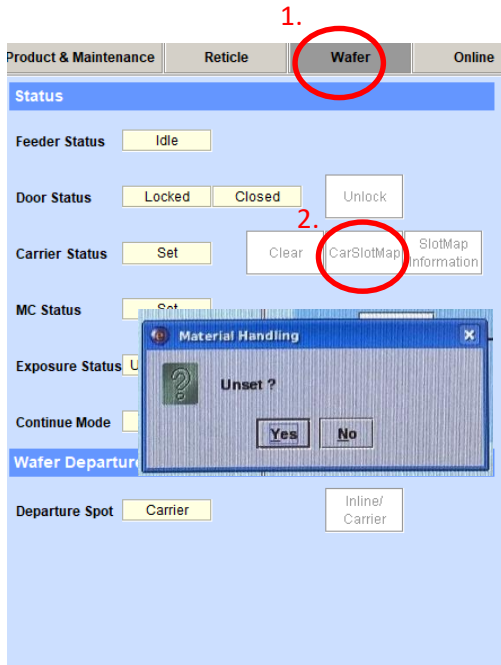
No.	Lot ID	Lot Status
991	100nm-tgate-Si	NO STATE
992	LOCAL_LOT	NO STATE
993	DP016_8um_E850_F0	NO STATE
994	DP016_8um_E850_F0	NO STATE
995	LELE2nd	NO STATE
996	LELE2nd	NO STATE
997	LELE2nd	NO STATE
998	100nm-tgate-Si	NO STATE
999	840_17x17_FEM370	NO STATE
1000	LELE2nd	NO STATE (highlighted with a red circle)

Additional details from the interface:

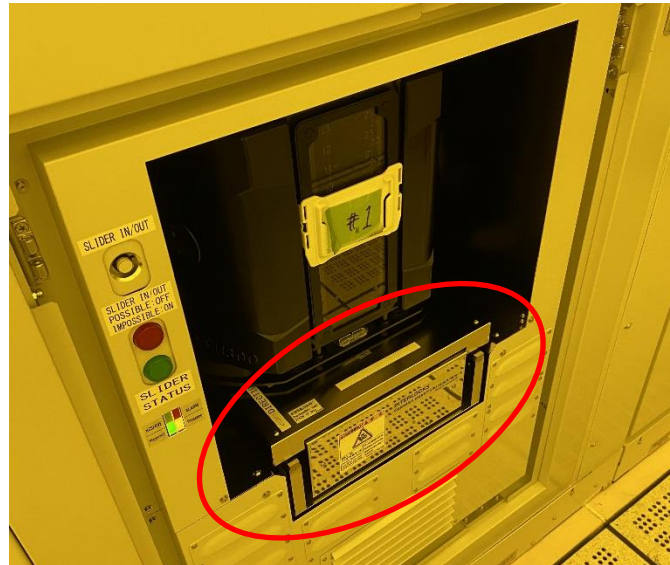
- AGAs: Good (Green), Fail (Red), Skip (Yellow), Warning (Yellow)
- Lot ID: LELE2nd
- Recipe: /TSRI01/LELE01_2nd
- Wafer: 1
- Assist Command: Reticle Alignment, Joystick RA, Joystick PRA
- Job Details: Patch No.: 1, Layer No.: 31, Lot ID: DP016_8UM_E850_F0, Recipe Name: /TSRI01/Reticle840_20x20_TOK_Conventional, Reticle ID: /TSRI01/TSRI_Test_Trench_No_FRA, Seq Mode: 1st, SlotMap: 6, Wafer Diameter: 200.0 (mm)

TSRI-248 操作順序 (UnLoad Wafer)

