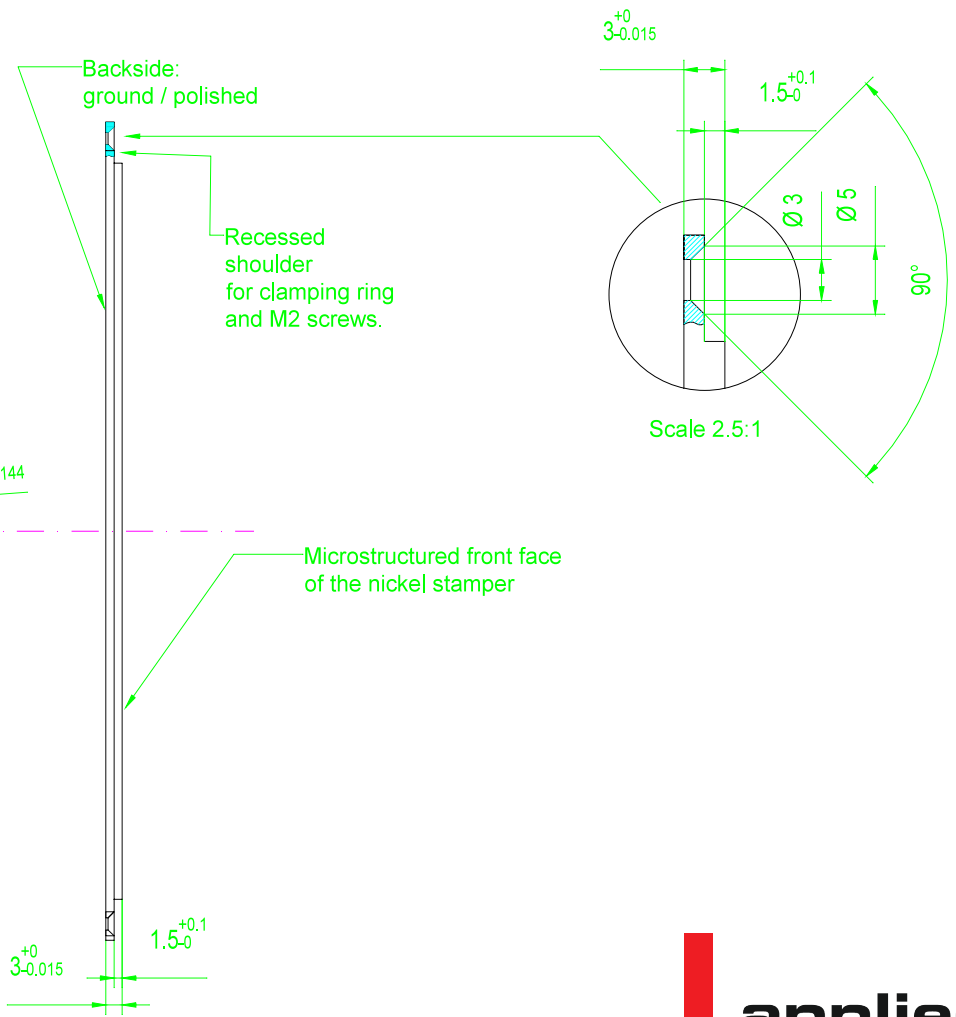
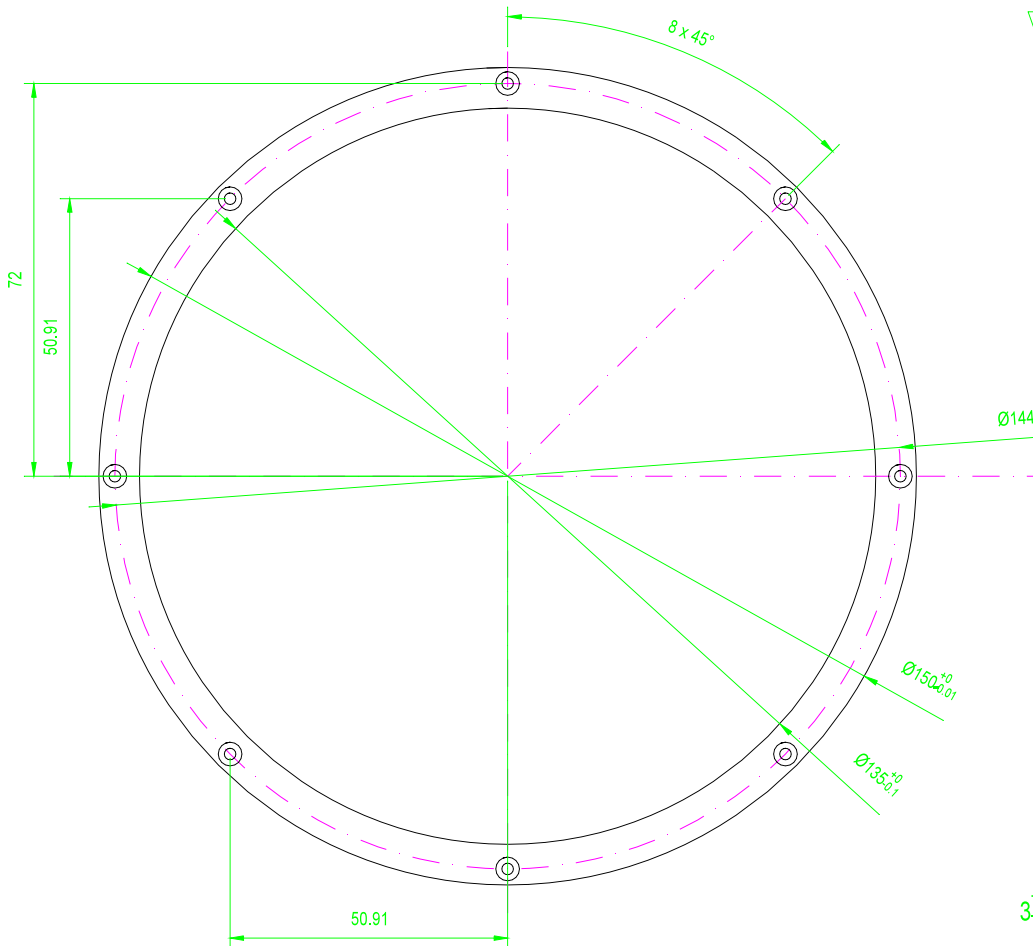


