

Cross-section Polisher JEOL IB-19530CP

Operation Manual

Sample rotation holder (IB-1150LSRH)

Initialization

1. Open the Ar gas valve



2. Turn on the main power



Open the chamber

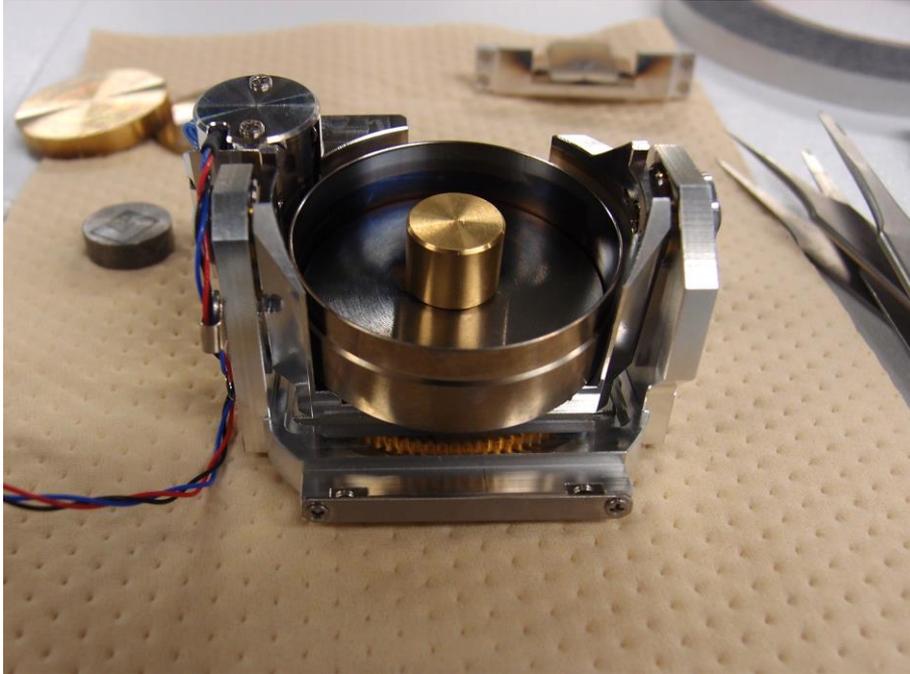
3. Press the [VENT] button for 5 seconds.

(The vacuum evacuation automatically stop, and the front door open.)