1. Unset wafer: 點Wafer → CarSlotMap 來Unset wafer，並且確認stage 退出到外面。



UnSet 的狀態



Set 的狀態



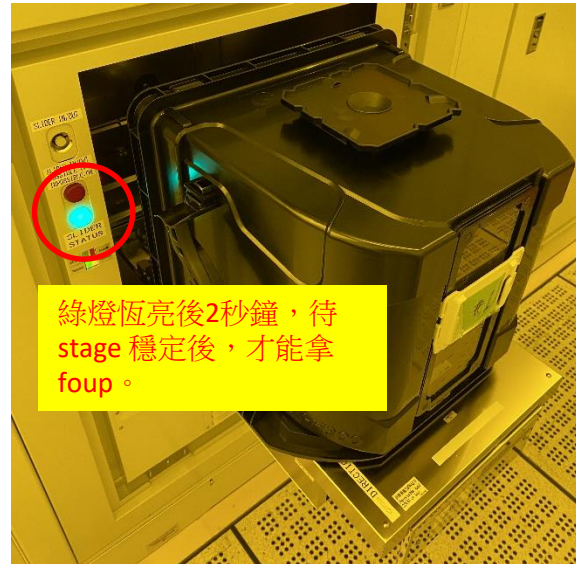
TSRI-248 操作順序 (UnLoad Wafer)

1. 按下SLIDER IN/OUT，將stage 退出來，等綠燈恆亮後過2秒鐘，待stage 穩定後，才能拿foup。

UnSet 的狀態

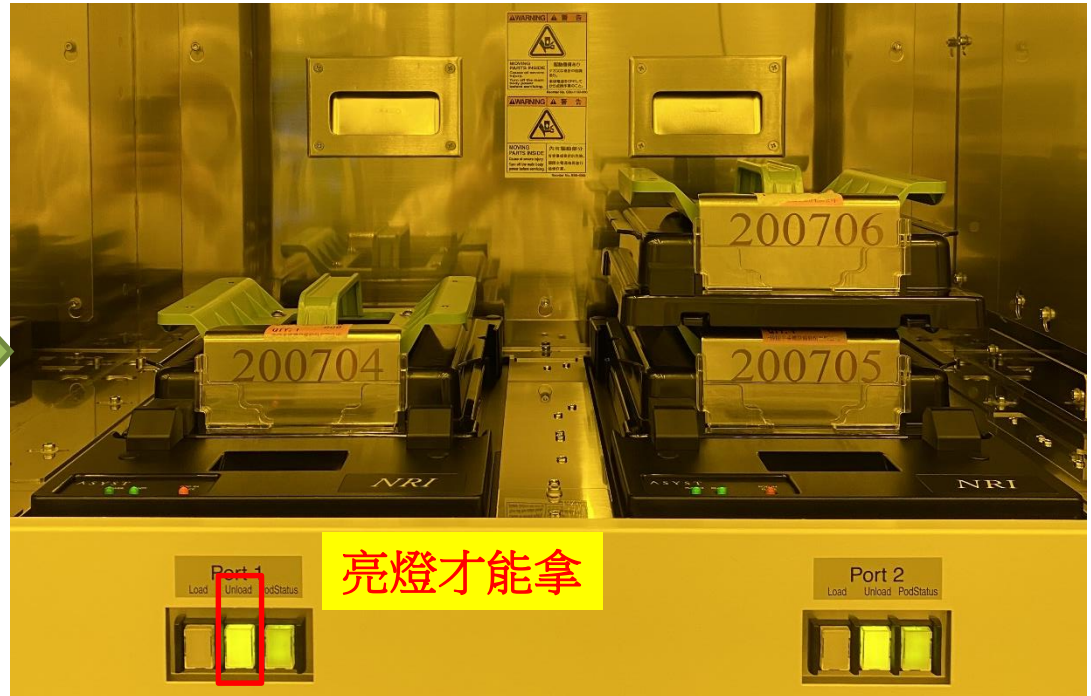
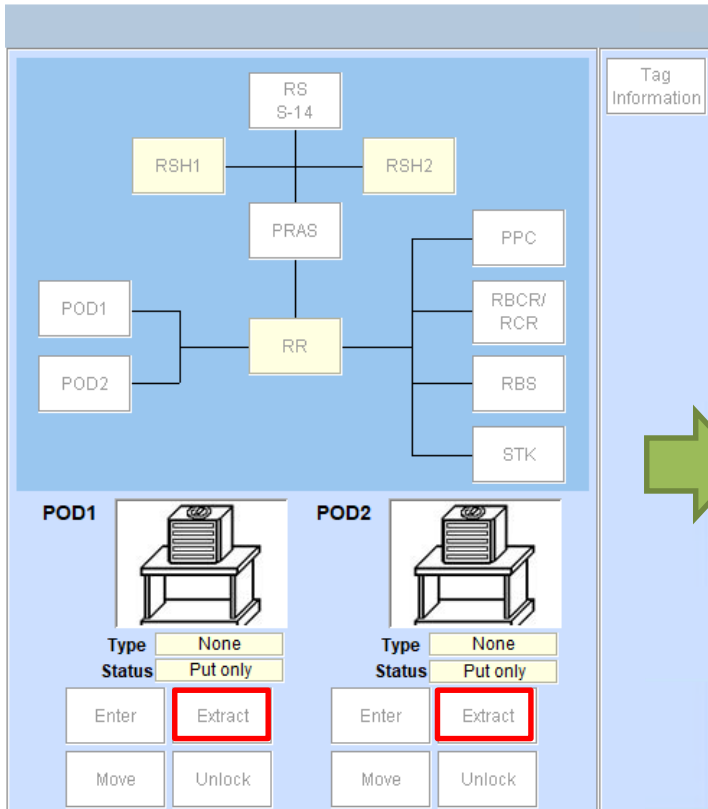


