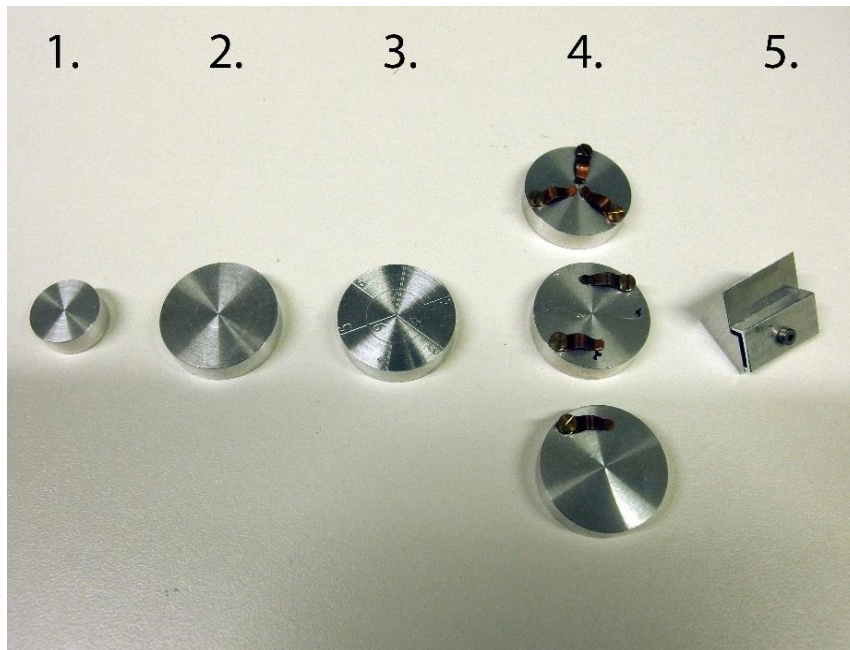


## Standard sample holder and first preparation tips:

### Hitachi sample holder made of aluminum with M4

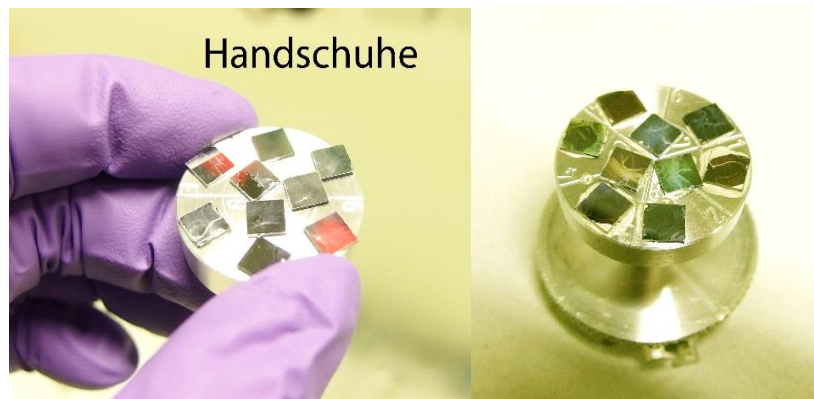
- 15mm diameter (for the C-tapes)
- 1 inch
- 1 inch with 9 numbered fields for 5x5mm wafers
- Clampable 1 inch holders - with one clamp, 2 or 3 clamps
- Holder for 90 ° tilting from our metal workshop

(Please ask around in the working group beforehand. Upon request, you may take samples with you to the metal workshop.)



**In general, please stick samples onto the sample holder such that they are conductive and planar:**

**Ag glue** - (with a brush) pull up the contact in one or two places on the side or, if necessary, with a fine needle or wooden toothpick (for ground bias).



You can order (only as an example!) from Plano Inc. (or from any other manufacturer)  
[www.plano-em.de](http://www.plano-em.de)

**Product No. 511 conductive silver with acrylic adhesive**

**Product No. 510 conductive silver in alcohol base**

<https://www.plano-em.de/produkte/rem-zubehoer/leitfaehige-loesungen-verduenner/511/leitsilber-mit-acrylklekle>

or **carbon glue (if necessary)**

**Product No. 697 Plano-Leit-C**

**For powder samples or single crystals:**

15mm - **C-tape** adhesive on both sides.

Tap off the powder from a spatula and brush or blow off excess powder. Do not apply mechanical pressure as this could destroy sensitive particles and crystals.

Alternatively, particles may be applied by spin coating (from solution) to 5x5mm wafers (from Plano) (preferably monolayer)

**C-tape**

**Product No. G3347 PLANO-Leit-Tabs**

**Silicon wafers** (for spin coating powder) - Glue this wafer with Ag-gel to the sample holder

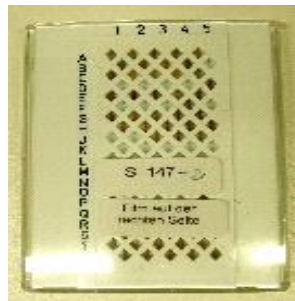
**Product No. G3390 silicon carrier cut**

Handle this wafer always with SMD tweezers. (Tweezers with jaws)

Preparation on glass is not suitable; conductive or semi-conductive substrates are necessary, e.g. ITO (has its own structure), HOPG, wafer (smooth surfaces)

**STEM grids** (there are no grids in the STEM AG Scheele available; please order itself.)

There are numerous Cu grids available from different manufacturers, just as an example:



**Product No. 468 - TEM grids - carbon film on carrier mesh**

Ideally, use reversible tweezers with a fine tip for STEM preparation, e.g. Dumont product # 154  
For further information see separate instruction “preparation of STEM samples”

Please indicate the position of the grids to be measured, e.g. A1 ...

**For EDX:**

Arrange small single crystals on the C-tape all around the outside if possible, or on a wafer 1 inch with 9 numbered fields; in the case of multiple occupancy, leave the middle positions 7-9 empty.