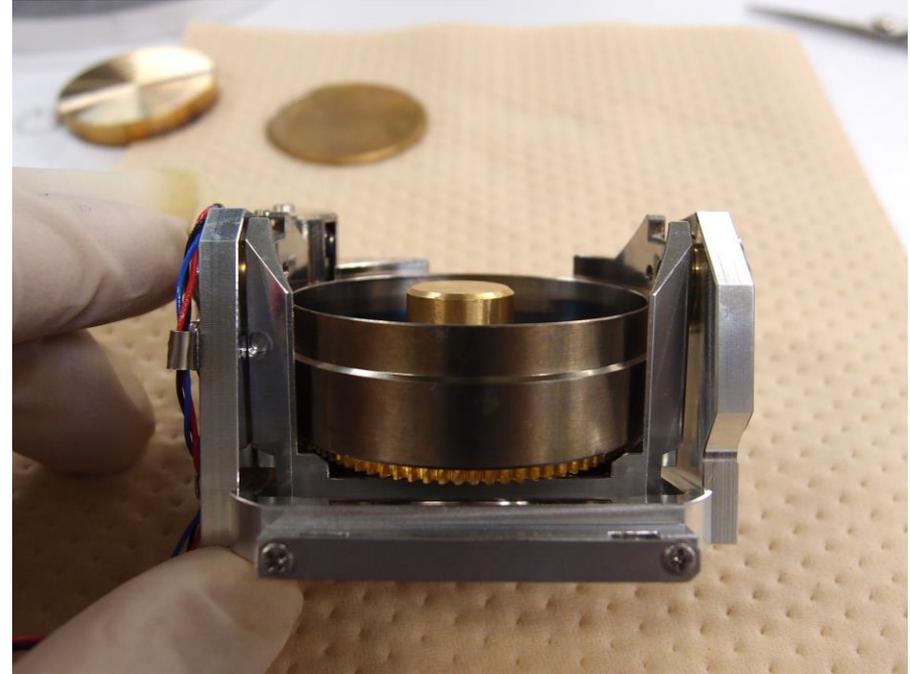


Sample Mounting

4. Fix the sample with carbon-tape/cramp.

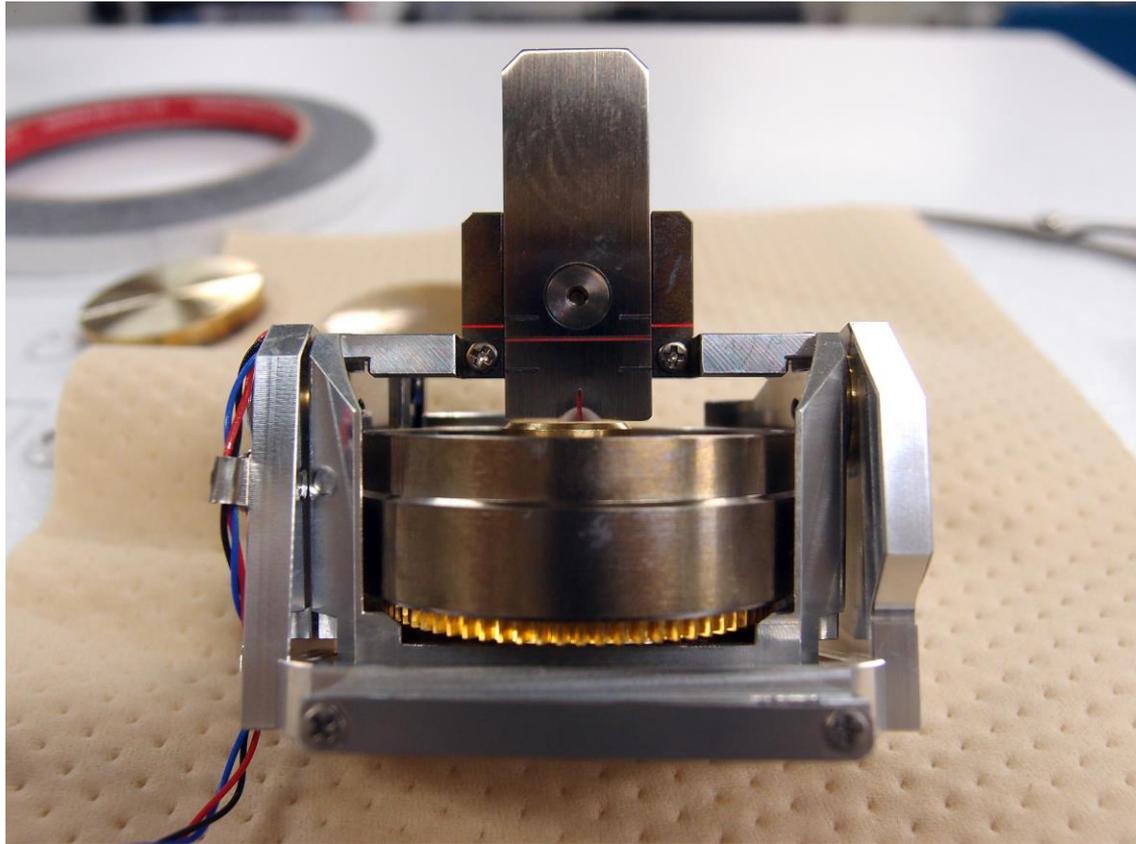


5. Adjust the height (*the sample protrude about 1 mm above the holder.*)