Load port 退出來的狀態



TSRI-248 操作順序 (UnLoad 光罩)

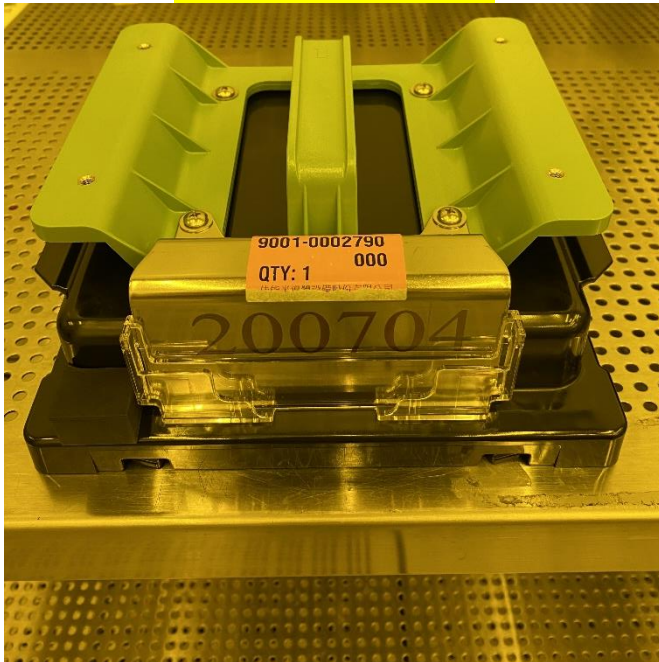
1. 將光罩盒退出機台。點選Extract將Pod 退出機台。確認Unload 燈亮起後，拿起Pod。



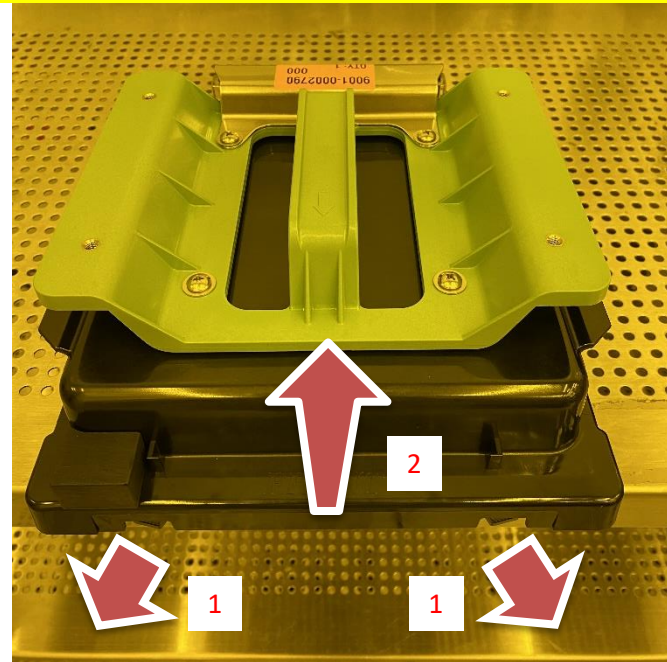
TSRI-248 操作順序 (UnLoad 光罩)

1. 將Pod 放置桌上，Pod 數字朝後，由Pod後下方外拉卡榫，然後向上拿起盒子。

Pod 放置桌上



Pod數字朝後，由Pod後下方開啟盒子





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End