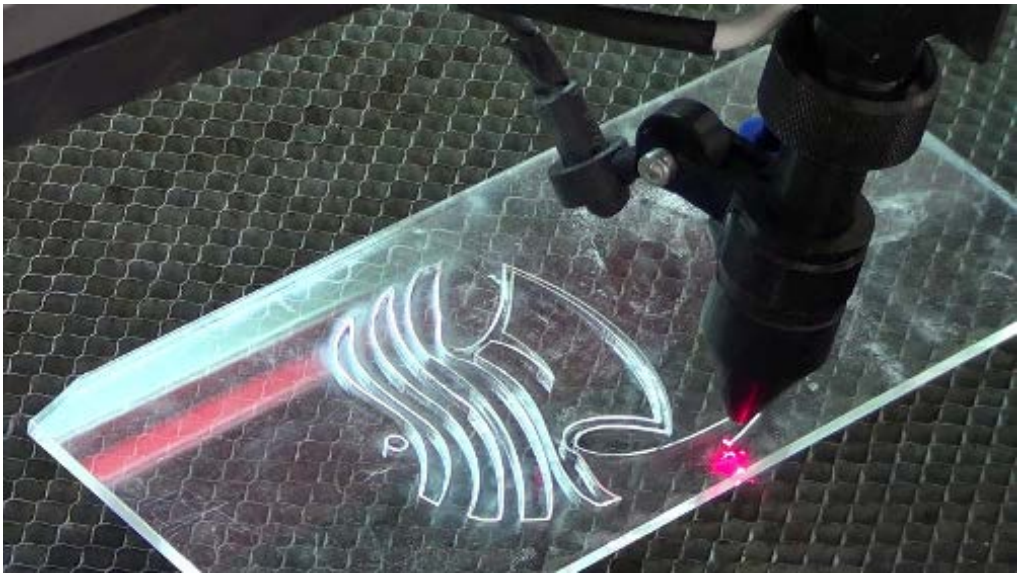
Custom Multi-Focal lens module

for glass cutting

Diffractive Multifocal (MF) lenses are widely used for glass cutting applications. In this process, multiple foci are formed along the cutting path, thus increasing the speed and accuracy of the process.

To achieve optimal performances, small separation distances between neighbor foci and high-power densities are required. This is usually achieved with a high NA objective lens. However, the majority of off-the-shelf high-power objectives does not meet the application requirements and result in degraded performance.

To address this issue, HOLO/OR has develop a tailored focusing module for glass cutting applications, used with a Multifocal lens. HOLO/OR's Multifocal module (MF module) maintains diffraction limited spots size at all foci.



Advantages of the MF module:

1. Complete solution - no need to purchase the components from separate vendors
2. Enhanced performance - very low aberrations level, Diffraction limited spot size
3. Accepts large input beam diameter (15mm or more), enabling smaller spots
4. Tailored per customer's parameters
5. Compact module - 30mm diameter, ~25mm length
6. Achieves more accurate results and increases process throughput