## Hot embossing stamp: Specifications

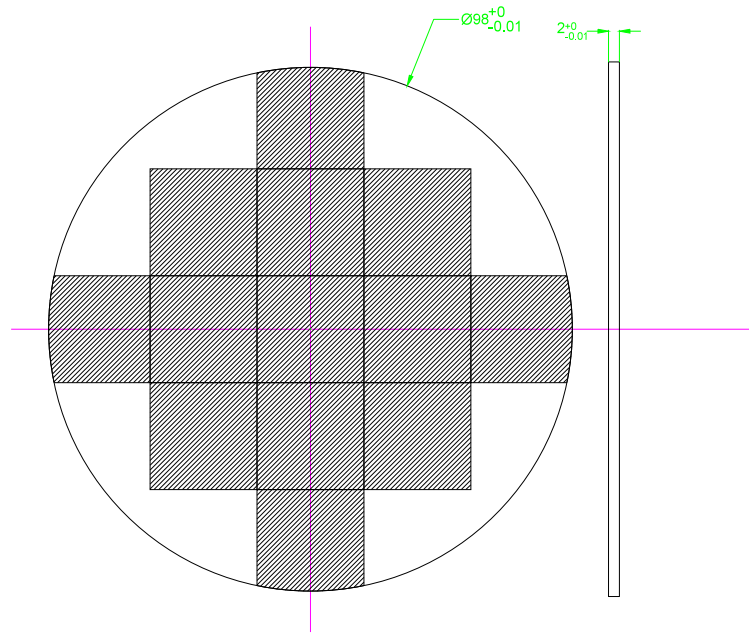
- Pattern depth range = 70nm - 500µm
- Pattern height uniformity = 3 – 5%
- **EXCLUSIVE: adjustable drafted sidewalls up to 15° (easy demolding)**
- Manufacturing according to adapted LiGA-process
- Multilevel pattern available (micro+nano)
- Alignment-precision level-to-level  $\leq 3\ \mu\text{m}$
- Alignment-precision micropattern to machined features  $\leq 20\ \mu\text{m}$
- Stamp thickness = 0.5–3.0mm
- Maximal stamp dimensions = 300 x 300mm
- Maximal patterned area = 200 x 200mm
- Parallelism Frontside-to-backside  $\leq 10\ \mu\text{m}$  (Backside surface grinded)
- Integration of mechanical mounting features
- Robust handling
- Ready-to-use stamps according to customer drawing
- Contour wire-electrodischarge machined (tolerance = +/-10µm)
- Available antisticking-coating (fluoro-based)
- Available wear-protection coating (TiN)
- Compatibility to most patterning methods:
  - e-beam resists (PMMA, HSQ)
  - XIL- resists
  - UV-lithography AZ positive resists, MicroChem SU-8
  - Hot-embossed polymers, Thermal imprinting,...

Pos 1



1	1	pcs	electroformed Nickel	Microstructured nickel-stamper for hot embossing	
Pos.	Amount	Unit	Material	Description / Characteristics	
Replacement			Replacement	Created	06.March 2020 R. Bischofberger
				Checked	06.March 2020
				QA	06.March 2020
				Released	06.March 2020 R. Bischofberger
	1	changer enlarged mounting holes		Project-No.	06-03-2020
No drawing	<input type="checkbox"/>			Substitute for	amS-27-09-05
Drawing of same number	<input type="checkbox"/>			Replaced for	n.a.
Drawing of different number	<input type="checkbox"/>	Item-No.		Number of sheets	1
(c) 2020 microSWISS	Project Customer specific hot embossing tool			Drawing number	EVG-HET-17-01-2020
				Scale	1 : 1
				Sheet-No.	1

Pos 1



1	1		EF Nickel ( Ø 100 x 2.0 )	Nickel-shim			
Pos.	Menge	Einheit	Material	Benennung/Merkmale			
Aend.			Aend.	Erstellt	06.March 2020	R. Bischofberger	Massstab
				Gepueft	06.March 2020		1:1
				Normgepueft	06.March 2020		
				Freigegeben	06.March 2020	R. Bischofberger	
				Auftrags-Nr	n.a.		
Ohne Zeichnung	<input type="checkbox"/>			Ursprung	06.March 2020	Anzahl Blatt	Blatt-Nr
Zeichnung gleicher Nr.	<input type="checkbox"/>			Ersatz fuer	none	1	1
Zeichnung anderer Nr.	<input type="checkbox"/>	Sach-Nr.		Benennung		Zeichnungsnummer	
(c) 2020 microSWISS	Benennung			Jenoptik-HEX Stamp		HEX-Stamp_06-03-2020	