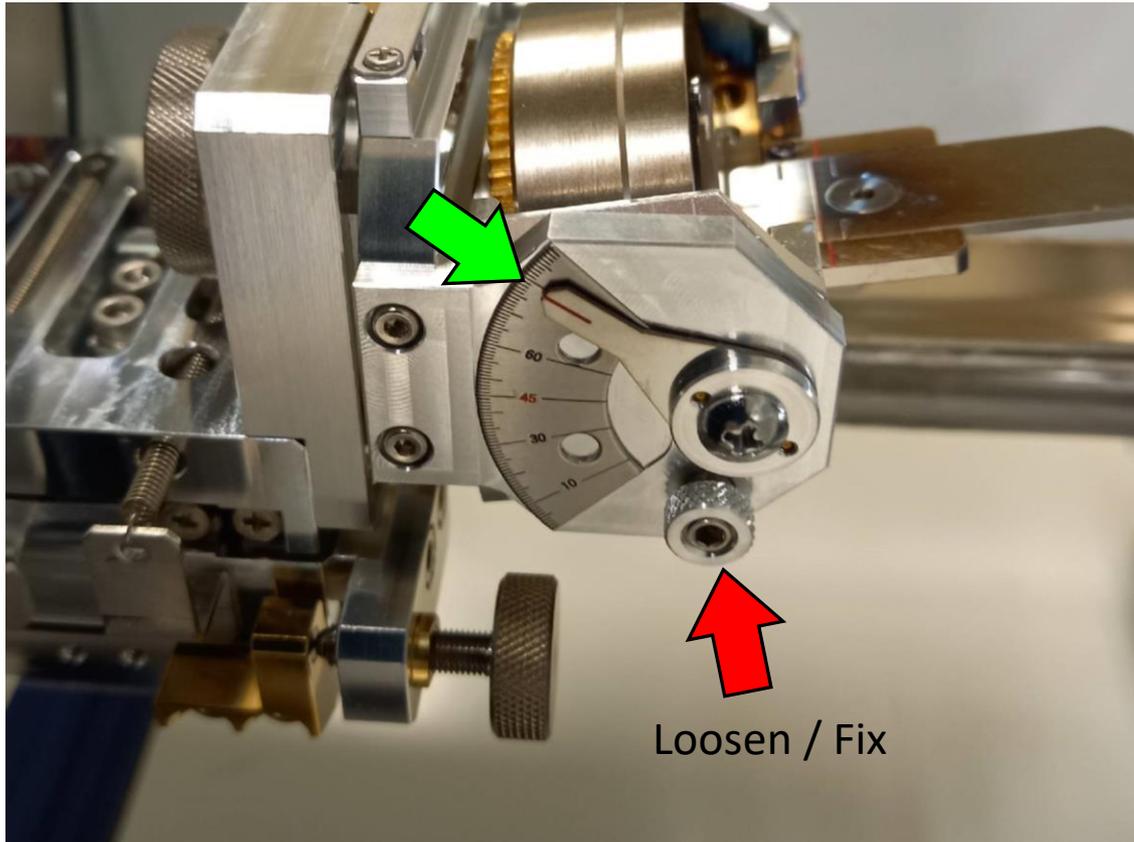
Center position with centering-tool

6. Attach the centering-tool and align the processing position with the center-mark.

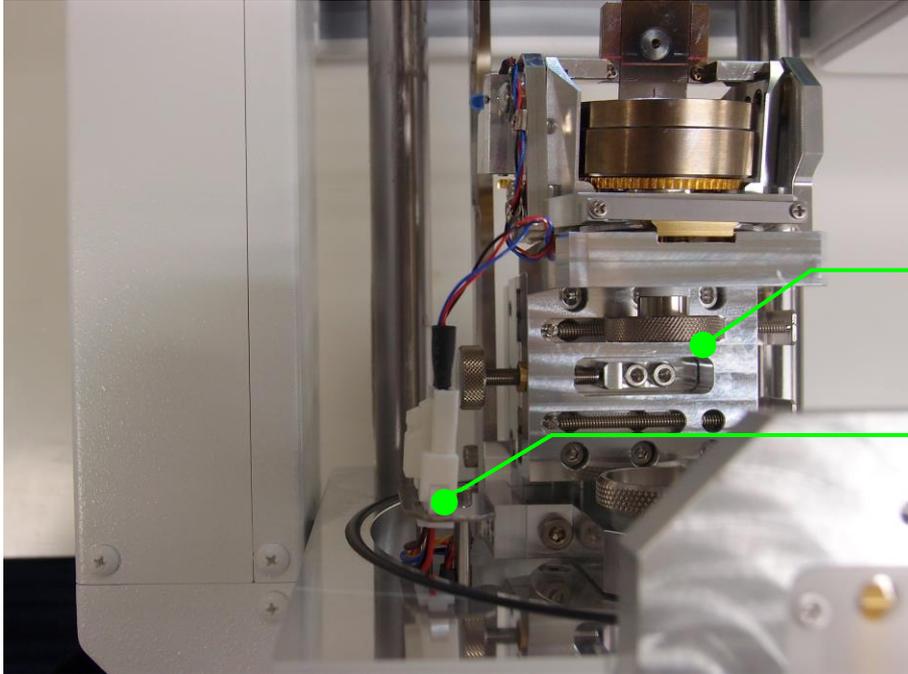


