

Phase Masks

for high-precision laser processing

Customized quartz phase masks

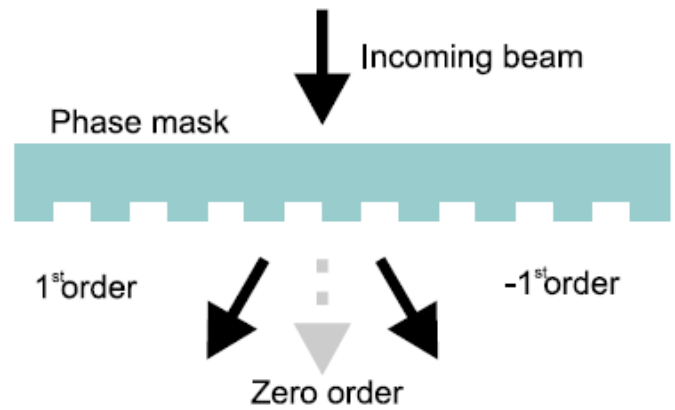
Customized phase masks and diffractive phase elements are fabricated with the use of a new patented method. The masks are made of fused silica and are particularly suitable for laser micro fabrication with UV- and high power lasers using mask imaging optics.

We manufacture a variety of phase masks ranging from simple structures such as 1D- or 2D-gratings and beam shaping optics to highly complex structures defining for example computer generated holograms. The new phase masks are suitable for the entire wavelength range from the near IR to the deep UV (193 nm) and can be irradiated with high power.

Consequently, they can be operated with excimer lasers as well as femtosecond lasers.

Application example: Diffractive beam splitter

Diffraction grating with zero order suppression and high efficiency in +/- first diffraction order



SiO₂ phase masks - key features

- Large area
- High efficiency
- VUV to NIR
- Perfect zero order suppression

