



Low volume LabSCIL tool

SCIL Nanoimprint solutions offers NIL manufacturing solutions in a large variety. From manual R&D tools to fully automatic cassette-to-cassette systems and from 3" up to 300 mm wafers.

The R&D tools and automatic production tools use the same imprint method which allows easy transition from manual to semi-manual and automatic processing. The low volume LabSCIL tool is especially developed for R&D labs at Universities, Research Institutes and companies who are interested to develop SCIL processes and applications. Also for companies interested in a tool that can be used for small series pilot production the low volume SCIL tool will be ideal.



Key features

- Easy to operate stand-alone SCIL imprint unit.
- Tri-layer stamp construction allows conformal contact printing even on nonflat and bowed surfaces.
- Unique SCIL imprint process ensures sub 10 nm resolution with low pattern deformation and no stamp damage by particles.
- The excellent etch properties of the sol-gel resist result in high etch rates.
- The thermal stability, optical transparency and (UV) stability of the sol-gel makes it suitable as functional layer.
- Use of thermal sol-gel increases stamp lifetime.
- Overall combining highest imprint quality and yield with high throughput and low total cost of ownership.

Specifications

Operation	Manual loading of wafers with a resist coating. Imprint process runs automatically.
Wafer sizes	3" up to 8" (or 200 mm)
Wafer thickness	0.3 - 2.5 mm
Wafer handling	Manual loading in a tray
Resist types	Thermal sol-gel UV sol-gel UV organic
Imprinting	SCIL low pressure softstamp NIL
Dimensions (WxLxH)	1.8 x 1.4 x 2.2 m
Overlay alignment	Full wafer < 1µm