Adjust the tilt angle

7. Adjust the tilt angle. $10^{\circ}\sim 15^{\circ}$



Attache the rotation-holder



8-1

Attache the rotation-holder

8-2

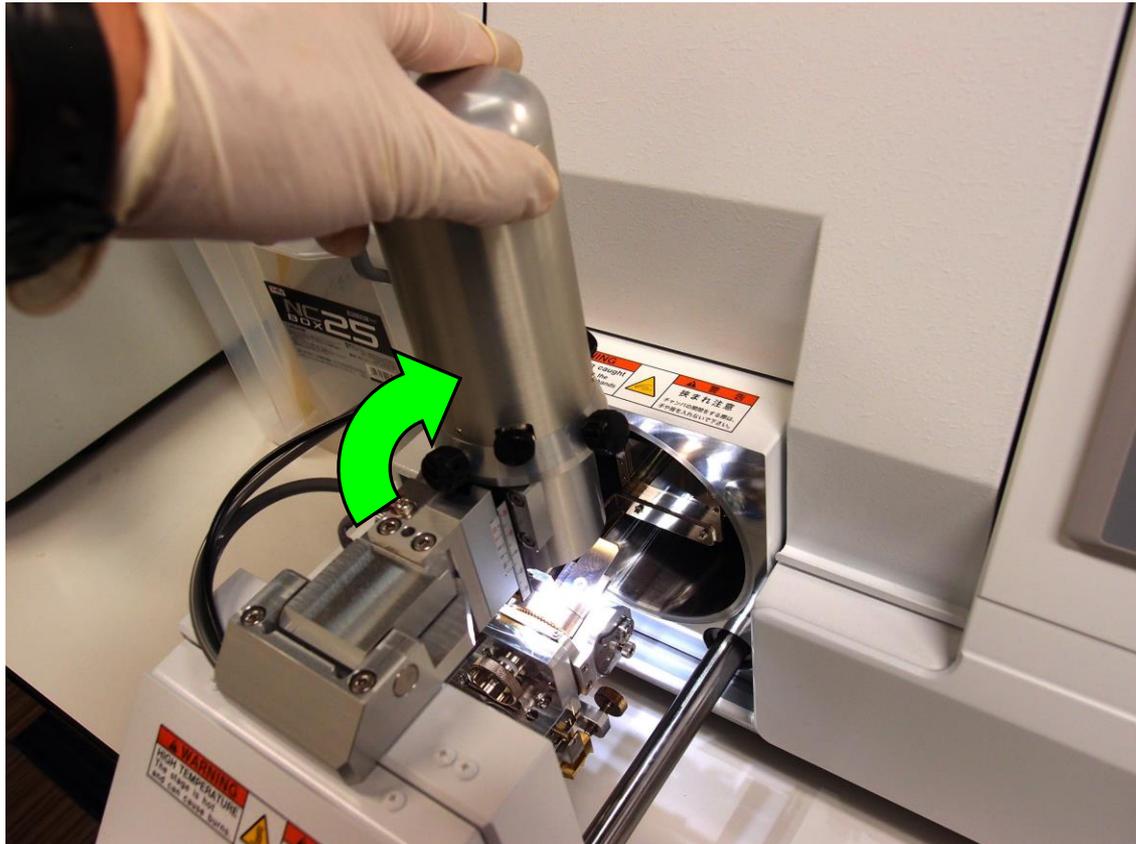
Fix the rotation-holder

8-3

