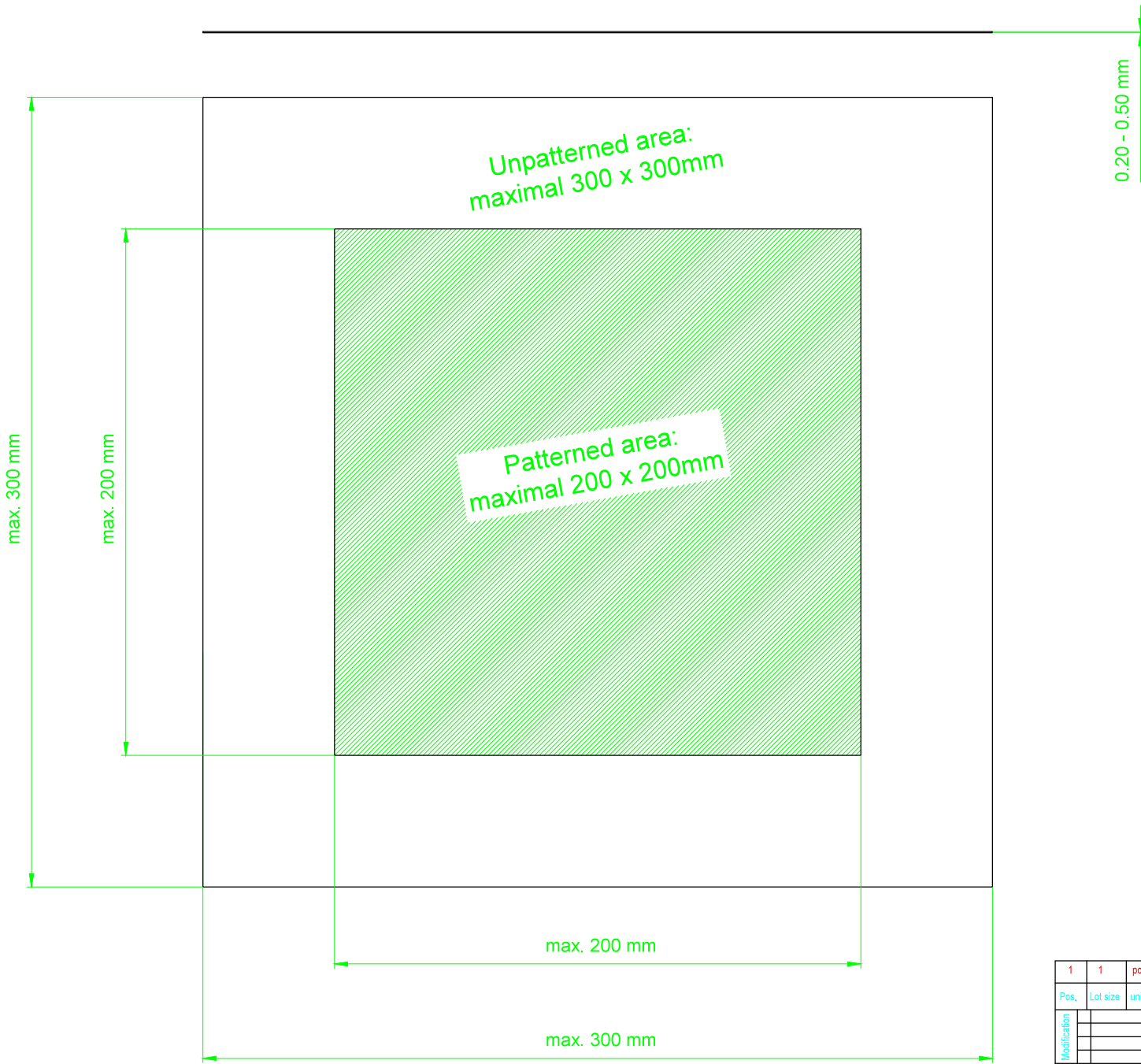


Roller-embossing shims: Specifications

- Pattern size range > 70nm
- Pattern height / uniformity = 50nm - 50µm / 3 – 5%
- Manufacturing according to adapted LiGA-process
- Multilevel pattern available (micro+nano)
- Alignment-precision level-to-level ≤ 3µm
- Alignment-precision micropattern to machined features ≤ 20µm
- Shim thickness: 0.25– 0.5mm
- Maximal shim dimensions = 300 x 300mm
- Maximal patterned area = 200 x 200mm
- Parallelism Frontside-to-backside ≤ 10µm (Backside surface grinded)
- Robust handling
- Ready-to-use shims according to customer drawing
- Contour wire-electrodischarge machined (tolerance = +/-10µm)
- Compatibility to diamond milling
- Available antisticking-coating (fluoro-based)
- Available wear-protection coating (e.g. TiN)
- Compatibility to most patterning methods:
 - e-beam resists (PMMA, HSQ)
 - XIL- resists
 - UV-lithography positive resists, SU-8
 - Hot-embossed polymers, Thermal imprinting,...



1	1	pcs	Nickel (300 x 300 x 0.25mm)	Roller embossing Shim / electroformed Nickel		
Pos.	Lot size	unit	Material	Denomination / Characteristics		
Modification:				Created	06. March 2020	R. Bischofberger
				Checked	06. March 2020	
				Norms checked		
				Approved	06. March 2020	R. Bischofberger
w/o drawing	<input type="checkbox"/>			Project #		
Drawing with identical #	<input type="checkbox"/>			Origin	06. March 2020	Total sheets
Drawing with alternat. #	<input type="checkbox"/>			Replacement for	new	1
(c) 2020 microSWISS	Identification			Roller-embossing shim		Sheet #
				Drawing identification		1 : 1
				Roll-embossing shim_06-03-2020		