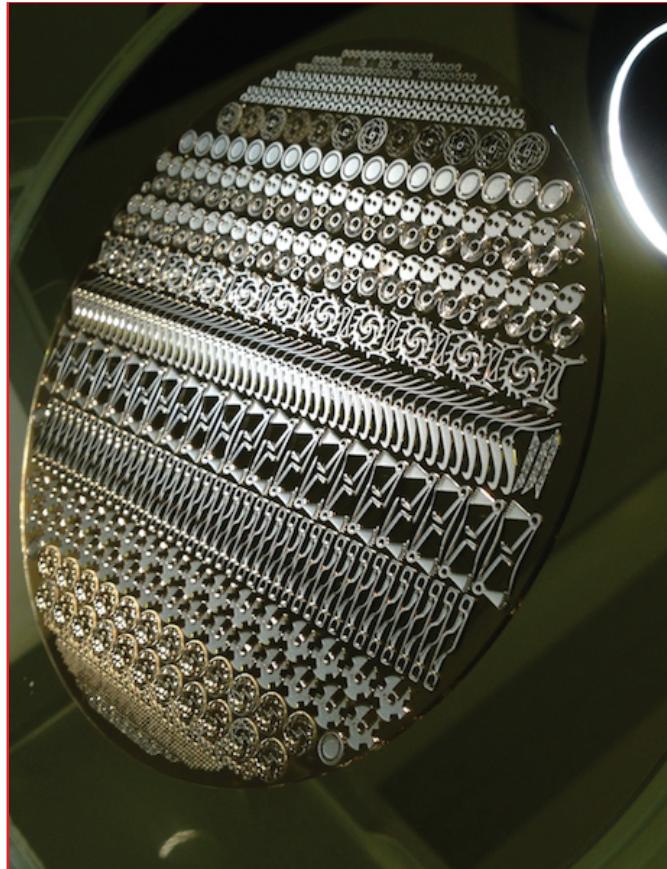


Watch components

Micropatterned watch-components with highest precision and surface quality made by LiGA-process.

applied microSWISS AG is an innovative manufacturer of microstructured metal components for the watch industry for more than 20 years. We manufacture components according to customer requirements using the LiGA-process.

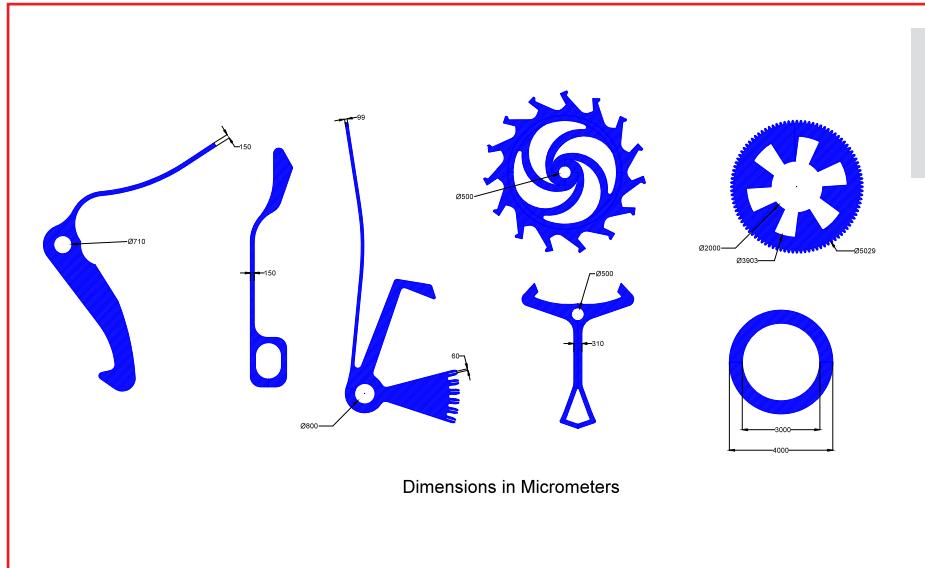
We are your partner for your micro- / nanostructured components. We have profound experience and solutions for parts with up to 500µm thickness. We deliver ready-to-assemble microparts.



Different watch components, batch-processed

Specification highlights

- Manufacturing according to LiGA-process
- Geometrical creativity beyond limits of conventional manufacturing
- Maximal part thickness = 600 µm
- Number of patterned levels ≤ 3
- Alignment-precision level-to-level ≤ 2 µm
- Thickness uniformity = 3 - 5 %
- Front-surface lapped or polished
- Sidewall roughness in optical quality
- Ready-to-assemble components according to customer drawing
- Materials: Ni, NiP or Gold
- Available wear-protection or low-friction coatings (e.g. TiN)
- Combination of nanopattern (face) and micropatterning (geometry)



STEP 1:

Customer to provide part geometry as CAD-file with dimensions in μm .



STEP 2:

LiGA-manufacturing including layout engineering, masklayout and manufacturing.



STEP 3:

Singulation, cleaning, packaging and shipping according to customer's instructions.