Connect the cable **with careful**

Camera

9. Installation of the camera



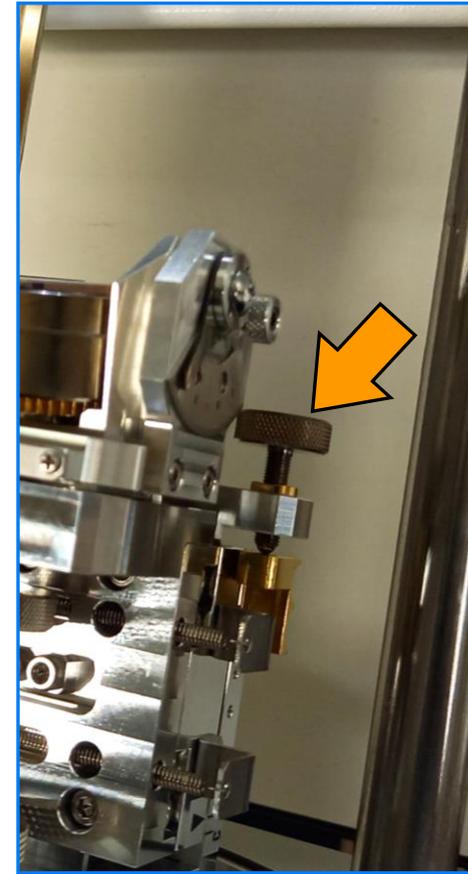
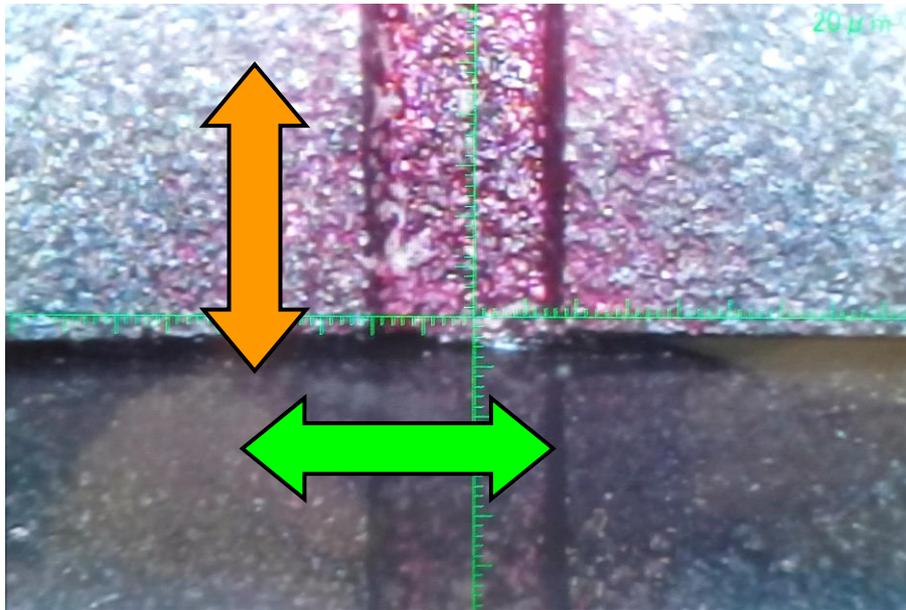
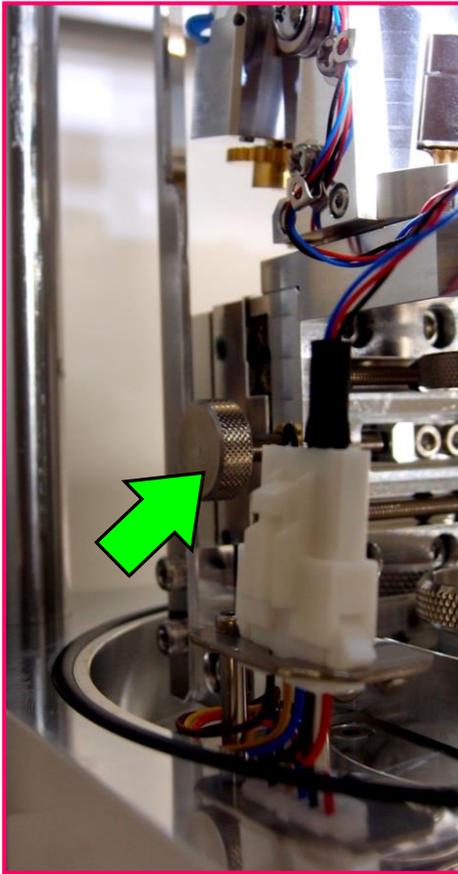
Exchange the camera-mode

