

Samples for the PHELIX beamline

1. The samples for the Phelix beamline have to be mounted on flag style sample holders that will be placed on the PTS adapter (Fig. 1). PTS adapters and flag style plates (Cu, Ta, Mo) are available on site.

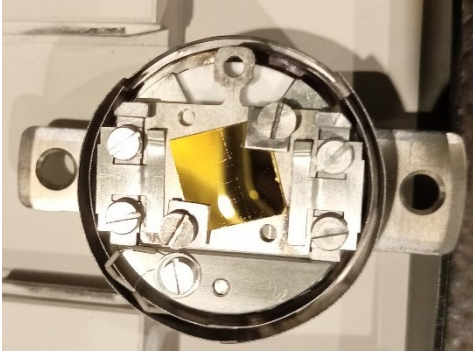


Fig. 1. PTS adapter

2. Use either the standard Omicron plate that fits PTS adapters, the wobble stick for transferring the flag style holder to the sample station and the sample station in the analysis chamber or prepare plates according to the dimensions given.
3. Leave the stripes of 2 mm wide on both sides of the plate free and smooth for the holding springs (marked red in Fig. 2). The visualizations of samples with maximal possible dimensions are shown below (Fig. 2). Please note that the flag style plate is mounted vertically in the analysis chamber.

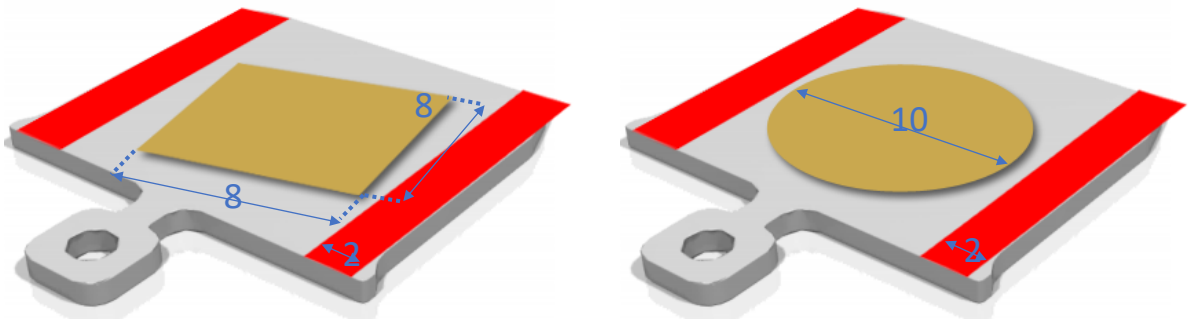


Fig. 2 Maximal acceptable dimensions of the sample.

4. Ensure that all of the materials used for mounting the sample and the sample material itself are UHV compatible at the highest temperatures they will be treated with. Check their melting temperatures and the vapor pressures vs temperature curves. It is not allowed to melt samples on the manipulator. The sample plate and mounting clamps should be made of a nonmagnetic metal (pure Mo, Ta, Ti, Cu are acceptable). Avoid soft or fragile materials. After mounting the sample make sure it is properly grounded.