

# protowerk

## CUSTOMIZED PROTOTYPING

### Application

Our early stage prototyping laboratory more flexible and with faster turnaround times

#### DEVELOPMENT

- rapid but high quality parts in an early stage
- reduce administrative efforts
- time-and-effort model being flexible in work plans and tasks

#### YOUR BENEFITS

• high quality micro- and/or nano-structures

Specification

- rapid iteration time
- at the beginning no necessity of full regulatory attendance
- smooth transition from early prototypes to higher volume manufacturing with the proper design and material

#### APPLIED TECHNOLOGIES

I. Mastering and injection molding creates parts in disc format





2. Milling of throughholes and contour





3. Assembly of all parts





	Specification	recimology
Design	Design for subsequent mass manufacturing	Minimum documentation with focus on result-oriented engineering
Material	COP1020R	Injection molding
Format	Any format up to 12 cm diameter	Injection molding with disc platform and milling of final format
Feature Size	Nanometer and micrometer structures with a minimal lateral resolution of 100 nm, Aspect ratio of 1:10 depending on structure and density	Photolithography Nickel plating
Assembly	Multiple layers can be assembled, incl. inlet and outlet features	PSA Solvent-activated thermal bonding Laser welding

#### MAIN PROCESSES

- MASTERING
- MOLDING (e.g. COP)
- DICING OF FORMAT
- BONDING
- ASSEMBLY

The advantages of early prototyping at STRATEC Consumables

UV glueing

Tachnalag