10. Press the [カメラ].

The image shows a control panel interface with a blue background and white text. At the top, there are five menu buttons: 操作画面, プリセット, ガス最適化, カメラ, and 設定. A green arrow points to the 'カメラ' button. Below the menu buttons, there are several control elements: a 'VENT' button (highlighted in green), an 'EVAC' button, a pressure gauge labeled 'Pa' with a black bar, a '5.0 kV' display, an 'Arガス流量 3.3' display, an 'イオンビーム' display with 'On' and 'OFF' options, a '0 μA' display with up and down arrows, a 'タイマー 04:00' display, a '00:00' display, and a '開始' button with a play icon. On the right side, there are four mode selection buttons: 自動開始モード, 自動電源停止モード, 試料回転ホルダー, and 仕上げ加工モード.

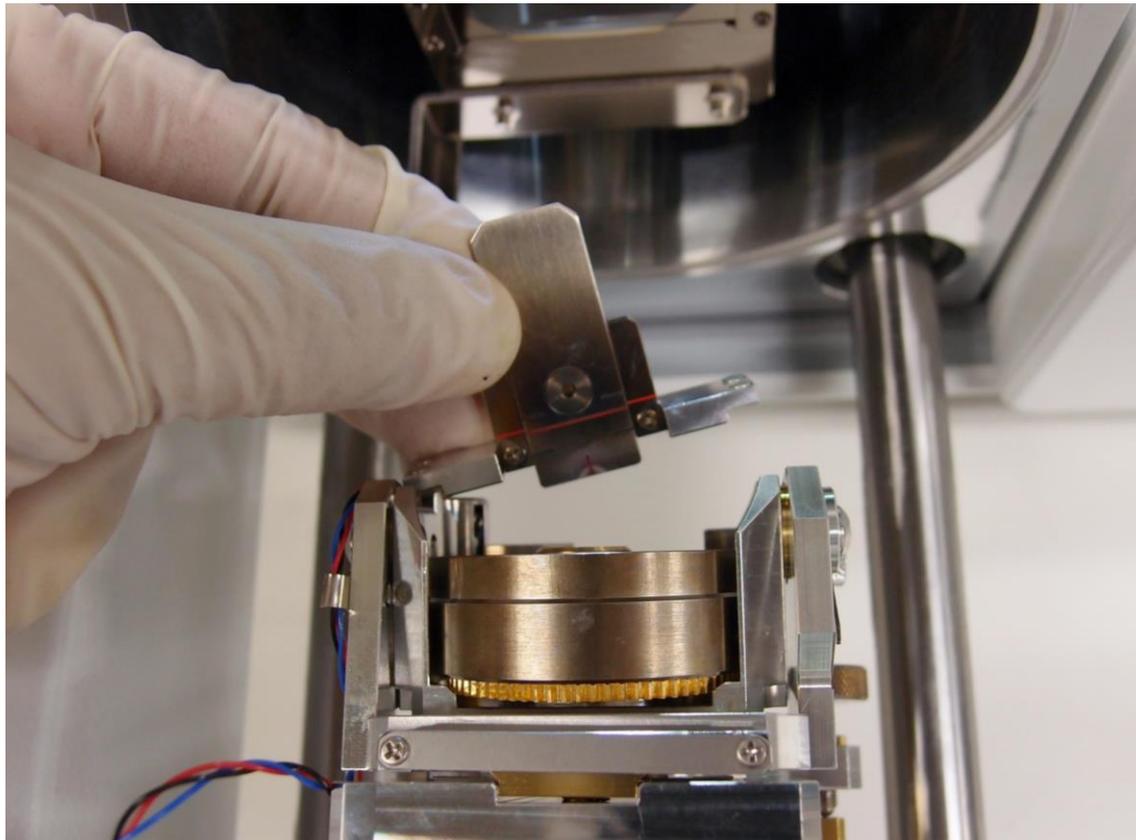
Adjust the stage position

11. Adjust the red center-mark on image with X, Y screws



Remove the centering-tool

12. Remove the centering-tool



Rotating

13. Press [試料回転ホルダー] and make sure the rotating

The image shows a control panel interface with a blue background and white text. At the top, there are five tabs: 操作画面 (Operation Screen), プリセット (Preset), ガス最適化 (Gas Optimization), カメラ (Camera), and 設定 (Settings). The main area contains several controls:

- On the left, there are two circular buttons labeled VENT and EVAC, and a vertical black bar with the label Pa below it.
- In the center, there are three large rectangular displays: the top one shows 5.0 kV, the middle one shows Arガス流量 (Ar Gas Flow) as 3.3, and the bottom one shows イオンビーム (Ion Beam) status as On and OFF.
- To the right of these displays, there are two smaller displays: the top one shows a current value of 0 μA with up and down arrow icons, and the bottom one shows a timer set to 04:00 and a large digital display showing 00:00.
- On the far right, there is a vertical stack of buttons: 自動開始モード (Auto Start Mode), 自動電源停止モード (Auto Power Stop Mode), 試料回転ホルダー (Sample Rotation Holder) - highlighted in green with a green arrow pointing to it, 仕上げ加工モード (Finishing Mode), and a large play button labeled 開始 (Start).

Vacuum

14. Close the door, and evacuate the vacuum



Vacuum

14. Close the door, and evacuate the vacuum

