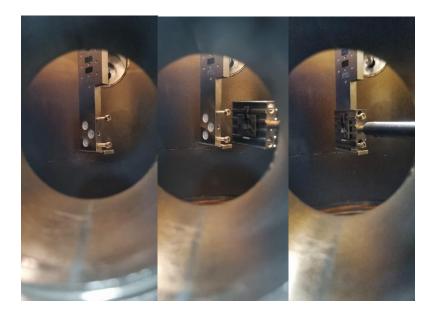
Introducing the sample holder

- 1. On the XPS interface put the manipulator on the transfer position SAMPLE --> TRANFER --> TRANFER POSITION;
- 2. Certify that the slot is free in the manipulator (no other sample holder is attached);
- 3. Vent the load lock and carefully screw the transfer bar on the sample holder. Keep the plates numbered as 3-4 facing you (1-2 facing the beamline);
- 4. Pump the load lock and wait until the pressure is lower than ~6 x 10⁻⁶ mbar;
- 5. Before starting the transfer certify that the Analyzer is turned off, ionic pump valve **(GM1)** and M6 valve are switched off (The aperture of M6 valve can be controlled by using the IHM located at the control room);
- 6. Open the valve **GM2** and push forward the transfer bar without rotation.
- 7. Slide the holder on the manipulator slot by **gently pushing the bar**. The guiding screws on the manipulator must be aligned with the holes on the sample holder. If not, adjust the manipulator position using the XPS interface;



- 8. Slowly unscrew the transfer bar ensuring that the holder remains fully attached to the manipulator (guiding screws head clearly visible);
- ^{9.} Fully retract the transfer bar, close valve GM2 and wait until the main chamber pressure is lower than 5 x 10⁻⁸ mbar to start the measurements.

Removing the sample holder

- 1. On the XPS interface put the manipulator on the transfer position **SAMPLES** --> **TRANSFER** --> **TRANSFER POSITION**;
- 2. Before starting the transfer certify that the Analyzer is turned off and the M6 valve is switched off by using the IHM located at the control room;
- Certify the load lock pressure is below ~6 x 10⁻⁶ mbar, open valve 1 and push the transfer bar forward
- 4. Screw the transfer bar on the sample holder and slowly pull backward while gently moving the bar to keep the guiding screws aligned with the holes on the holder
- 5. Fully retract the bar and close valve 01.
- 6. Vent the load lock and unscrew the sample holder from the transfer bar.