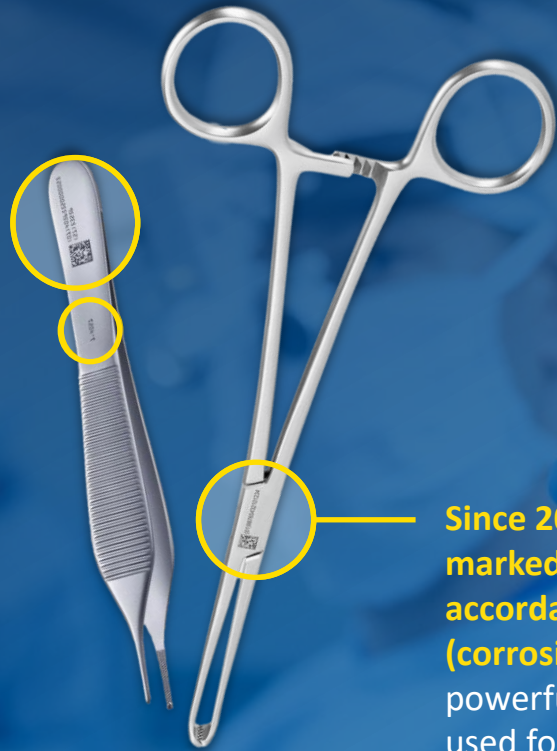


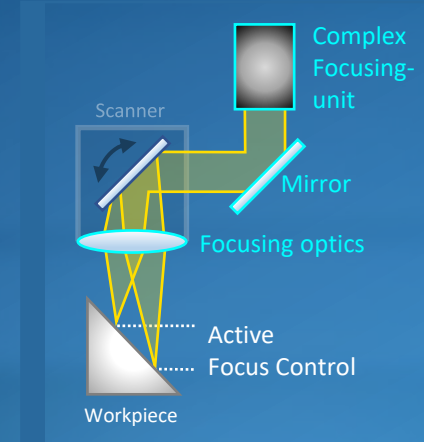
Example – Micro-Machining

Medical Product Marking with Lasers

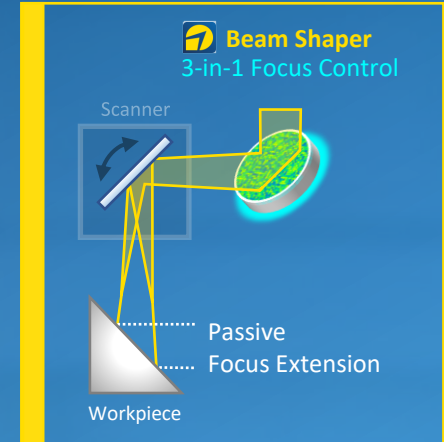


Since 2021, medical products must be marked with a identification number in accordance with the UDI Regulation (corrosion-resistant). Increasingly powerful ultra-short pulse lasers are being used for this purpose. Beam shaping can solve several challenges at once.

Previous system



New system



Challenges for laser marking systems

- Precise marking on uneven surfaces
- Optimization of rejects and speed
- High-cost pressure

Midel beam shaper enables new generation of systems

- ✓ Simplified and cost-efficient system
- ✓ Precise and fast marking
- ✓ Process reliability minimizes rejects

Our passive beam shaper replaces the functionality of a complex focusing system

Example – Micro-Machining

Laser Marking of Smartphone Cover Glass



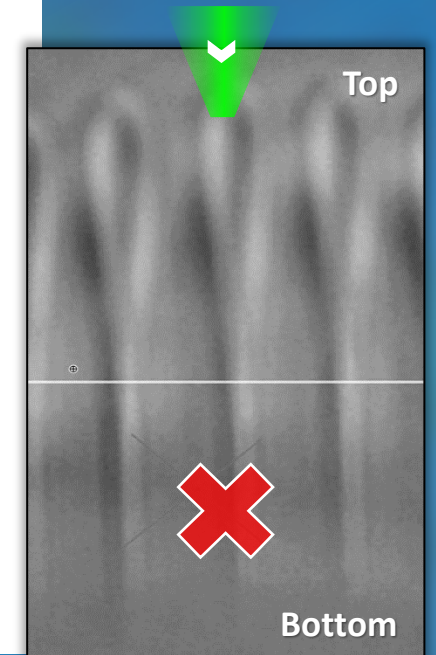
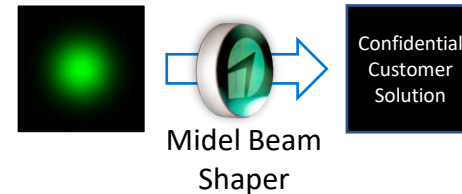
Every top display layer is a thin **cover glass**, which needs to be marked with a **hidden microcode**.
Currently the process is run with **simple laser beams**.

Problem

Laser markings penetrate deeply into glass (drop shape)
-> Production Rejects
-> Limited phone thickness

Need

Customized beam shape, with less intensity in center to suppress deep tail.



Side View of Markings