The image shows a control panel for a vacuum chamber. At the top, there are five menu tabs: 操作画面 (Operation Screen), プリセット (Preset), ガス最適化 (Gas Optimization), カメラ (Camera), and 設定 (Settings). The main display area contains several controls and readouts:

- On the left, there are two circular buttons: VENT (white) and EVAC (black with white text). A green arrow points to the EVAC button.
- Below the buttons is a vertical black bar representing a pressure gauge, with the unit Pa at the bottom left.
- The central area has three readouts: 5.0 kV, Arガス流量 (Ar Gas Flow) 3.3, and イオンビーム (Ion Beam) On/OFF.
- To the right of these are two vertical sliders: the top one is set to 0 μA, and the bottom one is a timer set to 00:00.
- On the far right, there are five large buttons: 自動開始モード (Auto Start Mode), 自動電源停止モード (Auto Power Stop Mode), 試料回転ホルダー (Sample Rotation Holder) in green, 仕上げ加工モード (Finishing Mode), and a large play button labeled 開始 (Start).

Processing

15. After the 10 minutes, set “time” and press [開始]

操作画面 プリセット ガス最適化 カメラ 設定

VENT

EVAC

5.0 kV

Arガス流量 3.3

イオンビーム
On OFF

▲ ▼ 0 μA

タイマー 02 : 00

02 : 00

自動開始モード

自動電源停止モード

試料回転ホルダー

仕上げ加工モード

▶

開始

Pa

After Processing

16. After Processing and take the sample.

The screenshot displays a control panel with a blue background and white text. At the top, there are five tabs: 操作画面 (Operation Screen), プリセット (Preset), ガス最適化 (Gas Optimization), カメラ (Camera), and 設定 (Settings). The main area contains several controls:

- On the left, there are two circular buttons: a grey one labeled "VENT" with a green arrow pointing to it, and a white one labeled "EVAC". Below them is a vertical black bar with "Pa" written at the bottom left.
- In the center, there are three stacked boxes: the top one shows "5.0 kV", the middle one shows "Arガス流量 3.3", and the bottom one shows "イオンビーム On OFF".
- To the right of these boxes is a vertical stack of controls: a box with a triangle up/down icon and "0 μA", a box with "タイマー 04 : 00", and a large box with "00 : 00".
- On the far right, there are five stacked rectangular buttons: "自動開始モード", "自動電源停止モード", "試料回転ホルダー", "仕上げ加工モード", and a large "開始" (Start) button with a play icon.

Shut down

17. Turn off the main power



18. Close the Ar gas valve

