CHEMICAL POLISHING.
SURFACE PROCESSING TO INCREASE THE BREAKING RESISTANCE.
CHEMICAL POLISHING.

Mechanical processing of brittle/hard materials causes micro-cracks in the surface, which affect the breaking resistance of the entire part. Our chemical polishing process can remove micro-cracks, which can be the starting point for a break, from inaccessible places.

THE SOLUTION

▸ Chemical removal of micro-cracks to increase the breaking resistance
▸ Precise etching according to the customer’s details
▸ Difficult to access and non-plane spots that are not optically active can be reached, such as pockets, holes, capillaries and other precise geometrical shapes

APPLICATIONS

▸ Components for highly technical applications, which
▸ have to be moved quickly,
▸ are exposed to high pressure (loads higher than 50 MPa) and/or a vacuum
▸ experience strong vibrations,
▸ are subjected to changing temperatures
▸ Lightweight structures for the semiconductor and aviation and aerospace industries, e.g. mirror blocks and mirror sub-strates used in astronomical telescopes
▸ Prisms for operation microscopes

POSSIBLE MATERIALS

▸ Zerodur®
▸ ULE
▸ Quartz
▸ Clear-ceramic
▸ Other materials upon request

PROCESSING CHAIN

OUR STRENGTHS ARE YOUR BENEFITS

▸ Many years’ chemical polishing experience and the handling of high-value parts
▸ Optimum and flexible production conditions ensured through the use of specific equipment
▸ Option to be personally present during the processing of prototypes
▸ Environment protection and occupational safety at the highest levels
▸ Absolute confidentiality
▸ Customized processes
▸ Project-related development